white paper:
digital citizenship: a holistic primer

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abstract

The purpose of this paper is to describe in broad terms the nature and purpose of Digital Citizenship, as well as how and why it has assumed a position of importance in the education of our children. This paper also considers how Digital Citizenship is currently being employed and managed in schools and the kinds of role we can expect it to play in the future.

digital citizenship defined

What is Digital Citizenship? Generally speaking, it is a term the education world has adopted to describe a broad area of inquiry and activity related to the ethics, concerns and opportunities associated with living a digital lifestyle. Digital citizenship reflects our quest to help students, as well as ourselves, develop the skills and perspectives necessary to live a digital lifestyle that is safe, ethical and responsible, as well as inspired, innovative and involved. We want all students to be able to assume the roles of researcher, participant and leader as they build communities that effectively span their physical and online worlds. Toward that end, Digital Citizenship seeks to provide guidance, perspective and activities to help them do so.

The term "digital lifestyle" refers to our socially mediated, technologically infused, mobile lifestyle that has many new qualities and implications for citizenship that were not in play during earlier times. One of these qualities is the degree to which we are empowered in the digital era. We, as individuals and as groups, can push a few buttons and exert immense influence on the few and the many, near and far away. Another quality is that our new lifestyles are both invisible and omnipresent. On the one hand, they can be lived underground, where we can travel the passageways of the Internet out of public view if we choose. On the other hand, our online lives can also be very public. We can broadcast what we do to millions, intentionally or without even noticing, leaving behind our digital footprints - some would say our digital tattoos - wherever we go.

However, the quality that makes our new lifestyle truly unique is that we now live in two places at once. We live in real life (RL), as well as in immersive reality (IR), the world on the other end of our smart devices, which are, to quote MIT's Sherry Turkle, "always on, and always on us." We occupy two ecosystems, our natural ecosystem and a world of real time media that travels with us wherever we go. Our new normal requires us to combine RL and IR into one integrated sense of place, or risk being immobilized by chaos. The result is that we suddenly have a clear, compelling and urgent need to develop new skills to navigate our new reality.

One response to this need is fear. Many are concerned that those we meet online might be unscrupulous or dangerous, and that our children might not have the discernment or skills necessary to protect themselves and their friends. There is good reason to be concerned because, as Turkle reminds us, "the job of adolescence is centered around experimentation - with ideas, with people, with notions of self." Prior to the Internet, adults had a better chance of witnessing the identity play and development of maturing youth and therefore had a better chance of being involved when necessary. But the invisible world of personal networks has made this much more difficult, and have led many to heed the call to Digital Citizenship.

However, while an interest in children's safety may inspire our interest in Digital Citizenship, an equally important concern should also guide us: casting Digital Citizenship in positive terms. We need to portray Digital Citizenship for what it is: the most positive development in education since the Internet became a fixture in our lives. Digital Citizenship provides a real opportunity to rebuild our educational systems. It gives us the chance we have been waiting for to develop approaches to education that reflect the ethical and

innovative perspectives we cherish, and to build the futures we want for ourselves and our children. However, we need to suspend our fears in order to be able to think in terms of these possibilities.

history of digital citizenship

In retrospect, our interest in Digital Citizenship began when we started questioning the impact of living a technological lifestyle. Perhaps an official beginning point for this consideration in education is ISTE's (International Society for Technology in Education) original set of educational technology standards, created in 2000, which included "Standard VI. Social, ethical, legal and human issues." However, we had to wait for the ISTE refresh standards of 2008 to see the term "Digital Citizenship" to appear as "Standard 4. Promote and model Digital Citizenship and responsibility."

The delay in seeing this term surface makes some sense. We only became concerned with citizenship when the Internet was created and led to the development of common virtual space. This in turn led to the formation of communities, which made us wonder what it meant to belong to those communities, and what our expectations of each other were as community members. Citizenship has always been associated with the rights and responsibilities of living in a community. This has not changed over the centuries. However, now we are also citizens of a new second reality that qualifies as a community: an immersive, online reality, as well as the inclusive communities we create that straddle and integrate RL and life on online. With the release of "version 3" of ISTE's student standards in 2016, Digital Citizenship is now firmly embedded in our vision of the future as Standard #2.

do we need a special form of citizenship?

An area of contention in the Digital Citizenship field is whether or not we even need to pursue a specialized form of citizenship to deal with behavior associated with living a digital lifestyle. Generally there are two schools of thought about this issue. The first says that just because we are dealing with issues related to digital culture, we don't need special kinds of considerations for citizenship, ethics or character education. Doing right is doing right, regardless of the technology we use. Whatever works for real life will work for our new virtual and immersive domains as well. In contrast, a second school of thought says, "Let's be realistic. Immersive reality, as well as living in two places at once, has created a new world that invents new behaviors with complex moral implications that we have not dealt with before. We are mashups of ourselves, managing our relationships in multiple dimensions. Of course we need some new approaches to ethics." It is easy to side with the first school of thought. We would like to be able to simply apply the ethics of our parents without any kind of updating. However, the digital domain is different enough from life in pre-Internet times to warrant a number of special ethical considerations. Therefore, currently we are better served by developing Digital Citizenship as a new area of interest which draws upon, reinterprets and finds new and focused ways to apply the ethics of yesterday to the future world of emerging technology. This may change. The two worlds may merge so thoroughly and invisibly that citizenship will simply assume to include our digital lives. But for now, Digital Citizenship deserves its own, specialized focus.

the three core themes and nine elements of digital citizenship

Perhaps one of Digital Citizenship's most challenging aspects is the fact that it embraces such expansive territory. It literally touches all areas of human activity that require the use of technology or the Internet – constituent components of everyday life as most of us experience it these days. This section addresses that challenge by dividing Digital Citizenship into three broad core themes: REP, or, Respect, Education and Protection. Each of these is further subdivided into three elements, for a total of nine elements, as depicted below:

Core Theme Category	Elements
1. Respect	Etiquette, Access and Law
2. Educate	Literacy, Communication, and Commerce
3. Protect	Rights & Responsibilities, Security and Health & Wellness

Each of these is addressed in turn.

core theme i. respect yourself and others

Respect refers to establishing guidelines for viewing and treating others, as individuals and as groups. Respect has always been an important component of interacting with others. But in the online world, where we lack many of the social cues that facilitate communication, respect deserves special attention.

The three Digital Citizenship elements that fit within the core theme of respect are: etiquette, access and law.

1. etiquette

Etiquette focuses on the social norms involved in interacting with one another. Social norms have always changed over time. However, as technology evolves and creates new forms of human behavior, norms are evolving quickly. Of particular note is the fact that the act of interposing technology into communication, and the masking of the people on the other end of an electronic communication with distance and the use of screen names, can foster a kind of indifference or anonymity. It can also foster a kind of unbridled freedom of expression, the results of which can haunt those who fail to consider the implications of the emails or Tweets they send. The bottom line is that while the basics of etiquette that we have inherited from our parents' generation are still in play, new technology requires new etiquette considerations. As we go forward we will we need to pay attention not only to etiquette as we have known it in the past, but also to what it will become as new technology assumes a place in our lives and schools.

2. access.

Digital access is about our connection to resources, information and the online opportunities that characterize personal and professional development in the Digital Age. Personal tools like smart phones are now becoming the common denominator for opportunities not just in the United States but also around the world. Those without them are the "have nots" of the digital generation.

Our concern with access is not restricted just to physical access to devices and bandwidth. Socioeconomic barriers can also prevent students from accessing the tools of opportunity. In addition, restrictive curriculum or school policies can confound the access issue. Schools or districts planning to utilize online or technological requirements for basic studies within the classroom must also provide the access needed to make their program successful.

Resolving issues of access can have positive repercussions that extend beyond school. For example, a school or district that provides 1:1 access for all students can often also provide similar opportunities for families and community members who have few other options.

3. digital law.

Digital law addresses legal concerns related to online activities. Currently, it is focused on three basic areas: the collecting and sharing of personal information; copyright and the issues surrounding the use of other people's materials; and criminal behavior that may abrogate both older laws that were in force before the Internet became a fixture in daily life, as well as newer laws that are related to issues that have developed because of new digital environments. Newer laws address various Internet-specific activities, such as digital copyright, software pirating, stealing online identities, Internet scams and hacking. At the school level, digital legal issues have tended to focus on flagship issues, such as properly searching for and citing the use of

online resources, the sharing of inappropriate images like sexting (the taking and sharing of sexually explicit images), and cyberbullying, that is, acts of mean and often threatening behavior that occur online. But as the technology evolves, we can expect the issues to evolve.

Legal issues can extend beyond typical school activities into areas of the "Dark Web" – that part of the Web that most can't access through normal Internet use. Rightly or wrongly, the Dark Web is often associated with criminal activities, such as the buying and selling of illegal information and goods, and its use by ISIS and other criminal organizations.

States such as Utah, Washington and Nebraska are working on laws that focus on Digital Citizenship in general and Student Protection in general to help address some of the legal issues mentioned in this section.

core theme ii. educate yourself and others

In 1970 the futurist Alvin Toffler (1970), quoting from a conversation with Herbert Gerjuoy, said "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn". These words aptly describe one of the foundational requirements of any approach to Digital Citizenship: the need to be able to adapt to a constantly evolving sense of what it means to be educated and literate. There is already micro generational evidence that bears out Toffler's wise words; sometimes children born only a few years apart have identified an entirely different experience with the technology than their siblings. As technology tools continue to evolve, educating ourselves, our students and each other becomes increasingly important.

The three Digital Citizenship elements that comprise the education core theme are: literacy, communication, and commerce.

1. digital literacy

This specifically relates to Digital Citizenship by focusing on information life skills, which Digital Literacy (1997) author Paul Glister defined as, "The ability to understand information and - more important - to evaluate and integrate information in multiple formats...being able to evaluate and interpret information is critical." If one of our goals is to provide students the skills they need to become socially responsible digital citizens, then another one key goal must be the literacy of our students.

The early leaders of the United States realized that the productivity of a society was dependent upon the literacy of its citizens. For them, literacy involved reading and writing text. Today it also involves learning how to navigate, evaluate and use digital tools and online resources. It also involves other kinds of literacy, like media literacy and visual literacy, which are important for understanding the nature of reading and writing the new kinds of content that the digital world uses on a daily basis.

2. communication.

Communication is concerned with defining, organizing and sharing content in ways that are effective and relevant. Today there are many methods of sharing information including email, Twitter and Facebook. Often, we get comfortable using particular media channels and stop asking, "Is there a better medium to use to say what I want to say?" Given that transmedia communication is at the heart of the global village, "the message" needs to become the core focus of our activities. This requires our constant review of the media channels available to us with the goal of communicating as clearly, creatively and inclusively as possible.

3. digital commerce.

This element addresses issues related to the global marketplace that international electronic networks have made possible. Of particular concern in the Digital Citizenship world is the use of personal financial information, as well as the digital footprints we leave behind as we buy and sell online. Many of us live our financial lives online, buying and selling goods and services using credit cards, PayPal, and other approaches to financial transaction. As a result, we increasingly leave ourselves open to financial mishaps and predators. We want students to understand this. We want them to know how to protect their financial information so they can enjoy the freedom that living an online life affords.

core theme iii. protect yourself and others

Protection is the final core theme. It is within this theme that empathy and character feature most prominently.

The three Digital Citizenship elements addressed in this core theme are: rights and responsibilities, security and health and wellness.

1. digital rights and responsibilities.

As Uncle Ben of Spiderman fame said, "With great power comes great responsibility." This is particularly true in the online world. And it is true for everyone, whether they are average digital citizens or superheroes. All of us must be vigilant as we watch for signs of problems online. In addition, we need the skills to know what to do when we see them. In this respect, our students need guides to help to learn about the pitfalls, as well as the opportunities, of social media. As they develop their skills, they need to become guides themselves.

2. digital security.

This element focuses on the processes we use to protect our information. On one level it addresses technical approaches, such as the use of firewalls and virus protection. On another, it addresses the training we need with regard to making judgment calls about how much personal information to reveal online. Social media has made this issue especially urgent. Our security, and the security of others, is the responsibility of everyone.

3. digital health and wellness.

This element addresses the need to find a balance between the lives that we live in the real world and those we live online. We live in an era in which people are constantly "on their devices," while ignoring those in their immediate environments. In fact, some research is showing that many technology users are addicted to their technology (Common Sense Media, 2013, Conrad, 2014). In addition, we live in the era of "the quantified self," in which technology tools provide ways to help us monitor and improve our physical health. It is our responsibility to help students balance the many sides of technology, and to help students understand the social, interpersonal and physical implications of spending too much time online.

approaches to internet access

Even though Digital Citizenship is a vast area of inquiry and activity, one topic in particular poses practical concerns for many in the K-12 world: student Internet access. A common misinterpretation of this issue sees it as being purely technical in nature, concerned largely with the practicalities of Internet filtering and blocking. Instead, access should be seen first and foremost as an expression of community values. How a school approaches Internet access makes a statement about those values. Because values vary at least somewhat from community to community, each community approaches Internet access somewhat differently. Therefore, Internet access should begin as a discussion, the goal of which is to clarify those values. Policies should emerge as a result of those discussions, which then lead to approaches to policy implementation. Approaches can involve the use of everything from highly restrictive software monitoring to trust-based, one-on-one mentoring.

How differently do schools approach the issue of Internet access? There are two dimensions that need to be considered: Material that students are allowed to search for and read and view, and original material that students are allowed to create and post themselves. With regard to the first, some schools drastically limit Internet access, while others use no filtering at all. Many fall somewhere in between. With regard to posting, some schools allow very little, while others actively pursue the development and publishing of student online portfolios. Again, many schools fall somewhere along the continuum described by these approaches. The point is simply this: Schools have many choices when it comes to approaches to Internet access. Each approach poses problems while creating opportunities. Each approach reflects a particular value position. Schools need to consider their options thoughtfully and deliberately. In the end, Internet policy is an extension of community narrative.

involve everyone in the internet access discussion

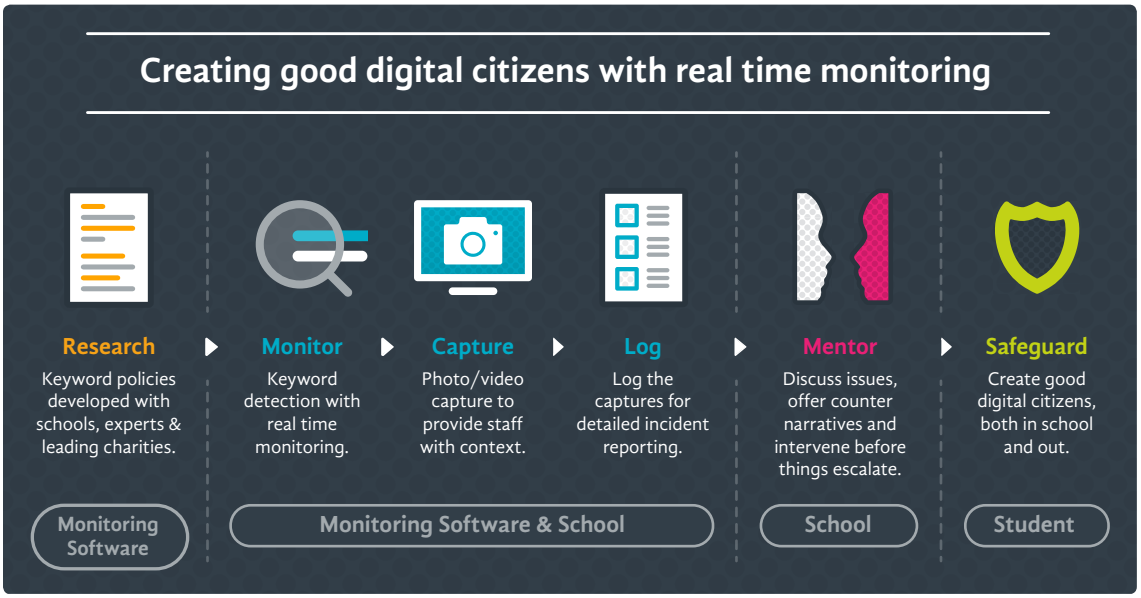
Internet access is not just a school issue. The BYOD "bring your own device" movement in school, and the ubiquitous access afforded by mobile devices, ensures that students take their online lives with them wherever their "RL" lives go. Whether students are at home, at school or are out socializing, they access the same social media and online resources. It is all one, seamless life to them. It will only become more seamless as technology evolves. Access may happen presently through their laptops, smart pads, phones; however, it will happen through whatever connected, wearable and even embedded technology finds its way into their lives in the future.

The point is this: Given how pervasive access already is, discussions about access should involve all community stakeholders. We need parents, students, teachers, administrators, school board members and members of the larger community to be part of the conversation. We need to promote the kinds of online lives that reflect community values that we can all support.

Of special note is the role of student involvement in such a discussion. It is the job of adults to involve students in whatever discussions occur about Internet access, and ultimately in the development of user policies. We want students to help "frame the system" so that they don't feel a need to "game the system." We need to give them whatever chances we can to process the ethics of leading a digital lifestyle if we want them to develop the skills and perspectives of informed and involved digital citizens. After all, the best filter they will ever develop, and the only one they will be able to use when not in school is, as the saying goes, "the one between their ears."

how does monitoring work?

Currently, one approach to addressing the issue of student Internet access, is the use of monitoring systems. The diagram depicts the steps involved in digital monitoring, the idea being to allow students the online freedom they need to grow, learn and survive in a digital world, with the safety net of keyword monitoring to protect against the risks.



A good monitoring system acknowledges the abundant and growing risks presented by the online world and understands that schools cannot be expected to be experts in all these areas. Working with schools, young people, charities and specialists, key word libraries are developed and built into the monitoring system's database, along with definitions and an indication of the threat level posed. A good monitoring system will accommodate an individualized approach to populating the database in order to account for age, developmental level and perhaps even special permissions established on an individual basis. The monitoring system then compares student online activity with the key words in the database, and then captures, flags and logs an "incident" whenever a match is found. A good monitoring system provides context around these incidents, with either a screenshot or video capture to provide alerted staff with the 'who', 'what', 'where' style information they need to address the issue.

How schools deal with what the monitoring system yields depends on policies they have developed. As pointed out in this paper, that varies among schools. Whatever the school's specific process, the information flagged up by a monitoring system allows schools to open dialogues with students, mentor and educate them in relation to the incident and create good digital citizens wherever they are accessing the Internet from.

applied digital citizenship

The reality is that Digital Citizenship is relatively new and is experiencing growing pains as it tries to find its way into school communities and, more importantly, everyday curriculum. One way to see Digital Citizenship in action is to examine what is currently happening in classrooms. Luckily, there are teachers around the world who are "connected educators" who are committed "to breaking down the walls of a traditional classroom." What follows are examples of the efforts of some of these connected educators who are trying to integrate digital citizenship into the mainstream of education.

elementary school

Elementary teacher Kayla Delzer provides our youngest learners opportunities to use social media tools in real life situations. Delzer is not just a teacher, she is a "Digital Role Model" for her second grade students, who have never known the world they live in without WiFi or mobile devices. Her students use a classroom Twitter account and are assigned "Tweeter of the Day," which provides the students an opportunity to share what they are learning with a global audience and to practice being a digital citizen in a safe learning environment alongside their teacher.

The only way our students will be empowered to be digital citizens is if teachers provide authentic opportunities to make digital citizenship action-based. Our students can't just read and write about digital citizenship; they need to be directly involved in it, on a daily basis. For example, Linda Yollis' third graders are bloggers who create videos for other students, like **How to Write a Quality Comment** (www.youtube.com/watch?v=UDVSw54VU1A). Students creating content like this further highlight how our students can easily be engaged in the digital citizenship critical conversation as content. Other educators like Ryan Reed are bringing pop culture into the classroom. Reed, a K-8 instructional technology teacher, is harnessing the global phenomenon, Pokémon Go by embedding all nine elements of digital citizenship into playing the game. Why is this important? Connected educators are literally gaming digital citizenship both in and out of the classroom. Being able to bring the outside world into the classroom authentically engages students into being designers, critical thinkers, global collaborators, problem solvers and active digital citizens.

middle school

In 2010, connected educator and seventh grade teacher, Pernille Ripp, elevated networked learning to a global level when she launched the Global Read Aloud, a global reading project that uses a variety of social media tools to connect more than 500,000 students on six continents. As described on the website,

> "Global collaboration is necessary to show students that they are part of something bigger than them. That the world needs to be protected and that we need to care for all people. You can show them pictures of kids in other countries but why not have them speak to each other? Then the caring can begin."

high school

Known as the Lady Gaga of high school English teachers, Nicholas Provenzano has said it best, "We are living in a world where students are exposed to more sources of information and have access to share their own information. Sadly, the crazy, mean-spirited, violent, angry, and bigoted voices are becoming louder on social media...schools need to educate students AND parents on best practices of

using the Internet." Provenzano instituted 20 Time, where 20% of the time in school is dedicated to specific student interests. The 20 Time projects became central to blogging and ultimately became part of TEDxYouth talks. These high school students had the opportunity to deeply examine what interested them the most as they blogged and developed their stories into a TEDxYouth talk.

High school mobile learning coach, Jennifer Scheffer, also provides real world learning opportunities that apply higher level thinking specifically in area of Digital Citizenship. Scheffer runs the Burlington High School Student Help Desk in which students actively engage with modeling positive and practical use of social media and technology. Her curriculum helps students establish positive e-reputations through the creation of digital resumes using social media services like LinkedIn and About.Me. In addition, her students use social media tools such as Twitter and SnapChat to solve problems and create solutions.

Scheffer moves her students from being socially responsible to being socially aware digital citizens who are uncovering injustices and social inequalities. For example, one of her high school seniors, Timmy Sullivan, a bilingual international speaker, blogger and educational activist, became involved with developing curriculum as a direct result of a vandalism incident at a local mosque. Timmy not only stood up against the unjust actions of his peers, but saw an opportunity to initiate a change in the curriculum; she worked alongside other students and educators to revamp the high school curriculum.

K12 school district

At Longview Independent School District, TX, IT Director Brian Pitts and his team use online monitoring software to flag up early warning signs related to online safety. Rather than simply blocking and filtering online content, this software allows Longview ISD to monitor student devices. This approach allows educators and administrators to review and assess logged activity, based on contextualized information, so that they can intervene, educate and safeguard as necessary.

> "It provides automated help detecting symptoms and indicators of online safety concerns which is invaluable to our district. As log files are collected at a rate of tens of millions of entries per day, it would be impossible for us to pick out all the safeguarding issues on our own."
>
> **- Brian Pitts, Longview Texas Independent School District**

higher education

At the University of Saint Joseph in West Hartford, CT during the Fall of 2011 incoming freshmen enrolled in a First Year Seminar, Pleased to Tweet You: Are You a Socially Responsible Digital Citizen? Even though the seminar initially started as a way to help students develop consciousness and empathy online, it evolved into a collaborative project that connected the college freshmen in West Hartford, Connecticut with high school juniors in Birmingham, Alabama using social media tools like Twitter and Skype. This course provided students an opportunity to become actively engaged in social justice issues in their local, global and digital communities. The final collaborative project, the iCitizen Project was a multimedia presentation including Skype sessions, PSAs (Personal Service Announcements) videos created by the students, blog communication and tweets that defined citizenship in the 21st century.

The project defined an iCitizen as being a citizen of the world. "Together we learned what it means to be an active citizen instead of just a resident, an enabler of change, and not a bystander. We learned to humanize the

person on the other side of the screen. For a generation who has mostly grown up around computers, it's hard to think there's anything new that you could possibly learn about the Internet. But this class has shown us that there is always room to grow, connections to forge and communities to contribute to, both in your backyard and behind the computer screen." It was a transformative experience for both the college freshmen and high school juniors as they became focused on changing minds, attitudes, and hearts.

During 2013, the University of Alaska offered a MOOC-style course on the topic of Digital Citizenship, which addressed topics of particular interest to educators. Even though the course was created for fifteen graduate education students, the world was invited to attend on a non-graded basis. As a result, five hundred students from many countries joined the conversation, providing a diversity of perspective from which everyone benefitted. The course can still be used at **jasonOhler.com/digcit.**

All the educators featured in this section approach teaching and learning as a way to positively engage students with online resources and social media tools. Their goal is not only to connect and collaborate with other students and classrooms, but also tackle real world issues. If more K-12 students were provided opportunities to be content creators, problem solvers and digital citizens, we would see a difference in how we humanize our local, global and digital communities.

the future of digital citizenship

Given that Digital Citizenship responds to changes in technology, and given that the future of technological evolution is very difficult to predict, no one can say what Digital Citizenship will look like going forward. However, here are some broad themes that seem destined to become the focus of much attention and debate in the near term.

1. will digital citizenship align itself with a philosophical or research base?

While many seem to view Digital Citizenship as arising from nowhere – because the technology that drives it seems to do so – others see it as an extension of already existing theoretical and applied traditions, such as character education and socio-emotional learning. In fact, Digital Citizenship could benefit from foundational approaches like these in order to take advantage of the research and experiential history they provide. In return, Digital Citizenship could inform these traditions with fresh perspectives, as well as ways to consider new behavioral issues arising from the digital lifestyles we now live.

2. how should students be involved digital citizenship movement?

The current reality is that adults tend to make all the Internet rules for students. When they do so, they deprive students of much needed chances to flex their ethical muscles. If students aren't allowed to frame the system that guides their use of technology and the Internet, then they tend to game the system. Expanding student involvement in framing the system promises to be a much debated topic going forward.

3. the extreme edge of digital citizenship – What shall we do about shirts with WiFi and neuro-enhancing chips?

With so much concern focused on immediate issues of digital citizenship, like copyright infringement and cyberbullying, sometimes it is difficult to see down the road. The reality is that a number of the technologies we use today will seem tame in comparison to what is right around the corner, including connected

clothing, real thinking caps that raise test scores, contact lenses that provide Internet connectivity, the Internet of Things, and much more. How will communities respond to these technologies? How will we provide students the opportunities to think the changes that await them?

4. will our approach to the internet in education be driven by fear, or by a more positive approach to the world of online possibilities?

Many in the Digital Citizenship field are very focused on cyberbullying, sexting and other hot button issues. This is very understandable. Just one story about harm coming to children because they trusted the wrong people online induces justifiable fear. However, we need to couple any fear-based approach we use with another approach: mining and shaping the Internet experience for positive reasons. For example, it makes sense to warn students that the digital trail they leave behind them wherever they go online that can so indelible that they last a lifetime – causing some to some to refer to them as digital tattoos. We have all heard stories about a tweet gone awry which cost someone a relationship or a job. However, it also makes sense to balance this by having students create deliberate digital footprints in the form ePortfolios and web resources that tell the story of themselves as their lives as they want them told. Students need to develop the skills and perspectives necessary to flourish in their online environments.

5. what kinds of home-school-community connections do we want to cultivate?

The reality is that our online lives travel with us, and cross the boundaries our school, professional and personal lives rather effortlessly. Therefore, our digital lifestyles, and the digital citizenship concerns we have about them, are simply too big for schools to handle by themselves. We need to find ways for educators, parents community members work together effectively to address the ethical issues that our digital lifestyles present us. We need to ask, What kinds of home-school-community connections should we develop to best prepare students to be ideal digital citizens?

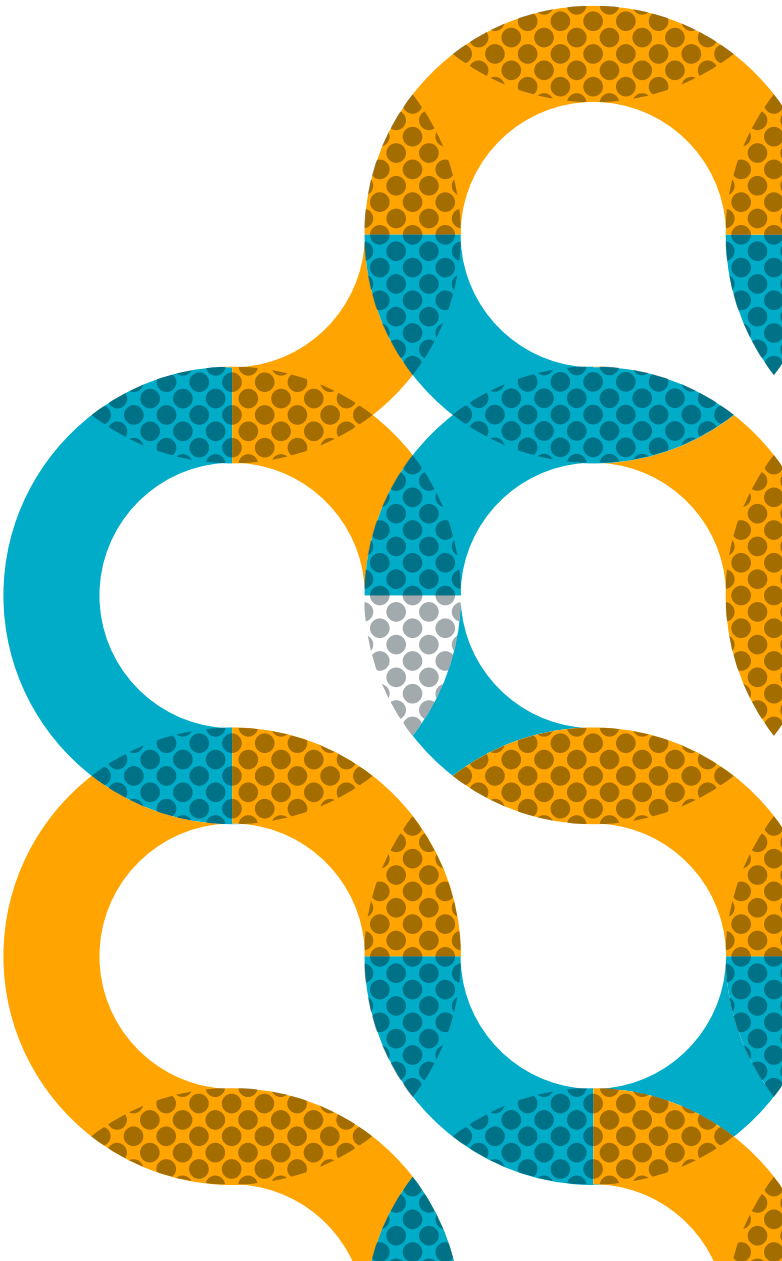
6. what is the role of software management tools in protecting, managing and providing opportunities for students in the arena of student Digital Citizenship activity?

Companies like Impero offer sophisticated systems that can help schools track and manage student Internet activity. Have we reached the point where using these kinds of systems will need to become the norm? If so, what will be our goals is using such an approach? And even if we do use such systems, all they can do is give us raw data that we then need to address on a school-by-school, and student-by-student, basis. What form will our response take? Communities need to determine the values that will drive their responses, and they will need to do so with input from all the stakeholders associated with a school community.

conclusion – how should we teach digital citizenship?

Years ago the highly respected educational theorist John Dewey stated that schools need to become mini societies, mirroring the real life social activities of the students they teach (Pamental, 2010). These are wise words for us as we embrace a world in need of the guidance Digital Citizenship can offer. We can't afford to be reactive to changes and innovations in society. Instead, we must become change leaders who welcome the new landscape of social media for the opportunities it affords us to create new pedagogies.

This leads us to a final issue that is clearly on the table and in need of our attention: Should we teach Digital Citizenship as a stand-alone topic or integrate it across the curriculum? The simple answer is both. However, the future of successful Digital Citizenship lies in addressing it throughout curriculum, as well as throughout our personal and professional lives. We enter an ethically challenging arena whenever we pick up our smart phone or go online. Our students need to understand this. They need to understand that Digital Citizenship concerns arise everywhere, in biology and history class, as well as in their private lives. Given our already overcrowded curriculum, finding effective ways to integrate Digital Citizenship throughout the school day, will be challenging. But it is a challenge we must take on.



about the authors

impero

Impero is a team of technology enthusiasts with a passion for education. Author of Impero Education Pro, a consolidated suite of network management, online safety and classroom control tools, Impero supports IT pros, empowers teachers and protects students. Through keyword detection and real-time monitoring, Impero Education Pro creates a safe and engaging learning environment for our digital age. Impero supports Windows PCs, Laptops, Macs, iPads and Chromebooks.

Impero Education Pro is actively used in over 70 countries worldwide, by over 500 school districts in the US, and across more than 40% of high schools in the UK. Impero employs over 80 people with offices in Los Angeles, CA and Nottingham, England.

internet safety

With growing concern for student safety online, Impero works alongside national non-profit safety groups and US school districts to continually improve the Internet safety features in Impero Education Pro and support a best practice approach to digital citizenship in schools.

a best practice approach

1. continuous research:

Impero's keyword policies (including adult content, self-harm, counter-radicalization, sexting, grooming, suicide, cyberbullying, racist language, LGBT derogatory language, violence and weapons and more) have been developed with leading non-profits, safety experts, and young people, to understand the terms associated with each safety risk.

2. monitor, rather than simply block:

Impero Education Pro monitors school networks in real time, using complex algorithms to detect for key words and phrases that could indicate a student is at risk. When a keyword is detected (in applications, email, social media, search engines, websites or URLs), the incident is captured. This capture is timestamped and logged with a screenshot, or video clip, to provide 'who, what, where' style information, putting the incident into context. Advanced policies also allow schools to tailor the system, adding custom keywords and detection settings.

3. open dialogs & educate:

As captures are logged, relevant staff members are notified. Flagged keyword notifications provide full definitions and severity levels to help staff understand and respond. Staff can also see detailed records of student Internet usage and previous captures, allowing them to make informed decisions regarding next steps. Armed with relevant information, staff can open up dialogs with students and safeguard as necessary. This approach is centered on identifying students at risk and tackling issues head on before they escalate. When the appropriate response has been actioned, staff can record it on the system for future reference. This complete log of information helps staff to see patterns of misconduct or concerning behavior and address them with one-on-one support, lesson plans, or assemblies based on the relevant issues.

4. promote digital citizenship through safeguarding:

By opening up conversations about online behavior, students can be educated to understand the risks, teaching them to act responsibly online, whether they are being monitored or not.

about the authors

The Digital Citizenship Institute is committed to promoting social good through the use of technology and social media. Turning the tide away from the negative stories on cyberbullying, sexting, trolling, tech addiction and inappropriate uses of technology, the Institute extends this conversation to amplify the positive. Viewing social media as a powerful learning tool, the focus is on encouraging and practical solutions for students and school communities. They do this by embedding core skills and concepts into all grades and subjects, putting ideas into action and transforming problems into opportunities.

digital citizenship defined

By embedding Dr. Mike Ribble's nine elements of digital citizenship into best practices, research, curriculum & instruction, professional development, experiences, workshops & events, the Digital Citizenship Institute transforms problems into opportunities and digital citizens into digital leaders. Their team is focused on building communities of best practice.

differentiating factors

The Digital Citizenship Institute empowers schools and communities to think, act and connect responsibly and respectfully on and offline. They do this by giving participants the tools and training they need to brainstorm, design, collaborate and execute on projects that solve real world problems and create positive digital footprints.

The Digital Citizenship Institute provides a community-driven approach to educating and empowering digital citizens to solve problems in local, global and digital communities. The Digital Citizenship Institute turns negatives into positives, raising awareness and creating opportunities for social good to ultimately transform participants into active designers, creative thinkers, global collaborators, problem solvers and justice-oriented digital citizens

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Marialice B.F.X. Curran, Ph.D. - Founder & CEO at Digital Citizenship Institute

Dr. Curran has served in education for over twenty years as an associate professor, principal, teacher and advocate for student voice. Her teaching career began in a middle school classroom. Her Boston College doctoral work further explored middle level education and adolescent development.

Recognized as an international expert in digital citizenship, Curran is founder and CEO of Digital Citizenship Institute, co-founded both Digital Citizenship Summit and #digcit Twitter chat. Her passion is helping others use social media for social good, empowering multi-stakeholders problem solving for local, global and digital communities.

Curran created, developed and taught the first 3 credit digital citizenship course at both the undergraduate and graduate level at University of Saint Joseph in West Hartford, CT, and continues to provide digital citizenship professional development there.

Marialice is passionate about modeling digital citizenship to youth, even as a mother. She and her nine-year old son founded DigCitKids, as part of the Digital Citizenship Institute, to inspire other parents and children to follow their lead.

Digital Citizenship Institute:

http://www.digitalcitizenshipinstitute.com/

DigCitKids:

http://www.digcitkids.com/

Dr. Jason Ohler – Professor Emeritus of Educational Technology and Virtual Learning, author, speaker

Dr. Jason Ohler is a professor emeritus, speaker, writer and a lifelong digital humanist who is well known for the passion, insight, and humor he brings to his writings, projects, teaching and presentations. During the 1980s he created one of the first educational technology master's degrees for teachers in response to desktop computing that was founded on principles of digital citizenship.

Dr. Ohler has been helping community members, organizations and students at all levels understand the ethical implications of being digital citizens in a world of roller coaster technological change ever since. His most recent book, 4Four Big Ideas for the Future, reflects on his 35 years in the world of educational media and innovation in order to chart a course for a future. He is first and foremost a storyteller, telling tales of the future that are grounded in the past. Dr. Ohler currently teaches in Fielding Graduate University's Media Psychology PhD program.

Dr. Jason Ohler Ideas:

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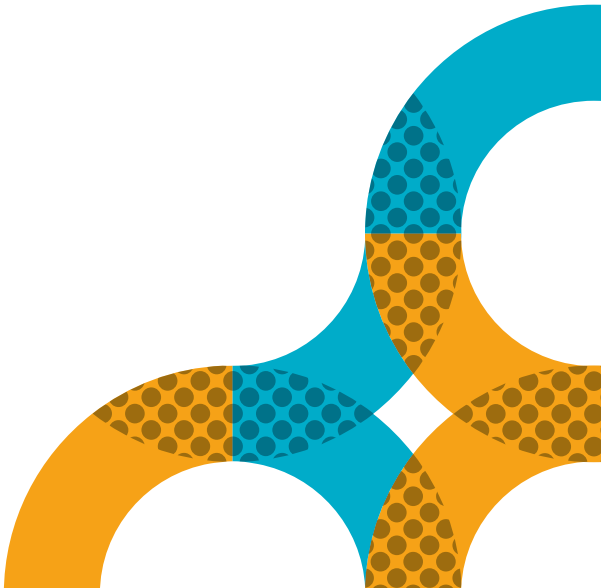
Dr. Mike Ribble, Ed.D - District Director of Technology, Educational Technology presenter, consultant, author

Dr. Ribble has spoken on the topic of digital citizenship to parents, teachers and students in the United States and internationally. He has written articles for THE Magazine, District Administrator, Leading & Learning, Kappa Delta Pi Record and Innovate My School. Dr. Ribble is interested in helping students, teachers and parents understand the issues around technology and how to use these tools appropriately. His current work is focused around character education and how that can improve user's online profile.

The Digital Citizenship Website:

http://digitalcitizenship.net/



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