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Optional No Longer

The Need for Effective
School Technology Policies

Critical Chapter Questions

- What is the purpose for school technology policies?
- What do students, staff, and parents expect from school technology?
- Why are policies necessary for technology use?

Chapter Focus: *Define the value of school technology policies and procedures and the importance of policies for instruction.*

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Jacob has been an elementary school teacher for 15 years and works in a school between an affluent community and a farm community. The changes that have entered the classroom, as well as those that have left the classroom, have usually been positive, and Jacob looks at new "education fads" as opportunities to add one or two new ideas to his solid, and effective, teaching style. One of the more positive changes in his classroom in the last few years has been an influx of computers and educational software into the school. In fact, more and more professional learning opportunities are focused on specific tools for teaching and

skill reinforcement, and Jacob has enjoyed working with other teachers to create lessons for his classroom. From conversations with other teachers in his district, Jacob knows that his school is about average, with several computer labs in addition to classroom computers, and many of the schools are using the same teaching and learning software. Jacob is keenly aware of the students' expectations to have more computer access and wonders how the middle and high schools are keeping up with the students' technology needs each year.

How is a computer used in a classroom? It's easy to imagine students and teachers sitting at computers and using them to read or send e-mails, type documents, and complete instructional assignments with specialized programs. It's a little more difficult to imagine a teacher or student using a classroom computer to purchase stocks and bonds during class time instead of teaching and learning, post locker-room pictures of students on a Web page, or capture standardized test items to gain "an edge" before a big test. Unfortunately, all of those situations are real—both students and teachers have done all of those things with the technology provided by schools or school districts like yours and mine.

WHY SCHOOL TECHNOLOGY POLICIES ARE ESSENTIAL

Consider a recent court case reported in *USA Today:* A middle school locker room was under camera surveillance. The cameras were noticed by a visiting sports team at a multischool event. During the investigation, it was found that the images of students undressing were even available through the Internet for remote surveillance (Associated Press News, 2007). Since an agent of the school was responsible for installing the cameras as part of a security initiative, the Overton School Board was charged as guilty of civil negligence and had to pay the affected students a settlement. While this may seem like an isolated incident, other school districts have worked to remove cameras from inappropriate locations and have written policies to prevent such events from happening at their schools.

School technology policies and procedures are the guidelines for appropriate technology use in the school environment. Policies shape the day-to-day use of school technology, define boundaries around student and staff member behaviors, and clarify technology use issues and concerns for parents and community members. Designed and implemented properly, policies become living documents that can weave a community around the infusion of technology into schools and school districts as well as protect students and the school. For clarity, let's define the terms *policy* and *procedure* as well as consider what might fall into the category of *local* school policies and procedures.

Policy

Policies are usually short, single-topic documents to establish the school board position on a specific topic of education. A policy is passed by the school board and usually reviewed by the board's legal counsel. As a public document, a policy is openly available, and many school districts post their official and approved policies on districts' Web pages. Many policies include standard statements as quasi-governmental agencies, such as nondiscrimination statements or organizational documents. In some cases, specific policy areas are required by the state or federal departments of education to align schools with state or national standards.

Procedure

A procedure is a document that is subordinate to a policy and is usually an internal or working document within the school district. Procedures are usually developed within a school district to address day-to-day operations as well as clarify policy statements. As a result, many procedures are multiple pages long and include very specific details about school district operations. Many school boards review procedures along with policies, but a board review is not always required. For example, a school district may have a policy that states the board's support of classroom technology and a student information system. The procedure or procedures related to the policy would cover many more details, such as password use, student data privacy, and electronic mail management. Like policies, some procedures are required by state or federal departments of education. An example would be a procedure that reflects state requirements and defines the types of scholastic data that are reported periodically to the state department of education.

Local School Policies and Procedures

Local control of schools enables each school to make additional policies and procedures to address the way teaching and learning is accomplished at the school. Discipline policies, dress codes, specific traffic flow procedures, and other "business" tasks are implemented at the school and sometimes codified. These local school procedures often include the use of technology, including cell phone use, computer lab scheduling, and media center technology availability.

The policies and procedures described above are all part of the scope of this text. For the purposes of this book, the term *policies* will be used to indicate policies along with associated procedures. There are some instances throughout the text that will treat policies and procedures separately, and in those cases care is given to differentiate between the

two. Generally, school districts can develop their own definitions of policies and procedures, so consult with your local district to determine the appropriate vocabulary around these types of documents.

School technology policies establish the groundwork for implementing technology solutions in the classroom, at the school administration level, and at the school district level. It is important to identify and publicize technology policies and procedures to clarify the intended use of flexible technology devices, such as phones with cameras, MP3 players with recorders, cameras with Internet-connection capability, and phones with Internet browsers. While it may be easy to discuss the use of technology in the classroom, the expected learning impact for the students, and the benefits of standardized electronic data collection and reporting, the reality is that a computer or other technology device can accomplish so many different tasks, and without clear guidelines that are properly communicated, the potential for misuse of classroom technology is great. Each person using a district-owned computer, camera, personal digital assistant (PDA), or specialized device should understand the appropriate use of that device in the school environment and off campus.

For example, imagine a student who is using a district-owned camera for a yearbook assignment to take several candid school shots around the school gymnasium. With the digital camera provided by her teacher, the student chooses to take three pictures of a classmate in the locker room. Since the camera is so small, nobody notices her actions, and the student leaves the locker room to go to her language arts class. In class, the student asks to use the classroom computer during an independent writing assignment, and she uploads the pictures onto the social networking Web site facebook.com.

In this example, several school technology components were used to accomplish a task that is forbidden in most acceptable use policies (AUPs). Even though it sounds like an open-and-shut case where the student did something wrong, the legal perspective may not be so clear. Additionally, these kinds of technology uses are becoming more and more common, and the devices allow these types of inappropriate activities are also becoming more common. Therefore, developing, implementing, and communicating technology policies and procedures that have real impacts on students' and staff members' behavior and safety are becoming more important. Unfortunately, many school districts and schools have been slow to implement such policies and procedures. Paul McNamara (2006) writes in *Network World* that "despite daily headlines demonstrating the potential risks—as well as growing parental concern—most school districts still have no policy governing in-school or after-hours use of social networking sites such as MySpace."

Student Safety

Protecting students is, at best, a difficult job. Schools and districts that place student protection—whether physically, emotionally, or socially—at

the top of their priority lists certainly have a challenge ahead of them. Schools and districts that protect students have often enlisted the wide range of school stakeholders, including parents, staff members, community members, and the students themselves.

The same groups of stakeholders need to be present in the development of technology policies, too. With the growth of the Internet and social networking sites, however, students are at increased risk in every area of their lives. In the article, "Teen's Vault to Internet Fame—Cautionary Tale," reported first in the *Washington Post* and again in *eSchool News,* an 18-year-old pole-vaulter was the victim of just such a risk. Allison Stokke had her picture taken by a track-and-field journalist, and her picture was copied from the journalist's report. Faster than you might think possible, Allison's picture was e-mailed, used as part of "lewd blog discussions, thousands of MySpace messages, a YouTube video, a fake Facebook profile, and an unofficial fan Web site" (Stansbury, 2007).

The lines between school responsibilities and parent responsibilities for student safety are also much more blurred than in the past as students receive more and more access to classroom computers along with personal resources. If a student takes a picture using their cell phone's built-in camera during an after-school event and then posts it without permission to the district's online forum and discussion board, it's not clear who violated the privacy rights of the person in the photograph. Furthermore, some school-related support organizations, often known as booster clubs, feel that they are outside the guidelines of the school AUPs and procedures. Pictures, notes with personal information, and defamatory comments are sometimes posted to these organizations' Web sites, so helping extracurricular organizations understand policies and procedures is extremely important.

Effective Instruction Through Technology

Designing technology policies and procedures that support the right activities relies on solid communication of what policies and procedures are already in place. If your school or district has not developed such policies, do not be worried—developing and redeveloping policies and procedures are similar processes. Most school or district administrators can articulate the expectations for appropriate uses of school or district technology, but without clear communication to staff members, parents, and students, misunderstanding will almost always occur. For example, students might believe that it is their right to access to their personal e-mail accounts on district computers. Teachers may feel that using their district-provided computer access to purchase personal items online is appropriate. The reality is somewhat different: Technology is provided in schools for the purposes of instruction or administrative tasks.

How can technology be used in schools then? As quasi-governmental organizations, public schools and school districts must adhere to the guidelines for use of public funds, such as those for technology. A public

school board usually governs public schools and school districts, and a common practice—if not required by law—is to make financial disclosures to the public at various times throughout the school year. As a result, the public has input into the technology funding process to support instructional goals. Private schools may have more flexibility when spending funds, but their supporting parents and student communities often have different controls on the administrative spending patterns.

Policies and procedures also come into play when purchasing new technology for schools. For example, another aspect of policies and procedures in the support of instructional technology use are around the concept of purchasing and standardization of the school or district's technology environment. Instructional technology policies should also involve partnerships among vendors to meet administrative and instructional needs, because the vendors can provide insight on how to implement their technology within specific standards. Technology, usually an expensive addition to the school building, only has a limited shelf life and becomes obsolete within a few years. School technology policies can define the terms of vendor agreements, support structures, and purchasing or leasing cycles to meet the school or district's needs. Policy statements also govern items that are purchased using a bidding practice or public request for proposals. Putting specific items or requirements on bid lists to encourage vendors to address technology requirements also allows the district to standardize its overall purchasing strategy and the types of equipment that will require ongoing support.

As parents, teachers, community members, and students turn to school or district Web sites to find teaching and learning resources, policies and procedures can shape the content that is placed on school Web sites. Web development policies can clarify questions about a range of topics, including student work samples, photographs, and links to nonschool-owned Web sites. Without a clear policy or procedure in place, schools or districts can represent themselves poorly with their presence on the Web, betray student or staff confidentiality, and violate federal privacy laws or other information-privacy laws. School Web sites are also a point of exposure for providing the community with examples for complaining about the school board if content is managed carefully. As a result, Web policies often include a simple style guide, branding information, and even verbiage for specific schools' Web sites (Tiemann, 2007; Miller et al., 2005).

Amy Tiemann (2007) in the CNET news article "Is Your School's Web Site Revealing Too Much?" describes the importance of developing two-tiered Web sites that provide public information without restriction as well as a password-protected component for employees accessing information or students completing assignments. Each school and district must decide what is publicly available to parents and community members, and student confidentiality is essential. However, without some oversight and clear policy-driven guidelines, even the most harmless of photos and student information can become a source of enhanced photos and twisted news articles.

Finally, to maximize the opportunities for effective instruction through the use of technology, instructional technology policies and procedures should support nontraditional education, such as online programs for homebound or online students, educational kiosks, and self-service Web sites provided by the school or school district. As more and more schools use online and technological methods to reach students in locations other than the classroom, clear guidelines and parameters for using school or district resources should be identified. Teaching and learning resources on the school or district Web site can be valuable instructional supplements, but without clear definitions of Web use, regardless of the accessing computer or location, such tools can become discussion boards for bullying, complaining about school administrators and staff, and other noninstructional activities. In an article, "Schools Adapt to Digital Age" in the *Cincinnati.com* newspaper, the need for technology policy structure and understanding is described as an essential component of a successful school district (Kennedy, 2007). After all, the article notes, students are forced to move into a regulated technology environment as part of their work careers. Reporting from Kenton County, Kentucky, policies were changed to allow students and teachers bring their own laptops to school. Instructional technology, regardless of the owner, was deemed important enough to write specific policies to accommodate student needs (Kennedy, 2007).

Connecting to Learning Objectives

Regardless of the vision and mission of the school or district, school technology policies must adapt to the changing face of education and the uses of technology in the teaching and learning process. Policies and procedures should be flexible, not flat and autocratic. Otherwise, in an instructional setting, technology policies can become out of date as quickly as the computer equipment in the district's classrooms. Additionally, the policies and procedures surrounding school technology must account for innovation within the classroom. One of the best ways to prepare policies for innovative teaching and learning, for example, is to include a clause that defines approval committees or review processes for new technology. Routine approval of instructional technology by a local school or district-level review team would lend a level of credibility to new classroom resources as well as prevent redundancy in those technologies already purchased for student or teacher use. While a process like this may appear to slow down the adoption of new technology, a regular review cycle would help expedite the review activities.

Whether the district is more restrictive or more lenient in its approach to technology standardization of classroom equipment, school technology policies should address some fundamental questions and philosophical points:

- What is the school board or school district's position on classroom technology?

- What instructional purposes will be served through the use of technology?
- Is technology and instruction by technology considered essential to the learning process or a supplement to other classroom activities?
- How are students and staff members protected from inappropriate uses of school technology?
- What group within the school district is responsible for managing school technology?
- What are the consequences for inappropriate use of school technology?

Once these points are established, a school district has a solid beginning on or foundation for further technology policies and procedures. As noted before, a major challenge of developing any policies or procedures is that such documents do not always have a long shelf life and become outdated almost as soon as they are written. An annual review of all technology policies and procedures is recommended to keep technology policies and procedures up to date and make sure that they address current "hot" topics around technology in the schools or the district.

LEGAL POLICY REQUIREMENTS

In addition to crafting flexible policies, school districts and administrators need to be aware of the laws that pertain to the policies that they're creating. Most states require school districts to make their board-approved policies publicly available, and many school districts also publish their procedures. Unlike policies that cover financial activities, grounds maintenance, and human resource activities, technology policies have been coming under close public watch as classroom technology news articles, publicly available grants, and conference topics spotlight the power of technology in the classroom. Technology policies may require additional review by school communities and may also be reported to the state or federal education departments.

The Children's Internet Protection Act

As a federal law enacted in December 2000 (Public Law 106–554), the Children's Internet Protection Act (CIPA) is a law designed to encourage school districts to use filtering software, hardware, or other measures throughout school districts. The law also applies to public libraries; CIPA is a requirement for entities receiving federal funds that support Internet access. School districts must have a CIPA-based policy in place to receive telecommunications services discounts, commonly referred to as the E-rate program. There are three components to the legislation, and each of these three components may already be part of your district's policy and procedure documentation, but each of these items must be revisited each year

that E-rate funds are requested. Whether schools or districts choose to apply for E-rate funds or not, the U.S. Congress has defined the guidelines around *appropriate use* for almost all public schools that are consistent with CIPA. The CIPA legislation states that schools and libraries must have

- A technology protection measure, which will filter out offensive or inappropriate materials from Internet users;
- An Internet safety policy, which includes provisions to restrict inappropriate use of Internet and technology resources; and
- A public hearing to adopt the technology protection measure and Internet safety policy.

More than that, though, the CIPA legislation was a groundbreaking move to provide local answers to a growing public problem. Regardless of the philosophical discussions about specific items to be filtered, schools and districts could no longer ignore the need to keep students away from inappropriate Web sites. In most locales, the local and state definitions of obscenity, pornography, and harmful content have been reviewed, updated, and revised to ensure that they comply with the public concept of appropriate.

As a result, schools are required to demonstrate their CIPA compliance on a regular, usually annual, basis to maintain their federal funding. Since the E-rate program is managed through the Federal Communications Commission (FCC), the FCC Web site is a good place to learn more about CIPA (see http://www.fcc.gov/cgb/consumerfacts/cipa.html).

Challenged by the American Library Association as unconstitutional, the CIPA legislation was upheld by the Supreme Court, that maintained the legislation is both constitutional and necessary (search for "United States et al. versus American Library Association, Inc. et al." for more information). Rebuffing their position that restricting information from Internet users is an infringement of free speech, the American Library Association was reminded that filtering could be turned off for legitimate research purposes.

As a result of this particular case, the CIPA regulations have become more prominently upheld in schools and school districts. Therefore, school districts must continue to develop policies and procedures to address the CIPA requirements.

The Family Educational Rights and Privacy Act

To protect the privacy of students and their families, the Family Educational Rights and Privacy Act (FERPA) was signed into law by President Ford in 1974. Like CIPA, the FERPA regulations must be met before federal funds are given to agencies, including school districts. Since its enactment, FERPA has been amended several times to maintain relevance to public interests.

FERPA is designed to prevent unauthorized sharing of student data only with parental consent or with the consent of students 18 or older. This protection extends to individual student information being published on the Internet or in other formats. Parents have the right to waive the confidentiality provided by FERPA, and many school districts have "release" documents to allow individual student information to be published, such as highlighting student achievers on Web pages or in newsletters (U.S. Department of Health and Human Services and U.S. Department of Education, 2008).

According to the U.S. Department of Education (2008), FERPA makes provisions for sharing information within certain guidelines. These guidelines allow educators to make informed decisions on the parents' behalf while in the care of the school. Personal student and related family information can be shared with the following:

- School officials with legitimate educational interest
- Other schools to which a student is transferring
- Specified officials for audit or evaluation purposes
- Appropriate parties in connection with financial aid to a student
- Organizations conducting certain studies for or on behalf of the school
- Accrediting organizations
- To comply with a judicial order or lawfully issued subpoena
- Appropriate officials in cases of health and safety emergencies
- State and local authorities within a juvenile justice system pursuant to specific state law

Source: http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html

Additionally, schools may release directory information, usually consisting of student names and addresses, to various organizations, including college and military recruiters. Each school district, however, may create its own policies and procedures to establish what information is distributed and the method parents can use to withdraw their students' information from the directory. Usually, this information is shipped electronically to various agencies that will incorporate student information into mailing databases, resulting in all of those college letters received by graduating high school seniors.

So how does FERPA impact school technology policies? FERPA is designed to protect personal information, and a great deal of student information is maintained electronically. Distributing individual student scores on a Web page, posting individual student pictures with full names, and publishing address information for students who walk home every day all violate FERPA regulations unless parents have given their approval for such activities. Unfortunately, all of these events have occurred, making personal student information public and placing students or their families at risk

(U.S. Department of Health and Human Services and U.S. Department of Education, 2008).

Another component of FERPA allows parents and students over the age of 18 the opportunity to review and request amendment of their personal records as needed. Although the parents may have a contention with the record, schools must have policies and procedures in place to address any discrepancies through a hearing process.

In an age where computers are so prevalent, printouts of student data can also become violations of the FERPA legislation if they are left on the printer or at home where other people can see them. Laptops that contain personal student information must be safeguarded through unique usernames and passwords from people who are not educating those students. In an Alabama court case, Appelberg versus Devilbiss, No. Civ. A00–0202–BH–C (S.D. Ala. Jan. 30, 2001) the daughter of a school secretary used inappropriate access to review the personal records of a classmate, illustrating the very reason that FERPA was enacted. Other cases include publication of student performance data on standardized tests, posting of student social security numbers, and several noteworthy cases where universities and school districts released significant portions of their data record to other organizations or to the Web.

There is one other concern in the topic area of FERPA. Social network sites, which are online communities of self-selected individuals, are places where students can provide a great deal of personal information without any oversight from parents. Instead of the school system giving away personally identifying information, many students post more about themselves than a school could ever provide. Pictures, comments, phone numbers, and even sexual preferences are all visible for members of the social networking system. Unless students are taught to protect themselves more effectively and restrict publicly posted personal information, the idea of keeping personal and family information private is just that—an idea.

As a result, school districts should develop policies and procedures to meet FERPA regulations, and then continually educate staff members, parents, and students on the importance of keeping student data safe and secure (Hart, 2008).

COMPARING TECHNOLOGY EXPECTATIONS AND CORRELATING POLICIES

When it comes to working with the varied members of a school community, there are expectations that each person or group brings to the school. When developing school technology policies and procedures, it is a good practice to remember these expectations and address them effectively in meetings and in documents produced for review.

Students' Expectations

Students expect school technology to be state-of-the-art and an open door to the rest of the world. As true as this may be within the home, the computers at most schools are several (or many) years old and filtered in accordance with CIPA requirements. High-speed Internet connections may also be available at the local coffee shop, but within the school, there may even be restrictions on what Web sites and online resources can be accessed. These limitations can come as something of a shock to students, especially to those who have a recently manufactured computer and a high-speed connection in their own home. Tom Regan (2007), writing for the *Christian Science Monitor*, identified a number of technology expectations brought to school in their heads, not their book bags.

Students also have the expectations to bring other electronic devices to school, including cell phones, digital cameras, and media devices, such as MP3 players or iPods. As electronic miniaturization continues, these devices are easier to transport to campus. School districts have instituted a wide variety of policies and procedures aimed at the control of these devices, ranging from a "technology items are confiscated" approach to the "just don't let the device interrupt the classroom" approach (Higgins, 2007). Some school districts have chosen not to address these devices through policies and procedures at all but allow the local schools to make decisions on what is permissible on school grounds.

One of the most difficult considerations to make when developing policies around small technology devices is whether or not these devices pose a threat to the learning environment within a school. Lawsuits and disciplinary hearings have occurred around the country as students have used camera phones to take pictures of standardized tests, posted locker-room photos on Web sites, and even provide covertly filmed teachers' lectures on students' personal Web sites as a criticism of the school district. In many cases, the goal is to keep students focused on academics and to cut down on cheating (Quattrini, 2007). Whether these activities violate FERPA or other laws depends on the specific cases, but the availability of such devices continues to make students, parents, teachers, and administrators nervous.

Teachers' Expectations

Most teachers want the technology in their classroom to be reliable and effective at supporting curricular goals. Being able to complete administrative tasks, develop lesson materials, and communicate effectively with others are usually the top technology expectations for teachers. The challenge with many teachers, though, is that they have very little exposure to the concepts of data security and view such concepts as an added work, especially where a computer is involved. Many districts have begun laptop distribution programs for teachers, giving them a tool to use when

away from the school campus, but have not trained the teachers sufficiently to protect student data outside of the school environment.

Even though teachers are becoming more technologically proficient, there is still a healthy attitude of distrust for computers, and no shortage of teachers who are "afraid" to put their work on a computer. With the advent of blogs, podcasts, and wikis, this gap of technology proficiency among teachers has widened, and teachers who are only marginally comfortable with technology may be unable to cope with the instructional changes necessary to accommodate new teaching styles in a student-safe manner.

Parents' Expectations

While parents often provide solid technology resources within the home, there is a gap of understanding about what technology is being used for teaching and learning around their children. The parents of younger students are usually around when their children are at the computers but less so as the students get older. As a result, parents are often unaware of their children's activities using home and school technology. Students will use home computers to post inappropriate comments about teachers and others (Haigh, 2007), experience bullying or harassing situations and are even being targeted by social networking sites as soon as they access the Internet (*eSchool News*, 2007). Depending on their school network infrastructure, these activities can continue onto the school grounds.

Parental expectations of technology usually focus on the value of technology to prepare children to reach the next goals, whether those are standardized tests, school projects, or career opportunities. The school or district must take responsibility to communicate the use of technology and its impact on learning. Additionally, parents expect students to be in a safe environment while at school, and this applies to the use of technology. Schools and districts can manage parent expectations through open houses, parent-teacher association meetings, and awards ceremonies.

USING POLICIES TO SHAPE INSTRUCTIONAL EXPECTATIONS FOR TECHNOLOGY

To look deeper into the use of technology in schools, the policies that shape instruction are the most valuable of all, because they signal the purposes of technology in classrooms and administrative offices. Each time new instructional technology is purchased by the school district, the opportunity to use the technology for inappropriate purposes grows along with the instructional possibilities. The incorporation of technology into the curriculum requires a great deal of planning and preparation, and staff members should be aware of the good and the not-so-good implications of using the new technology.

Teacher Technology Literacy

Technology competence has been mandated for teachers by a number of state school boards and legislatures, which has required teachers to take classes or provide evidence of competency for technology use in the classroom. While this has encouraged many teachers to learn new skills and attain basic technology competency, such measures fall short of getting teachers to use technology on a regular basis in the classroom. There are two broad types of technology provided for teachers, equipment and access, and both require strong policies to help teachers understand the appropriate use of these components of instructional technology.

The first type of teacher-managed technology is equipment. With the advent of less expensive laptops, however, the scenario of the desktop computer for teaching and administrative tasks has changed. As noted before, many school districts are providing laptops for their teachers, encouraging teachers and administrators to use school technology for more and more tasks. Teachers are expected to bring the computers home in the evenings and on weekends, making many of the administrative tasks normally accomplished after the school day something that can be accomplished at the teachers' convenience. Other technology issued to teachers includes handheld PDAs, such as Palm Pilots, and digital devices for classroom instruction, such as polling technology. Projectors, electronic whiteboards, and even cell phones have become common teacher-managed equipment over the last few years.

Another type of technology provided to teachers can be summed up in a single word: access. Teacher Web pages, e-mail portals, and online teaching resources are all part of the instructional technology mix. Instructional applications, where teachers design online lessons for their students, require a clear understanding of the protection of student data and the careful use of sensitive information. Teachers are often issued usernames and passwords for online resources that have been purchased by the school or district, and should be treated as carefully as teachers' grade books.

Policies that support instruction from the teacher point of view often fall short of the realities of the instructional environment. Dozens of questions arise, and well-designed policies make successful resolutions easier. What happens if a piece of equipment is damaged through negligence? Who makes the final determination of negligence and then who pays for the damaged equipment? What if a student or thief steals a laptop from an unlocked, unattended classroom? What are the consequences of a student seeing—or even worse—changing other students' grades from an unattended teacher computer? Policies and procedures should detail the resolution of such events, along with many others.

Administrator Technology Literacy

The need for technology-aware administrators is continually growing. In her book *Critical Technology Issues for School Leaders,* Susan Brooks-Young

(2006) encourages administrators to focus on their vision for education, then find resources to support the achievement around that vision. "A realistic assessment of where your school is in technology use and creation of a useful professional development plan must be based on research on *how teachers learn to become more effective instructional technology users*" (Brooks-Young, 2006, p. 42). In addition to discussing specific tools, she continually focuses on the purpose of technology tools to educate and inform with a unified philosophy shared throughout the school community.

The unified philosophy for education rests ultimately with the administrator, who is the lead learning practitioner in the school. With the advent of multiple communication tools that are low cost and media rich, school administrators have the potential to reach more members of the school community than ever before. Ignoring the available technology will certainly not make it go away, but embracing it to accomplish educational goals can have rich rewards for the entire school. For instance, e-mails, video broadcasts, and Web sites created by the school can significantly improve the impression of the school community toward the school, building a pathway for increased school support.

School and district administrators are often connected to local school staff members through e-mail, making technology literacy a critical component for administrative success. Understanding the policies and procedures around technology can often protect administrators and schools from parents, students, or staff members with an inflammatory school issue. If education is the best defense against poor decisions, then this is doubly important for administrators as the public figure for the school or district. The opposing legal team, newspaper, or parent group could easily expose the school to wrongdoing if the administrator is not prudent with e-mails and other recorded communications and documents.

Consider a news article from *The Boston Globe*, "Officials Defend Tapping E-mails" where a principal and a teacher were allegedly sharing "jokes" between friends. A school district technician, investigating allegations of an inappropriate relationship between the two staff members, evaluated their e-mail communications. Lawyers became involved, and the legitimacy of the technician's right to read personal communications was questioned. However, since the policies and procedures were in place to support such activities, the technician had the right to review anyone's communications when needed (Beecher, 2007). Many school districts forget to educate school staff members about their rights and the risks of using school technology and that electronic communications are discoverable, especially where privacy is concerned.

Policies and procedures around technology can support the technology-aware administrator, just as a lack of understanding of school technology use can be perceived as an administrator shortcoming. Without a clear interpretation of technology policies, a school leader is left making decisions without enough background to make the *right* decision. In Thomas Hutton's article (2007) about the concerns arising around

students' online activities, entitled "Blogging for Columbine," Hutton emphasizes the need for increased attention on student safety and appropriate use of online tools. Throughout the article, Hutton encourages increased awareness of teacher technology literacy and the importance of constructing a plan to use technology to meet instructional needs. Technology use awareness through nonscholastic media like MySpace, Twitter, Ning, Flickr, Tagged, and Facebook, Hutton points out, may have identified warning signals before a major catastrophe occurs.

Expectations of Students From K–12 to Postsecondary Learning

Often it is at the postsecondary level that the importance of technology policies and procedures becomes a critical issue. Adult students have earned a negative connotation when it comes to software piracy, illegal downloading of files, and misuse of technology, and offer suffer in the media as the source of piracy blame. On the other hand, colleges and universities, however, are getting smarter about using technology to their advantage or using it in a more positive way. "College Goes Wireless" by Melanie Brandert (2007) of the *Sioux Falls Argus Leader* identifies a number of ways that the South Dakota Board of Regents is aggressively providing wireless access throughout the state's college campuses. While this may appear to be a response to the changing needs of students, the increase in wireless technology on campus is a reflection of needs expressed by the K–12 community, too. In conjunction with the postsecondary wireless technology implementation, teachers, staff members, and administrators have all received training on using technology more effectively to complete their job tasks. Ideally in situations like these, training on the technology tools should also include a briefing on technology policies and procedures.

Using computer simulations of environments and characters that students design for themselves, called avatars, some teachers are using a Web-based tool, Second Life, as the location for holding classes (Sussman, 2007). Students can interact with one another and hold class discussions in this environment, although there is still a need for face-to-face instruction. Instructor Joe Sanchez, University of Texas-Austin, said that some students get frustrated that the system is not faster paced (Sussman, 2007). Other students may be intimidated by the technology, preferring more traditional learning methods. In the future, will students expect such experiences as part of their college curriculum, and will K–12 schools move to teach students these skills before they graduate high school?

Additionally, ethical behavior must be emphasized repeatedly to students to ensure that every student hears the message. As reported by Mitch Bainwol and Cary Sherman (2007) in *Inside Higher Ed*, college students alone accounted for more than 1.3 billion illegal music downloads in 2006. Unfortunately, reports such as these overshadow the

positive use of technology in the educational process in secondary education environments.

Business Technology Expectations

The business community that surrounds each school has its own expectations of the school system graduates. In a recent poll of more than 7,000 Americans, one of the important keys to educational success for upcoming workers is the use of technology (Stansbury, 2007). Educational technology is viewed as an "equalizer" that can compensate for poor school conditions in the lives of students, providing connections to better learning opportunities outside the school environment. Some companies view the school-to-workforce connection as the most important long-term strategy in their businesses. Cisco, a major infrastructure technology provider, has even developed a 21st Century Schools Initiative to address their own corporate focus on building a stronger workplace. (For more information, visit www.cisco.com/web/strategy/education/index.html.)

In the workplace, though, there are policies and procedures to protect the companies' interests where current students will work in the future. There are significantly different consequences for not following the rules in the workplace, however. Businesses expect recent graduates to be able to use technology in a productive, ethical, and company-focused manner. Acceptable use of technology may not be part of a hiring package but is certainly expected of the staff members. Workers who spend a great deal of time using the Internet for inappropriate reasons or their work resources to accomplish personal goals may quickly find themselves without a job. Employers are also looking for staff members with a clear focus on ethical uses of technology outside of work as well, and more and more businesses are looking for personal Web sites of potential employees to see if the candidate is the right fit for the corporate culture (Davis, 2002).

Businesses also have their own policies and procedures around technology use as well, and experience in working within policies and procedures is a key expectation many corporations have for their employees. As a result, strong policies and procedures at the school level can lead to prospective employees who actively manage their technology use for the good of the company, not the good of the individual. Providing skills to balance personal and professional technology use are important, especially when students are engaged in a dual-enrollment environment, where students are on a high school campus part of the day and participating in college courses for the remainder of the day. Consistent application of school technology policies supports the student in any environment where learning is the goal.

SUMMARY

School technology policies are constructed to support the instructional and administrative goals of schools and school districts and should grow out of the broader mission and vision of the school. Without a clear understanding of the mission and vision of the educational institution, policies and procedures become empty rules without reference points and often confuse all levels of technology users, from the district administrators through the students and their parents.

Students' and staff members' use and understanding of technology in the classroom vary greatly, and policies and procedures need to be flexible enough to address these different expectations as well as provide solid guidelines for innovative classroom technology. Without a thorough comprehension for the way teachers and students use classroom and personal technology, policies will be unable to accommodate the needs of schools. Policies and procedures should support the unique uses of technology within a framework of keeping students and staff members safe while using technology. As evidenced by CIPA (laws protecting student Internet use) and FERPA (laws protecting the personal information of students and their families), the need to protect students while using school technology is a continual challenge.

However, by clearly linking the importance of providing safe technology resources to instructional goals, the entire community can support instructional technology policies and procedures. Acceptable use agreements are only the beginning of building community support for strong technology policies, because effective communication to parents, students, staff members, and business community makes the need for comprehensive policies and procedures even more significant.

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