

By Mike S. Ribble and Gerald D. Bailey

Subject: Appropriate technology use

Grades: K-12 (Ages 5-18)

12

Standards: NETS•S 2; NETS•T VI; NETS•A VI (http://www.iste.org/ standards/)

Learning & Leading with Technology Volume 32 Number 2

Copyright © ISTE (International Society for Technology in Education), 1.800.336.5191 (U.S. & Canada) or 1.541.302.3777 (Int'l), iste@iste.org. All rights reserved.

re you irritated at the thoughtless technologyrelated interruptions in public places? Are you tired of having to "police" staff and/or students who use technology inappropriately? Are you concerned that schools ban certain forms of technology in schools only to see students using and misusing it after the last school bell rings? A growing consensus among technology leaders is that we must begin educating teachers, students, and administrators in the day-to-day use of technology. Simply put, personal misuse and abuse of technology have reached epidemic proportions in school as well as in our daily lives. Digital Citizenship must become part of our school culture-not just a class or lesson but the way we do business in education.

The following discussion briefly reviews the nine categories of digital citizenship we described in the September issue of L&L 2004. (See "Digital Citizenship: Addressing Appropriate Technology Behavior," pp. 6-11.) The nine categories emerged from an extensive search of hundreds of articles that spoke to the issue of digital citizenship, which can be defined as the norms of behavior with regard to technology use. (Editor's note: See Resources on p. 15 for a partial list.) We follow that with focus questions and suggestions by category for how administrators and tech leaders can begin to create education environments conducive to teaching digital citizenship. Also see Creating

Personal misuse and abuse of technology have reached epidemic proportions in school as well as in our daily lives.

an Action Plan on p. 14 for several overall strategies for getting started.

- 1. *Etiquette:* electronic standards of conduct or procedure
- 2. *Communication:* electronic exchange of information
- 3. *Education:* the process of teaching and learning about technology and the use of technology
- 4. *Access:* full electronic participation in society
- 5. *Commerce:* electronic buying and selling of goods
- 6. *Responsibility:* electronic responsibility for actions and deeds
- 7. *Rights:* those freedoms extended to everyone in a digital world
- 8. *Safety:* physical well-being in a digital technology world
- 9. *Security* (self-protection): electronic precautions to guarantee safety

Focus Questions

Etiquette. How do technology leaders maximize a culture of high technology use while minimizing poor technology etiquette? Technology leaders must provide a solid example for faculty and students. Students and teachers should be required to silence (i.e., mute or vibrate) or turn off their own electronic equipment (e.g., cell phones, personal digital assistants or PDAs) during class. Students and teachers should not play games or use instant messaging on portable lap-

Digital citizenship can be defined as the norms of behavior with regard to technology use.

tops, desktops, or PDAs during class. Users need to remember that what they do in public affects others.

Where and when should digital etiquette be taught? Outside school, violations of digital etiquette are ignored or tolerated by members of society. Inside schools, we create rules (AUPs) and regulations or even ban the technology being used inappropriately. The nine themes of digital citizenship should be discussed and understood in relation to all curriculum areas.

Communication. How does a school district create a digital citizenship program that affords students the opportunity to make good decisions when faced with many options? Technology leaders need to provide timely training on what is available and appropriate. The training of teachers, staff, and students on the precepts of digital citizenship should be ongoing throughout the school year.

What form of communication is most appropriate under any given set of circumstances? Use face-to-face communication instead of electronic communication when the situation involves sensitive, personal, or negative information. Electronic communication is used to convey basic information for the sake of efficiency and effectiveness.

Education. Students need just-in-time information. This process requires so-phisticated searching and processing skills (i.e., information literacy and

Feature



Creating an Action Plan

Though there is no step-by-step plan for dealing with teaching digital citizenship, technology leaders should consider the following strategies:

- I. Make digital citizenship a priority in your district and building technology plan by explaining its importance in society.
- 2. Empower your technology leadership teams by providing examples of problems that occur in the 10 areas of digital citizenship. Discuss and debate the areas, especially the positive examples.
- 3. Enlist all stakeholders by explaining the urgency—both in schools and out—of teaching digital citizenship. Engage parents in dialogue using the focus questions for all 10 areas of digital citizenship.
- 4. Empower technology leadership committees to identify and prioritize the steps needed to deal with digital citizenship in curriculum, staff development programs, and board policy, by providing a clear understanding of what technology and literacy skills are needed in this new digital society.

technology skills). In other words, learners must be taught to learn anything, anytime, anywhere because society has begun to learn in this manner. How do technology leaders teach necessary technology standards? Schools and school districts need to develop information literacy and technology skill curriculum materials matched to content standards and a plan to implement that curriculum.

How do schools begin to work with business, military, medicine, and government as well as other segments of the workplace to achieve a mutual understanding of technology needs and uses for productive citizenship? Schools can develop plans, programs, and/or partnerships for preparing electronic workers for technology-rich work environments. Digital citizenship involves educating a new breed of person—information workers with a high degree of information literacy skills. Educators need to take notice outside their field for help.

Digital Access. Digital exclusion of any kind minimizes the growth of human beings in an electronic society. Many factors contribute to the digital divide, including economic, social, and even personal reasons. How do technology leaders ensure that everyone has equal access to technology regardless of gender, race, age, ethnicity, and physical or mental challenges?

Technology leaders must be aware of and support electronic access for everyone to create a foundation for digital citizenship. Providing the resources to allow everyone to participate in a digital society is necessary. Both elementary and secondary students need to have access to upto-date computers, software, digital cameras, and so on. Assistive technologies such as page readers for word processing, spreadsheets, and Internet use should be provided for students with special needs. School libraries are open to the public after school and on weekends, which allows for access students may not have at home.

How do we provide equal access for those who cannot or choose not to use technology? Some people have the resources to allow them to participate in the digital society. Others cannot afford the technology. Still others may choose not to use the technology. Schools and society must provide access while leaving the choice to become a participating member in the digital community up to the individual. *Digital Commerce.* The rise of the digital economy does not change the issue of right and wrong, but it does make buying and selling goods easier, which magnifies the issue of illegal activities. How do technology leaders ensure that students learn how to operate in the new digital economy? Students must be taught how to make wise decisions for purchasing goods legally and the consequences of not doing so.

What are the new technical skills required to participate in a digital economy? Students should be taught how to electronically purchase goods with emphasis on privacy, identity theft, and credit card protection. They can be shown how to shop for the best bargains using specific research strategies, such as buying a book online.

Digital Responsibility. Digital responsibility deals with the ethical use of technology. What is ethical or unethical in a digital community (inside school and outside school)? Students should not be able to steal or cause damage to other people's work, identity, or property. Creating Web sites that are belittling and/or slanderous to others is destructive behavior. Hacking into another person's computer information, downloading music illegally, plagiarizing, or creating and distributing worms, viruses, or Trojan Horses are unethical acts regardless of whether school or personal property is involved.

How do school leaders focus on the positive side of technology integration without over-emphasizing rules and regulations? Students can be taught about ethical and unethical technology behavior in a manner that allows them to make decisions and understand the consequences of

In other words, learners must be taught to learn anything, anytime, anywhere because society has begun to learn in this manner.

Learning & Leading with Technology Volume 32 Number 2

Copyright © ISTE (International Society for Technology in Education), 1.800.336.5191 (U.S. & Canada) or 1.541.302.3777 (Int'l), iste@iste.org. All rights reserved.

Students should be taught how to electronically purchase goods with emphasis on privacy, identity theft, and credit card protection.

those decisions. Students, teachers, administrators, and parents can work with community members to create a forum for dialogue about ethical and unethical technology behavior in the workplace.

Digital Rights. Basic rights are extended to every digital citizen. Digital citizens should have the right to privacy, free speech, and so on. What are digital rights for administrators, teachers, students, parents, and community members? Students can be taught about basic freedoms such as speech, privacy, and right to property and how they apply to technology use. Students can work with local, state, national, and international agencies or citizens to learn how digital rights are violated or protected. Schools can work with local businesses or agencies to establish internships and community service programs that focus on digital rights.

What school district and classroom policies must be in place to protect the digital rights of everyone? Basic digital rights must be addressed, discussed, and codified in the school district.

Digital Safety. Eye safety, repetitive stress syndrome, and sound ergonomic practices are included in the digital safety category. Students must be taught that there are inherent dangers of technology use. How do a board of education, superintendent, and principal initiate a digital safety program without unduly alarming the school community? The school district can implement a program dealing with safe use of equipment and give each teacher responsibility for teaching digital safety.

How can a technology staff development program be initiated to ensure that the entire district is aware of and skilled in digital safety measures? Digital citizenship includes a school culture where technology users are taught how to protect themselves through education and training.

Digital Security (self-protection). It is not enough to trust other members in the community for our own safety. In our own homes, we put locks on our doors and fire alarms in our houses to provide some level of protection. The same must be true for digital security. We need to have virus protection, backups of data, and power surge control devices on our equipment. Students should be taught how to use surge protectors in their homes with their own computers, to back up data, and to use passwords to protect their electronic work.

How can a technology staff development program be initiated to ensure that the entire district is aware of and skilled in digital security measures? School districts could develop partnerships with local, state, and federal agencies to protect users online. The school district could create a plan for protecting district data in case of emergencies or attack by hackers (e.g., backup systems).

Conclusion

The debate and necessary dialogue about digital citizenship are long over due. If we hope to create citizens who know right from wrong and appropriate from inappropriate behavior in the 21st century, technology leaders must make digital citizenship a top priority in their school districts. The old adage seems quite appropriate when gauging the importance of digital citizenship education: "If not here (schools), where? If not now, when? If not you, who?"

Resources Articles

- Fryer, W. A. (2003). A beginner's guide to school security. *Technology & Learning*, 24(2), 9.
- Hafner, K. (2003). *Eluding the Web's snare*. Available: http://www.nytimes.com/2003/ 04/17/technology/circuits/17shun.html?e x=1063339200&en=b2b9d72b27138633 &ei=5070.
- Harmon, A. (2003). New parent-to-child chat: Do you download music? Available: http://www.nytimes.com/2003/09/10/ technology/10MUSI.html?th.
- Harmon, A. (2003). *Digital vandalism spurs a call for oversight*. Available: http:// www.nytimes.com/2003/09/01/ technology/01NET.html?ex=1063339200 &en=6c9adcbdd0cb5f11&ei=5070.
- Mitchell, W. J. (2003). Designing the space. *Syllabus, 17*(2), 10.
- Reuters. (2003). *Blaster suspect a typical teen?* Available: http://www.wired.com/news/ technology/0,1282,60263,00.html.
- Rimer, S. (2003). A campus fad that's being copied: Internet plagiarism. Available: http://www.nytimes.com/2003/09/03/ education/03CHEA.html?th.
- Salpeter, J. (2003). Professional development: 21st century models. *Technology & Learning*, 24(1), 34.
- Toppo, G. (2003). Who's watching the class? Webcams in schools raise privacy issue. Available: http://www.usatoday.com/ usatonline/20030811/5396054s.htm.

Web Sites

- PBS's Digital Divide series: http://www. pbs.org/digitaldivide/themes.html.
- World Wide Web Consortium's Curriculum for Web Content Accessibility Guidelines: http://www.w3.org/WAI/wcag-curric/.



Mike S. Ribble serves as the instructional services coordinator for the College of Education at Kansas State University. He has worked as a network manager at Northeast Community College in Norfolk, Nebraska.

He was an assistant principal and before that a science teacher at Bishop Carroll High School in Wichita, Kansas.



Dr. Gerald D. Bailey is professor of educational leadership in the College of Education at Kansas State University. His areas of specialty are technology leadership and staff development. Prior to earning his doc-

torate at the University of Nebraska, he worked as a classroom teacher, demonstration teacher, and supervisor in the Lincoln (Nebraska) Public Schools.