By Mike Ribble

Passport to Digital Citizenship

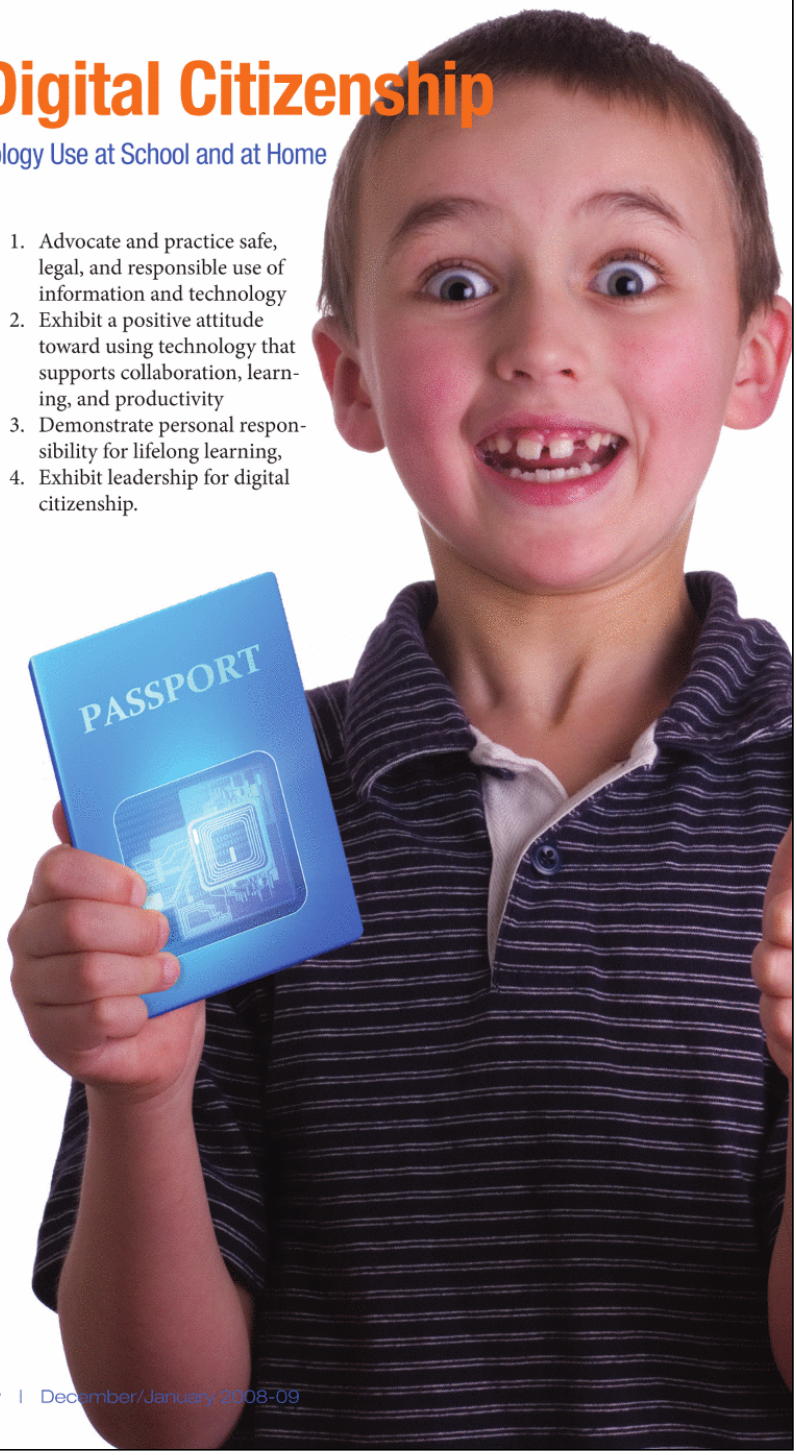
Journey Toward Appropriate Technology Use at School and at Home

Technology has changed our lives. In fewer than 30 years, we have gone from barely hearing about cell phones, laptops, and MP3 players to almost not being able to live without them. Many of us can't get away from our e-mail, instant messaging, or the Internet, even on vacation, because we now have mobile devices that we carry with us all the time. Some of us feel lost without our cell phones, laptops, or MP3 players to the point of being almost unable to function. With all this technology, do we ever stop to ask, "Am I using this technology appropriately?" or does this thought even enter our minds? If we do think about it, are we teaching students to become more responsible with their behavior, and does this carry over when they go home? Do we have a "common language" that we can use to talk to students and parents about appropriate technology behavior?

At NECC 2007, ISTE started its NETS Refresh Project, beginning with student standards (NETS•S). One of the updates to NETS•S that came out of this refresh was a change in the wording of the standard on social, ethical, legal, and human issues to digital citizenship. So what is digital citizenship? According to the new NETS•S, it is:

> Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. In this students will:

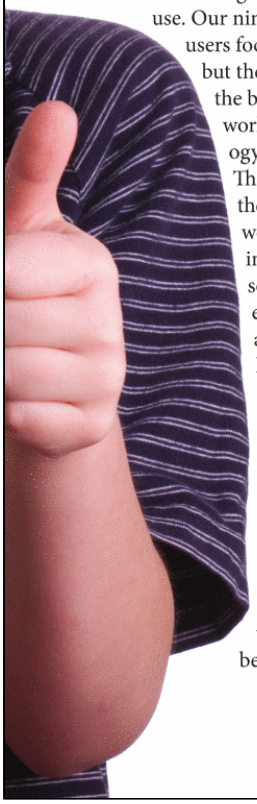
1. Advocate and practice safe, legal, and responsible use of information and technology
2. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
3. Demonstrate personal responsibility for lifelong learning,
4. Exhibit leadership for digital citizenship.



At that same conference, ISTE released the book *Digital Citizenship in Schools*, in which Gerald Bailey and I cover nine themes that we discovered are key to the concept of digital citizenship. (See Nine Elements of Digital Citizenship.) The book includes updated coverage of the themes as well as activities for the classroom and district use that can help get students started on their journey toward becoming full citizens of the emerging global digital frontier.

Digital citizenship describes the norms of appropriate, responsible behavior with regard to technology use. Our nine elements help users focus on these issues, but they expand beyond the boundary of just working with technology appropriately. They also begin to set the stage for how we work with each other in a global, digital society. These nine elements create a foundation for helping to educate children on the issues that face them in an increasingly technological world.

It is also our hope that digital citizenship can create a base for all technology users to begin to discuss the



Nine Elements of Digital Citizenship

DIGITAL ACCESS — Full electronic participation in society. Can all users participate in a digital society at acceptable levels if they choose?

DIGITAL COMMERCE — Electronic buying and selling of goods. Do users have the knowledge and protection to buy and sell in a digital world?

DIGITAL COMMUNICATION — Electronic exchange of information. Is there an understanding of the digital communication methods and when they are appropriate?

DIGITAL LITERACY — The capability to use digital technology and to know when and how to use it. Have users taken the time to learn about digital technologies? Do they share that knowledge with others?

DIGITAL ETIQUITTE — The standards of conduct expected by other digital technology users. Do users consider others when using digital technologies?

DIGITAL LAW — The legal rights and restrictions governing technology use. Are users aware of laws (rules, policies) that govern the use of digital technologies?

DIGITAL RIGHTS AND RESPONSIBILITIES — The privileges and freedoms extended to all digital technology users and the behavioral expectations that come with them. Are users ready to protect the rights of others to defend their own digital rights?

DIGITAL HEALTH AND WELLNESS — The elements of physical and psychological well-being related to digital technology use. Do users consider the risks (both physical and psychological) when using digital technologies?

DIGITAL SECURITY — The precautions that all technology users must take to guarantee their personal safety and the security of their networks. Do users take the time to protect their information while creating precautions to protect others' data as well?

issues that technology has brought us. We need not only to educate our children on the issues that are occurring with technology but provide resources for our teachers and parents as well.

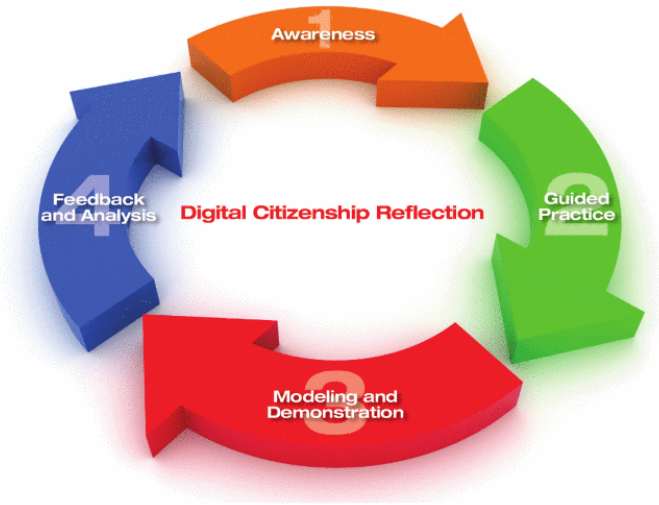
The nine elements that we have identified provide a good launching point for users, but they are only the beginning. They are not enough to prepare our children to live, work, and play in this new digital society. What we also need is a process for implementing these ideas into their daily lives. All technology users need help deciding what to do with the information when they look at a new technology (or even one that they have worked with for years). That is why we created the four-stage cycle of technology integration.

This cycle of integration helps the user begin to internalize those issues. It is a cycle because there is no real end to learning. We are constantly learning, relearning, and unlearning information about technology. This cycle helps users to begin focusing on their actions when using technology and reflecting on what they are doing correctly as well as what they need to work on. The four stages in the reflection model are intended to enhance understanding of digital citizenship.

Similar stages have been used in other learning models, and they provide a framework for helping children understand why being good digital citizens is important.

By using this reflection model, teachers, parents, or anyone can begin discussing the issues with children, students, or other users. This will help to open the conversation of technology use in the home, school, or within the community so that we can focus on using the technology appropriately in a safe environment. Once users are part of the community, they will be expected to practice appropriate technology use as members of that society. Here are some directions for how each stage should be discussed and implemented:

Four-Stage Technology Learning Framework for Teaching Digital Citizenship



Stage 1: Awareness

Awareness means engaging students to become technologically literate. The awareness stage goes beyond just basic knowledge or information of hardware and software. Users also need to understand examples of misusing and abusing both. Students need to learn what is appropriate and not appropriate when using different digital technologies.

Stage 2: Guided Practice

Following awareness activities, educators need to provide their students with opportunities to use the technology under their guidance by focusing on "appropriate use of technology." Students need to be able to use technology in an atmosphere where exploration and risk taking are promoted. During this same period, students may make mistakes and need the support of their teachers. The school needs to become a place where students can investigate with technologies they use every day.

Stage 3: Modeling and Demonstration

Teachers need to plan time with their students to focus on appropriate technology use at school, home, and in society. Students need to see that their teachers are following the proper technology-based citizen behaviors being taught to them. Digital citizenship activities and dialogue between students and teachers help teach digital citizenship. Adults need to be positive role models of good digital citizenship so students can follow their example. In fact, kids need numerous technology role models to gain a thorough understanding of these complex concepts. With the new NETS•T, teachers will also be asked to provide guidance in digital citizenship.

Stage 4: Feedback and Analysis

The school should be a place where students and their teachers can discuss their use of technologies to see how they can use them more appropriately. Adults need to provide constructive criticism on how students should use

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the technologies in the school as well as out in society. Kids should have the opportunity to analyze and explore why they should use technologies in a certain way. Teachers need to create an atmosphere where their students can ask questions about why these behaviors are inappropriate.

Beginning the discussion on digital citizenship in our schools and providing a process for implementing it is a good start, but there is a missing component to this equation. We need to bring parents and community members into this discussion as well. Too often when dealing with technology, there is a disconnect between what is happening in the schools and what is being done at home or in the community. We see and hear about students who have to "gear down" when they are in schools because there is such a difference between their use of technology at home and at school. Perhaps they have more freedom at home because their parents are not aware of the issues within digital citizenship.

The importance of digital citizenship cannot be underestimated. At NECC 2008 the NETS refresh continued for teachers and added digital citizenship to the NETS•T. The way we provide a common understanding among all groups will allow all of us to be included in the conversation about how we should be looking at technology within this rapidly changing society. Some are further ahead than others, but we all need to have a universal understanding of the issues that are occurring in our schools, home, and society.

There needs to be a common language between our schools and homes that clearly outlines what we expect our children (as well as ourselves) to know and follow. Digital citizenship can begin to bridge these groups so that when we talk about how we expect our students to act, we have some common ground on which to begin. Digital citizenship is not a culmination of how to work with technology but a beginning of a process. If we start this journey at the same place, both educators and parents can work together to prepare our children to become global digital citizens.

Mike Ribble has been working on the concept of digital citizenship for the past five years. His first book, Digital Citizenship in Schools, *provides many resources for teachers and administrators. His next book,* Raising a Digital Child, *will be the first in ISTE's new imprint, HomePage Books, targeted to parents.*