

Teaching Digital Citizenship:
When will it become a Priority for 21st Century Schools?

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The amount of technology misuse and abuse is at an all time high since the introduction of the microchip. Teachers see students out of control. Students see teachers and parents who know very little about using technology in innovative and creative ways. Schools respond to student inappropriate behavior by implementing Acceptable Use Policies (AUPs). Meanwhile, society continues to produce a growing number of “poor technology role models.” Ribble, Bailey & Ross, 2004 and Ribble & Bailey, 2004a believe that technology misuse/abuse is a crisis situation that demands an intelligent, “teaching” response. We believe that you cannot legislate appropriate technology behavior—you have to teach appropriate behavior. This “teaching solution” is called Digital Citizenship—*teaching appropriate technology behavior*.

Sociologists have determined with every new technology there has been a lag between the time it is introduced and the point where it becomes mainstreamed into society (Krotz, 2003). During that time, society creates rules, policies, and procedures that will help users to understand the technology. The recent wave of digital technologies has left our society gasping for air. When we begin to understand one technology, another new one comes along. In the past, it has been the adults who have taken hold of the technology, come to grips with it, and then passed down the knowledge to the next generation. With the tsunami-like nature of new digital technologies, children are learning to use technology at the same time as the adults. This leads to misunderstandings and uncertainties of how technologies can or should be used.

Digital Citizenship has nine major themes for describing appropriate and inappropriate uses of digital technology (Ribble, Bailey & Ross, 2004; Ribble & Bailey, 2004a). They include: Rights, Safety, Security, Access, Communication, Etiquette, Responsibility, Education, and Commerce.

In an effort, to better understand the importance of Digital Citizenship, we have defined each theme and present a scenario with inappropriate and appropriate responses to clarify each of the Digital Citizenship themes.

1. Digital Rights definition: *those freedoms extended to everyone in a digital world.*

Digital Rights Scenario

Mrs. Jones is the principal of the local high school. Her technology coordinator Mr. Young comes to Mrs. Jones and indicates that he sees students accessing pornographic websites. Mr. Young says that he has a “demo” of an inexpensive web filter that could be used to solve the problem.

Inappropriate - Mrs. Jones agrees that there is a need to keep students from accessing these inappropriate sites. She tells Mr. Young to purchase the software and put it on the network. A month later, a teacher comes to Mrs. Jones and indicates that students are unable to access specific research sites on

the Internet. The teacher indicates she has spoken to the technology coordinator, who related that Mrs. Jones had approved the purchase of the software without informing the staff. The teacher responds that there are several teachers who are upset because their students are working on legitimate projects but access to these sites is being blocked.

Appropriate - Mrs. Jones asks the technology coordinator to gather information about this web filter as well as other options that could be implemented. She indicates that this information will be brought to the school's technology committee for discussion and approval. Mrs. Jones puts this issue on the next month's agenda for discussion. At the meeting, the technology committee recommends the software purchase as well staff development for everyone who will be impacted by the web filter.

2. Digital Safety definition: *physical well being in a digital technology world.*

Digital Safety Scenario

Rob who is a junior at Anyschool High enjoys using the computer. He has been using a computer since he was in fifth grade. When he enters high school, his parents purchase laptop for him. Rob is able to take it to school, use in his room, or on the couch, or wherever he wants. Rob uses his computer several hours a day in awkward positions. Lately, he has been noticing pain in his lower arms and wrists. At first, he believes that the pain is not bad; but now, it has become painful to use his keyboard.

Inappropriate--Rob does not tell his parents because he knows that they will take him to the doctor. He is afraid because the doctor may want him to decrease the amount of time on the computer and will tell his mom to restrict his computer privileges.

Appropriate--Rob is concerned about losing computer privileges because he is sure that typing is causing his physical pain. He decides to tell his mother about the pain and she takes him to the doctor. The doctor indicates that there is some inflammation but no major damage. The doctor refers Rob to a physical therapist who teaches him a set of exercises to avoid repetitive stress syndrome. Rob models these new found techniques with his teachers and friends.

3. Digital Security (self-protection) definition: *electronic precautions to guarantee safety.*

Digital Security Scenario

Adam purchased a computer from BigComputer.com which is a computer sales website. After this recent purchase, he receives an email from BigComputer.com asking customers for information because their database "crashed" and lost sales information for the last six months. The email asks for basic information

including name and address, but also asks for his password to his account on BigComputer.com website.

Inappropriate--Adam decides to email the information since it looks legitimate. A few days later, another email comes from BigComputer.com saying that there had been a phishing* scam that is designed to get personal information from their customers.

Appropriate--Knowing that businesses would never ask users for their password, Adam decides to send an email directly to BigComputer.com with a copy of the e-mail he had received. He receives an e-mail that indicates that this request is a scam. Adam does not reply to the original request, and relates his experience to his friends.

4. Digital Access definition: *full electronic participation in society.*

Digital Access Scenario

Urban School District's technology coordinator (Mr. Black) and the school superintendent (Mr. White), decide to make information gathering easier, and notify parents that paper forms will no longer be used. They explain that paper copies will not be used because they can be accessed on the school district website.

Inappropriate – Mr. Black and Mr. White send the new policy out to all parents. A number of parents bitterly complain because they do not have regular access to computers. Mr. Black and White are puzzled since it seems to make the process easier and faster.

Appropriate – Mr. Black and Mr. White discuss requiring parents to complete information online. They conduct a survey to determine how many parents have computer access at home. When reviewing survey results, it is clear that students belonging to some minority groups have fewer opportunities to access digital technologies than other groups. Mr. Black and Mr. White conclude that keeping forms on the school district website is a positive step forward, but keep both options—electronic and paper. They begin to strategize about how to make technology available to all groups in their school district.

***Phishing**--Pronounced "fishing." A scam designed to steal valuable information such as credit cards, social security numbers, user IDs and passwords. Also known as "brand spoofing;" an official-looking e-mail is sent to potential victims pretending to be from their ISP, retail store, etc., and that due to internal accounting errors or some other pretext, certain information must be updated to continue the service. (Techweb, 2004b)

5. Digital Etiquette definition: *electronic standards of conduct or procedure.*

Digital Etiquette Scenario

Mr. Sheridan (high school principal) is expecting an important phone call from the superintendent's office this evening. However, he also needs to attend the school play.

Inappropriate--When entering the auditorium, Mr. Sheridan begins to talk to several parents and forgets about the impending phone call. During the play, his cell phone rings loudly. Parents and students begin looking at Mr. Sheridan as he struggles to answer his phone. Because he is flustered by the call, he begins the conversation before he exits the auditorium.

Appropriate--Knowing he does not want to disturb the performance, Mr. Sheridan puts his cell phone on vibrate. In the middle of the second act, the phone vibrates. Mr. Sheridan quickly leaves the auditorium and conducts the conversation in a private location.

6. Digital Communication definition: *electronic exchange of information.*

Digital Communication Scenario

Mrs. Baxter (language arts teacher) explores new, innovative ways for students to write essays in class. She finds a website that describes how teachers can use blogs* to help students post their thoughts and ideas on the web. She decides to set up a blog for her students.

Inappropriate –Mrs. Baxter tells her students to navigate to her blog website and record their ideas. She describes the assignment as a diary-like writing. After a couple of days, she finds inappropriate postings formation (e.g., discussions of personal information concerning boyfriends and girlfriends), but she cannot identify the authors. After a week, she shuts down the blog and decides that blogging was a bad idea.

Appropriate—Mrs. Baxter speaks to her class about the process of blogging. She emphasizes and illustrates examples of appropriate comments. After a couple of weeks, the students are responding almost every day, and they are coming to class with more in-depth questions that relate to concepts being discussed in class.

***Blog** (from **WeBlog**)--Web page that contains links to Web sites that cover a particular subject or that are based on some other criterion, such as interesting or entertaining sites. The blog typically provides a short summary of the referenced sites and may also contain commentary and humor. Blogs have become a form of artistic expression, enabling anyone to personally publish a directory about a subject that interests them (Techweb, 2004a).

7. Digital Responsibility definition: *electronic responsibility for actions and deeds*

Digital Responsibility Scenario

Mariann frequently participates in online chatroom groups that are frequented by teens. She meets some interesting people. In one chatroom, a student from another school district identifies himself to all the members of the chatroom. He begins to tell them how he is going to kill everyone in his school.

Inappropriate--Mariann is afraid and leaves the chatroom. She decides not to return to this site. A couple weeks later, she hears about a school shooting in a school in a nearby state. Mariann wonders if it was the same student from the chatroom.

Appropriate—While in the chatroom, Mariann becomes concerned about the person who is planning a school shooting. She becomes alarmed and tells her parents. In turn, they contact local law enforcement officials who identify the teen. Subsequently, they find guns and ammunition with notes indicating that he is planning to shoot his classmates.

8. Digital Education definition: *process of teaching and learning about technology and the use of technology.*

Digital Education Scenario

Mrs. Meredith, a teacher with 25 years experience, is apprehensive when she hears that computers are being put into her classroom over the summer. She does not see herself as a technology user, and she is afraid of harming the equipment.

Inappropriate—Mrs. Meredith decides that she has done things the same way in her classroom for 25 years and figures that they are working “ok.” She concludes that there is no reason to change how she teaches her class; however, she allows students to use computers to write papers or use them when they have “extra time.”

Appropriate— In the summer, the district has staff development sessions on how to use technology effectively in the classroom. Mrs. Meredith attends the sessions and learns how to access resources from Internet and identifies appropriate sites for her students. In addition, there are presentations dealing with students using technology to supplement their classroom experiences. The trainers also provide resources that she can use for her grade level. Mrs. Meredith spends the rest of the summer changing her lesson plans to integrate the new technology. When the new semester starts, she feels confident teaching in a new way using technology.

9. Digital Commerce definition: *electronic buying and selling of goods.*

Digital Commerce Scenario

Liz is using the Internet to buy a new MP3 player. She is unsure of the types players and the quality of equipment that is available. She has a limited amount of money to spend, and she is not really sure what a good MP3 player costs.

Inappropriate - Liz finds several MP3 players when searching the Internet but none of them are in her price range. Finally, she finds a website - bigsucker.com where the same MP3 player is 50 percent less than what she finds on other websites. She immediately puts in an order without researching the company or determining if her information is secure on that website.

Appropriate - Liz discusses with her friends as well as her teachers in school about buying technology online. Most of the advice she receives deals with spending the necessary time to research the companies and making sure they are secure and legitimate. She finds bigsucker.com where the same MP3 player is 50 percent less than what she sees at other websites. After some research and speaking to her teacher, she finds that this website is not a reputable company. More importantly, they do not have a secure website for payments. She finds a player that is a little more expensive from another company called Highqualitystuff.com. They have a good reputation with high ratings from previous users. Liz completes her purchase without any complications.

Creating a Plan of Action

Appropriate technology behavior does not happen by accident. School technology leaders make it happen. They need to consider the following strategies when implementing a plan to teach Digital Citizenship:

1. make Digital Citizenship a priority in your district by explaining by sharing these scenarios.
2. empower your technology leadership teams by having them examine each of the scenarios presented here. Allow them to discuss and debate the nine themes of Digital Citizenship.
3. enlist all stakeholders (teachers, administrators, parents, community leaders, and students) in the discussion by showing the pressing need for teaching Digital Citizenship.
4. prioritize the steps needed to integrate Digital Citizenship into the curriculum from the information gathered in steps 2 and 3.
5. provide training and resources to classroom teachers (staff development) to begin educating students about making appropriate decisions regarding technology.

Conclusion

Digital Citizenship must become a priority in public education. However, technology misuse/abuse is a societal problem as much as it is a school problem. If we are to become a civilized technological society in the 21st century, technology leaders must create a vision for intelligent technology behavior. Digital Citizenship must become the norm and not the exception in our society.

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