

SCHOOLS AND TECHNOLOGY: THE SCHOOLS' RESPONSES
TO TODAY'S TECHNOLOGICAL TRENDS

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SCHOOLS AND TECHNOLOGY: THE SCHOOLS' RESPONSES TO TODAY'S
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ABSTRACT

New technology trends create a dilemma in the education world as schools try to create policy that minimizes distractions in the classrooms. What are schools doing to keep up with these new trends and could some applications better serve the students if the schools promoted their use? How does policy affect students, teachers, and parents?

This study examined what technologies school districts in North Central Ohio were promoting within their schools and what school policies were being used to guide technology in and outside of the schools. An internet survey on technology and school policy was completed by 132 school personnel. Participants were employees of districts that used North Central Computer Cooperative as an email, technology, and continuing education service provider.

Key findings included twenty-two percent of teachers and administrators responding who stated their district will be considering new technology policies in the next year and were considering a change in cell phone policy that would open up cell phone use for educational purposes. Schools were also planning to address social networks in these new policies. Teachers and administrators stated that 65.9% of them worked for a district where communicating with students on a social network was discouraged and 17.1% stated that doing so could result in possible punitive punishments. Most of the school policies discouraged use of any electronic device during the school day.

DEDICATION

This manuscript is dedicated to my mother and father, though divorced for many years, have always put aside their differences to encourage me to “reach for the stars”. It is also dedicated to the love of my life, my husband, and my children who continue to encourage me even when my work takes me away from family activities. My academic pursuit has taken more years than the average student, interrupted by marriage, children, and the finite search for a career choice. But I wouldn’t have done it any other way . . . I love being a teacher and having the opportunity to guide students to be the best they can be. And lastly, this manuscript is dedicated to God because through him all things are possible.

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CHAPTER I

INTRODUCTION

Technology is prevalent in today's society and teenagers are embracing it with open arms. It is the responsibility of the older generations to guide the youth through the media and technology world by not just teaching children about technology but by teaching them morals and values that will protect them and help them to develop in a healthy environment. While adolescents may believe they are ready for adult responsibilities, they are truly not ready to view all of the graphic visions and information the media can deliver. Under proper guidance, social networking sites can be very beneficial in promoting adolescent development. These sites can help with communication, expression, identity, a social backboard, artistic expression, music exploration, literature, and friendships (Neal, 2007).

New terms like the information revolution, the e-generation, and the MySpace generation are being used to describe today's rapidly changing teen culture. Today's culture is one in which teens are bombarded with information and technology. Teenagers are very adaptable and welcome the newest technology to better their lives academically, socially, and emotionally. In 2007, about sixty percent of all teenagers had a cell phone and spent about an hour a day talking on it (Center on Media and Child Health, 2007). The Center on Media and Child Health also stated, "According to market research firm The Yankee Group, fifty-four percent of eight to twelve year olds will have cell phones

within the next three years.” According to the Harrison Group’s 2006 Teen Trend study (Olsen, 2006), teens spent about seventy-two hours a week using electronic media.

Thirty-three percent of teenagers have an ipod and seventy-five percent of teens are either listening to music or downloading music using their computer for approximately two to three hours a day. According to the Kaiser Foundation Teens Online report (2002), sixty-one percent of teens fourteen to seventeen years of age had internet access on their home computer with twenty-nine percent having access from a computer in their bedroom. The most popular online activity was emailing, with ninety percent of teenagers participating. Instant messaging came in second with seventy-four percent of teenagers utilizing IM services (Kaiser, 2002). According to The Nielson Company (2010), twenty-eight percent of youth with mobile phones use smart phones. Teens are now averaging 3,339 text messages per month (six or more per hour while awake). (Nielson, 2010). With the new technology being used by teens, the question arising is, are schools responsible for keeping teenagers safe and responsible while using these new-found resources that have been widely embraced by the teen culture.

There are risks involved in the use of social networking sites and parents and schools cannot assume that just because their child is in their home (or school) they are safe from sexual predators, bullying, violence, drugs, harassment, peer pressure, and pornography. Parents and schools who choose not to take the time to learn about these sites, educate their children, and set guidelines are putting their children at risk for potentially harming activities. Schools also need to rise to these same expectations to properly prepare children for society’s expectations. “Netiquette” needs to become part of the curriculum in any class that uses technology. Teenagers need to understand how to

use media resources in a respectful way. Schools also need to rethink their technology policies especially if their policy is to eliminate as much student technology use as possible (Deubel, 2009; Eifler, 2010; & Ritter, 2007). Schools need to promote acceptable use and netiquette within the schools rather than declaring war on cell phones and iPods. Schools and students seem to be butting heads when policies eliminate the possession of any and all electronic devices. Instead, if everyone works together, they can help to encourage an environment that promotes healthy development and reduces the risk of predators, bullying, and other internet dangers.

Recently, the news has been full of discouraging stories about teenage use of social networking sites to bully other students, assault other students and even going so far as to post videos of the assault. Other stories dealt with advertising underage drinking parties, teenagers selling and taking drugs, etc. Cell phones have been used to take pornographic pictures and forward them to other students. Texting has made it easier to cheat on tests and spread rumors about other students. Teachers have been fired for Facebook activities deemed inappropriate (Olson, Clough, & Penning, 2009), while other schools are considering new policy regarding teachers' social networking with students (Dillon, 2010). Technology is not a trend that will disappear. Schools are trying to decide how to embrace technology to the benefit of students without eliminating it completely. What has become clear is that public schools are beginning to find that they can no longer ignore the impact that outside technology has on their students and on the school environment. In practical terms, the question is, how will schools handle, as a matter of policy, the impact of cell phones, texting, digital photography technology, digital music players, social networking, blogs, You Tube, and Podcasts? Will schools

accept technology and use it as a way to better communicate with parents and students?
In what ways will school policy continue to develop around these technological issues?

Statement of the Problem

Schools have been tasked with many responsibilities ranging from feeding children, teaching students social skills, and preparing the youth for the world that awaits them after school. Schools attempt to accept technology and the technological trends that will promote education but what about the technological applications that appeal to teenagers or their families? Do schools have a responsibility to govern all applications of technology? Do schools view themselves as the ones who should teach children how to be safe when using technological resources? Finally, should schools be required to keep current with trends and provide services through these new technological advances?

Some schools are trying to avoid any issues from surfacing by prohibiting social networking sites, while others are struggling to tap into the myriad of benefits beyond the classroom. The negative impact of technology use by teachers and students continue to be reported in the news. Headlines included “When Young Teachers Go Wild on the Web”, Washington Post, (Shapira, 2008); “Teen Arrested in Downingtown Hacking Case”, Daily Local News: Associated Press, (2008); “Mean Girls: Cyber Bullying Blamed for Teen Suicides”, Good Morning America, (DeNiles, Donaldson, & Netter, 2010). These stories underscore the need for school officials to decide if they should be taking an active role in educating students about these new technologies and policing the technology. Simply stated, the problem was that there was no uniform policies as of yet to address the challenges and impact of new technologies within (or out of) the schools and the educational environment for both students and teachers. For example, the

Brookfield School Board considered passing a policy banning teachers from social networking, texting, and instant messaging on or off the clock, even including their personal use (Debruin, 2009). Ultimately, the school board decided against banning texting because it could be beneficial in communicating with students on field trips and sporting events. Some progressive schools might actually encourage teachers to “friend” students on social network sites to be a role model and to make them more available after the school day to answer questions about homework.

Importance of the Study

This study will identify the current trends of schools in central Ohio, their use of technology in the schools, methods and policies schools are using to select and implement new technologies, teaching responsible and safe usage, monitoring cyber bullying, and what technologies schools are promoting to connect with students and parents. Obviously, our society (i.e., the police, school personnel, and parents) is responsible for protecting children while helping them grow and learn. Schools may be feeling the pressure to take on more responsibility regarding technology than has traditionally been provided by the family (Dretzin, 2008).

Rather than discuss who should be responsible for managing these technology related matters, the purpose here is to identify where school personnel believe their responsibility lies when it comes to technology. One reliable way to assess perceived responsibility is to survey school personnel about their understanding of existing school policies, and ask about current, ongoing activities in classrooms. By identifying current activities and policy trends through the use of a survey, institutions may find a clearer path to evaluate and create more consistent, standardized policies for students.

Additionally, the findings may also identify areas where those who create these technologies and applications can, in the future, design applications to help meet the needs of the schools.

CHAPTER II

REVIEW OF LITERATURE

Today's culture is one in which teens are bombarded with information and technology. Teenagers are very adaptable and welcome the newest of technology to better their life academically, socially, and emotionally. As students are increasingly obtaining and using various technological gadgets, the likelihood of their increased preoccupation with them increases. Social scientists are concerned that students will replace face-to-face social interaction, such as going out with their friends on a Friday night, with social technology, such as sitting at home and texting their friends on their cell phones or surfing one of the many social networking sites (Kelsey, 2007). Such preoccupation may be benign, or may result in loss of sleep during the school week (e.g., students staying up late to modify their social networking profile or keeping updated on the postings of their online friends). Some students readily admit their preoccupation with technology to be an "addiction", and that it is a real challenge to be without it online contact for even a few hours at a time. Not only does it take constant work for the school systems to keep up on the latest technology for educational purposes, now schools have had to consciously stay informed regarding rapidly developing technology as it becomes accessible to students, how are they using it, and what the dangers are, if any. Whether schools want to or not, they are finding themselves being drawn into these technologies.

Schools have not been able to create clear guidelines or policies for both students and staff, maybe in part because the school districts are still learning themselves. The easy way out has been to prohibit the use. Before examining each of these new technology pieces separately, it is important to understand that there is a new push for schools to embrace technology and the learning potentials associated with it.

The 2010 National Education Technology Plan has called for “Connected Teaching”

This idea is guided by a 24/7 approach where teachers would have access 24/7 to data, resources, and student learning in order to connect to students, professional content and other resources to promote engaging learning experiences both inside and outside of school (US Department of Education, 2010, see Figure 1). Technology is the key component in the model of “connected teaching” and is the center of this theory with the teacher providing the educational experience for the student. This systems theory approach enables teachers to give instruction in multiple dimensions as shown in Figure 1. Online environments promote participation not just with students but also with administrators and parents. The online environment now becomes a learning community with personalized learning experience allowing for creativity and self expression. This community provides students with emotional and social connections that go beyond their teacher and peers to the larger world.

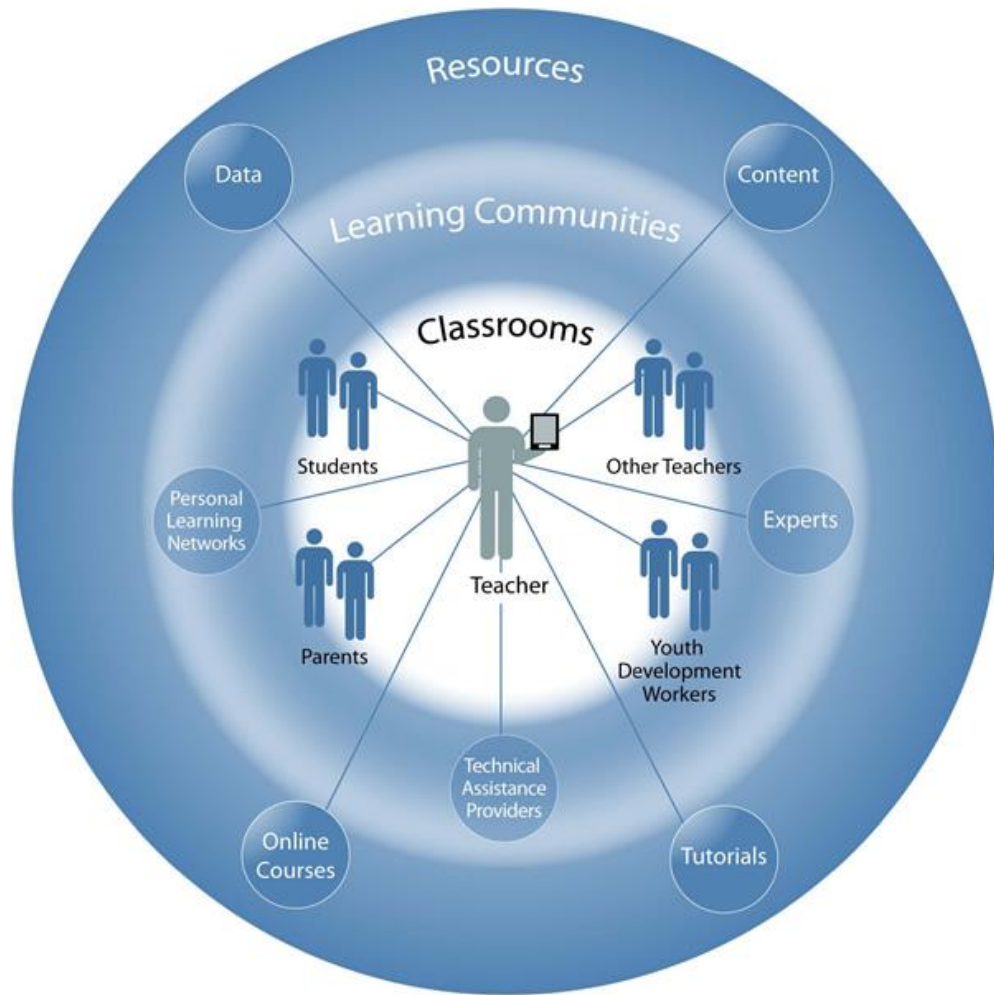


Figure 1 - Connected Teaching Builds New Competencies and Expertise

Note: US Department of Education Office of Educational Technology, (2010).
 Transforming American Education: Learning Powered by Technology.
 National Education Technology Plan 2010 Executive Summary.

Student Access to Technology

Eighty-six percent of families with teenagers (12-17 years old) have some type of internet access, while 8 percent have no computer in the home and an addition 4 percent have a computer with no internet access (Lenhart, Purcell, Smith, & Zickuhr, 2010). Even though not every teen has a computer at home 93 percent are online with 63 percent getting online daily. Internet access is not limited to computers. Teens also access the internet through cell phones, game consoles, and portable devices. Teens own an average

of 3.5 of the following devices: cell phones, mp3 players, computer, game consoles, and portable gaming devices (Lenhart, Purcell, Smith, & Zickuhr, 2010). There is a trend in viewing this technology as a distraction to the classroom (Lenhart, Ling, Campbell, & Purcell, 2010 p. 4) “Most schools treat the (cell) phone as a disruptive force that must be managed and often excluded from the school and the classroom.” On February 11, 2009 the General Assembly of Pennsylvania introduced House Bill No. 363 which proposed eliminating all electronic devices on school grounds and in school vehicles (House Bill 363, 2009). What exactly are teens doing with technology and why are schools (and states) so quick to ban their use?

Social Networking

A social networking site is an internet site where people can go and publish web pages about themselves and view pages that others have made. These sites are generally public and can be viewed by anyone who has a computer. The page that one creates is called a profile and can include a picture, the person’s location, his or her interests and hobbies, and links to other people’s profiles. When one chooses to link another person’s profile to their page the linked person is referred to as a friend. This creates a mammoth internet network of people, hence the term social networking. In January of 2009, Facebook leaped ahead of MySpace by doubling the amount of MySpace users (Summers, 2010) and had 1,191,373,339 visits per month from their users (Kazeniak, 2009). Facebook has captured 65% of the social networking internet traffic (Melanson, 2010) with 500 million active members (Facebook, 2010). Social networking is no longer limited to sitting at a computer but can be accessed through mobile devices. There

are over 150 million users on Facebook that access the social network through their mobile devices. Millions of teenagers are using these sites on a daily basis and potentially have several different profiles on various social networking sites. Seventy-three percent of teenagers 12-17 years of age use a social networking site (Lenhart, Purcell, Smith, & Zickuhr, 2010).

Blogs have become the new form of keeping a personal journal with the exception that it is available to anyone who wants to read the journal entry. Blogs are similar to a diary but they are posted electronically for others to read and comment on. According to Goodstein (2007) one in five teens who are online regularly read blogs, and thirteen percent post to their blogs.

Social network sites have made many common teenage activities digital and extremely portable, especially with the additional advances in cell phone technology. Note-passing has been replaced with email; talking on the phone or talking to someone in another room has been replaced by texting; message boards in hallways have been replaced by “comments” found on social networks; and fliers, brochures, and bulletins have been replaced with social network bulletins, which can be sent to all friends at once. Today’s teens are digitally driven to the point that they feel as if they cannot function without their computers, cell phones, and portable music players (Neal, 2007). Technology is woven into the very fabric of their being and plays a big part in their social and emotional development.

While many schools block many of the social network sites such as Facebook and MySpace, there are many educational sites that offer an education experience in a social network setting. These sites promote both formal and informal learning (Quinn, 2009).

In one site there are tools that promote collaboration, such as wikis, journals, and blogs; material can be relayed through notes, links, power points, and videos and students can create original work to submit and take tests. This social educational environment that is not limited by the walls of the classroom can be another way to facilitate learning.

Adolescence and Development

Teens are drawn to these sites because developmentally they are trying to establish their identity and to connect with peers. Neal (2007) states that teens are trying to fulfill five developmental needs: security, identity, belonging, purpose and competence. When it comes to security, teenagers are trying to figure out whom they can trust and whom they cannot trust. Can they trust their school, teachers, parents, and friends? Usually teens are very trusting when it comes to internet use, not realizing that the digital space is a public space that is virtually open to surveillance, lurking and stalking by anyone with digital access. Indiscriminant use of this technology is as dangerous as being unaware of the dangers in an amusement park, if not more so. There are lots of strangers moving about in an amusement park, most with the intent to enjoy the park safely, but some danger always lurks in larger crowds.

Teenagers have come to embrace the following four messages about our culture (Kelsey, 2007). First, personal entertainment is of the highest importance. Teenagers are constantly being entertained by television, iPods, cell phones, video games, and at the same time, being bombarded with advertisements. The expectation is if it is not fun, it is not worth the time. This attitude can be problematic for educators and employers when teens buy into the idea of high consumption and needing to always be entertained.

The next message Kelsey, 2007, states that teens believe is that privacy has no value. The internet technology has provided a unique opportunity to forces both positive and negative on individual privacy, making unguarded personal data and information only a few mouse clicks away. Everything appears to be public information, and keeping things private or a secret is not as important as it was in the past. As has been the case with adolescent clothing trends, skirts are getting shorter, tops are lower cut, and everything is getting tighter, leaving less to the imagination. Covering one's body would imply that it is private, and privacy, like modesty, appears to have little value in the teen world.

Teens also believe that to be happy, or to find happiness, one must be a grown up (Kelsey, 2007). Adulthood is glamorous with decisions, responsibility, and freedom. Teens believe that adult activities such as drinking and sex are part of happiness and they are increasing their participation in these types of activities. Teenagers want to grow up as fast as possible so that they can find this "perceived" happiness in the adult world and adult activities.

The last message teens are being given is one that says material consumerism is a sign of success (Goodstein, 2007). With society's need for instant gratification, being able to buy or charge whatever is wanted, when it is wanted means that you are successful. Money is linked to power and success and teens are seeking ways to be consumers to promote their perceived level of success. Marketers see this perception of success and use it quite successfully within advertisements.

Safety and Social Networking

It is important for parents and schools to be proactive when it comes to a child's safety, regardless of whether they are in public or at home using the computer. Kelsey (2007) recommends that parents need to learn about networking when children are nine years old because statistically these children will be attempting to use the internet for networking within three years. Social network sites are full of dangers including sexual predators, sexual assault, voyeurism, pornography, bullying, plotting, illegal / prescription drug solicitation, and threats. These threats are not taken lightly and social network sites are blocked by most schools' web-filtering systems (Bramble, 2009). Children need to be taught how to be safe in this computer world and that cyber space is full of just as many predators as the outside world. McKenna (2006) stated that fifty-seven percent of people worry about being victimized through a cybercrime, but seventy-four percent are still giving out information that puts them at risk. School administrators report that about half of their districts require internet safety lessons (Teicher, 2010). It is virtually impossible to protect kids from all of the dangers on the web, this is why it becomes important to teach them how to protect themselves. According to Kelsey (2007) twelve percent of kids were threatened physically and five percent were scared for their safety as a result of cyber bullying. It would seem easy to tell children not to read any emails or postings from a bully, but kids cannot help reading what is sent to them. Children need to be taught to delete, block, and ignore messages along with how to report online bullying.

While teenagers are waiting longer to have intercourse other sexual activities has been on the rise (Guttmacher, 2011; Kaiser, 2011). Teens are curious about sexuality. While there has been a decrease in middle school intercourse (Guttmacher, 2011; Kelsey, 2007), there has been a rise in other sexual activities. According to Kelsey, forty-seven percent of teens are virgins (not engaging in intercourse) and, of those forty-seven percent, thirty-five percent are participating in oral sex. Girls are gaining popularity through oral sex and publicizing themselves as promiscuous. Social networking sites have made it easy for a female to make a profile that focuses on sexuality.

Unfortunately, social networking websites have also become a great source of information for nefarious individuals, with information on everything from how to grow your own marijuana to how to make your own drug paraphernalia. Social networking sites have provided a way for drug dealers to reach a wider array of consumers. The latest drug trends have included prescription medication, and teens are using social networking sites to buy pills. Johnston, L., O'Malley, P., Bachman, J., & Schulenberg, J. (2004) note that girls are now using and abusing drugs just as much as their male counterparts.

While pornography is generally prohibited from appearing on social networking pages, it is showing up regularly. People can even choose to link porn stars as their friends on the social networking sites. Thirty-four percent of child exposure to porn on the internet happens in spite of the filters that are used to prevent pornographic pop-ups (Kelsey, 2007). Teens have become accustomed to promiscuous and pornographic images. Fleming, Greentree, Cocotti-Muller, Elias, & Morrison, (2006 p. 138) state, "violent pornography has been associated with violence against women." Priority needs to be placed on protecting children from pornographic images.

Cyber Bullying

Cyber bullying is the act of using technology such as the internet, blogs, chat rooms, social networks, cell phones, email, or other technology for a minor to bully another minor. Hinduja and Patchin (2010) state the victims of cyber bullying are two times more likely to attempt suicide than their counterparts who were not cyber bullied. The number of students being cyber- bullied range from 10 percent to 40 percent based on age (Hinduja & Patchin, 2010). Schools have been reluctant to become involved in bullying that takes place outside of the classroom and on technological resources. School officials read headlines of schools being sued for not responding to these issues and schools where they are sued if they do because of the students' first amendment rights. Schools seem to be adding cyber bullying to their acceptable use policy making "it is a contractual issue, not a constitutional issue" (Wired Kids, 2009, p. 1).

Sexting

Sexting in and of itself is the act of "sending sexually charged messages or images via cell phone" (Muscari, 2009, p.1). "Sexting" has become a new trend amongst teenagers with 20% of the teenage population admitting to "producing and distributing nude or semi-nude pictures of themselves" (Humbach, 2009, p. 435). What teens do not understand is that it is both a state and federal felony to even take a picture of themselves naked. Muscari (2009) even goes as far to say that it has become a public health issue because of the number of teens who commit suicide, are convicted of felonies, or are

socially taunted because of sexting. Taylor (2009), states that teens may have innocent intentions, but sexting is still considered child pornography which is a felony. Teenagers convicted of child pornography because of sexting often times must be registered and tagged for life as sex offenders for what Parker (2009, p. 1), states is “otherwise normal teenager behavior.” To further complicate the issue, teenagers who receive these messages can be charged with possession of child pornography. If they forward the message to a friend, they can now be charged with distributing child pornography (Humbach, 2009). Humbach states that under the law “40-50% or more of otherwise law-abiding American teenagers are already felony sex offenders” (2009, p. 4). This social phenomena in a sense has become a trap for many unsuspecting teens.

Parents, Schools, and Teachers

Navigating the ever-changing face of the teenager’s cyber world can be challenging. The overwhelming amount of information and different sites is enough to stop parents and teachers in their tracks, but for the safety and healthy development of children, it needs to be explored. This task can become even more challenging if the parents and teachers are not computer literate. Being computer literate is significantly helpful, but not a requirement when it come to keeping a child safe. Parents can promote values, have open discussions, teach safety, and have their child show them their site, all without being computer literate. The largest obstacle for parents has been finding the time to dedicate to their child’s cyber safety. People today are involved in many more activities and commitments than ever before (Rosen, 2008) making it necessary to try and multitask throughout the day. Trying to find the time to learn about some of the issues

that are threatening or risky for their children can become difficult. But it is not just up to the parents to make sure their kids are safe. Children spend the day under the care of the schools who also need to make sure kids are safe when they go online.

School Policy

Since social networks are receiving thousands of new members daily it is difficult to regulate these digital spaces. Website administrators rely on users to report falsified information, pornographic material, threats, bullying, and any other inappropriate or objectionable content. Parents should be viewing the sites and helping to report any abuse. Parents can spark conversation by asking teens about their MySpace or Facebook usage and by asking the teen to show them their profile. Teenagers will respond better to a parent who asks to see their site rather than going behind their back and viewing the teen's profile without their knowledge (Farnham & Farnham, 2006). Even though the teenager is posting information to a public site, he still feels as if privacy and trust has been broken if the parent sneaks around to view their profile (Kelsey, 2007; Neal, 2007).

With the dramatic increase of technological gadgets, schools are going to have to learn how to police the technological world. It will be a struggle to keep up with technology and the latest teen trends. Some schools just ban the use of technology (particularly cell phones), except for use of the school computers for research, which was recommend by the National Education Association (NEA) since these items can be a source of distraction (Simpson, 2008). This anti-technology attitude can be very dangerous. Students then receive the message that these technology resources are of no value or strictly used for entertainment value. Instead, schools should embrace

technology, they should encourage their students to learn to use technology to its fullest potential (not just entertainment), set acceptable-use guidelines, teach internet safety, and teach netiquette (technology etiquette). Some schools fail to teach internet safety because of their excellent filtering system, and the close supervision of students on computers. This creates problems when the child is using computers at home or in public where these safety features are not employed, since the child may not have an understanding of safety and what they could be exposed to on the internet (Wishart, 2005). This is why it is important that schools accept technology rather than reject it and teach students how to use it to better prepare them for the future.

Obviously, the benefit of social networking for teacher-student interaction has potential. Properly supervised and implemented, social networking can include students asking teachers for information about class work after school hours, and students may have the opportunity to learn more about their teachers making them seem more like people with interests and hobbies rather than permanent fixtures in the school building. High school academic clubs have even begun to use Facebook to create pages where students can “follow” the page to get the latest information on activities, meetings, and competitions. Adult communication with adolescents on a teenager communication channel has potential to immediately create a new set of concerns. For example, if there is a student with a provocative profile, it can hinder communication with teachers just because of the nature of the profile. School officials may be concerned that they would be accused of inappropriate conduct just because of what the teenager’s profile states.

How accountable do schools hold students for what is published on social networks? If a student athlete professes in a blog entry he or she was drunk at last

Friday's party, is he then suspended for the rest of the season? Do "No Tolerance" policies apply to social network sites? What if a student says that his French teacher tops his list of people he or she wishes to kill? Is that considered a threat and should the student be expelled? As the popularity of social networking sites continues, these are questions policy makers and schools will have to face. A senior at Edgewood High was expelled for stating on Facebook that he wanted to kill his teacher (Barlona, 2010), but at the same time the Onalaska School District is allowing a student to come back to school who threatened on Facebook to kill seven students (KIRO News, 2010). The community is in an uproar because they do not feel this student has been punished sufficiently.

Schools would be further ahead to use email communication with their students. According to research (Kaiser, 2002), it is the most common computer activity for teenagers. According to Mehta and Chalhoub (2006, p. 169), "Email increases the opportunities for information sharing. It is particularly useful for sending links to websites and forwarding electronic leaflets. When used as an adjunct to face-to-face consultations, it can be used to iron out any potential misunderstandings and reinforce the important points." Email can also be used to assign and monitor homework, providing documentation that can improve record-keeping. Not all schools and certainly not all teachers are utilizing email to its fullest potential. Schools probably need to start bridging the communication gap before moving to social networking sites that possess greater issues.

Cell Phones in the Classroom

Seventy-five percent of teenagers 12 – 17 years of age own a cell phone with 72 percent of teen’s texting (Lenhart, Ling, Campbell, & Purcell, 2010). One-third of teens text more than 100 times in a day with half of the teens sending at least 50 text messages a day. Sixty-five percent of teenagers with cell phones bring their cell phone to school even though cell phones were banned. Forty-three percent of teens stated their main reason for getting a cell phone was for texting purposes (Nielson, 2010). Between sexting, bullying, cheating, texting, health concerns, privacy issues and the general distraction cell phones create, it is no wonder schools have been so quick to ban them from their property (Deubel, 2009). Fifty-eight percent of teens owning cell phones admit they have sent a text message during a class where cell phones were banned from school (Lenhart, Ling, Campbell, & Purcell, 2010). Of the teens who take their cell phone to class, 43 percent stated they text at least once a day during class, (Lenhart, Ling, Campbell, & Purcell, 2010). Twenty-five percent have made or received a phone call during a class, (Lenhart, Ling, Campbell, & Purcell, 2010).

Cell phone ownership appears to cut across all demographic groups regardless of income. Forty-one percent of teens with a household income of \$30,000 or less use their cell phone to access the internet (Lenhart, Ling, Campbell, & Purcell, 2010). The higher the family income, the more teens use their cell phone to access the internet. Schools have tried to minimize the cell phone distraction by eliminating cell phones on school property (24%) or allowing cell phones at school but not in the classrooms (62%) (Lenhart, Ling, Campbell, & Purcell, 2010). This ban on cell phones or mobile devices stifles the innovative learning that could be taking place in the schools (Deubel, 2009).

As cell phone technology increases, so do the opportunities for cheating, but at the same time so do the academic uses. Cell phone have the capability to be calculators, digital cameras, an internet tool, hold notes or books, timers, and digital recorders (Eifler, 2010; Hall, 2007). In other words they have potential to become the academic “Swiss Army Knife” (Hall, 2007). Montgomery (2010) listed many potential uses for cell phones:

- Polling students using a web/text service
- Text assignments
- Upload assignments
- Digital photo assignments
- Calculators
- Video clips
- Photography documentation
- GPS
- Internet access
- Search engines/references
- Mp3 player
- Calendar function
- Timer/counter/alarms
- Text reminders

Besides being a mini computer in the hands of a student there is also the benefit that parents can keep in constant contact with their children whether there is an emergency or change in pick up plans after school (Shaw, 2011).

Communication Services

Technology is beginning to bridge a gap between schools and parents. Schools are beginning to realize that traditional methods of communication are no longer effective. Methods of communication should come in many forms and be accessible to parents on any socioeconomic status level. Parents already feel over-committed and stressed by their demanding schedules. This direct communication in the parent’s choice

of media can reduce the stress of the parent and possibly promote better communication between the parent and school.

One new method of communication is called a web-based communication system which got its start in 2004 (Walters, 2007). These systems can relay information using email, text messages, or phone calls with information such as school closures, emergency bulletins, and medical alerts. With the click of a button parents can receive information pertaining to their child's school and help to ease communication issues. Parents opt in for their preferred method of communication and can receive information faster than the process of contacting local media to relay a message on radio and television.

Notification systems are taking the process a step further by sending daily messages home from school about a child's performance, behavior, upcoming events, and homework assignments. Villano (2008) states old methods of calling trees, phone calls, newsletters, and copies of parental letters are time-consuming and unreliable. Messages can now be sent with a click of a button eliminating hours or even days worth of work. Teachers simply access a database and select the parent(s) that they wish to receive the message. For example, a notification can be sent out to parents about upcoming parent/teacher conferences, an individual message, or if their child has forgotten their daily homework assignment. The message systems are so advanced that they can even relay messages in different languages for school districts that have multi-lingual students.

Online grade books are another method that schools are using to help students and parents (Villano, 2008). Parents and students can log onto a website and gain access to attendance records, individual assignments, and current grades. This is a way for parents to monitor their child's progress and help them meet assignment deadlines. The online

grade book also allows for easy access to the teacher through email if there are any questions. Teachers may even link additional resources or electronic textbooks to web pages or the grade book system to further help students and parents. Of course these systems come with a price. Just because the school elects to use them does not mean that parents will automatically use the new form of communication.

Recently school districts have started using Facebook and Twitter to communicate with families (Melton, 2009). Schools can post or tweet anything from tomorrow's lunch menu to early release reminders. Facebook also encourages a dialogue and while schools may get negative feedback, it should be viewed as constructive criticism.

Teachers and Social Networking Sites

Technology is prevalent in today's society, and teenagers are welcoming it with open arms. It is the responsibility of the older generations to guide the youth through the media and technological world, not just by teaching the children about technology, but by teaching them morals and values that will protect them and help them to develop in a healthy environment. While adolescents may believe they are ready for adult responsibility, they are truly not ready to view all of the information the media can deliver. Under proper guidance, social networking sites can be beneficial in promoting adolescent development (Neal, 2007). These sites can help with communication, expression, identity, a social backboard, artistic expression, music exploration, literature, and friendships (Neal, 2007). This is especially true when what teenagers want is to be part of a group, to be included in activities, and to make and maintain friendships.

There are serious risks involved in the use of social networking sites. Parents and schools cannot assume that just because their child is in their home, that they are safe from sexual predators, bullying, violence, drugs, harassment, peer pressure, and pornography. Parents and school personnel who choose not to take the time to learn about these sites, educate their children, and set guidelines are putting their children at risk for potentially harming activities. Schools also need to rise to these same expectations to properly prepare children for society's expectations. Netiquette needs to become part of the curriculum in any class that uses technology. Teenagers need to understand how to use their media resources in a respectful way. Schools also need to rethink their technology policies, especially if their policy is to eliminate as much student technological use as possible. Schools should promote acceptable use and netiquette within the schools rather than declaring war on cell phones and iPods. Systems theory suggests that if everyone worked together they can help to promote an environment that encourages healthy development and reduces the risk of predators, bullying, and other internet dangers.

Research Questions

Technology is not a trend that will disappear. Schools are being challenged to decide how they will embrace technology while maintaining their social responsibility to keep their charges safe from harm. School personnel are beginning to find that they can no longer ignore the impact that outside technology has on their students. Thus, some researchable questions arise.

- How are schools handling the impact of technology (i.e., cell phones, texting, digital photography and video, digital music players, social networking, personal blogs) on the educational experience?
- In what ways are schools finding ways to utilize technology and use it as a way to better communicate with parents and students?
- What school policies have emerged and developed around technological issues?

As these questions addressed in this study a clearer picture will be developed of school policy. It is important to note that most technology policies seem reactive instead of proactive. In other words, the policy seems to develop in response to a problem that has already occurred. Examining how policy is anticipated to change will also be important in developing an understanding about some of the challenges technology have impacted the school environment.

CHAPTER III

METHODOLOGY

Using a self-report electronic survey, this study is an attempt to profile common school policies regarding some of the current technological trends. The purpose of this study was to identify the current trends of schools in handling technological issues such as education, usage, and discipline with both students and staff. The study will focus on whether or not the schools address technology issues outside of the classroom, such as social network sites, as well as personal electronic devices within the schools. The results of the survey will reveal the extent of schools' varying policies concerning technological issues related to today's technology and trends.

Sample

The sample of participants consisted of employees of school districts that are part of the North Central Ohio Computer Cooperative (NCOCC). The cooperative serves mostly schools in Richland, Crawford, Morrow, and Huron Counties. Anyone employed by a K-12 school district could respond to the survey. NCOCC services 19 public and private schools. Participants were invited to participate in the survey by an email invite that was sent to all employees in each of the school districts serviced by NCOCC. The district web addresses were obtained through NCOCC.

This sampling strategy included an array of school districts and schools within those districts, and includes teachers, administrators and other staff personnel (ie.

technology coordinators, secretaries, aids, etc.) who work within the district, which will provide a more complete statistical picture of technology uses in and out of the classroom.

Instrument

The instrument used here was a self-report questionnaire, a copy of which can be found in Appendix B. Most questions were multiple choice items with an option to add other information. The survey's web-based implementation marks the only methodological departure from a standard "pencil-and-paper" survey. By mounting the survey on a web-server, the project design capitalizes on ease of delivery, the potential for rapid data collection, and a lower level of obtrusiveness into the professional lives of educators. The survey was designed to take less than five minutes to complete. The online survey also allowed the researcher to cover wider geographic areas, as well as removing the need for travel time for its administration. Participation in the survey was by choice of the participant.

The survey contained 22 questions created by the researcher. Questions one, two, and three were demographic items, which were used for sample description. Question four determined the respondent's professional position in the school (e.g., teacher, counselor, administrator, etc.). Question five asked for an estimate of the number of computers in the school, and is a rough estimate of the degree of access to technology. Question six asked the degree to which the school/district encourages staff members to use technology to communicate with students and parents.

Questions seven and eight asked about online grade book availability and the expectation of parents to check and monitor grades. This is important to see if the school

is giving parents complete access to grades in order to promote the student's learning.

Question nine asked if the school was using a web-based notification system. This is still a new concept, but with the increase in texting as a form of communication, this could be a new trend in education. Question ten dealt with how the schools promote technology within the classroom, while question eleven asked if the school was prohibiting the use of personal technological gadgets.

Questions twelve, thirteen, fourteen, and fifteen asked about teaching internet safety. This is important because students put themselves at risk every time they go online or text. Related to safety issues, questions sixteen through nineteen addressed whether or not the school believed they have a responsibility to provide for the safety of their students outside of school, whether it is linked to the internet or cell phones.

The remaining questions dealt with school/district policy regarding technology. Question twenty asked whether or not teachers are encouraged to communicate with students using a social networking site. This is important because the data will help to identify if there is a trend in this policy or if it is still such a new concept that schools are still struggling with how to handle social networking sites. Question twenty-one was about policy and whether or not the school has not only instituted a policy about technology in the school but also outside of school. Question twenty-two addressed any potential policy changes that may take place in the next year. This is important because many schools may be considering changing how they deal with technology-related issues. After the project is completed, a link to summary results will be posted on the listserv from which the sample was drawn.

Data Collection Method

Data was collected using an email invitation containing instructions and a link to the web-based survey. A copy of the email invitation can be found in Appendix A. The invitation also asked participants to forward a copy of the survey invitation to any other school personnel who they believed would be able to provide reliable accounts of technology use within the school environment. Privacy issues were dealt with by noting on the invitation and the survey itself that (1) no identifying personal information or personal responses would be shared, making participation completely anonymous, and (2) that respondents were explicitly giving informed consent by clicking on the link and completing the questionnaire. The email addresses were derived from the North Central Ohio Computer Cooperative (NCOCC) that serves educators in public and private schools. The addresses were obtained and sent by user lists within each of the 19 districts. NCOCC serves educators of grade levels in a four county area in central Ohio. Anyone employed by a district serviced by NCOCC could respond.

Data Analysis

Responses were downloaded into a data file which was coded into different variables for analysis. A statistical analysis for each research question was created, where numerical responses were coded and were be accompanied by a narrative illustrating the array of responses. Questions also included a qualitative analysis of responses, such as the attitudes of the district towards technology and what future policies might evolve. Findings were summarized and are discussed in Chapter IV.

CHAPTER IV

FINDINGS

Demographic Information

One hundred thirty-two people participated in the survey. All were from the state of Ohio and came from 6 counties in North Central Ohio, with the largest concentration (40.4%) coming from Crawford County. Respondents came from school districts located in Richland, Ashland, Crawford, Knox, Huron, and Morrow Counties. In Figure 2 the counties and number of participants from each county are indicated (see Figure 2).

From Figure 3 below the sample breaks down as follows. Most (93.2%) of the respondents came from districts that had 3000 or less enrolled in their school, with 4.5 percent having 3001 to 6000 students, and each of the following three categories each had .8 percent: 6001 to 9000, 9001 to 12000, and 12001 to 15000. The rural classification had 70 percent while suburban had 13.1 percent and urban had 6.9 percent. The “other” classification had 9.9 percent with half of those stating they were in a small town or rural setting. Of the respondents, an overwhelming majority were teachers (75.4%), with the next closest category being technology coordinators with 9 percent. Figure 3 illustrates the different positions held by the participants within their school district.

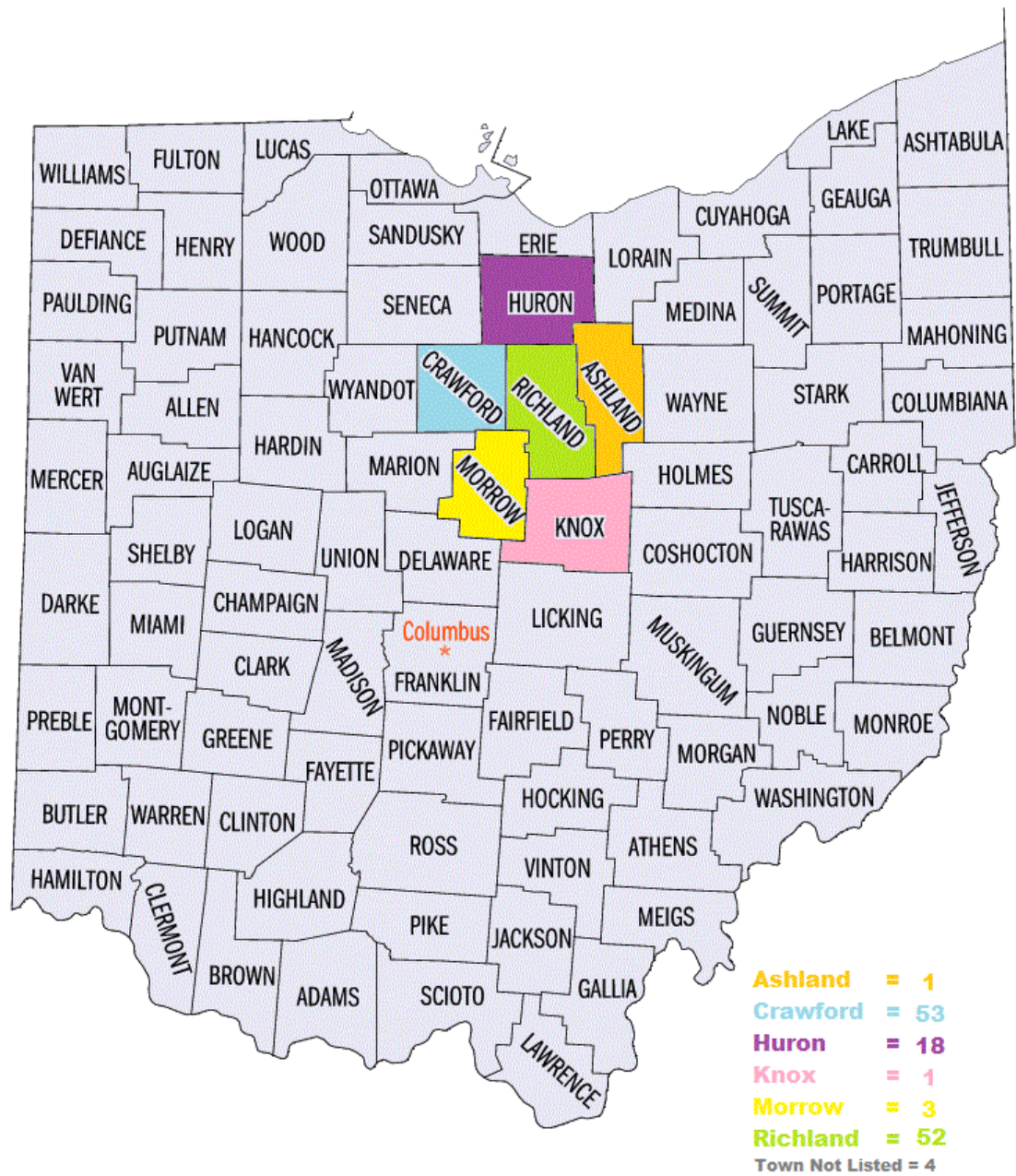


Figure 2 – Participants & Locations (n=132)

What is your position in the district?

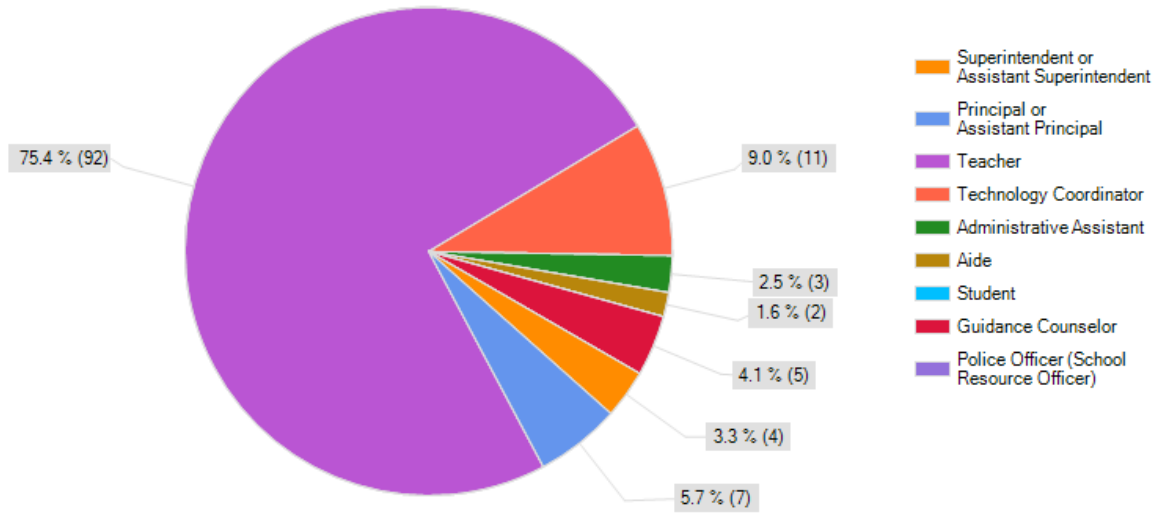


Figure 3 – Position in School District (n=122)

Impact of Technology

Many respondents (45.4 %) were unsure of how many computers their school district had. Just over twenty-two of the participants (22.7%) had 200 or fewer computers in their district, with 15.1 percent having 201 to 400 computers; 14.3 having 401 to 600 computers; 6 percent having 601 to 800 computers; and 2 percent having 801 or more computers.

Of the six technology areas listed on the survey, all applications were encouraged with basic software use having been encouraged the most (96.2%). This information is presented in Figure 4.

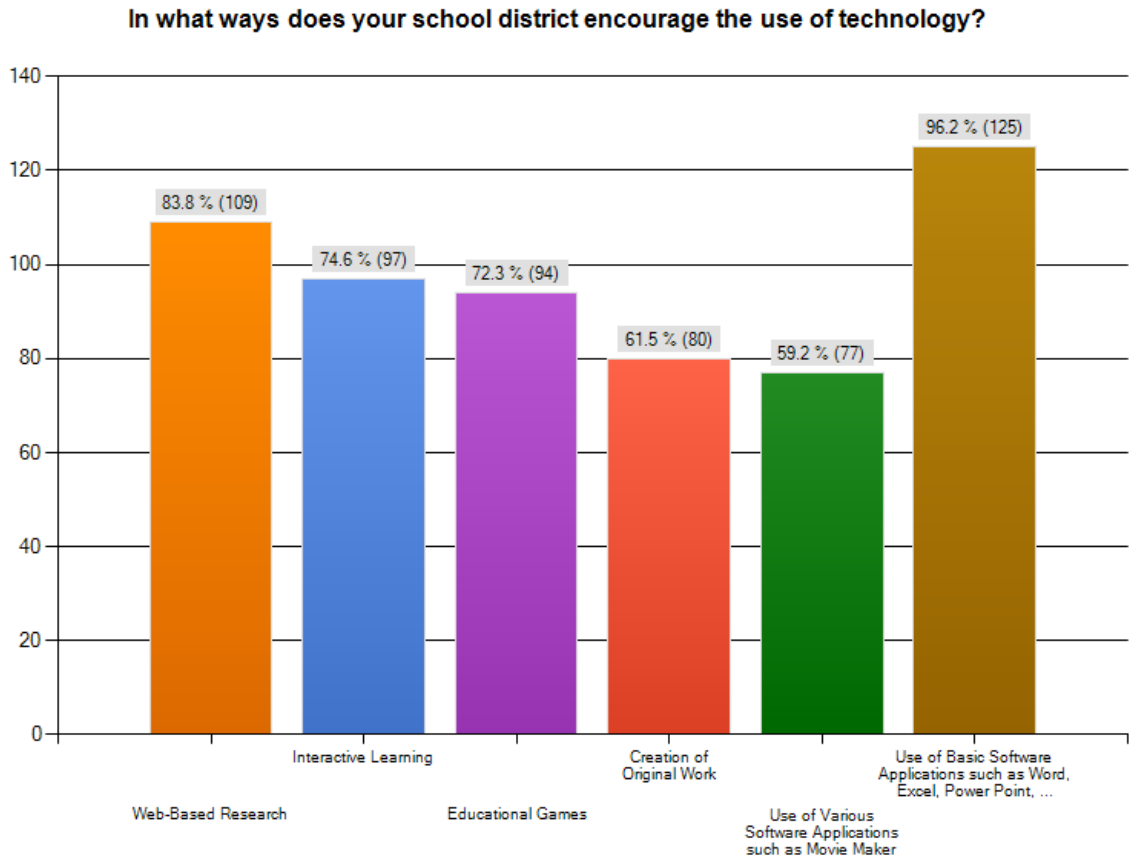


Figure 4 - Encouraged Use of Technology (n=130)

Most schools rely on the computer courses to teach internet safety to the students (65.6%), while 10.2 percent of the respondents said that their school does not teach any internet safety. The next highest area to teach internet safety was when it was done during assemblies or large group settings (26.6%). Figure 5 shows the breakdown of the areas where internet safety is taught in schools. Seven of the respondents stated that they did not know if or when internet safety was taught in their district. Two participants stated internet safety was covered by the library, and two more said by the guidance department. Two more participants noted that they were in the process of revising internet safety education for next year. There respondents noted that internet safety was

covered in the Acceptable-Use Policy and two more stated that it is covered in the elementary classrooms.

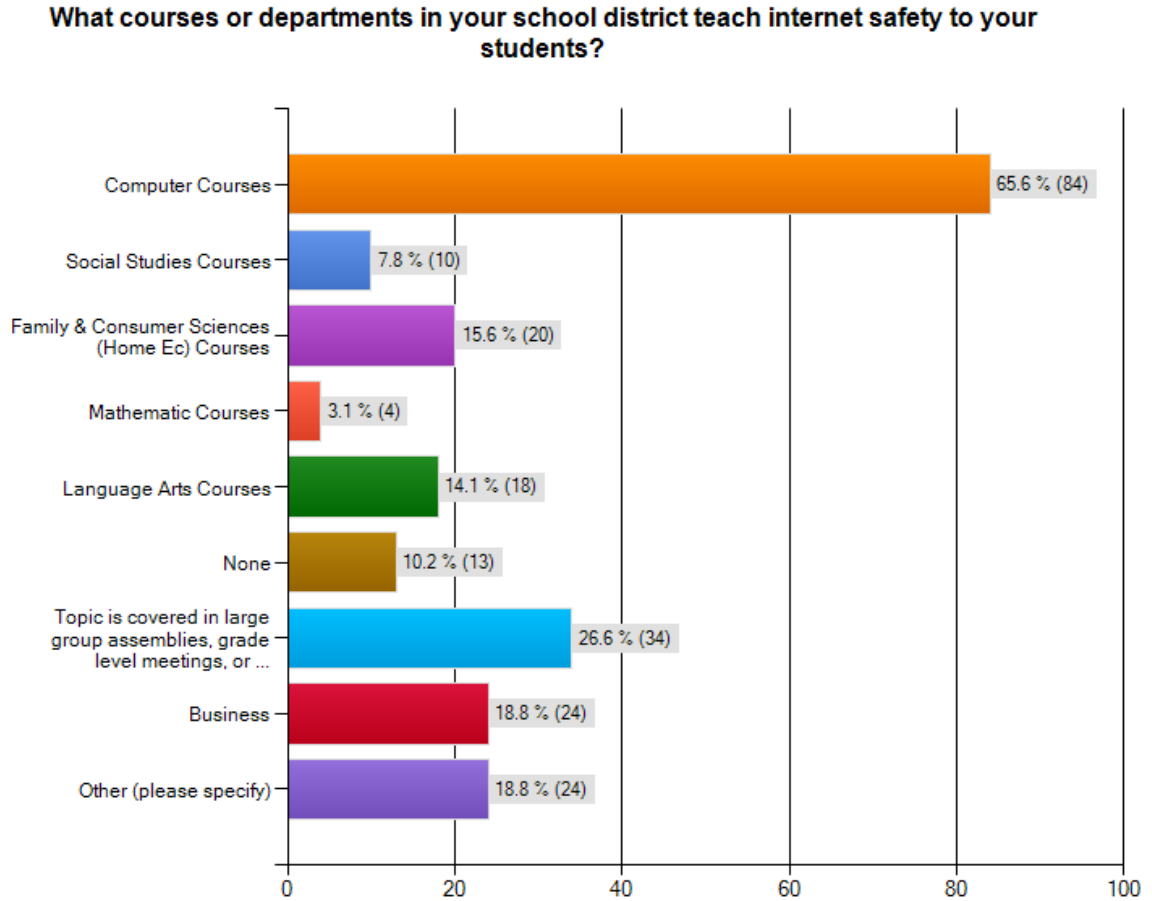


Figure 5 – Departments Teaching Internet Safety (n=128)

Internet safety lessons began in kindergarten for the students in their district according to 27.9 participants, with 26.1 percent stating they started in second through fifth grade. Sixth through eighth grade had the highest response with 30.6 percent of respondents stating these were the grade levels where internet safety lessons began, while 15.3 percent claimed they did not start until the ninth through twelfth grade. Almost sixteen (15.9) percent did not know when internet safety lessons began for the students of their district. Of the 132 participants 69.6 percent did not know what curriculum was

used if any to teach internet safety. Seventeen participants (12.8%) stated the curriculum was either teacher selected or teacher created. Nine percent stated it was part of the computer or technology class curriculum, while 2.2 percent said it was created or selected by the media/technology coordinator. Three percent listed specific curriculum which included iSafe, Cybersmart, and a video called Netiquette, while another three percent had guest speakers from the local police department, Helpline, or a representative from the state. Internet safety curriculum can cover a wide variety of topics. In Figure 6, participants stated if the areas of cell phones, mp3 players/iPods and email were covered as part of their internet safety (etiquette) curriculum.

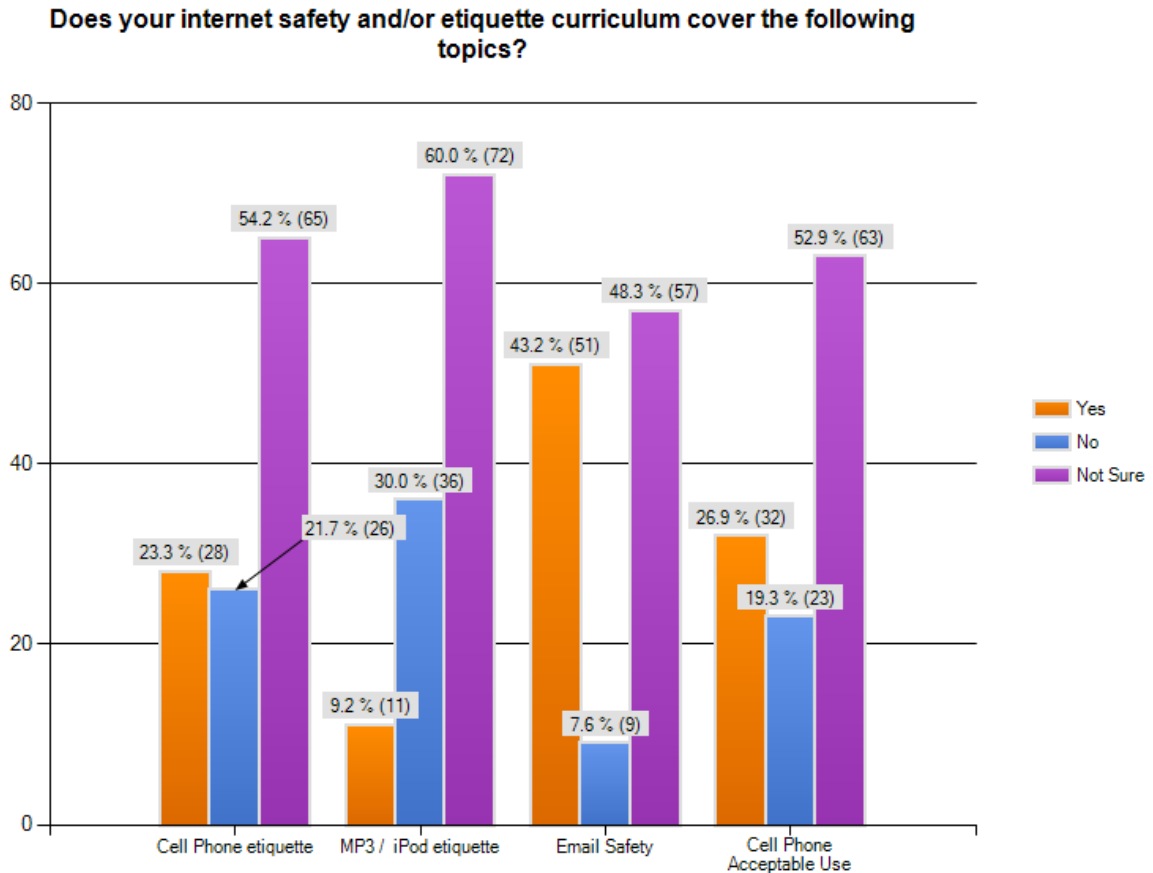


Figure 6 – Additional Topics Covered with Internet Safety (n=120)

Communication with Parents and Students

More than half of the teachers (54.2%) are encouraged to post assignments or homework to the online grading system while twenty-six percent are required to post assignments or homework. Just over one-third (36.7%) reported that they were encouraged or required to create and manage web pages, while 17.7 percent were encouraged or required to create online newsletters. More than half (55.7%) were encouraged or required to communicate with parents on a regular basis using email. More than half (57.3%) of the participants stated that texting students was either discouraged or not permitted. A majority of participants (58.8%) stated that blogs were

neither encouraged nor discouraged as a form of student learning or communication. Podcast also straddled the middle of the fence with 64.1 percent stating their district neither encouraged or discouraged their use for improved student learning.

All of the participants schools used a web-based grade book where students, teachers, and parents could access information at any time. Even with access to grades at any time, 91.7 percent of participants said their school still prints report cards, while 3 percent only provide report cards through the web-based grading system. Just over seventy- four percent (74.2%) said that their school district employs a web-based notification system that does notify parents through text, email, or phone calls when there is an emergency or closure. Another 3 percent are currently considering a notification system while 22.7 percent stated they currently do not use a web-based notification system.

Policy

Figure 7 shows what items students were permitted to use during the school day. Some of the personal electronic items currently have no policy governing their use on school property.

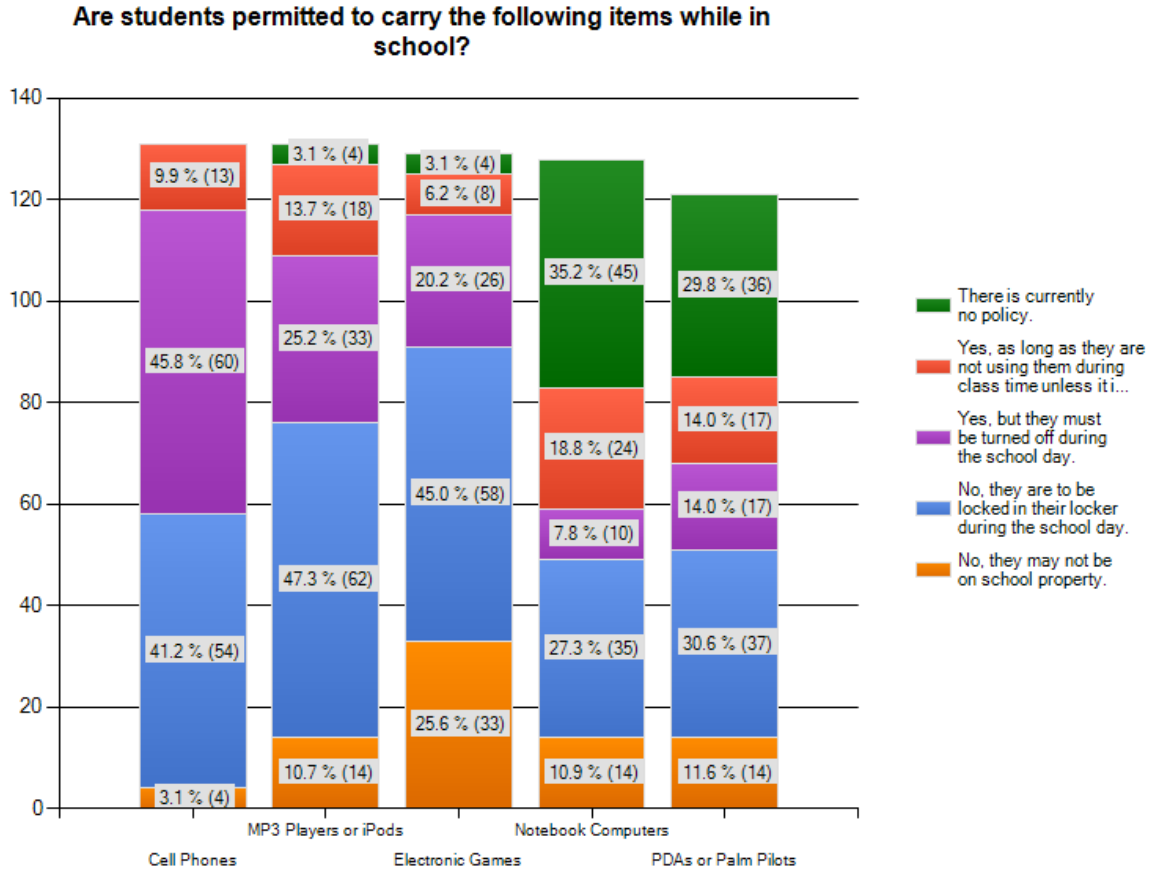


Figure 7 – School Policy on Personal Electronics (n=131)

When it comes to monitoring what kids are doing outside of school with technology the responsibility was split between technology coordinators and principals and assistant principals. Both groups had been selected by 23.5 percent of the participants. Third in monitoring the use of technology outside of school was parents (18.9%). Almost seventeen percent (16.6) said that no one is responsible for monitoring use outside of school, while 12.1 percent were not sure if anyone was supposed to monitor student- use outside of school. Two respondents (1.5%) even wondered if the school had the right to monitor what the students were doing after school. According to 9.6 percent of participants, teachers were responsible for monitoring internet use outside

of school and guidance counselors were named by 8.7 percent of participants. Also, superintendents or assistant superintendents were responsible according to seven percent of the participants. Three percent specifically named teams of people that included both administration and staff as being responsible for monitoring internet use outside of school while 2.2 percent said it was not looked at unless a problem arose that disrupted the learning process.

Twenty-eight percent of participants were unsure if a student has ever been punished in their district for something they posted on the internet while 41.6 percent stated that a student had been punished for something posted on a blog, a profile, a video web site, or elsewhere on the internet. An additional 7.5 percent stated that students had been punished for sexting, sending other inappropriate text messages, or hacking into a server. Only 25.6 percent stated a student had not been punished for something posted on the internet. Of the eleven harmful statements or activities specified in the survey that a student could post online, more than half of the districts would take disciplinary action in all but three scenarios: drinking, smoking, and slander. Most districts would have considered taking some kind of action in all scenarios as illustrated in Figure 8.

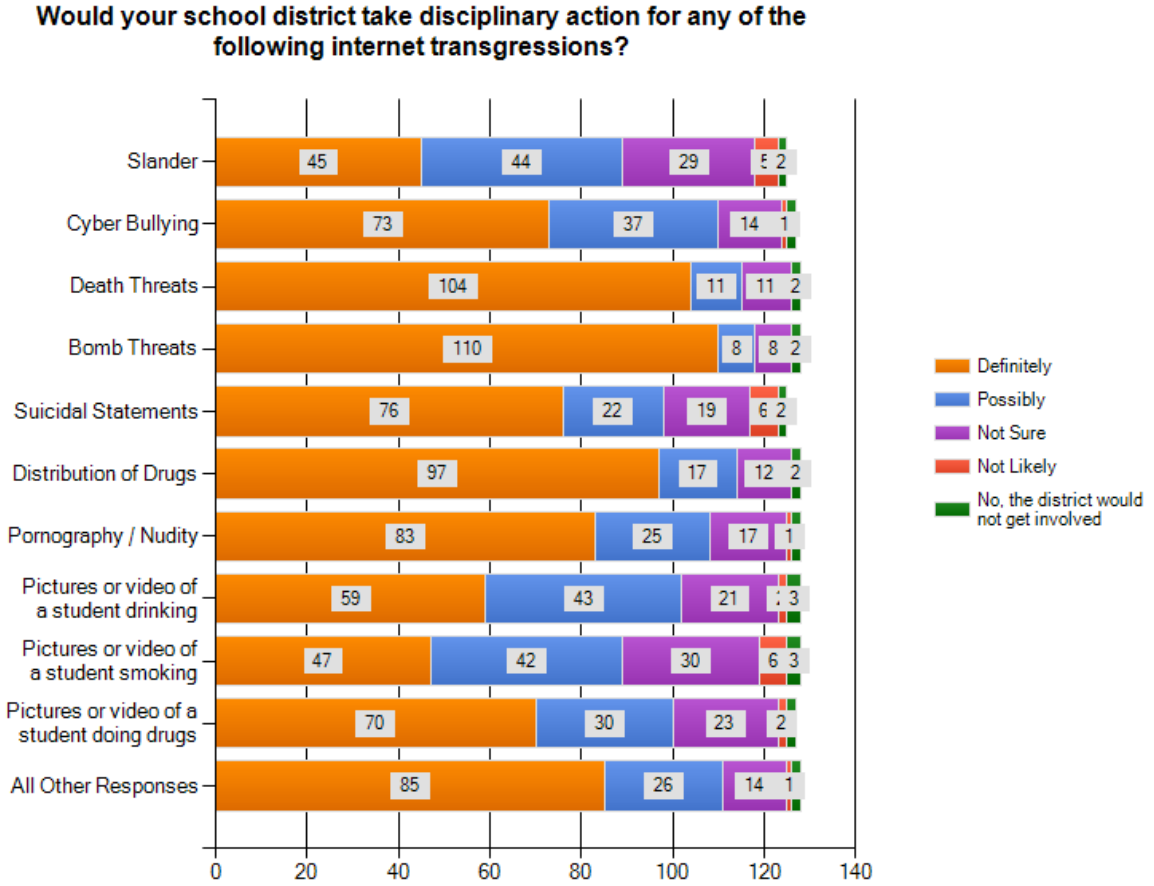


Figure 8 – Disciplinary Actions for Internet Transgressions (n=128)

Almost thirty-five (34.5) percent of the participants said that their district had required a student to remove something they had posted online, with an additional 3 percent stating that they involved the police or parents. Less than 1 percent responded that removal was strongly suggested but not required, while 20.8 percent stated their district had never required a student to remove anything they posted online with about forty (39.3) percent stating that they were not sure.

The majority of participants (65.9%) stated that they were discouraged from using social network sites to communicate with students, with 17.1 percent of the respondents stating that they might have received punitive punishment for interacting with students on

a social network site. Social networking as a way of communicating was slightly encouraged by the school district for 8.5 percent of the respondents with 27.9 percent being neither encouraged nor discouraged. Only 11.6 of the participants stated that the school had a clearly stated policy regarding technology use in and out of the school. The majority (75.1%) of participants stated that while their schools had a technology policy, it did not clearly cover use both in and out of the school. Just over ten (10.9) percent stated their school had no policy. Of the respondents 44.6 percent were anticipating a policy change within their district with regard to technology. Twenty-two percent of the respondents anticipating a change stated that cell phones would be addressed because they were expecting them to be used in the classroom as part of the educational experience. More common themes included social networking (12%), netbooks & iPads (8%), and bullying (6%). Table 1 shows a sampling of comments from the respondents as to how they foresee a policy change within the next 12 months. Of the 112 that responded, 35.7 percent did not anticipate a policy change in the next 12 months stating that their district just completed a new policy.

Table 1 – Policy Changes Within the Next 12 Months (n=50)

Comments on Policy Change	
1	more opportunities for student cell phone use in school
2	The use of cell phones is always changing and since the school has a facebook I expect a policy change
3	Policy change in according to regards to technology outside of the school
4	Administration is trying to push through a policy for teachers that is the same as the policy for students.
5	I believe the policy regarding use of phones, iPods, etc. will be modified to allow use for assignments, and possibly in other non-class situations.
6	update AUP to include social networking & Internet safety policies
7	contract year, full social networking policy coming about
8	Web based communication of school closings and delays has only been implemented this week. Started on January 23. Also, something addressing bullying outside of school is being heavily studied.
9	I could see our district adopting a stricter policy concerning internet and cell phone/texting outside of school and the consequences in school.
10	We need to address net books and create a policy for using them.
11	implementing AUP for social networking and the use of technology outside of the classroom
12	maybe a more specific policy on cyber bullying
13	more receptive to texting and cell phone ipads etc, this is new frontier and is looked at favorably
14	More usage of blogs and cell phones for learning
15	for cell phones
16	We seem to be moving toward a more progressive use of technology especially student owned devises.
17	looking to use ebooks; looking to use cell phones
18	yes social networking policy for staff is going to be put in place next school year
19	We are introducing many new forms of tech, such as ipads, ipods, cell phones in the classroom, and will be introducing email addresses for all High School students through live@edu so they will be able to access school projects anywhere with internet connection, so I anticipate that we will need to update the policy soon.
20	Yes, we are beginning to see a real need. Cyber-bullying is becoming more of an issue.
21	we have to do something about cell phones. We should allow them and teach proper etiquette.
22	cell phones- recent in-service promoted cell phone use and we will begin to pilot usage in class
23	to protect staff from litigation
24	we may be getting computers for individual distribution to students -- will need to extend current policies
25	The district has just developed a policy for social networks used by teachers

CHAPTER V

DISCUSSION

The survey results provide valuable insight to the current state of educational technology policy and the direction in which it is headed for small rural schools in North Central Ohio. At least three-fourths of respondents were teachers who were well-versed in what happens inside of their classroom and building, but were not always sure of information pertaining to the entire district. Several teachers were able to give information about how many computers were in their classroom or in their building but 45 percent of the participants were not able to state how many computers were available in their district. As schools and teachers create more technology-related assignments, the number of computers available for student use becomes an important consideration, especially if only 86 percent of teenagers have internet access at home (Lenhart, Purcell, Smith, & Zickuhr, 2010). With eighty percent of the teachers encouraged or required to post online assignments or homework, student accessibility to computers needs to be factored into the assignment.

However, the expectation of the teachers' use of technology does not stop with the posting of assignments. Teachers are expected to create web pages, post grades online and communicate with parents using email. All of the schools used a web-based system and most were sensitive to the needs of families without internet access by also printing report cards for students. School districts recognized parents' and students' needs to be connected to the school where more than three-quarters of the participants'

districts employed a web-based notification systems that provide up to date information on closures and other school announcements through a text, email, or a phone call.

Districts in North Central Ohio encourage the use of technology in many different forms whether involving software, research, creating original work, or interactive learning. The main source of educational experiences using technology involved computers, since the majority of schools had policies against students using cell phones, MP3 players or iPods, electronic games, notebook computers, or PDAs during the school day. All districts had policies against the use of cell phones during class time. This policy will be one that changes dramatically within the next 12 months since forty-five percent of participants were expecting a policy change and of that forty-five percent, twenty-two percent said that they were planning to use cell phones as a teaching tool. One participant stated that he or she “will begin to pilot (cell phone) usage in the class.” Another participant said that their school is planning to change the policy to allow for the use of electronic devices for assignments and non-class situations.

Surprisingly, more than 10 percent of the respondents stated that their schools did not teach any internet safety. While some schools rely on internet filter systems, no systems are fail proof. Even if using the system, students can still post blogs, participate in forums, and instant messaging in educationally-sound environments while still putting themselves at risk. The survey made it painfully clear that there is little consistency in teaching internet safety. Based on the “other” comments, many respondents were not sure when internet safety began and who was teaching it. Several stated that they felt it was the parents’ job to teach their children about being safe on the internet. More than sixty percent of participants thought their district started internet safety lessons in

elementary school somewhere between kindergarten and fifth grade, but almost seventy percent had no idea what curriculum was being used to teach their students to be safe. Several comments included information stating the teachers were responsible for putting together their own curriculum and finding their own resources. Since there could be many variations in the curriculum being taught, it might be beneficial to assess the students' understanding of internet safety district-wide. Many were unsure if the internet safety curriculum included additional topics such as email safety, acceptable cell phone use, and cell phone and MP3 etiquette. With the increase in sexting, maybe schools will begin to address acceptable usage of cell phones.

The respondents reported varying information when answering questions about social networking sites and who should be monitoring their use. The top four responses for monitoring included technology coordinators, principals, and no one. With all of the media attention on bullying, schools cannot afford to turn a blind eye to the sites where bullying has occurred. The survey showed that schools do see a need to take action with more than 40 percent of participants stating that their district had punished a student for something the student posted online. An additional 8 percent had been punished for sexting or other inappropriate messages. Students have also been asked to remove something they posted online that the school deemed inappropriate. What makes this a concern is that only 12 percent of the participants said their school had a clearly-stated Acceptable-Use Policy for technology use inside and outside of the school. Students need to better understand the risks and the potential punitive punishments for their actions on a public website. The majority of schools would possibly take some type of disciplinary action for the following infractions posted on an internet site (in order of

highest number of responses to lowest) death threats, distribution of drugs, cyber bullying, bomb threats, pornography/nudity, pictures/video of a student drinking, pictures/video of a student assaulting another student, pictures/video of a student doing drugs, slander, suicidal statements, and pictures/video of a student smoking. It is apparent schools see the need to protect the students and hold high expectations for them in and outside of the classroom in order to positively affect their future. Schools in this area did not believe that their teachers should be using these social network sites to communicate with their students and could result in the teacher being punished. The lack of control of students and teachers in this virtual environment concerns schools.

Schools are looking to better meet the needs of their students and the use of technology is one way to better prepare students and facilitate their learning. School personnel absolutely recognized the need for change when addressing their technology policies. Policies regarding the ever-changing technology need to be adapted to the latest trends to promote education and protect the students. More than a third of the participants stated they had just had a policy change and another forty-five percent were anticipating one within the next twelve months. One participant stated, “We seem to be moving towards a more progressive use of technology especially student-owned devices.” Other similar comments included allowing use of student-owned iPads, iPods, cell phones, laptops, and ebooks during the school day. The education system may be taking a turn towards using more student-owned devices rather than providing a few classroom computers for student use. This could be a way to potentially cut costs and still meet the needs of the students.

Response to the Research Questions

Schools have varying responses to how they are handling the impact of technology. They are promoting the use of web-based research, interactive learning, educational games, the creation of original work, and basic software applications. School personnel struggled to identify internet safety curriculum and the topics covered in teaching safety and etiquette when using technology. Schools have used technology to better communicate with parents and students. Using a variety of internet sources schools have tried to provide information in various formats to ensure that parents and students are information in a timely manner. Policy did not always match the actions taken by schools and schools sometimes had to respond to situations where no policy was in place. School technology policies appear to be continually evolving with many schools recently changing policy or planning to change policy within the next twelve months.

Additional Research Suggestions

The same study could be expanded to include a larger sample either in the state of Ohio or throughout the United States. This information could give a more accurate picture of current policy trends within the schools. The study could also be narrowed to focus on just one piece of technology and its implementation within the school. For example the study could focus on cell phones and the ways schools or teachers might be using them in their classrooms. Since policy seemed to have such a varying response when it came to social networking sites it could be advantageous to examine what new school policies are being created for students and staff. Another subject worth research

might be the use of course management systems (similar to educational social networking site) that are becoming more main stream such as Moodle and Blackboard. Instead of researching the policies that are currently being implemented the research could dig deeper and assess the effectiveness of each of the policies.

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APPENDICES

APPENDIX A
EMAIL ANNOUNCEMENT

Hello,

My name is Jennifer Klaus and I am a graduate student at the University of Akron. I am looking for anyone who works with in a school district to answer a survey about technology use in their school. The survey has 22 questions and should take less than 5 minutes to answer. All individual results will remain anonymous. In addition to your participation, if you know of any other school employees, in or out of your district, that are knowledgeable about technology use in schools, I am asking that you forward this email to them as well.

The link below will take you directly to the survey. By clicking on the link you are giving your informed consent to participate.

<https://www.surveymonkey.com/s/5WZBTK8>

Thank you for your participation.

By completing my anonymous questionnaire, you are helping me to complete my graduate work. I will not be receiving any other benefit from your participation. Upon completion of my study, I will be placing a summary of my findings online and will provide the web address to you via this list serve.

Jennifer Klaus, CFCS

APPENDIX B
QUESTIONNAIRE

1. Default Section

Thank you for participating in this survey on schools and technology for The University of Akron. All results will remain anonymous. Please have multiple people from your district complete the survey. There are 22 questions which will take you about 5 minutes. Thank you in advance for your time.

1. Where is your school district located?

City/Town:

State:

2. Approximately how many students attend school in your district?

- Under 3,000
- 3,001 to 6,000
- 6,001 to 9,000
- 9,001 to 12,000
- 12,001 to 15,000
- 15,001 or more

3. Is your district...

- Rural
- Suburban
- Urban
- Other (please specify)

4. What is your position in the district?

- Administrative Assistant
- Aide
- Guidance Counselor
- Police Officer (School Resource Officer)
- Principal or Assistant Principal
- Student
- Superintendent or Assistant Superintendent
- Teacher
- Technology Coordinator

Other (please specify)

5. Approximately how many computers do you have in your district for student use?

6. Are teachers, coaches, and/or staff members encouraged to

	Required	Encouraged	Neither Encouraged or Discouraged	Discouraged	Not Permitted
Post assignment descriptions or homework on the web-based grading system?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create and manage web pages?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Send email communications to parents on a regular basis?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create on-line newsletters?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use texting as a way to communicate with students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use blogs for student learning or communication?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use Podcasts to improve student learning?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Does the school district use a web-based grading program (on-line grade book) that teachers, parents, and students can access on-line at any time?

- Yes
 No

8. Does your school print report cards or are parents expected to monitor their child's progress on-line?

- Yes, we print report cards for all grades.
 We print report cards for some grade levels but not all grade levels.
 No, we do not print report cards.

9. Does the school district use a web-based notification system that will text, call, or email information such as school closures or emergency information to parents?

- Yes
 No
 We are currently considering it.

10. In what ways does your school district encourage the use of technology?

- Web-Based Research
- Interactive Learning
- Educational Games
- Creation of Original Work
- Use of Various Software Applications such as Movie Maker
- Use of Basic Software Applications such as Word, Excel, Power Point, Paint

11. Are students permitted to carry the following items while in school?

	No, they may not be on school property.	No, they are to be locked in their locker during the school day.	Yes, but they must be turned off during the school day.	Yes, as long as they are not using them during class time unless it is for a class assignment.	There is currently no policy.
Cell Phones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MP3 Players or iPods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronic Games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Notebook Computers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PDA's or Palm Pilots	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

12. What courses or departments in your school district teach internet safety to your students?

- Business
- Computer Courses
- Family & Consumer Sciences (Home Ec) Courses
- Language Arts Courses
- Mathematic Courses
- None
- Social Studies Courses
- Topic is covered in large group assemblies, grade level meetings, or some other type of student gathering.
- Other (please specify)

13. At what grade level does your district begin to teach internet safety and technological etiquette?

- K-2
- 2-5
- 6-8
- 9-12

14. What curriculum is used to teach internet safety and/or etiquette?

15. Does your internet safety and/or etiquette curriculum cover the following topics?

	Yes	No	Not Sure	
Cell Phone etiquette	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MP3 / iPod etiquette	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email Safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cell Phone Acceptable Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Who is in responsible for monitoring student internet use outside of school such as youtube, blogs, facebook, etc.?

- Guidance counselors
- Principals or Assistant Principals
- Superintendent or Assistant superintendent
- Teachers
- Technology coordinator
- Other (please specify)

17. Has your school ever punished a student for something they posted on a blog, a profile, a video web site, or anywhere else on the internet?

- Yes
- No
- Other (please specify)

18. Would your school district take disciplinary action for any of the following internet transgressions?

	Definitely	Possibly	Not Sure	Not Likely	No, the district would not get involved
Bomb Threats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cyber Bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Death Threats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distribution of Drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pictures or video of a student assaulting another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pictures or video of a student doing drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pictures or video of a student drinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pictures or video of a student smoking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pornography / Nudity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Slander	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suicidal Statements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Has your school ever required a student to remove something they have posted to the internet such as a blog, a comment, a web page, a video, etc.?

Yes

No

Other (please specify)

20. Are teachers and staff encouraged to use social networking sites such as facebook to communicate with students?

Completely Discouraged (Possible Punitive Punishment)

Just Discouraged

Neither Encouraged or Discouraged

Slightly Encouraged

Highly Encouraged (Particularly at the High School Level)

21. Does your school have clearly stated policy for students and teachers regarding technology and its use inside and outside of school?

- Yes, there is a policy but it does not clearly state anything about computer use outside of school.
- Yes, the policy states use in and out of school.
- No Policy
- Other (please specify)

22. Do you foresee a policy change for the district within the next 12 months addressing any of the issues in the survey? Please explain your answer.

Yes

No

Other

A copy of the research results will be provided through the original listserv. Again all participants' responses will remain anonymous.