Digital Citizenship in K-12: It Takes a Village

Randy Hollandsworth, Lena Dowdy, and Judy Donovan

Students will require awareness that online behaviors can impact people within their immediate circle of friends but also outside of that circle.

Abstract

Digital citizenship encompasses a wide range of behaviors with varying degrees of risk and possible negative consequences. Lack of digital citizenship awareness and education can, and has, led to problematic, even dangerous student conduct. If our educational village does not address these issues, the digital culture establishes its own direction, potentially pushing a productive, long-term solution further out of reach. By tapping into the experience of various practitioners and experts in the field this article provides the reader with a number of suggestions that can help the professional to help their students become better digital citizens.

Keywords: Digital Citizenship, School Library Media

According to Wikipedia (2010), the Nigerian Igbo proverb, "Ora na azu nwa", translates as "it takes a village to raise a child" (Proverb Question section, para. 6). Whether this popular phrase derives from international cultures or from one's own experiences in life, it provides a framework for our schools and society to meet a cultural shift in a global society. Creating awareness and enhancing digital citizenship in our society could best be assessed as having reached a pivotal point. Weigel, James, and Gardner (2009) assert that, "the Internet's potential for learning may be curtailed if youth lack key skills for navigating it, if they consistently engage with Internet resources in a shallow fashion, and/or if they limit their explorations to a narrow band of things they believe are worth knowing. Left to their own devices and without sufficient scaffolding, student investigations may turn out to be thoughtful and meaningful –or frustrating and fruitless" (p. 10). The growing level of Internet access and student use, both in and out of school, raises the question, 'Who will own this challenge of guiding students toward a productive and safe technological society?'. That society will be defined by effective attitudes and practices in digital decision making, ethical and legal issues, online safety, consumer security, and technology related health issues.

As stated by Weigel, James, and Gardner (2009), "many American youth are introduced to digital media at relatively young ages and spend more time engaging with digital media at critical development stages than their older counterparts did" (p. 8). According to the Pete Blackshaw, an executive vice-president of the Nielson Company (2009), the online population of youth, grades 2-11, number "boys at 8,040,000 and girls at 7,927,000" (p. 1). As the Internet has gone mobile, the Nielson Company reports that by age ten over half of youth own or borrow a cell phone, while six out of ten own a cell phone at age eleven, and three-fourths of youth age twelve own a cell phone (p.1). The accessibility and use of student-based digital connectivity is inevitable both in K-12 and outside of school. Thus, returning our thoughts to the question of who will take on the challenge of supporting the growth of an effective digital society. The goal of this paper is to provide a shared understanding of the current state of digital citizenship. It further seeks to engage the professional media specialist/instructional technologist in assessing the state of digital citizenship in their academic and professional environments.

The term digital citizenship might create a

confusing mental picture of what it represents in the K-12 classroom. If aligned with character education, it would lend itself to becoming a good citizen in the digital community. In many of the projects and curriculums examined through this article, the term represents a more comprehensive view of technology usage. In addition, it would include considerations for student safety and security, educational enhancement, ethical and legal behaviors, and becoming an effective member of digital communities. Mike Ribble (2010) defines digital citizenship as, "a concept, which helps teachers, technology leaders, and parents to understand what students/children/technology users should know to use technology appropriately" (p. 1). He further elaborates that, "it is a way to prepare students, children, and technology users for a society full of technology" (p. 1).

In so many instances involving K-12, initiatives are defined less by what they do than where funding originates. One initiative that has driven the use of digital citizenship curriculum in K-12 is the "E-Rate" funding sponsored by the Schools and Libraries Program of the Universal Service Fund signed into law on October 10, 2008. This funding provides discounts to assist most schools and libraries in the United States in obtaining affordable telecommunications and Internet access and is managed by the Universal Service Administrative Company and the Federal Communications Commission (USAC, 2010). Judi Repman, graduate program coordinator for media specialists at Georgia Southern University states, "Given that accepting e-rate funding now requires schools to teach digital citizenship, I think we'll start to see lots of vendors who will develop curricula to provide this required instruction. Leadership is coming from many places, but mostly from those in administrative roles, including media specialists" (personal communication, August 19, 2010).

The growing level of Internet access and student use, both in and out of school, raises the question, 'Who will own this challenge of guiding students toward a productive and safe technological society?

Vicki Davis, co-founder of Digiteen.org states, "digital citizenship has just come on the radar and it changes rapidly" (personal communication, July 19, 2010). Davis further denotes that digital citizenship will have to be less of an educational program and more of a social action, a student centered approach that becomes part of what students believe (personal communication). In reference to the negative events associated with the K-12 digital usage, Davis states, "this is an opportunity to empower a new generation of students who will stand up and speak out when they see these things happening" (personal communication).

Ron Clark, well-known author and director of the Ron Clark Academy in Atlanta, acknowledges that "we must take a lead and become advocates of good digital citizenship, we must know what is out there, and parents and kids must be involved together to ensure success" (personal communication, July 19, 2010).

So, the inevitable question must be asked: Who represents the village for our youth, as it relates to digital citizenship? Will it be parents, teachers, administrators, academics, technology professionals, media specialists, or students? The answer, although complex, becomes somewhat obvious that for a successful cultural shift, it will require all of us. The implementation of this type of program will require an established and shared curriculum, an establishment of middle ground between reactionary and proactive actions in the K-12 environment. Hilton Smith, program coordinator in northeast Georgia for the Foxfire initiatives, encourages that for program success there must be student involvement (personal communications, August 19, 2010). The group that can most influence digital behavior, and misbehavior, are our youth. As noted by Carrie James from the Good Play Project states, "One of the strongest takeaways from our studies of digital youth is that they most often think and act in individualistic ways online" (personal communication, August 1, 2010). Students will require awareness that online behaviors can impact people within their immediate circle of friends but also outside of that circle. Additionally, student digital behaviors can impact their own personal social dynamics, personal resources, careers, and safety. In an effort to establish positive role models, the K-12 professional community must come together to provide a proactive approach to this cultural challenge. The ultimate goals by local school administrations, information technology directors, media specialists, teachers, parents, and students must be aligned to realize the potential for developing good global and digital citizens. Mike Ribble states, "Educators and technology people need to both be involved – the technology people tend to go for a tech solution (firewall) and want things very secure.

They do not understand why curriculum

is needed. Educators want things wide open for their students research needs. There is a disconnect between the groups" (personal communication, August 11, 2010). Vicki Davis highlights that a very special effort and approach will be required to impact student belief systems on the use of digital tools, both in and out of the classroom (personal communication, July 19, 2010). In many instances, the responses from the survey for this article and personal contacts reflect a picture where many of the vested parties are seeking their own answers and their own goals, which would explain why many of our students are fending for themselves in this cultural and technological playground.

Like a village, the K-12 professional community must develop common ground that advocates the use of technology in the classroom while preparing the student to make sound choices both for themselves and for others in the digital world. A constant thread, throughout all the interviews, points to a proactive approach for effective digital practices. These opportunities will consist of effective digital citizenship curriculum, peer mentor programs, effective role models, educational faculty/staff awareness, enhanced awareness of the risks, and most importantly - a proactive versus reactive approach. Sturgeon (2008) writes, "If we filter out everything in a school, we lose that teaching moment. Filters are not foolproof; we need to educate students on the safe use of the Internet" (p. 5). The cultures around gaming, social networking, cell phone connectivity, and the immediacy of information raise significant questions for the professional media specialist in K-12. These questions begin with: When do we begin?; Which proactive approach is best?; What resources are viable?; Who should be engaged first: peers or the next generation?; What resources are available right now? In an effort to address some of these questions, a list of resources on national initiatives, safe web sites, digital citizenship curriculum, and ongoing research are provided in the appendix. A snapshot of the nation has been sought on this topic through a series of interviews, current literature, and an online survey for K-12 media specialists in fifty state organizations. As noted by the GoodPlay Project Report (2009), *Meeting of the Minds: Cross Generational Dialogue on the Ethics of Digital Life*, "Parents and educators offer what guidance they can, yet struggle to make sense of it all" (p. 2). With the information gained in this article, it is hoped that like a 'village', the AECT professional community, might offer the bridges necessary for proactive initiatives in digital citizenship.

Safety in Numbers

The challenges faced by many local educational administrations are how to balance online accessibility by students with effective pedagogy, student safety and security, and a manageable learning environment. Many systems have applied various approaches including student/faculty/parent educational approaches, student Internet operator's licenses, Internet filters, accessible use policies (AUP), and absolute banning of cell phones, to name a few. To explore the level of digital connectivity in K-12, consider 2005 reports by the National Center for Education Statistics (NCES), noting that 66.1% of students use the Internet both in and out of school, while 48.8% use the Internet in school (2010, p. 1). NCES also reports that students use the Internet, both in and out of school, at a rate of 23.2% for three and four year olds, followed by ages five-nine at 42.7%, ages ten-fourteen at 69.5%, and age fifteen and older at a rate of 79.5%, with little differentiation by gender (p. 1). The National Center for Education Statistics (NCES) reports 70.1% of students use the Internet for email and messaging, as compared to 49.8% using the Internet for purchases and information, 59.3% for playing games, and 82% using the Internet, both in school and outside of school, for school assignments (2005, p. 1). The Nielson Company (2009) reports, "To adults, cell phones are a communications device. To children, cellphones are a lifeline. Consider that the average thirteen-seventeen year old sends more than 2,000 text messages per month. Compared with the total mobile Internet population, teens are much bigger consumers of social media, music, games, videos/movies and technology/science. iSAFE, a non-profit organization promoting child Internet safety, reports "that 58% of kids admit someone has said mean or hurtful things to them online; 53% of kids admit having said something mean or hurtful things to another online; 42% of kids have been bullied while online; and 58% have not told their parents or any adult about something mean or hurtful that had happened" (2010).

In a final report by Harvard University for State Attorneys (2008), the Internet Safety Technical Task Force (ISTTF) denotes, "The majority (59%) of parents say the Internet is a "positive influence" in their children's lives

"Educators and technology people need to both be involved ...There is a disconnect between the groups."

Mike Ribble,
Co-Author
Digital Citizenship in Schools
http://www.digitalcitizenship.net

Figure 1.

(Rideout 2007, as cited in ISTTF), but many have grave concerns about the dangers posed by the Internet" (p. 17).

One does not have to venture too far these days to hear about these dangers or to personally experience an online event that is suspect of fraud or questionable intent. Parents seek protection for their sons and daughters, as do K-12 administrators, school boards, parent associations, teachers, and even students in some cases. Additionally, it is not unusual to see or hear research findings, news events, and reality-based television scenarios proliferating the risks of the Internet. In the types of threats identified by the Internet Safety Technical Task Force (ISTTF), students are exposed to varied risks at varied levels in categories defined as, "sexual solicitation, online harassment, and problematic content" (p. 39). The ISTTF encourages readers to critically evaluate the real data and issues. One example noted by the ISTTF was in a reference to the Crimes Against Children's Research Center Report, stating, "that one-in-five or one-in-seven minors are sexually solicited online" (as cited by ISTTF, 2009, p. 13). The Task Force further states, "without context, this citation implies massive solicitation of minors by older adults" (p. 13). The Task Force report continues to define that for this type of criminal event, "other peers and young adults account for 90-94% of solicitations in which approximate age is known" (p. 13).

"This is an opportunity to empower a new generation of students who will stand up and speak out when they see these things happening"

Vicki Davis,
Co-founder of Digiteens
http://digiteen.ning.com

Figure 2.

Findings by the GoodPlay Project indicated in a cyber-bullying scenario presented to students, that most elected to handle it effectively, but a third of the students elected to disregard the bullying and not report it (Santo, James, Davis, Katz, Burch, & Joesph, 2009). James further reflects that, "While the bulk of youth's online activities are conducted beyond the school day, educators often have to deal with effects in school – e.g., conflicts between students due to online bullying or gossiping. Moreover, some parents may expect teachers and administrators to address digital citizenship issues. For a number of legitimate reasons, many schools tend to be reactive, rather than proactive, about such issues. However, the groundwork for digital citizenship is best laid in a proactive way, before problems arise" (personal communication, August 1, 2010).

Developing a Digital Community

As the statistics show, students use technology often, and use is increasing at a rapid growth rate. Although schools and parents try to ensure the safety of our students, it is imperative that students accept responsibility for using current and future technology in an ethical and legal way.

When students are faced with difficult decisions or questionable use or content, they must have the tools in which to handle these circumstances. While school systems and parents are each attempting to address these issues, common policies, standards and language of digital citizenship must be developed. Awareness, education, and action are required in order to give students a base of knowledge and a code of conduct, to support them in this digital society. A citizen in this digital society is able to get an education, work, buy, sell, trade, interact with others, and be entertained; all of the same characteristics of a traditional society. It is not considered acceptable to send our children into traditional society without teaching them the basic concepts of legal, ethical, and moral conduct. So why would it be okay to send them out into this digital society with little knowledge about these same concepts? As shared in a personal interview with Vicki Davis, she reflected on the responses of students to the news of these digital elements and that they were upset that no one has told them or no had informed their friends to the risks and responsibilities (personal communication, July 19, 2010).

Students must be taught digital literacy. Digital Literacy and Citizenship in the 21st Century offers a definition for digital literacy as "the ability to use technology competently, interpret and understand digital content, assess its credibility and create, and research and communicate with appropriate tools" (Common Sense Media, 2009, p. 1). Many new programs that address digital citizenship are designed for students of middle school age and older. Research shows, however, that many students have already derived their own rules for use of technology by this age. Students use technology at home before they start school, requiring parents to begin teaching their children digital citizenship as soon as they begin to use a computer. Parents are the most vital part of a village approach. They must gain awareness, educate themselves and take action in order to prepare their children for this digital society before they enter the school doors. Teachers, media specialists, and technology people must

gain awareness, educate themselves, and be ready to take action as soon as students enter the school doors. As with other performance standards in addressing digital citizenship, the village must create a common set of policies, practices and curriculum with the end result in mind. What should a good digital citizen look like as an adult member? Parents, educators, students and community should all have input in creating policies, procedures, and curriculum; not only the content, but the timing as well. Mike Ribble states that digital citizenship should be a part of the curriculum, begin in kindergarten, and build each year (personal communication August 11, 2010).

Digital citizenship can be compared to American citizenship in that all digital citizens have the same basic rights: to privacy, free speech, and creative work rights. Teaching students how to protect their privacy is critical. Everyone has the right to free speech but students need to be taught to think about what is said and posted online, which has far reaching effects. Students should also understand that when something is created it belongs to the creator. It should not be copied or altered in any way. Students do not fully understand copyright laws or how to legally obtain information, songs, pictures, etc. The village must take responsibility to ensure students know not only what is illegal but also what is legal. Students must understand that with rights also comes responsibility, the responsibility to conduct themselves legally and ethically, as well as to help their peers accept responsibility.

Parents and educators have a difficult job in keeping up with the newest technologies, their purposes and their effects on students. However, it is important that parents and schools stay informed, involved, and actually become advocates for the newest technologies. Parents and schools cannot afford to ban, ignore, or stifle the use of technology at home, at school or in our communities. A supporting example of this is the current use of posting boards, such as Facebook's 'bathroom wall' feature allowing students to post messages on other Facebook account holder's site anonymously. The potential use, and misuse, of this feature for students is indicative that you cannot build enough firewalls, policies, or restrictions to prepare students to handle problematic content or online events. Students must be given the opportunity to accept, embrace and learn new ideas as they surface, and how to be confident and responsible users of technology. Students should do more than just survive in this digital society. They should create, innovate, and thrive. It is the responsibility of media specialist, teachers, administrators, and parents (the village), to begin the discussion, gain awareness, educate themselves, and begin the journey of preparing students for success in this new and different digital society.

Media Specialist Survey

To understand how digital citizenship is taught in schools, a survey examining digital citizenship in schools was created. Presidents of state library media and educational technology associations were emailed a request to invite their membership to participate in the survey. The survey consisted of ten questions examining digital citizenship, available in Survey Monkey. Over 500 education professionals responded, primarily practicing library media specialists (97% of respondents).

Survey responders were asked if teachers and administrators in their districts are aware of and teach about digital citizenship issues. They rated the level of awareness of teachers and administrators from most very aware of digital citizenship issues to no awareness by these educators.

Agreement with the level of awareness of teachers and administrators as indicated by the statements below:	Teachers		Administrators	
	Percent	Number	Percent	Number
Highest level - very aware of DC issues and some teach students about these issues	8.2%	42	19.8%	102
Most are aware of DC issues	49.4%	253	55.3%	284
Some are aware but most are not	35.4%	181	19.3%	99
Only a few teachers/administrators are aware of these issues	5.1%	26	4.7%	24
None of our teachers/ administrators are aware of these issues	2.0%	10	1.0%	5

Table 1. Digital Citizenship Awareness

The results indicate that about half of the library media specialists believe teachers are aware of digital citizenship issues (49.4%), 8.2% think teachers are very aware of these issues, and about a third (35%) believe some teachers are aware of digital citizenship issues but most teachers are not. About 7% of the respondents report only a few or no teachers are aware of these issues. Administrators were rated somewhat higher than teachers by the respondents, with 55% indicating their administrators are aware of digital citizenship issues and about 20% reporting that their administrators possess a high level of awareness of issues surrounding digital citizenship. The results show that cognizance of digital citizenship issues is not universal, and that more administrators appear to have a greater attentiveness toward digital citizenship concerns than many teachers.

The library media specialists were asked if specific digital citizenship skills are taught in their schools, and if the same skills are included in state educational standards. The results are below.

Respondents from fourteen states replied to the survey. Their replies indicate over 90% of schools teach students to avoid plagiarism, respect copyright, and to evaluate electronic information. About three quarters of schools teach students about the dangers of sharing personal information online and about online safety. Over half teach about cyber-bullying, getting more than one perspective, and respecting creative rights, as well as communication issues involving electronic communication. Less than half of schools teach about social networking sites, cell phone etiquette, or ergonomics.

State standards did not fare as well, as less than half of the respondents indicated digital citizenship skills are included in state standards. Even issues such as plagiarism, taught in 95% of schools as indicated by survey respondents, are included in only 44% of state standards. Some of the biggest gaps were in Internet safety issues,

"If we don't take a lead on this issue, they (students) will take the lead. We cannot afford to assume this won't happen. Teachers set the tone and need to be advocates of digital citizenship."

Ron Clark
Author &
Director/Founder of the Ron Clark Academy, Atlanta, Georgia
http://www.ronclarkacademy.com

Figure 3.

Percent and number of survey respondents who agreed with statement:	We teach these skills		These skills are addressed in our state standards	
Plagiarism	95%	491	44%	228
Copyright (i.e. respecting use guidelines)	94%	485	43%	225
Evaluating electronic information (i.e. websites)	90%	466	38%	199
Sharing personal information online	77%	399	25%	131
Safety online (i.e. viruses, hoaxes)	73%	378	23%	120
Cyber-bullying	66%	343	23%	120
Students seek divergent perspectives during information gathering and assessment	55%	284	26%	135
Creative rights (i.e. illegal file sharing)	54%	279	24%	126
Texting, Email, IM issues (i.e. harassment, stalking)	53%	**272**	16%	85
Social networking (i.e. appropriate posts, pages)	44%	**227**	13%	66
Cell phone etiquette (i.e. sexting, use in class)	36%	**184**	11%	55
Ergonomics (i.e. physical use of media)	33%	**170**	14%	70

Table 2. Extent to which digital citizenship skills are taught in schools / included in state standards

such as cyber-bullying and online safety. While these topics are widely taught in schools, less than a quarter of the participants indicate these to be included in state standards. One survey respondent commented, *"Digital citizenship is not very well addressed because it is not tested as a state standard"*.

Survey respondents were asked about copyright and creative rights to assess how digital citizenship is being taught in schools. An understanding was sought to uncover if this topic was integrated into the curriculum or taught primarily in one class or grade.

The results show almost half of the schools (47%) are teaching this example issue through several grades and subject areas, and 18.5% are teaching the digital citizenship issue in one specific class. 35% of respondents replied that these issues are not taught as part of the curriculum, and a low 3.5% do not teach about copyright/creative rights at all. Educators who responded to the survey were asked when students should begin learning about digital citizenship issues.

Most respondents believe digital citizen- ship education needs to begin in the early grades, with less than 15% choosing 5th grade and higher, 21% answered preschool and kindergarten, 33% 1st and 2nd grade, and 32% believe digital citizenship education should begin in 3rd and 4th grade. We asked responding educators to share how they kept students safe while using the Internet. The specific question asked "Which of these does your school have in place to monitor/ protect students using the Internet?"

Nearly all schools referenced in the survey use filtering and firewalls to control access to the Internet. Most (86%) rely on Acceptable Use Policies, and observation (93%). While 86% teach students proper behavior on the Internet, only about a third (37%) continue this education to include the home.

Survey respondents were asked for their general comments concerning Digital Citizenship to enhance the understanding of how different states are addressing this area with students. Some of these comments illuminate statewide efforts and show a wide variety of efforts in this area.

Comments from Survey Respondents

General survey comments on how digital citizenship is being applied in K-12 in various states:

- *Massachusetts has just passed a cyber bullying law.*

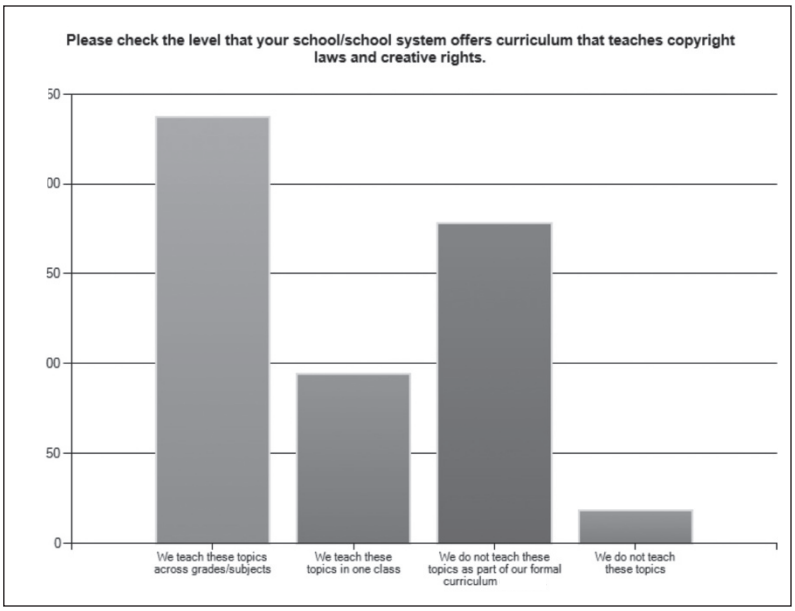

Figure 4. Indicate how copyright/creative right issues are taught in your school.

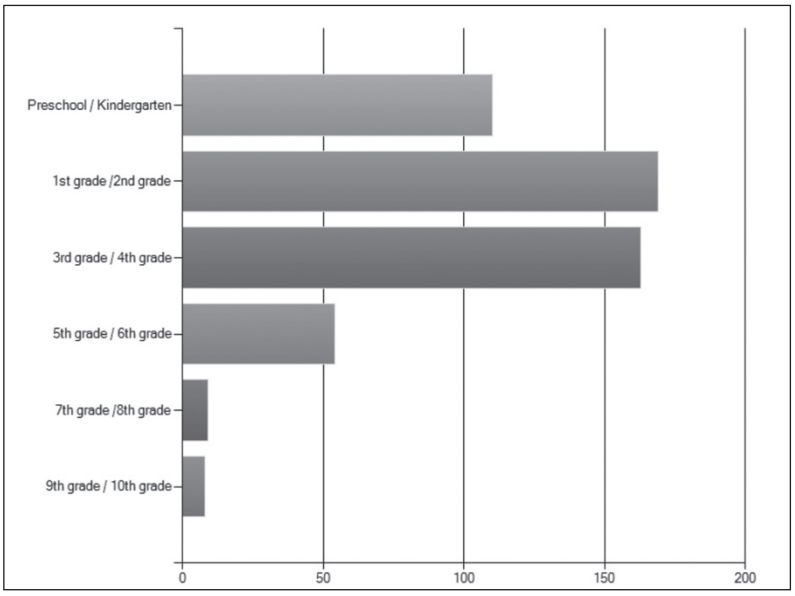

Figure 5. Grade when digital citizenship should first be taught in school.

We use this in our school/district:	Percent answering Yes	Number Answering Yes
Filtering	.98	507
Firewalls	.98	504
AUP Policies	.86	443
Observation	.93	478
Teaching proper behavior	.86	445
Parent/home education	.37	190

Table 3. Internet Safety.

- *The State of Missouri has developed Information Literacy Standards that deals with Digital Citizenship issues. This works very well with our library instruction since many of our databases are on the WWW.*
- *Virginia has an Internet Safety Program for all schools to follow. This is separate from our Standards of Learning, but it is still required curriculum.*
- *Kentucky is in the forefront of Digital Citizenship education. We teach these skills and train on usage at every grade level.*
- *Maine has had 1-1 laptops in all schools, in grades 7&8, for 8+ years. Ongoing teacher professional development has been a strong and important part of the laptop program.*
- *Arkansas has no organized state-wide program other than the Technology Infused Education (TIE) group--train the trainer initiative.*
- *Georgia needs Information literacy skills in the GPS[Georgia Performance Standards]. If it is not in the GPS it will not get taught.*
- *Tennessee has no Library Media Standards but will be adopting the Common Core Curriculum with Race to the Top. Teachers need training in teaching Digital Citizenship at the lower grades, but unless it's going to be tested, the training and teaching won't happen.*
- *Depends on the school and district in New Hampshire. Our district is reactive rather than proactive with regard to technology use; much of the equipment and software is outdated.*
- *Sadly, the state of Missouri seems not to care much about what really happens in our public schools other than test scores. Little to no support in the area of technology at all.*

"Media specialists are uniquely poised to encourage responsibility online because they are often witnesses to young people's choices and dilemmas online"

Carrie James,
Team Leader
Good Play Project
Harvard University
http://www.commonsensemedia.org/digital-citizenship/6-8

Figure 6.

There is widespread agreement as to the importance of practicing digital citizenship. Survey respondents note that, "*This is a very important concept to begin teaching students as they will use technology and the Internet more and more in the future. I don't think the students understand how the information they present to the world can be used against them - now or in the future*".

The International Society for Technology in Education (ISTE) National Educational Technology Standards (NETS) for Students, Teachers and Administrators lists digital citizenship as the one common theme across all three sets of standards (ISTE, 2010). The ISTE NETS standards clearly spell out the need for responsible use of technology by all users. In addition, the American Association of School Librarians (AASL) standards list over 20 items related to digital citizenship. The responsibilities listed below are very close to the NETS standards (AASL, 2010, p. 4).

1.3 Responsibilities
1.3.1 Respect copyright/ intellectual property rights of creators and producers.
1.3.2 Seek divergent perspectives during information gathering and assessment.
1.3.3 Follow ethical and legal guidelines in gathering and using information.
1.3.4 Contribute to the exchange of ideas within the learning community.
1.3.5 Use information technology responsibly.

Experts interviewed believe that if educators and parents do not address issues of digital citizenship in school and at home, external suppliers of curriculum will attempt to meet the gap with curriculums of varying quality. A survey comment addresses this lack; "*I would like to find a Digital Citizenship curriculum program that is positive and pro-active rather than "scare tactic"-based. As of yet, I have not found such a program to use in my instruction*".

Most who have studied this area believe that while a comprehensive curriculum is a necessary beginning, it will take the collaborative efforts of students, teachers, Library Media Specialists, administrators, all educators, parents, and community members to effectively teach and consistently practice the tenets of digital citizenship. Some schools are embracing collaborative efforts, as illustrated by this comment on the survey; "*I don't know how different states are handling it but in our district it is a collaborative effort with technology specialists, librarians and classroom educators*".

However, some challenges to a collaborative approach were described in the survey comments:

- *No one in the technology department in our district holds any sort of degree in education and yet makes constricting decisions about access. They are reactionary and fearful in their policy-making choices. We need to teach students how to be savvy users of this incredible technology.*
- *There seems to be a lot of fear by adults of access by students to digital channels. I think it has to do with loss of control and accountability.*
- *We are in the react-to-crisis mode on instruction on Digital Citizenship.*

- *Cobb County is becoming more restrictive in computer and Internet usage. A number of sites that would be useful to students and faculty are blocked*
- *Our county protects the students well with our filter system but it also keeps the students out of some great sites and teaching tools.*

Conclusion

So, does the solution resolve in building a wall around the village or seeking to prepare our youth to protect themselves and others? The Internet Safety Technical Task Force (2009) denotes that "these risks are not radically different in nature or scope than the risks minors have long faced offline, and minors who are most at risk in the offline world continue to be most at risk online" (p. 13). In addition to the risks and implications for individual students, Carrie James, Team Leader for the GoodPlay Project, establishes that "we find youth only rarely thinking beyond their circle of close relations to broader responsibilities or to the impact of their choices on the communities to which they belong online" (personal communication, August 1, 2010).

From the perspective of the GoodPlay Project, much work needs to be done in order to scaffold youth to think of themselves as digital citizens" (personal communication, August 1, 2010). It appears that professional educators, and specifically media specialists, need to know more about digital citizenship to be able to guide district efforts and model appropriate behavior. A survey comment reflects this, *"Too many educators "fight" aspects of the digital age rather than teaching students how to safely use it for their education"*. The survey results show that, in general, administrators were ranked as having higher levels of awareness of digital citizenship issues than teachers. Forty-two percent of respondents indicated teachers for the most part, are unaware of DC issues, with 25% of administrators mostly unaware. When it came to the highest level of awareness, and perhaps also teaching about DC issues, administrators again were rated more highly, at 20%, as compared to a low percentage of respondents (8.2%) who rated teachers as highly aware. The results in this area indicate that while the majority of teachers (58%) and administrators (75%) are aware of issues surrounding digital citizenship, there are many educators who need to be educated about these issues, as well as students.

One respondent notes the advantages of teaching the faculty first:

Every senior is required to follow a rubric that clearly covers following copyright law for their research papers and presentations. The faculty is in-serviced on how to teach copyright law to the students. By teaching the teachers how to teach copyright law, the teachers have come to understand the law, how to teach it to the students, and has taken ownership of preparing the students for understanding this issue in relationship to technology.

Library media specialists are a natural to take the lead on integrating a digital citizenship curriculum as part of the information literacy curriculum they already teach. Comments by respondents address this and indicate many library media specialists are leaders when it comes to teaching digital literacy:

- *The library/media specialists have been addressing this for at least 10 years. There is a push to integrate across content areas and grade levels more fully this year. It's the main goal for my school district this year.*
- *The media specialist is the main person in most schools to teach digital responsibility.*
- *We are in the process of serious revision of our library/information literacy curriculum. "Digital Citizenship" will be an essential component of our revised curriculum.*
- *As I librarian, I include all aspects of this topic in two electives that I teach: Information Problem Solving and Critical Reading. I also stress them when doing collaborative lessons with teachers.*
- *When teaching how to research in the third through fifth grades, the media specialist stress concerns with using technology and how to use it properly. She uses ISafe curricula and other programs that deal with such issues. The problem has been that the teachers are not always cooperative in follow through and re-teaching as necessary.*

Like a village, the K-12 professional community must develop common ground that advocates the use of technology in the classroom while preparing the student to make sound choices both for themselves and for others in the digital world.

Digital citizenship encompasses a wide range of behavior with varying degrees of risk and possible negative consequences. Lack of digital citizenship awareness and education

can, and has led to problematic, even dangerous student conduct. If we do not address these issues, others will, pushing a productive, long-term solution further out of reach.

It is not to say that no efforts have been made to teach digital citizenship, as reported by media specialist program coordinator, Dr. Judy Repman, "Most acceptable use policies required some level of instruction about digital citizenship but until recently this was not done systematically (personal communications, August 19, 2010). Ron Clark adds, "that although our Academy teaches fifth through eighth grades, digital citizenship should be addressed in first and second grade. If we don't take a lead on this issue, they will take the lead. We cannot afford to assume this won't happen (personal communications, July 19, 2010). Repman adds, "The media center is the laboratory for teaching 21st century skills. It would be difficult to see why a media specialist wouldn't take the lead here. If they don't, they risk becoming even more marginalized" (personal communications, August 19, 2010). It is clear that acceptable use policies (AUPs) are not enough. It will require discussion and dialogue between students, parents, and educators to advance the concepts of digital citizenship on topics such as safety, security, and problematic content (Ribble & Bailey, 2004). Carrie posits that, "schools should aim to develop a culture in which reflection on what it means to be a good person and a good citizen – offline and online – is a routine part of homeroom, advisory, or wellness courses if not integrated throughout the curriculum" (personal communication, August 1, 2010). Mike Ribble states that, "The hard part is changing attitudes. Students have to see how digital citizenship relates to them – it has to strike home. By the time students are twelve years old, their behavior in how they use technology has already been set. So digital citizenship in schools from grades 8-12 is starting too late. It needs to start in K-1 grades and build on topics each year (personal communication, August 11, 2010).

One perspective on this current snapshot, gained from this collection of thoughts from experts in the field and survey results from over 500 media specialists, is that no single entity can tackle this challenge alone. Digital citizenship issues concern media and technology, which are constantly evolving, with new applications added regularly. Thus, a one-time class, or waiting until 8th or 9th grade does not adequately address the issues. A one-time class becomes obsolete for digital citizenship, while students use various media in different ways in different grades. The school media specialist will need to interact with all grades, have a curriculum in place (information skills) to which digital citizenship can be added, and keep current with educational technology as part of their responsibilities. They are in the ideal position to teach digital citizenship, beginning in kindergarten and continuing through high school. As media specialists, you are encouraged to do the following in regards to digital citizenship initiatives:

- Establish appropriate policies and practices for digital practices in K-12.
- Educate all stakeholders, including administrators, teachers, students, parents, library media specialists, technology coordinators and community members
- Evaluate digital citizenship curriculums critically.
- Explore references and feedback from previous users of commercially developed digital citizenship curriculum.
- Emulate effective digital citizenship initiatives.
- Emphasize a collaborative approach to digital citizenship by all k-12 stakeholders, including parents and students.
- Equip students through proactive efforts versus reactive responses.

It is going to require involvement without overreaction to problems or oversight of potential risks. Parents have to be more involved and students must become the role models. Students will need guidance, accountability, and the opportunities to make mistakes and learn from them. Media specialists must become advocates for this delicate process of shaping a digital culture in collaboration with administrators, teachers, and technology professionals. It will take a village!

Lena Dowdy *(ldowdy@white.k12.ga.us) is a media specialist for Jack P. Nix Primary School, White County School Systems, Cleveland, Georgia. She holds a Masters in Education - Instructional Technology from the University of Georgia and has participated in the development and implementation of various technology-based projects and a video grant for her school.*

Judy Donovan, Ed.D. *(judy.donovan@gcsu.edu) taught Math, English and Social Studies, and served as a Library Media Specialist for many years before moving to higher education. She teaches and researches in the areas of technology integration in learning, technology and the role of the library media specialist, and online learning.*

Randy Hollandsworth, Ph.D. *(rhollandworth@piedmont.edu) is an Assistant Professor in Instructional Design and*

Technology with Piedmont College, Demorest, GA. He has worked in the fields of e-learning, performance improvement, instructional design, and instructional technology for over 20 years. He has served on the Executive Board for the North American Simulation and Gaming Association and is the current president of the Division of School Media and Technology for AECT.

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Appendix: Digital Citizenship Resources

Defining Digital Citizenship

Mike Ribble's Nine Elements Of Digital Citizenship	http://www.digitalcitizenship.net/Nine_Elments.html
Howard Gardner's Good Work Project	http://www.goodworkproject.org/

Safety Online & Safe Sites for Kids

iSAFE America	http://www.isafe.org/
bsecure – cyber bullying	http://www.bsecure.com/InfoCenter/cyberbullying.aspx
Digiteen Project	http://www.digiteen.org/
FEMA Online Safety for Kids	http://www.fema.gov/kids/on_safety.htm
Webkinz	http://www.webkinz.com/us_en/homega.html
Woogi World	http://www.woogiworld.com/
Club Penguin (Disney)	http://www.clubpenguin.com/

Digital Citizen Curriculum

GoodPlay Project – Middle Grades	http://www.commonsensemedia.org/digital-citizenship/6-8
iSAFE Curriculum	http://isafe.org/channels/sub.php?ch=ed&sub_id=subscription
Ribble's Resource Site	http://www.digitalcitizenship.net/Resources.html

Ergonomics

Oregon OSHA Site	http://www.orosha.org/cergos/

Copyright/Legal/Ethical

Creative Commons Licensing	http://creativecommons.org/about/
John Palfrey's Copyright blog	http://blogs.law.harvard.edu/palfrey/category/copyright/

Resource Page by Authors	http://digicit.wikispaces.com/