Educating digital citizens

Schools can prepare students to safely navigate the digital world and take advantage of the wealth of information that defines life online.

We start off early in life learning about staying within the lines. Mom always chided me to color within the lines with the crayons. Later, we learn the lines are not just a nuisance. In driver education, we learn the lines on the road help us work and play well with others on the highway. Knowing the rules of the road is a must. Cross those double yellow lines and you'll end up in a head-on collision.

We face the same challenge in the virtual world. As educators, citizens and parents, part of our responsibility is to teach our youth about where these lines are. Digital citizenship is how we can teach where the lines of cyber safety and ethics are in the interconnected online world our students will inhabit.

What it means to be a digital citizen

Digital citizenship for our youth is garnering greater attention. In June 2010, the Online Safety and Technology Working Group sent a report to Congress entitled "Youth Safety on a Living Internet," prepared in accordance with the Broadband Data Improvement Act and the Protecting Children in the 21st Century Act. One of the conclusions of the report was that new media education is essential to protecting 21st century youth.

The report said research shows that "civil, respectful behavior online is less conducive to risk, and digital media literacy concerning behavior as well as consumption enables children to assess and avoid risk, which is why this subcommittee urges the government to promote nationwide education in digital citizenship and media literacy as the cornerstone of Internet safety."

On the value of online safety education, Susan Crawford, assistant to the president for Science, Technology and Innovation put it more succinctly: "The best software is be-

By Thomas Tan

tween the ears." We cannot monitor our children every minute that they are online. In the absence of adult supervision, young people increasingly play with their own safety online. Risk to youths online can be reduced through Digital Citizenship education.

Beyond Internet safety

Ubiquitous connectivity allows us access to information any time and anywhere. A downside of this pervasive connectivity is the ease of sharing extreme sensationalized bits of digital misbehavior. In the short-reach newsprint world of communications, such sensationalized news tidbits would never see the light of day, let alone "go viral" and spread around the world.

Sensationalized news can make the world seem more dangerous than it is. Henry Jenkins, author and media professor at the University of Southern California warns against sensationalist media coverage of digital teens. Jenkins says research findings from the McArthur Digital Youth Project show that "most young people are trying to make the right choices in a world that most of us don't fully understand yet, a world where they can't get good advice from the adults around them, where they are moving into new activities that were not part of the life of their parents growing up – very capable young people who are doing responsible things, taking advantage of the technologies that are around them."

Digital citizenship helps not only to keep technology users safe. Digital citizenship prepares students to survive and thrive in an environment embedded with information, communication and connections.

The nine elements of digital citizenship

Digital citizenship can be defined as the norms of appropriate, responsible behavior with regard to technology use. In their book "Digital Citizenship in Schools" (2007), Ribble and Bailey identify nine elements that comprise Digital Citizenship. These elements are:

1. Digital access: Full electronic participation in society.

Digital exclusion of any kind does not enhance the growth of users in an electronic society. All people should have fair access to technology no matter who they are. Places or organizations with limited connectivity need to be addressed as well. To become productive citizens, we need to be committed to equal digital access.

2. Digital commerce: Electronic buying and selling of goods.

The mainstream availability of Internet purchases of things like toys, clothing and cars has become commonplace to many users. At the same time, an equal amount of

illegal/immoral goods and services are surfacing, such as pornography and gambling. Users need to learn about how to be effective consumers in a new digital economy.

3. Digital communication: Electronic exchange of information.

The expanding digital communication options have changed everything because people are able to keep in constant communication with others. Unfortunately, many users have not been taught how to make appropriate decisions when faced with so many digital communication options.

4. Digital literacy: Process of teaching and learning about technology and the use of technology.

While schools have made great progress in the area of technology infusion, much remains to be done. As new technologies emerge, people need to learn how to use that technology quickly and appropriately. Digital citizenship involves educating people in a new way to develop their information literacy skills.

5. Digital etiquette: Electronic standards of conduct or procedure.

Technology users often see this area as one of the most pressing problems when dealing with digital citizenship. We recognize inappropriate behavior when we see it, but before people use technology they do not learn digital etiquette (appropriate conduct). Many people feel uncomfortable talking to others about their digital etiquette. Often rules and regulations are created or the technology is simply banned to stop inappropriate use. It is not enough to create rules and policy; we must teach everyone to become responsible digital citizens in this new society.

6. Digital law: Electronic responsibility for actions and deeds.

Users need to understand that stealing or causing damage to other people's work, identity or property online is a crime. Hacking into others' information, downloading illegal music, plagiarizing, creating destructive worms, viruses or creating Trojan Horses, sending spam, or stealing anyone's identity or property is unethical.

7. Digital rights and responsibilities: Those freedoms extended to everyone in a digital world.

There is a basic set of rights extended to every digital citizen, including the right to privacy and free speech. With these rights also come responsibilities. Users must help define how the technology is to be used in an appropriate manner. In a digital society these two areas must work together for everyone to be productive.

8. Digital health and wellness: Physical and psychological well being in a digital technology world.

Eye safety, repetitive stress syndrome, and sound ergonomic practices are issues that need to be addressed in a new technological world. Beyond this are psychological issues that are becoming more prevalent, such as Internet addiction. Users need to be taught about the inherent dangers of

technology, and how to protect themselves through education and training.

9. Digital security (or self-protection): Electronic precautions that help guarantee safety.

In any society, there are individuals who steal, deface or disrupt other people. The same is true for the digital community. In our homes, we put locks on our doors and install fire alarms to provide some level of protection. The same must be true for the digital security. We need to have virus protection, backups of data, and surge control of our equipment to protect our information from outside forces.

So what does teaching digital citizenship look like in action? The website for Northside Independent School District in San Antonio (www.nisd.net/digitalcitizen/Main_Page.html) provides examples of how they are teaching the nine elements of digital citizenship. Make a virtual visit to see elementary and secondary scope and sequence charts.

In the online world, educated digital citizens are well equipped to safely and successfully navigate the online world, behave appropriately to avoid problems, and take advantage of the information and communication wealth that defines life online.

It has only been a short couple decades since the first Web browser appeared in 1993, and the rules of society and law often struggle to keep pace with the rate of technological change. Digital citizenship can help ensure that the ability of our technology is matched by the human wisdom to use it wisely. ∎

References

Ribble, Mike and Bailey, Gerald. (2007). *Digital Citizenship in Schools. International Society for Technology in Education (ISTE).* An updated version is scheduled to be released this year.

Broadband Data Improvement Act and the Protecting Children in the 21st Century Act. www.ntia.doc.gov/advisory/onlinesafety/BroadbandData_PublicLaw110-385.pdf.

Digital Citizenship: Using Technology Appropriately. www.digitalcitizenship.net

Digital Citizenship Wiki. http://digitalcitizenship.pbworks.com/w/page/17771708/FrontPage.

Digital Citizenship: Addressing Appropriate Technology Behavior. www.eric.ed.gov/PDFS/EJ695788.pdf.

Northside Independent School District, San Antonio, Texas. www.nisd.net/digital-citizen/Main_Page.html.

Youth Safety on a Living Internet (June 2010). www.ntia.doc.gov/reports/2010/OSTWG_Final_Report_060410.pdf.

Social Science Content Standards – Rights and Obligations of Citizenship. www.cde.ca.gov/be/st/ss/index.asp.

Thomas Tan is director of network and computer services with the Hacienda-La Puente USD in Los Angeles County. He has served on the ACSA Urban Education Committee.