

White paper

Prevention Science: A Framework for Positive Digital Citizenship

about the authors

This paper was commissioned by Impero Software for launch at the DigCitSummit 2017. It is the result of a collaborative effort between EPIK Deliberate Digital, Impero Software, the Digital Citizenship Institute, and Educate Empower Kids.



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Executive summary

In an ever-changing digital world, children are in need of significant mentoring and guidance on how to use technology in ways that are safe, healthy, responsible, and able to make a positive difference in their world. Because adults are often plagued by fear when it comes to technology, children are not receiving the kind of mentoring they need at home, at school, or in the community around them. Decades of research in prevention science show that the best prevention efforts:

1. Focus on shared risk and protective factors across multiple behavioral health concerns, rather than trying to address each problem individually
2. Consider all domains of a child's life (e.g. personal (including biological makeup), peer, school, family, and community/society)
3. Provide opportunities, skills, and positive reinforcement of prosocial behavior
4. Engage in multi-sector and whole-community collaborations and multifaceted programming efforts

Positive Digital Citizenship is a growing movement that encourages starting with a positive mindset and working side-by-side with youth (rather than at, to, or even for them) when exploring how to avoid risks and leverage the positives of digital technologies. This paper¹ explores how prevention science principles can provide a framework that can both inform positive Digital Citizenship efforts and facilitate communication about the growing Positive Digital Citizenship movement. The paper also extends bold call-to-actions to expand conversations and collaborations that can merge the prevention science, media literacy, and Digital Citizenship worlds.

This paper is a collaborative effort of [EPIK Deliberate Digital](#), [Impero Software](#), the [Digital Citizenship Institute](#), and [Educate Empower Kids](#).

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1. Introduction

“There are a thousand hacking at the branches of evil to one who is striking at the root.”

- Henry David Thoreau²

“What is important to us as a culture? How do we impart it to our children? How do we support it as adults? The questions are simple, but answering them takes a lifetime.”

- Dr. Jason Ohler³

All too often, when adults think of children and technology, fear and overwhelm are the instinctual responses. Experience shows that anxiety is very common among parents, educators, school administrators, pastoral leaders, legislators and others who care about children as they consider how to protect, teach, and mentor children in a technology-saturated world.

In her TEDx talk entitled “[The Challenge of Raising Digital Natives](#),” Devorah Heitner, Ph.D. (media historian and founder of [Raising Digital Natives](#)) captures many of the reasons adults experience fear when navigating issues related to children and technology.

“[Adults] say to me, ‘I’m concerned that our kids have no social skills. I’m concerned that my kid is addicted to games. I’m concerned that they are double-screening and multi-tasking to the point that it’s not clear that they’ll ever be able to focus on anything. I’m concerned that they’re going to take a naughty picture, hear about a naughty picture, receive a naughty picture, and their innocence will be destroyed. I’m concerned that they’re going to become a cyberbully, or be cyberbullied, or be blackmailed.... I don’t know what they are doing on there, but I’m worried about it.”

Dr. Heitner notes that history teaches us that whenever a new technology emerges, anxiety is the common response. For example, people were certain that the telephone would destroy family life, and yet now most of us cannot imagine family life (and other facets of our lives) without phones.

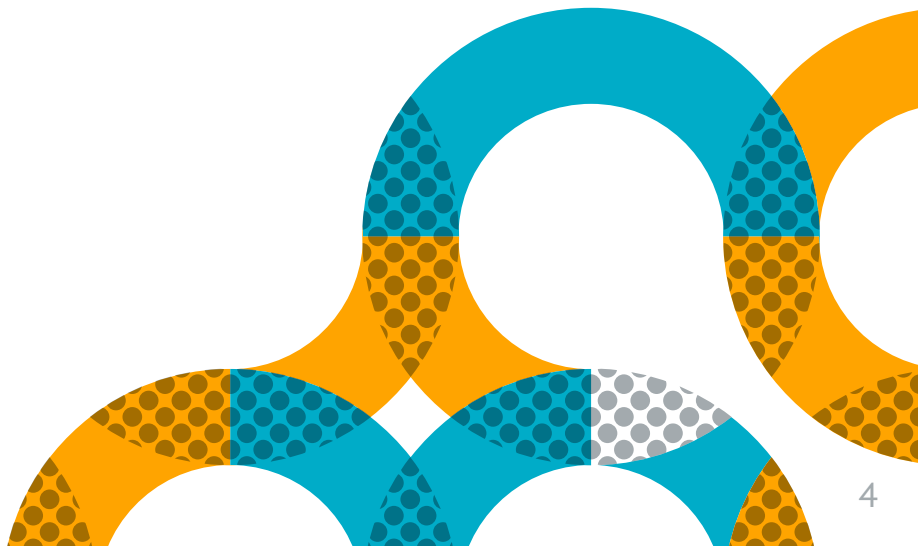
She is careful to say that this historical perspective should not be used to minimize the reality that risks exist. But she urges a more balanced approach to raising/teaching kids in a digital world. She invites adults to ask questions like: Are we focusing on what kind of people we want our children to be? Are we focusing on fostering and mentoring our children around positive uses of technology? Are we considering what positive outcomes we want and leading toward those?

Inviting more conversation and action around such a balanced approach is the purpose of the third annual [Digital Citizenship Summit](#) and the goal of this white paper. The theme for the 2017 DigCitSummit is **EXPAND**, with an emphasis on the word **and**.

Conversations around issues related to children and technology must always consider how to protect children from harm, and they can, and should, include a deliberate focus on exploring how children can be taught and mentored to use technology in positive ways in personal, school, community, and even global spheres.

²Henry David Thoreau, Walden

³Taming the Beast: Choice & Control in the Electronic Jungle, p. 3



Such a balanced approach to addressing issues related to children and technology is supported by principles and research in various fields whose goals are to help people live healthy, productive, engaged lives. For example, media literacy -- a decades-old field that is now coming into its time in a digital age -- reinforces the need for children and adults alike to be both wise and safe consumers of information and deliberate creators and contributors of media. Parenting theories recognize the need for both structure to help protect children as they develop impulse control and nurturing that can help them learn to guide themselves. Physical health science recognizes both the need to reduce risks and to increase healthy lifestyle choices. Mental health science recognizes the need to both reduce negative influences and thought patterns in one's life and to make deliberate choices that foster healthy thoughts, beliefs, interactions, and behaviors. Relational science desires to provide guidance for reparative therapies and urges prioritized, intentional focus on building relationships in positive ways. The list could go on.

The prevention science (sometimes called behavioral science) field also underscores the importance of a balanced approach. Decades of prevention science research has revealed that there are shared risk factors and shared protective factors that, when given attention through targeted programming and deliberate teaching and mentoring, can help reduce the chance of risky behaviors in youth. Prevention science principles also encourages a collaborative, whole-community approach to the health and well-being of children.

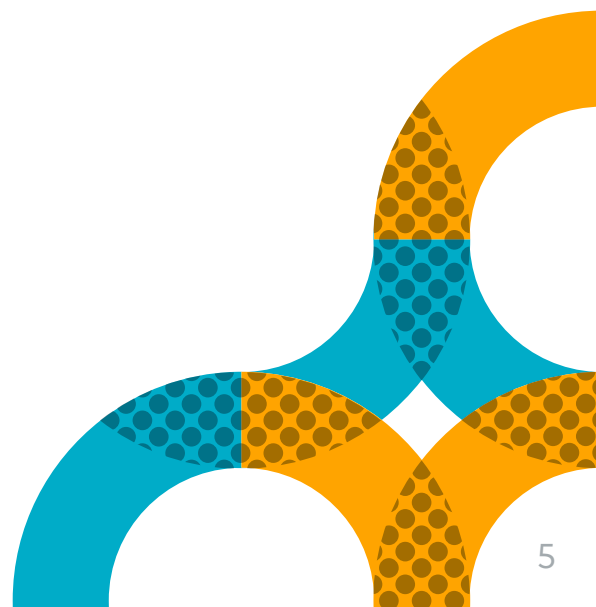
This white paper will explain prevention science research and principles and explore how it can be a framework to inform conversations, curricula, and collaborations around Digital Citizenship. Consistent with prevention science principles, the paper will acknowledge the concerns and risks related to digital technologies and will explore possible ways to mitigate those risks using technology. Also consistent with behavioral science research and programs, the paper will explore how prevention science's research into risk and protective factors might apply to Positive Digital Citizenship efforts. The paper will also present information about how research in the media literacy space can inform prevention science and Digital Citizenship initiatives. Lastly, the paper will reinforce the urgent need for a whole-community approach to addressing prevention and Positive Digital Citizenship goals in a digital world.

The hope is that the information in this white paper will be helpful to parents and professionals alike; will help spur cross-sector, whole-community collaboration; and will invite both those in the prevention science world and those in Digital Citizenship spaces to consider how their work might intersect. The assertion of this paper is that only through deliberate, collaborative efforts will adults be armed to work side-by-side with children to help them both face the dangers and leverage the possibilities of living in a digitally-driven world.

⁴ See <https://namle.net/>, <http://www.medialit.org/>, and <https://medialiteracynow.org/> for information about media literacy.

⁵ See, for example, the discussion on the balance of structure and nurturing here: <http://centerforparentingeducation.org/library-of-articles/discipline-topics/role-of-parents/>

⁶ J.D. Hawkins, J. M. Jenson, R. Catalano, M. W. Fraser, G. J. Botvin, V. Shapiro, C. H. Brown, W. Beardslee, D. Brent, L. K. Leslie, M. J. Rotheram-Borus, P. Shea, A. Shih, E. Anthony, K. P. Haggerty, K. Bender, D. Gorman-Smith, E. Casey, and S. Stone. 2015. Unleashing the Power of Prevention. Discussion Paper, Institute of Medicine and National Research Council, Washington, DC., 14. See also <http://aaswsw.org/wp-content/uploads/2013/10/Unleashing-the-Power-of-Prevention-formatted-4.29.15.pdf>



2. Digital Citizenship

2.1 A brief history

Digital Citizenship is often defined as “the norms of appropriate, responsible behavior with regard to technology use.”⁷ Historically, conversations around Digital Citizenship focused heavily, if not almost exclusively, on digital safety -- and understandably so. The risks and dangers of online life are real. To address these risks, during the past two decades to the present day, a plethora of organizations, curricula, and other resources have emerged to address online safety issues, especially for children.⁸

As the internet continued to evolve and the use of the internet expanded, awareness also arose around the need to discuss additional issues such as etiquette, copyright, privacy, ethics, and more. Thought leaders such as Dr. Mike Ribble (known by some as a godfather of Digital Citizenship), sought to encourage people to expand their perspective around digital issues. (See [work of Dr. Jason Ohler as well.](#)) Ribble outlined what are known as the “[Nine Elements of Digital Citizenship](#)”, which have been used worldwide for over a decade as a guide for conversations and curricula in schools.

[Common Sense Media](#), [Cyber Civics](#), and other organizations have also developed multifaceted models of Digital Citizenship, while other organizations focus in more detail on a specific Digital Citizenship issue (e.g., [iKeepSafe](#) recently decided to focus primarily on privacy, and [Social Assurity](#) focuses on helping students build digital footprints that help prepare them for college and career). (See also [DigCitUtah.com](#) for a curated list of oft-explored Digital Citizenship topics and categories.)

Until recently, however, most Digital Citizenship programs focused mostly on preventing the negatives. It was (and often still is) rare that conversations, collaborations, and curricula explored the positive side of Digital Citizenship. While safety and other issues are critically important, emerging efforts in the Digital Citizenship space are expanding conversations and culture to include celebrating and mentoring children in positive uses of technology. The goal of a Positive Digital Citizenship Movement is to help shift conversations and culture so that the positive consistently gets attention alongside the protective. Indeed, Positive Digital Citizenship asserts that some of the best protective measures are mentoring and experience in proactive, positive digital use.

Just as good citizenship in the face-to-face world is more than just obeying laws, locking doors, staying off the streets and not doing drugs, good Digital Citizenship includes being informed, involved, and engaged in efforts to improve communities and to help and serve others. [Digital Citizenship: A Holistic Primer](#)⁹ (2016) reiterates this idea.

⁷ http://www.digitalcitizenship.net/Nine_Elements.html

⁸ See some curated Digital/Internet Safety resources here: <http://digcitutah.com/digital-safety/>

⁹ “Digital Citizenship: A holistic primer” at <https://www.imperosoftware.com/us/resources/white-papers/digital-citizenship-holistic-primer/> or <http://www.digitalcitizenshipinstitute.com/wp-content/uploads/2016/10/digital-citizenship-a-holistic-primer-v2-1.pdf>



“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.... Digital Citizenship provides a real opportunity to rebuild our educational systems [and the culture at large]. It gives us the chance we have been waiting for to develop approaches...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.”

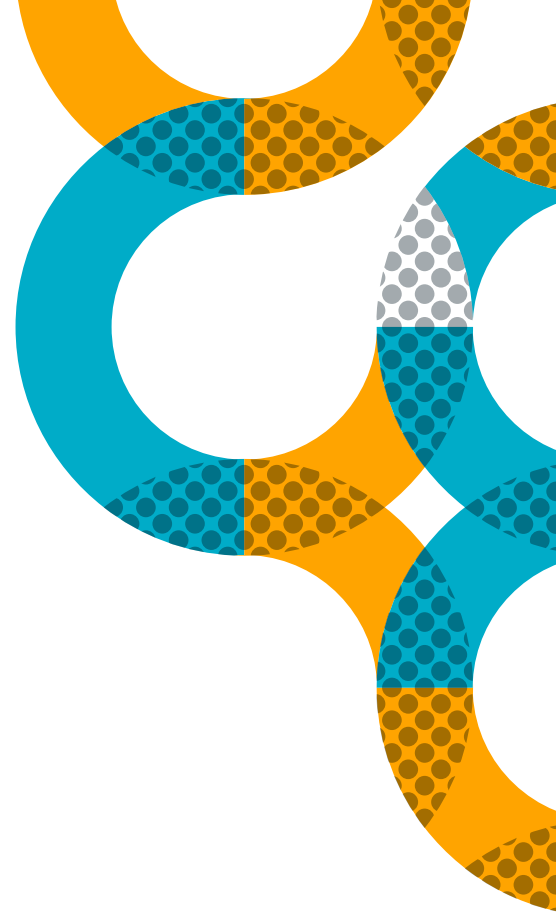
To suspend fear is not to ignore risk. It is simply to begin with a mindset that is proactive rather than reactive - one that first recognizes and strives to explore the vast potential for good that digital tools can provide and help children be safe, healthy, and responsible as they learn by experience to use these digital tools.

In short, citizenship in our local, global, and digital communities includes both reducing risks and proactively fostering positive opportunities to use technology for good. Citizenship is more than just know-how; citizenship is action to make our communities and our world safe places where human development, connection, and innovation can thrive. This paper suggests that this balanced, Positive Digital Citizenship approach is consistent with principles supported by decades of prevention science.

The Positive Digital Citizenship Movement also includes working with youth rather than at, to, or even for them. This is another significant shift from the past.

“The current reality is that adults tend to make 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 in the future.”¹⁰

¹⁰Digital Citizenship: A holistic primer” at <https://www.imperosoftware.com/us/resources/white-papers/digital-citizenship-holistic-primer/> or <http://www.digitalcitizenshipinstitute.com/wp-content/uploads/2016/10/digital-citizenship-a-holistic-primer-v2-1.pdf>



2.2 The DigCitSummit

It's an exciting time to be engaged in conversations around Digital Citizenship, and global conversations around these topics are expanding in part because of the [Digital Citizenship Summit](#) (DigCitSummit). The inaugural DigCitSummit took place in Connecticut in October 2015, the result of several years of collaborative efforts.

The 2016 Summit was held at Twitter Headquarters in San Francisco, California and included speakers from around the world. The focus of that Summit was how media literacy and Digital Citizenship intersect. Media literacy “provides a framework to access, analyze, evaluate, create and participate with messages in a variety of forms — from print to video to the Internet. Media literacy builds an understanding of the role of media in society, as well as essential skills of inquiry and self-expression necessary for citizens of a democracy.”¹¹ Media literacy is a foundation to Digital Citizenship and also could be considered a protective skill for mental, emotional, and behavioral health, especially since media can also be a risk factor in a multiplicity of behavioral health problems. (See Section 4.)

Now in 2017, the DigCitSummit has [exploded into the international scene](#), with events being hosted on nearly every continent. Movement is happening, and opportunities abound to engage in conversations about digital safety and using technology in positive ways. Whereas in the United States a lot of energy is being expended to balance the fear-based, safety-only mindset, the expanding global conversations can help countries that are just beginning Digital Citizenship efforts to start from the get-go with a balanced, prevent-the-negative and leverage-the-positive approach.

The intent of the 2017 DigCitSummit in Utah is to bring Positive Digital Citizenship squarely into conversations and culture around kids and technology. The goal is to help improve the culture in the United States and to invite developing nations around the world to start (from the get-go) to avoid a fear-based, reactive culture when it comes to kids and technology. Safety and other protection-based principles are, and will always be, important, and fostering positives is essential to helping children prepare to be deliberate digital citizens and influencers in their personal, local, global, and digital spheres.

2.3 What is meant by Positive Digital Citizenship?

Technology can magnify both the negative and the positive. Where there are negative things for kids to consume or engage in (e.g., pornography, violent content, bullying, sexting), technology can intensify the potential for harm. Anonymity, accessibility, and affordability of internet technologies can increase risks when compared to “real life” risky behaviors, while also often decreasing accountability for actions.

It is important to be clear here: Talking about Positive Digital Citizenship does not equate to ignoring the need to reduce risks/prevent the negatives. For example, many organizations and individuals are concerned about pornography exposure for children and feel that direct attention needs to be given to issues related to digital life.

Kristen Jenson from Protect Young Minds states:

“Every child deserves the education and tools to reject pornography as soon as they have access to the internet.”

“Digital addictions could be in a class of their own, because of the Triple A threat of the internet (Anonymous, Affordable, Accessible). I know of so many children/people raised in solid, functional, loving homes who get pulled into pornography. Protect Young Minds’ message is that we must be direct and specific about the dangers of pornography from a young age if we are going to inoculate kids against the bad and allow them to enjoy the good that a digital world offers.”¹²

¹¹ <http://www.medialit.org/media-literacy-definition-and-more>

¹² Quote from private correspondence. Shared with permission.

Parents have known concerns about many issues, such as cyberbullying and general internet safety issues, and sexting.¹³ Unfortunately, however, parents are not typically asked about the positives they see around children and technology (or even their lives in general). This is a simple example of how the culture tends to focus primarily on what is feared at the exclusion of what positives are possible.

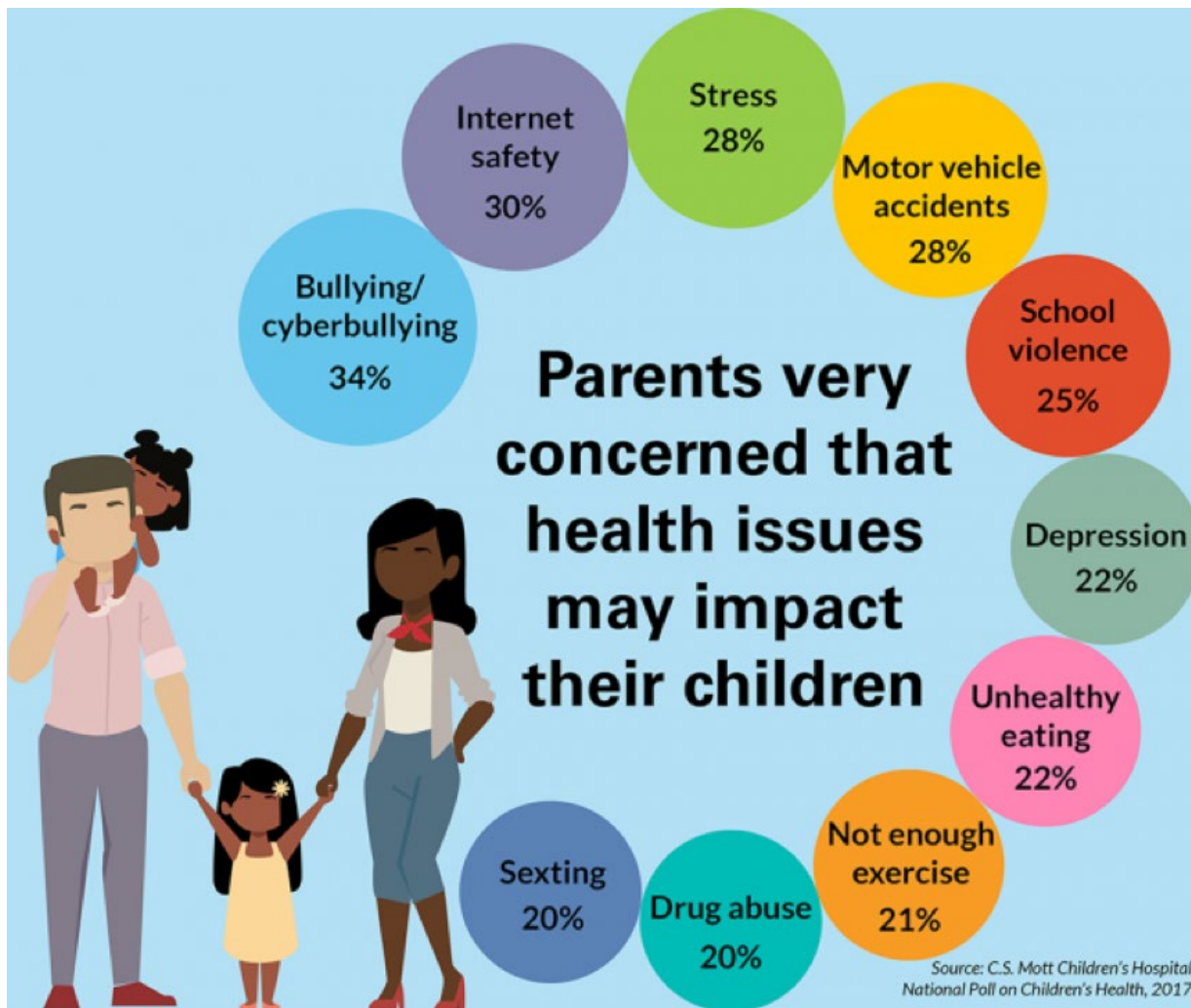


Figure 1 - C.S. Mott Children's Hospital National Poll on Children's Health, 2017, shows top parental concerns

More efforts are needed to explore, monitor, and measure the good that can be done in families, communities, and the world because of the power of digital technologies. Countless examples of such positives currently exist (see, for example, UseTech4Good.com, a new collaborative clearinghouse of examples of students using technology in positive ways). However, because adults often start and stop at the 'don'ts' when

engaging children and youth, the potential ideas around using technology for good may still be significantly unexplored. Expanding conversations and culture to include and deliberately foster the positives is a key focus of the collaborative efforts driving the Digital Citizenship Summits around the world.

¹³ <http://mottnpch.org/reports-surveys/bullying-and-internet-safety-are-top-health-concerns-parents>

The vision for Positive Digital Citizenship is summed up simply in one hashtag: **#UseTech4Good**. Just as parents and other mentors seek to teach children service, citizenship, and kindness from a young age through deliberate, positive teaching and side-by-side learning/service experiences, Positive Digital Citizenship encourages intentional parenting, teaching, and experience-creation around positive uses of technology. If adults are focused on, and united around the need for positive mentoring, children can see and experience Positive Digital Citizenship in various realms of their lives long before they actually own their own devices.

Side-by-side learning also can help bridge generational gaps that often exist around technology (later this paper will explore how such side-by-side learning can also be a protective action against behavioral issues).

As Jessica Millstone of BrainPOP notes,

“I strongly believe that kids have a lot to teach adults about communicating effectively through various forms of media & technology. [In addition], adults have layers of experience and perspective to share with kids as well, so forming strong connections and vehicles for communication between the generations is critical. I would like to open a discussion around what it looks like when students are encouraged to teach themselves and each other, guided by teachers and parents, and how to urge kids to “practice what they teach” throughout their lives. The overarching themes of Digital Citizenship provide unlimited opportunities for this kind of conversation!”¹⁴

Four Positive Digital Citizenship values capture foundational principles for changing conversations and culture that include the positives as a key part of Digital Citizenship.

1. **Kids Count: Continuously learning, side by side:** Youth often have technical skills that adults do not, and adults have life experience that youth do not.¹⁵ It’s only in working together that young people and adults can truly leverage the power to **#UseTech4Good**. Also, living in a digital world means we never stop needing to learn and adapt! We can learn together side-by-side with each other, across generations. **#NotAboutThemWithoutThem**
2. **The heART of Being Human:** We are more alike than different: Empathy and respect for our shared humanity is essential to good living and citizenship, both online and offline. When we focus on using tech for good, we focus more on what can unite us and on what we have in common, not on creating and contributing to more divide. This starts in our closest personal relationships and moves outwards in local, global, and digital spheres.
3. **Ripples of Good: Influencers of Change in Our Spheres:** We each can have an impact in our personal spheres of influence. Technology can expand our individual reach and impact. We should never forget that each of us can have an irreplaceable influence in our personal spheres. **#RipplesOfGood**
4. **Better Together: A “We not Me” Mindset:** As we each work in our individual spheres and find ways to connect our efforts through cross-sector and cross-generational communication, collaboration, and community-building, together we can create a more Positive Digital Citizenship culture.

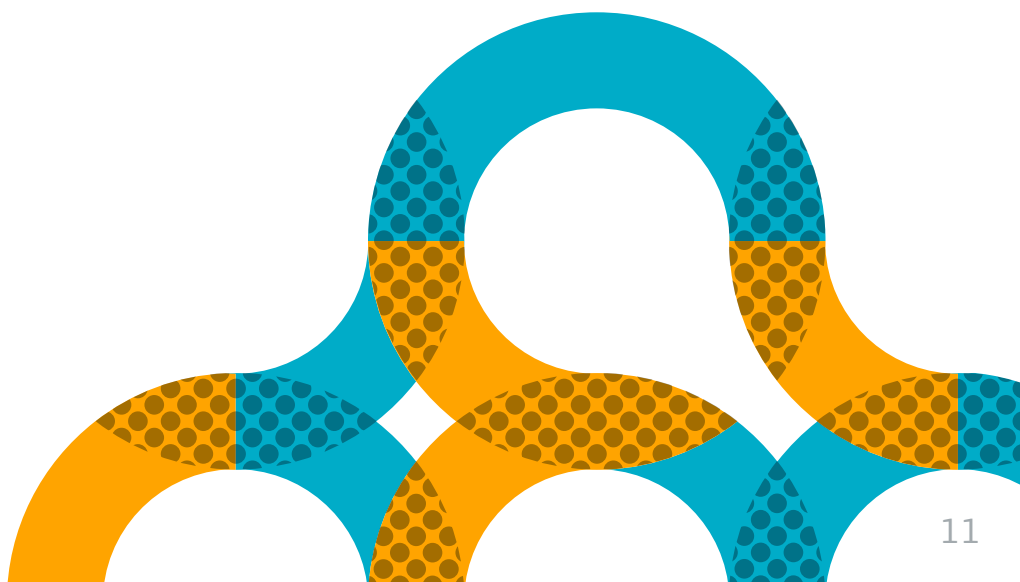
¹⁴Quote from a 2017 DigCitSummit speaker proposal. Shared with permission.

¹⁵See Devorah Heitner’s TED talk “The Challenge of Raising a Digital Native” at <https://www.youtube.com/watch?v=eRQdAOqrqGg>



Figure 2 – The four values of Positive Digital Citizenship

Positive Digital Citizenship is strongly emerging in the education sector, but many parents are still languishing, overwhelmed by fear, sure that the true solution to raising children in a digital world is simply to reduce or eliminate screen time or block out the negatives. Fortunately, the Positive Digital Citizenship Movement is starting to catch hold with parents as well.



Positive Digital Citizenship in action

The following quotes come from mothers who have caught the #UseTech4Good vision. They are also nonprofit founders seeking to help parents navigate parenting in a complex, digitally-driven world, so they have influence and experience beyond their parenting role.

Mom #1 is also a homeschooler who interacts with many others who homeschool as well as through her internationally-reaching nonprofit.

"I have spoken to countless women who, like myself, have found ourselves floundering in a tech-saturated culture. Many mothers (and parents) I have talked to have expressed a deep sense of helplessness and powerlessness in navigating the changing landscape around us.

"...[T]he movement for youth to use technology for good... has been the solution and the help that so many of us have needed. The realization [that] this cyber world isn't going away and that we needn't be fearful of it, has been groundbreaking for us. The idea that we can utilize tech for good in our homes to increase the values we are seeking to instill in our children has made a profound impact on us.

"The philosophical paradigm shift of [this] collaborative work has started to ignite in our culture and is empowering to so many women [and parents] as we lead in our homes with our children. The shift has come from changing our inclination to control every aspect of technology use in our homes to engaging with our children and teaching them how they can be their own filters. Also, by shifting the focus to creating good and uplifting content, we have found that bridges have been built through the pervasive generational gap we were feeling.

"I have personally seen a shift in mindset in my home. Rather than pushing and driving my kids away by negative attitudes about technology, I am using it to bring us closer. My children and I are seeking to make an impact and are engaging in creative projects together.... [As we do this], relationships [are] strengthened."¹⁶

Mom #2 also the founder of a growing nonprofit (and co-author on this paper), chose to help with this paper because of the impact of the Positive Digital Citizenship Movement on her work. She writes:

"I ... have spent four years working to help parents navigate the digital world as Board President of the non-profit organization, Educate and Empower Kids. In these years we have spent a lot of time researching the deleterious effects of pornography, online bullying, online predators and other digital threats to families.

"Much of our time and energy goes into researching and implementing the best strategies to help parents talk with their kids about online dangers and practice better digital habits within their own families. To this end, we created the 30 Days of Sex Talks program and wrote How to Talk to Your Kids About Pornography, which both address healthy sexuality, online dangers, sexting, and social media. Within my work, I have become very passionate about helping family members connect on a deeper level, in order to stay intellectually strong and emotionally healthy within our [often] disconnected, technology-driven world. In order to help parents with these issues, we wrote 30 Days to a Stronger Child, which is a parent-child activity book that focuses on filling one's social, physical, emotional, and intellectual 'accounts'."

"After [interacting with people involved in the Positive Digital Citizenship Movement], I have been inspired to change my approach in teaching parents and children.

"It is time to move beyond just stemming the tide of digital dangers and warning parents of rough waters ahead. The time has come to turn the tide and create real digital change in our homes and communities through a more positive approach.

"A focus on Positive Digital Citizenship is the answer. Their positive, collaborative approach is brilliant and ground-breaking and I believe this is the key to bringing real social change. One of my organization's contributions to this movement is a new children's book called Noah's New Phone which teaches kids about using technology for good."¹⁷

Kids need help both avoiding harm and leveraging positives in their lives and digital use. Positive Digital Citizenship seeks to balance the conversation that has, for decades, been dominated by a safety-only focus.

Prevention science, explored more fully in the following section, supports a balanced approach to helping children live happy and productive lives.

¹⁶ Carolina Allen, founder of Big Ocean, in a support letter written for a grant proposal for EPIK Deliberate Digital. Shared with permission.

¹⁷ Dina Alexander, founder of Educate, Empower Kids also wrote a support letter for EPIK Deliberate Digital, from which some of this quote has been drawn. Shared with permission.

3. Prevention science

3.1 The power of prevention

In July 2015, a team of American experts and influencers from various disciplines published a discussion paper entitled, “[Unleashing the Power of Prevention](#).” The abstract of the paper summarizes the collaborators’ bold intent:

“Every day across America, behavioral health problems in childhood and adolescence, from anxiety to violence, take a heavy toll on millions of lives. For decades the approach to these problems has been to treat them only after they’ve been identified—at a high and ongoing cost to young people, families, entire communities, and our nation. Now we have a 30-year body of research and more than 50 programs showing that behavioral health problems can be prevented. This critical mass of prevention science is converging with growing interest in prevention across health care, education, child psychiatry, child welfare, and juvenile justice. Together, we stand at the threshold of a new age of prevention. The challenge now is to mobilize across disciplines and communities to unleash the power of prevention on a nationwide scale. We propose a grand challenge that will advance the policies, programs, funding, and workforce preparation needed to promote behavioral health and

prevent behavioral health problems among all young people— including those at greatest disadvantage or risk, from birth through age 24. Within a decade, we can reduce the incidence and prevalence of behavioral health problems in this population by 20 percent from current levels through widespread policies and programs that will serve millions and save billions. Prevention is the best investment we can make, and the time to make it is now.”¹⁸

These experts note that the health issues of today are different from what they were 30 years ago because of the progress in infectious disease science. This paper will add to that observation by talking about the impact of media on behavioral health (see section 4).

In the prevention science world, the highest risks for mortality and other serious harms (at least in the United States) come from behavioral health issues, which experts identified as the following:

- > Anxiety and depression
- > Autism
- > Self-inflicted injury
- > Risky sexual behaviors
- > Unwanted pregnancies
- > Obesity
- > Risky driving
- > Alcohol, tobacco, and other drug use
- > Delinquent behavior, violence and aggressive behavior
- > School dropout

¹⁸Hawkins, Power of Prevention, 1

3.2 Shared risk and protective factors

Research over the past 30 years has shown that many of these problem behaviors can be prevented through identifying and creating programs that address shared risk factors and shared protective factors that cut across multiple behavioral health issues.

“Longitudinal studies have identified malleable individual and environmental risk factors that predict wide-ranging behavioral health problems (Catalano et al., 2011; Farrington, 1995; Hawkins et al., 1992; Loeber et al., 1998). Research has also identified positive attributes and protective environmental influences that buffer or minimize the adverse effects of exposure to risk (Lerner et al., 2005; Luthar, 2003). We cast a wide net [with the list of targeted risky behaviors] because many of these behavioral health problems are predicted by shared risk factors” [emphasis added].¹⁹

The notion of shared risk and protective factors is illustrated in the figure below.²⁰



Figure 3 - from Substance Abuse and Mental Health Services Administration (SAMSHA)

Simply put, ‘risk factors’ are elements in a child’s world that have been shown to increase the likelihood that a child will engage in unhealthy or risky behaviors. Protective factors are elements in a child’s life and environment that buffer a child against risk, “by either reducing the impact of risk, or changing the way a child or young person responds to it.”²¹

Important to note is that the notion of shared risk and protective factors apply to multiple contexts:

- The individual’s own personality, tendencies, biology, etc.
- Peer group situations and dynamics
- School culture and attitudes
- Family environment, history, and dynamics
- Community (and societal) dynamics, environment, socioeconomic dynamics, etc.

The Substance Abuse and Mental Health Services Administration (SAMSHA) explains this concept in more detail.

All people have biological and psychological characteristics that make them vulnerable to, or resilient in the face of, potential behavioral health issues. Because people have relationships within their communities and larger society, each person’s biological and psychological characteristics exist in multiple contexts. A variety of risk and protective factors operate within each of these contexts. These factors also influence one another.

¹⁹ Hawkins, Power of Prevention, p. 3

²⁰ See the Substance Abuse and Mental Health Service Association’s website at <https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/risk-protective-factors>

²¹ <http://www.communitiesthatcare.org.au/how-it-works/risk-and-protective-factors> -- Note that the Communities that Care model and corresponding Social Development Strategy is used in countries around the world, not just the United States.

Targeting only one context when addressing a person’s risk or protective factors is unlikely to be successful, because people don’t exist in isolation. For example:

- **In relationships**, risk factors include parents who use drugs and alcohol or who suffer from mental illness, child abuse and maltreatment, and inadequate supervision. In this context, parental involvement is an example of a protective factor.
- **In communities**, risk factors include neighborhood poverty and violence. Here, protective factors could include the availability of faith-based resources and after-school activities.
- **In society**, risk factors can include norms and laws favorable to substance use, as well as racism and a lack of economic opportunity. [Examples of] protective factors in this context would include hate crime laws or policies limiting the availability of alcohol.²²

As noted above, risk and protective factors can also exist in peer groups, schools, extended family systems, and so forth.

Table 1 shows how shared risk factors like generational patterns of the problematic behavior, high levels of conflict and management issues in the family, generational patterns of the risky behavior, and recognizable and consistent antisocial behaviors are all risk factors for a variety of behavioral health issues: substance abuse, delinquency, teen pregnancy, school dropout, violence, and depression & anxiety.

Risk Factors for Adolescent Problem Behavior	Substance Abuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
Community						
Availability of Drugs	•				•	
Availability of Firearms		•			•	
Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime	•	•			•	
Media Portrayals of the Behavior	•				•	
Transitions and Mobility	•	•		•		•
Low Neighborhood Attachment and Community Disorganization	•	•			•	
Extreme Economic Deprivation	•	•	•	•	•	
Family						
Family History of the Problem Behavior	•	•	•	•	•	•
Family Management Problems	•	•	•	•	•	•
Family Conflict	•	•	•	•	•	•
Favorable Parental Attitudes and Involvement in the Problem Behavior	•	•			•	
School						
Academic Failure Beginning in Late Elementary School	•	•	•	•	•	•
Lack of Commitment to School	•	•	•	•	•	
Individual/Peer						
Early and Persistent Antisocial Behavior	•	•	•	•	•	•
Rebelliousness	•	•		•	•	
Gang Involvement	•	•			•	
Friends Who Engage in the Problem Behavior	•	•	•	•	•	
Favorable Attitudes Toward the Problem Behavior	•	•	•	•	•	
Early Initiation of the Problem Behavior	•	•	•	•	•	
Constitutional Factors	•	•			•	•

Table 1: Shared risk factors across multiple risky behaviours.²³



© 2013 Center for Communities That Care, University of Washington

²² See SAHMSA's website at <https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/risk-protective-factors>

²³ <https://www.communitiesthatcare.net/userfiles/files/Risk-Factors-Chart.pdf>

Table 2 shows how various risk and protective factors can correlate to the different contexts listed above.





RISK FACTORS Risk factors increase the likelihood young people will develop health and social problems.	DOMAIN	PROTECTIVE FACTORS Protective factors help buffer young people with high levels of risk factors from developing health and social problems.
<ul style="list-style-type: none"> • Low community attachment • Community disorganisation • Community transitions and mobility • Personal transitions and mobility • Laws and norms favourable to drug use • Perceived availability of drugs <ul style="list-style-type: none"> • Economic disadvantage (not measured in youth survey) 		<ul style="list-style-type: none"> • Opportunities for prosocial involvement in the community <ul style="list-style-type: none"> • Recognition of prosocial involvement • Exposure to evidence-based programs and strategies (some are measured in youth survey)
<ul style="list-style-type: none"> • Poor family management and discipline <ul style="list-style-type: none"> • Family conflict • A family history of antisocial behaviour • Favourable parental attitudes to the problem behaviour 		<ul style="list-style-type: none"> • Attachment and bonding to family • Opportunities for prosocial involvement in the family • Recognition of prosocial involvement
<ul style="list-style-type: none"> • Academic failure (low academic achievement) <ul style="list-style-type: none"> • Low commitment to school • Bullying 		<ul style="list-style-type: none"> • Opportunities for prosocial involvement in school • Recognition of prosocial involvement
<ul style="list-style-type: none"> • Rebelliousness • Early initiation of problem behaviour <ul style="list-style-type: none"> • Impulsiveness • Antisocial behaviour • Favourable attitudes toward problem behaviour • Interaction with friends involved in problem behaviour <ul style="list-style-type: none"> • Sensation seeking • Rewards for antisocial involvement 		<ul style="list-style-type: none"> • Social skills • Belief in the moral order <ul style="list-style-type: none"> • Emotional control • Interaction with prosocial peers

Table 2: Shared risk and protective factors across various contexts or domains.²⁴

²⁴<http://www.communitiesthatcare.org.au/how-it-works/risk-and-protective-factors>, Hawkins, J. D., & Catalano, R. F. (2002). Investing in your community's youth: An introduction to the Communities That Care system. South Deerfield: Channing Bete. Google Scholar, Hawkins, J. D., Catalano, R. F., & Arthur, M. W. (2002). Promoting science-based prevention in communities. *Addictive Behaviors*, 27, 951–976. CrossRefPubMedGoogle Scholar

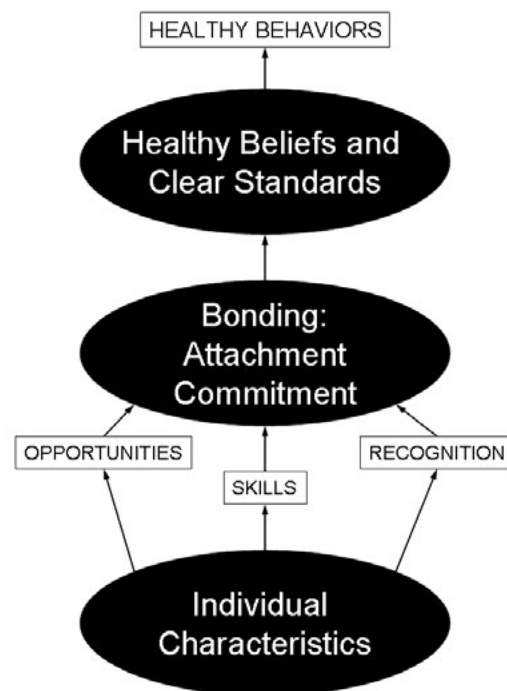


3.3 Communities That Care and the Social Development Strategy

The model that combines the principles and research around shared risk and protective factors in multiple contexts that impact a child’s likelihood of engaging in risky behaviors is called the **Communities That Care** model. A summary of Communities That Care follows:

“Communities That Care (CTC) is a program of the Center for Substance Abuse Prevention (CSAP) in the office of the United States Government’s Substance Abuse and Mental Health Services Administration (SAMHSA). CTC is a coalition-based prevention operating system that uses a public health approach to prevent youth problem behaviors such as violence, delinquency, school drop out and substance abuse. Using strategic consultation, training, and research-based tools, CTC is designed to help community stakeholders and decision makers understand and apply information about risk and protective factors, and programs that are proven to make a difference in promoting healthy youth development, in order to most effectively address the specific issues facing their community’s youth.

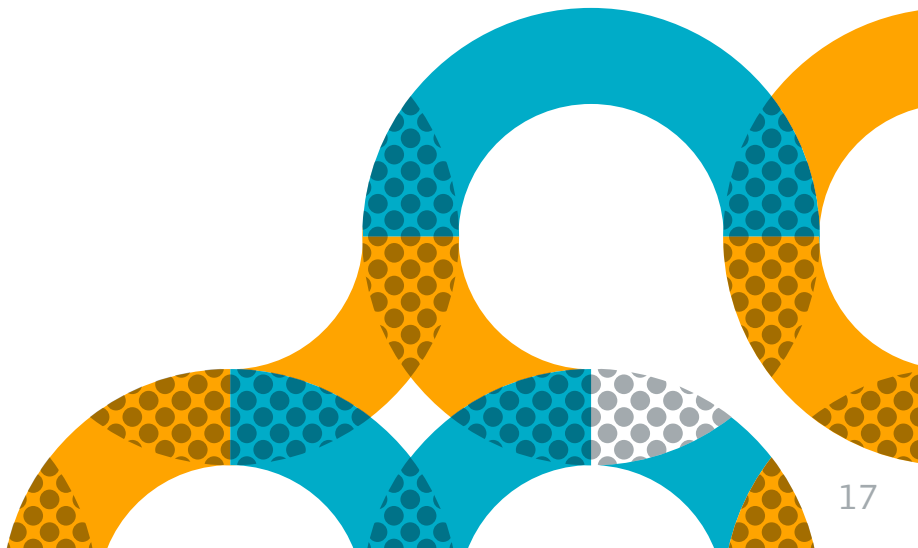
Developed by Drs. J. David Hawkins and Richard Catalano at the University of Washington’s Social Development Research Group (SDRG), CTC’s principal strategy, the Social Development Strategy, illustrated below²⁵, focuses on strengthening protective factors that can buffer young people from problem behaviors and promote positive youth development.²⁵



The Social Development Strategy

Figure 4 – CTC’s Social Development Strategy

²⁵ https://en.wikipedia.org/wiki/Communities_That_Care/. See original article for links to bracketed footnotes. Image in original.



When adults are aware of the starting-point individual characteristics of a child (both strengths and weaknesses), and increase opportunities, skills and recognition for prosocial/positive behavior in a context of clear beliefs and standards, all of these things can combine to increase the chance for behavioral health. This paper suggests that these same principles can and should be applied to Digital Citizenship efforts, and that digital elements could be assimilated into prevention science models such as CTC and the Social Development Strategy.

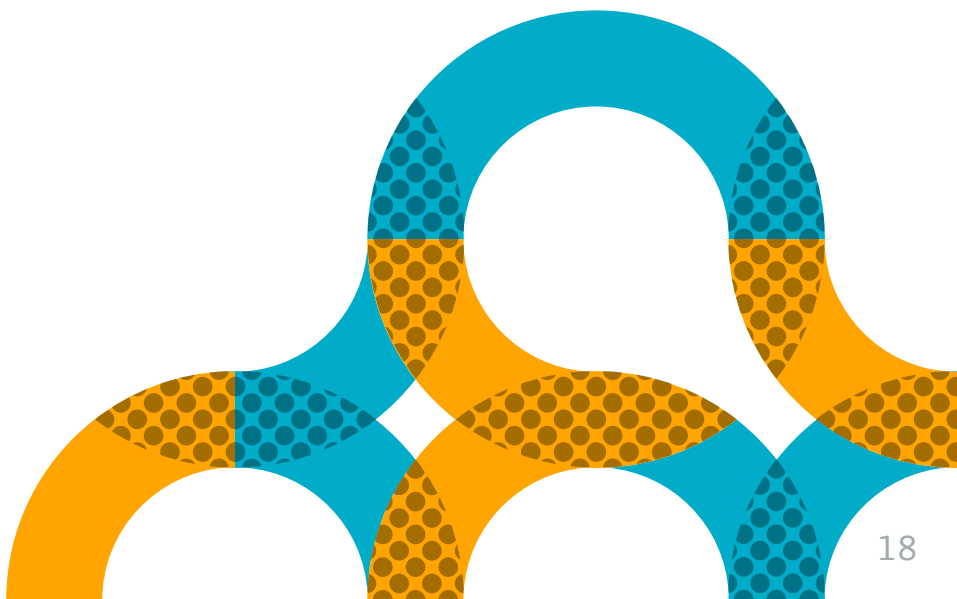
When you use the Social Development Strategy in daily interactions with young people, it helps keep them on track for healthy development. The strategy has five key components²⁶:

- Opportunities: Provide developmentally appropriate opportunities to young people, for active participation and meaningful interaction with prosocial others.
- Skills: Teach young people the skills they need to succeed.
- Recognition: Provide consistent specific praise and recognition for effort, improvement, and achievement.
- Bonding: Acknowledge a young person's effort and promote positive bonding — a sense of attachment, emotional connection and commitment to the people and groups who provide that recognition. Bonding can occur with a family member, teacher, coach, employer or neighbor.
- Clear Standards for Behavior: Through the process of bonding, young people become motivated to live according to the healthy standards of the person or group to whom they are bonded.

Figure 5 illustrates how CTC can help increase the level of protective factors in a child's life. Note the diverse list of protective factors at the personal/peer, school, and community levels.²⁶ (See [more research on the effectiveness of CTC](#)). An internet search on risk and protective factors can show how robust the concepts are and in how many different ways and contexts (personal, family, school, community) the principles can be applied.²⁷

²⁶ <https://www.communitiesthatcare.net/how-ctc-works/social-development-strategy/>, http://www.sdrp.org/pubs/ResearchBrief_Feb2016.pdf

²⁷ A few random examples include the following: <https://www.slideshare.net/DrSnipes/risk-and-protective-factors>, <http://www.wcsap.org/research-shared-risk-and-protective-factors>, https://www.hazelden.org/web/public/substance_abuse_prevention.page, <http://slideplayer.com/slide/3073288/>



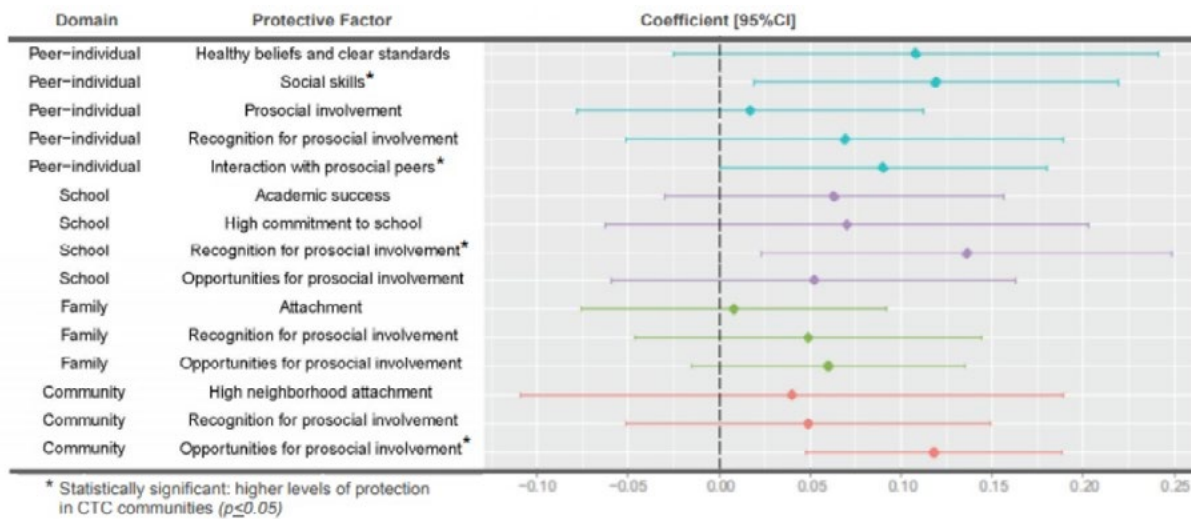


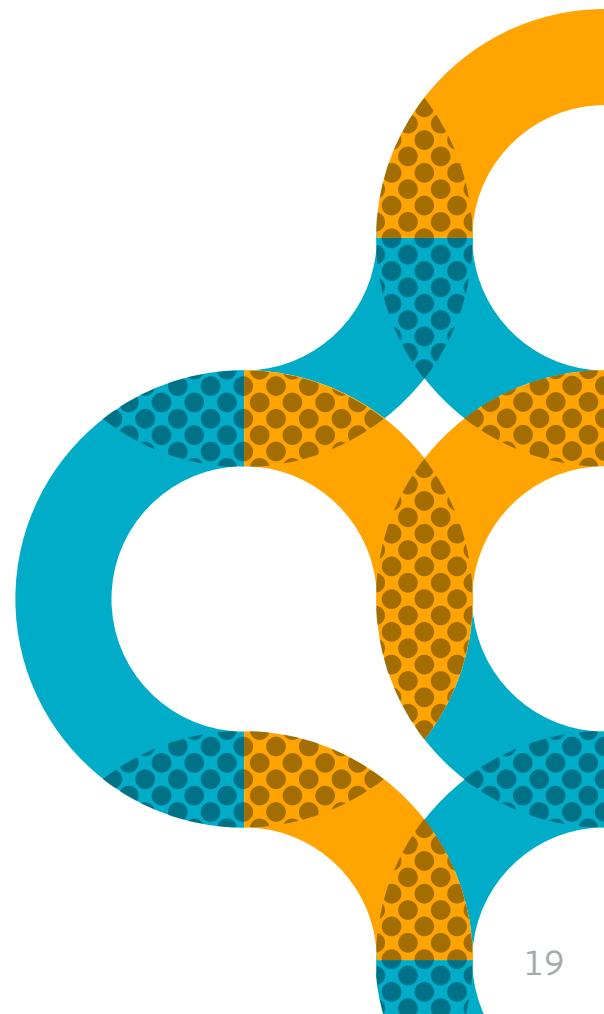
Figure 5 – Increasing protective factors through proven principles and programs

The Communities that Care model (including the Social Development Strategy) is being used and explored in countries other than the U.S.²⁸ and more research is needed to see how the principles can be applied and measured across the world. “It is important to identify the core elements of a program before implementation in different countries, as well as to identify changes in implementation across countries.”²⁹ Understanding the core elements of the program could also help when implementing in a digital context.

This model is also a powerful framework that parents could use to understand better how to help their children avoid a wide range of risky behaviors, both in real life and online. Likewise, youth could even help each other as they seek to encourage each other to be healthy at a personal level, to create safe and positive peer groups, and to support each other in community engagement opportunities that can build their own sense of purpose and make a difference in others’ lives.

²⁸ See, for example, <http://www.communitiesthatcare.org.au/how-it-works/risk-and-protective-factors> and <http://www.parentinguk.org/resources/communities-that-care-uk-a-new-kind-of-prevention-programme/>

²⁹ H. B. Jonkman, K. P. Haggerty, M. Steketee, A. Fagan, K. Hanson, and J. D. Hawkins, PhD. “Communities That Care, Core Elements and Context: Research of Implementation in Two Countries.” *Soc Dev Issues*. 2009; 30(3): 42–57. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2712284/#R10>



4. The prevention science framework applied to the digital world

4.1 Overview

It has long been said that the best way to treat a disease is to prevent it. Decades of research has shown that the best way to prevent diseases like cancer is to avoid harmful substances like nicotine and illegal drugs, to keep consumption of alcohol and unhealthy foods to a minimum, to eat a well-balanced diet, to exercise, and to lower the amount of stress in one's life. Continual education in health matters. Healthy relationships are important, too, in not only preventing the impact of stress and reducing risk of addictions ([connection, not sobriety, is touted as the true opposite of addiction](#)) are important simply for a richer, fuller, happier life.

Parents, educators and others should not just teach these principles. They should seek for ways to practice them with children. So, for example, intentional parents move beyond just talking or teaching about healthy eating. They seek to engage children in side-by-side life experiences through family mealtimes, going on shopping trips together (e.g., explaining purchasing decisions), and working together to make healthy food available in the home. Children can learn, by experience, how to cook a variety of foods in a variety of ways. Engaged parents use side-by-side cooking and family meal times as opportunities to enhance learning around a wide range of topics, such as knowledge of other cultures and concepts such as math or science.

Advances in public/prevention health science research have made it clear that principles such as the above apply to behavioral and mental health issues. Prevention science teaches that it's important to reduce risk factors (including the existence of risky substances and mitigating risk factors that may exist within and around an individual). It's also important to do what is possible to increase protective influences within and around an individual, such as resiliency skills, healthy familial relationships, a sense of connectedness and belonging in a community, practical skill-building, and positive reinforcement for prosocial behavior. Being educated on risk factors and on those components that lead to a healthy, robust life are critical to maintaining good physical and behavioral health.

Although prevention science models do not yet specifically extend to include digital behaviors in their research and programming, it stands to reason that similar core principles will have wide application with regard to digital life – to both preventing digital behaviors that are harmful to oneself or others and to leveraging the myriad, expanding benefits of technology. For example, protecting children against accidental exposure to harmful materials is something parents, educators, and technology companies alike should be concerned about. Helping children learn information and life skills to avoid addictive digital habits and addictive media are essential to digital health. Helping children enjoy a balance of different media, such as books, art, and music are excellent mediums to add to one's technology diet. Deliberate time without screens can also lead to a more balanced lifestyle and overall health. Just as guidelines and best practices exist around what to eat or take into the physical body, parents, teachers and other youth mentors can also help children understand healthy media consumption habits.³⁰

³⁰ See how one mother of a young child (age 4 at the time) applied these principles to media consumption here: <https://www.youtube.com/watch?v=t--fcq08UCw>

Children definitely need information about what to do or not to do, or what to consume or not to consume. And there is much more to helping children thrive in a digital world. Understanding the dangers and risk factors are just the first steps. As in the behavioral health framework, merely avoiding stress, risky relationships, and risky situations does not equal health. Learning how to form healthy relationships, create healthy habits and coping mechanisms, and engage in positive ways to interact with the world (in real life and via digital means) are ideal for both behavioral and digital health. Education and mentored positive life experiences are both key in the prevention model for physical, behavioral, and digital health.

As the world becomes an increasingly digitally-accessible place, the distinction between offline and online behavior will continue to blur. For youth, those boundaries are already almost non-existent. As such, youth spending more and more time online are susceptible to risks once relegated only to a physical space. Similarly, opportunities for positive impact (that used to be only possible in face-to-face interactions) can now be significantly expanded because of the benefits of technology.

As in behavioral health, the seeds of digital health first begin in childhood and extend in through the years of puberty. Environmental, biological, and developmental factors all influence both behavioral and digital health. Poor behavioral and digital coping skills can begin in childhood; similarly, healthy mindsets, habits, skills, and experiences can be fostered starting in early childhood around digital health. Long before children have (or don't have) digital devices of their own, the roots of healthy, positive digital use can be set.

It's important to note that a media-driven world has contributed risk factors to many, if not all, of the behaviors factors that concern public health/behavioral science experts. On the flip side, however, digital technologies can facilitate prevention efforts. And although this is a realm for further research, observation and experience would suggest that positive uses of technology can foster protective factors as outlined by prevention scientists.

This section will explore in more detail how digital life can both increase and help reduce risks and will also explore how a prevention science framework can apply to Positive Digital Citizenship efforts.

4.2 Technology increasing behavioral risks - some examples

4.2.1 The impact of technological media

As a review, key behavioral health issues that have been identified after years of research include the following:

- > Anxiety and depression
- > Autism
- > Self-inflicted injury
- > Risky sexual behaviors
- > Unwanted pregnancies
- > Obesity
- > Risky driving
- > Alcohol, tobacco, and other drug use
- > Delinquent behavior, violence and aggressive behavior
- > School dropout

Research has shown that digital issues can intensify many of the above behavioral health risks, all the more so because media use among children and teens is high. Research shows that youth ages 8-10 use media for an average of eight hours a day, while youth 11 and older are using media more than eleven hours a day.³¹ In young children, between 2011 and 2013, mobile device usage and access both doubled, and time spent on these devices tripled.³²

³¹ Rideout V. Generation M2: Media in the Lives of 8- to 18-Year-Olds. Menlo Park, CA: Kaiser Family Foundation; 2010 (link); see also Pediatrics journal study (AAP, Lapierre, et. al., 2012)

³² <http://www.common sense media.org/research/zero-to-eight-childrens-media-use-in-america-2013>

There are many ways that the media can increase behavioral health risks.

“In the media, children are exposed to sexualization, violence, bullying, marketing of unhealthy foods, alcohol and tobacco, and unhealthy body images and gender stereotyping. Media consumption influences children’s behavior and can contribute to aggression, violence and bullying, depression, body image issues, obesity, substance abuse, and other negative effects on physical and mental health.”³³

From substance abuse to sex, and mental health to fake news and conspiracy theories, the media is undergoing scrutiny in the USA and abroad for its role in influencing the rising generation. “It’s only right to give these kids the possibility to defend themselves from lies,” said Ms. Boldrini, President of Italy’s Chamber of Deputies over high-school education, as Italy takes up the task to implement media literacy starting October 31, 2017.³⁴

Understanding how media can impact behavioral, mental, emotional, and relational health is one important step in ensuring that prevention efforts (reducing risks and increasing protective factors) include information and support for media literacy skills; specific instruction on digital risks such as pornography, predators, privacy, sexting, and cyberbullying; and Positive Digital Citizenship.

Following are some selected examples of ways media can impact behavioral health. This review is not by any means comprehensive. Many more examples could be shared. For example, the Center for Media Literacy has a [Reading Room](#) of over 4000 research papers [see Resources section at the back of this paper for some examples]. People should also be aware of the massive database found at [Boston Children’s Hospitals’ Center on Media and Child Health](#).

The hope is that more deliberate attention can be given to the connections between media on behavioral health.³⁵ This paper seeks only to whet the appetite for such information-seeking.

4.2.2 Sexualized media content impacts multiple facets of behavioral health

With ever-increasing access to devices and streaming content, there are now unprecedented levels of sexualized content that children can get through the media.³⁶ This sexualized media can increase chances that youth engage in risky behavior and suffer other consequences. This paper suggests that sexual health measures need to consider more than simply reducing unwanted pregnancies or STDs.

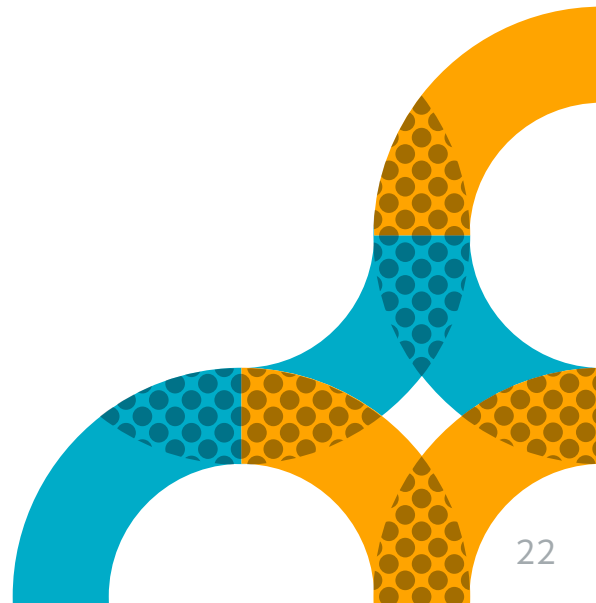
For example, the [American Psychological Association Task Force on the Sexualization of Girls in the Media](#) (2007) reported research that links sexualization with eating disorders, low self-esteem, and depression or depressed mood (Abramson & Valene, 1991; Durkin & Paxton, 2002; Harrison, 2000; Hofschire & Greenberg, 2001; Mills, Polivy, Herman, & Tiggemann, 2002; Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Thomsen, Weber, & Brown, 2002; Ward, 2004).

³³ Erin McNeil, <https://medialiteracynow.org/wp-content/uploads/2014/01/Drawing-the-connection-between-Media-Literacy-and-Public-Health.pdf>

³⁴ <https://www.nytimes.com/2017/10/18/world/europe/italy-fake-news.html?mwrsm>

³⁵ These insights include curated content from websites of Media Literacy collaborators who participated in the 2016 DigCitSummit at Twitter Headquarters. (See also a comprehensive database of research about how media can increase risk factors at Boston Children’s Hospitals’ Center on Media and Child Health)

³⁶ See, for example, <https://depts.washington.edu/thmedia/view.cgi?section=medialiteracy&page=fastfacts> and reports even from 2005 from the Kaiser Foundation: <https://www.brushfiresfoundation.org/sexual-content-on-tv-is-increasing/>



Furthermore, “exposure to developmentally inappropriate sexual content may contribute to difficulties forming healthy romantic relationships, increased risk of teenage pregnancy, poor body image and contracting a sexually transmitted infection or disease (STI/STD).... The link between sexual content in media and risky sexual behaviors is largely due to the many movies, music videos, video games, and TV shows that feature characters engaging in carefree sexual behavior without depicting any potential negative consequences. These characters are often glamorized in ways that inspire kids and adolescents to be like them. Studies have shown that children who are exposed to pornography often have difficulties distinguishing between the fictional pornographic characters and behaviors they see in real life sexual situations. This can lead to unrealistic views of how their bodies should look, insecurities about their appearance (particularly in males), and anxieties about sexual performance and intimacy.”³⁷ Lack of grounded sexual education at home, at school, and in other contexts (religious contexts, cultural contexts) can also leave children more susceptible to children seeing pornography as a “sexual super peer.”³⁸

Beauty Redefined is an organization founded by twin sisters who both did their doctoral research on the impact of media on body image, health, and even educational performance. For example, they write:

“When we live in a state of perpetual self-consciousness about our bodies, we are left with fewer mental and physical resources to do anything. Girls and women who are in a state of self-consciousness perform worse on math tests, logical reasoning tests, athletic performance, and have lower sexual assertiveness (including the ability to say “no” when needed). Self-objectification

leads to an increase in disordered eating and cosmetic surgery procedures, low participation in leadership positions, and leads girls to quit pursuits of math and science at greater rates....For a comprehensive list of the many consequences of self-objectification see the American Psychological Association’s Task Force on the Sexualization of Girls.”

Some would suggest that more sexual education is the simple answer to problems listed above. This paper would like to suggest the consideration that more media literacy education is needed, and expanded definitions and measures of sexual health are needed - grounded in a clear understanding of the impact of sexually-charged media content and social media engagement on children’s emotional, mental, relational, social, and behavioral health. Sexual health in a digital world is more complex than ever. This paper suggests that sexual health conversations, education, and research efforts need to take more into consideration than decades-old (pre-internet) measures of reducing unwanted pregnancies or STDs (as important as those measures are).

For more information about the problem of sexualized content on the health of children, teens, and adults, see the National Center on Sexual Exploitation and Fight the New Drug. Also, for a sobering exploration on the cultural trends around how digital technologies are impacting the social/sexual behavior of tweens and teens, see Nancy Jo Sales’ book, *American Girls: Social Media and the Secret Lives of Teenagers*.

³⁷ Center on Media and Child Health, <http://cmch.tv/parents/sexual-behavior/>

³⁸ <http://database.cmch.tv/SearchDetail2.aspx?rtrn=advnce&cid=4246>

4.2.3 Media can increase risks for obesity and other physical health problems

Besides the risks connected with distorted body image, disordered eating, and unhealthy sexual attitudes and behaviors, media messages can be contributing to the epidemics of obesity and diseases like diabetes. Food promotion to children needs to be carefully considered as part of a culture that encourages unhealthy lifestyles that can lead to myriad health problems. See, for example, the following three quotes:

Beauty Redefined is an organization founded by twin sisters who both did their doctoral research on the impact of media on body image, health, and even educational performance. For example, they write:

“Studies examining the extent and nature of food promotion to children consistently conclude that food promotion is the most prevalent marketing category targeting children and young people. Content analysis research finds that the majority of foods and food products promoted are energy dense, high fat, sugar and/or high salt, and in sharp contrast to national and international dietary guidelines. Sugar-sweetened breakfast cereals, soft-drinks, confectionary and savory snacks are the most frequently

advertised categories, with fast-food promotion continuing to gain marketing share. Promotion of unprocessed foods, such as fruit and vegetables, wholegrain and milk is found to be almost zero.”³⁹

“Among US preschool-aged children (2–5 years of age), obesity rates have more than doubled since the 1970s; among 6- to 11-year-old children, rates have more than tripled [A 2010 study showed that] “Branding food packages with licensed characters substantially influences young children’s taste preferences and snack selection and does so most strongly for energy-dense, nutrient-poor foods.”⁴⁰

“A Pediatrics study found (AAP, Eisenberg, et. al., 2012) media images of ideal male bodies have evolved to be more muscular (than even the largest human bodybuilders) and that boys’ body dissatisfaction has simultaneously increased. Among boys in middle school and high school:

- 35% have used protein powders or substances to get bigger
- 11% used growth hormones or other muscle enhancing substances
- 6% have tried steroids
- 90% exercised to gain muscle size”⁴¹

³⁹ The extent, nature and effects of food promotion to children: a review of the evidence to December 2008 (PDF Download Available). Available from: https://www.researchgate.net/publication/46787685_The_extent_nature_and_effects_of_food_promotion_to_children_a_review_of_the_evidence_to_December_2008 [accessed Oct 17 2017].

⁴⁰ <http://pediatrics.aappublications.org/content/126/1/88.full>

⁴¹ See Media Literacy Now’s document on the need for media literacy as a public health skill: <https://medialiteracynow.org/wp-content/uploads/2014/01/Drawing-the-connection-between-Media-Literacy-and-Public-Health.pdf>

4.2.4 Media's influence on social aggression and physical violence

More research is needed on the basic day-to-day impact of media on relationships. The media's influence on how people perceive themselves can affect how they see others and how they resolve differences, and could feed aggressive and violent behavior.

For example, a [2012 study \(Martins, N., and Wilson, B. J., 2012\)](#) found "that of the 50 most popular television programs among 2 to 11-year-old children, 92% of the programs contained some social aggression. On average, there were 14 different incidents of social aggression per hour in these shows. 'Compared to the portrayals of physical aggression, social aggression was more likely to be enacted by an attractive perpetrator, to be featured in a humorous context, and neither rewarded or punished. In these ways, social aggression on television poses more of a risk for imitation and learning than do portrayals of physical aggression.'"⁴²

This connection of media violence to real-life aggressive behavior and violence has been substantiated, according to the American Psychological Association's conclusion of [over 30 years of research](#), as well as research from the American Academy of Pediatrics. "As much as 10% to 20% of real-life violence may be attributable to media violence. A National Television Violence Study found the following: 1) nearly two thirds of all programming contains violence; 2) children's shows contain the most violence; 3) portrayals of violence are usually glamorized; and 4) perpetrators often go unpunished. ([AAP, 2001](#))

4.2.5 Media can increase risks for alcohol and substance abuse

From behavior to substance abuse, media's role in creating and depicting community norms continues to impact the decision and actions of its consumers.

While the risks of alcohol and tobacco use has gained some acknowledgement and even public health dollars in educating the public on advertising's power, there are still heavily weighted messages that alcohol, tobacco, and even drug use, are normal, desirable, and acceptable as depicted in TV and film.

A [content analysis](#) (2001) by the American Academy of Pediatrics, showed that mainstream television programming depicts or refers regularly to use of cigarettes, alcohol, and illegal drugs. According to the Center on Alcohol Marketing and Youth (CAMY) at the Johns Hopkins Bloomberg School of Public Health, [studies](#) (Siegel, M. et. al., 2015) have found that the more young people are exposed to [alcohol advertising](#) and marketing, the more likely they are to drink, or if they are already drinking, to drink more, as quoted in summary article by [Andrew M. Seaman](#). (Tanski, S. E. et. al., 2015)

"Finally, the U.S. Surgeon General has [concluded](#) (2012) that a causal relationship exists between depictions of smoking in film and smoking among youth."⁴³

More could be said about how technology can increase dangerous driving, how social media can impact mental and emotional health, and how social media platforms have complicated bullying problems, and have even sometimes been implicated as contributing factors in suicide (see, for example, [this tragic story](#) from Utah).

On the flip side, technology can also help in prevention efforts, both in decreasing exposure to harmful material and in helping facilitate more connection, bonding, and support.

⁴² See Media Literacy Now's document on the need for media literacy as a public health skill: <https://medialiteracynow.org/wp-content/uploads/2014/01/Drawing-the-connection-between-Media-Literacy-and-Public-Health.pdf>

⁴³ <https://medialiteracynow.org/wp-content/uploads/2014/01/Drawing-the-connection-between-Media-Literacy-and-Public-Health.pdf>

4.3 Technology protecting against risks

4.3.1 Protective application

While it is clear that media messaging, often through digital media, has increased behavioral health risks in many ways, on the flip side, digital tools can also be used to help reduce exposure to harmful content and interactions (reducing risks) and also by increasing protective factors in a child's world. Below is a discussion of filters and monitoring software, and anonymous reporting channels. Benefits of monitoring over filtering will be discussed, including the value of opening up channels of communication and support in a child's life.

4.3.2 Filtering

When parents, schools, and others try to address digital risks, almost without exception, they turn first to assessing options for filtering out harmful content.

Harmful content can be defined in a number of ways:

- Inappropriate content – explicit sexual or violent content that may upset, distort or influence young minds
- Content that could prompt bad decisions – pro-eating disorder websites, self-harming techniques websites etc...
- Contact websites – social media sites or forums where young people can meet strangers and initiate potentially dangerous relationships
- Illegal content – related to child sexual assault, terrorism and other illegal practices

Internet blocking, or web filtering, is considered a more traditional technique when it comes to reducing risk online. Blocking, as the term suggests, refers to a restriction on certain internet content from being accessed. Set at either a device or internet service provider level, filtering software can stop content deemed harmful from being made available to the user. Blocked websites are identified by their web address (URL), words in their address or by their domain (.co.uk, .com etc). Sometimes searches can be blocked by a specific keyword as well.

By blocking harmful content, a school or parent is protecting children from that specific risk, at that specific point in time, based on an ongoing database of problematic websites, keywords, and content. Filters are a good option for preventing accidental exposure.

Filters are limited in their effectiveness, however, for helping children develop internal filters -- the ability to identify and turn away from harmful material or behavior, and to seek help and support if exposed to such content. Filters could also give parents and educators a false sense of security; sometimes a "fix it and forget it" mindset can emerge where hard conversations and healthy communications are avoided. Children need more than passive protection from harmful content and interactions. They need continuous conversations about living in a digital world. They need a way to be accountable for their actions.⁴⁴

Both young people and adults alike have expressed the frustration that filtering software at school (and sometimes at home) hinders their ability to use online tools for learning and schoolwork. Sometimes filters (such as those on YouTube) can block family and child-friendly sites, too. There are pros and cons to filtering software - parents and schools need to discuss the benefits and downsides and continually engage with one another about how to both protect children from exposure to harmful content. This will empower young people to reject inappropriate content and become deliberate, positive contributors using technology.

⁴⁴ Thanks to Sam Black of Covenant Eyes for contributing to these sections on filtering and monitoring.

In the longer term, and in a culture where media of all sorts can often glamorize the very things from which parents want to protect their children, young people may not always be able to avoid exposure to harmful content, and sometimes they may actively seek it and find ways to circumnavigate a web filter. As young people grow and develop, having the ability to self-regulate and make sensible choices online becomes more critical to avoid these scenarios.

Filtering in practice

A school district in the US was made aware of a student being cyberbullied. A website had been set up in the student's name with derogatory language and images targeting that student. As a short-term measure, the district was able to block the website from being viewed on the district's network and WiFi, while they located the source and had it taken down.

Most accidental exposure happens at home. When parents use filters (such as free filters listed [here](#) or filters/filtering support purchased commercially), they can reduce some of the risks of accidental exposure, especially for very young children and for schoolchildren needing to use the internet for homework. They can also protect themselves from unwanted exposure to content on the internet.

4.3.3 Monitoring

In more recent years, online monitoring is becoming increasingly prevalent in schools and in the home. This shift from rigorous blocking to online monitoring is explained well in this video: [Don't just block it out](#).

For example, through keyword searches developed in collaboration with behavioral experts and nonprofit organizations, Impero monitors school network activity for the following at-risk behaviors:

- > Adult content
- > Bullying and trolling
- > Recruitment by extremist groups and ideologies that celebrate/encourage violence
- > Drugs and substance abuse
- > Eating disorders
- > Grooming
- > Illegal content
- > Hate speech
- > Self-harm
- > Sexting
- > Sexual assault
- > Suicide
- > Weapons and violence

Monitoring benefits have also been explored in societal and familial settings. For example, [researchers from the Public Health and Computer Science programs at Brigham Young University](#) have collaborated to explore how keyword searches on public social media streams can help identify those who may be at risk for engaging in unhealthy/harmful behaviors.

Likewise, for families, monitoring software like [Covenant Eyes](#) can help parents and spouses be alert to risky behavior online, which can help open up conversations in the home. Compulsive consumption of violent or adult content usually happens in isolation; monitoring software can help prevent that kind of isolation and can also alert parents of accidental exposure to violent or sexual content that is not uncommon in today's digital world.

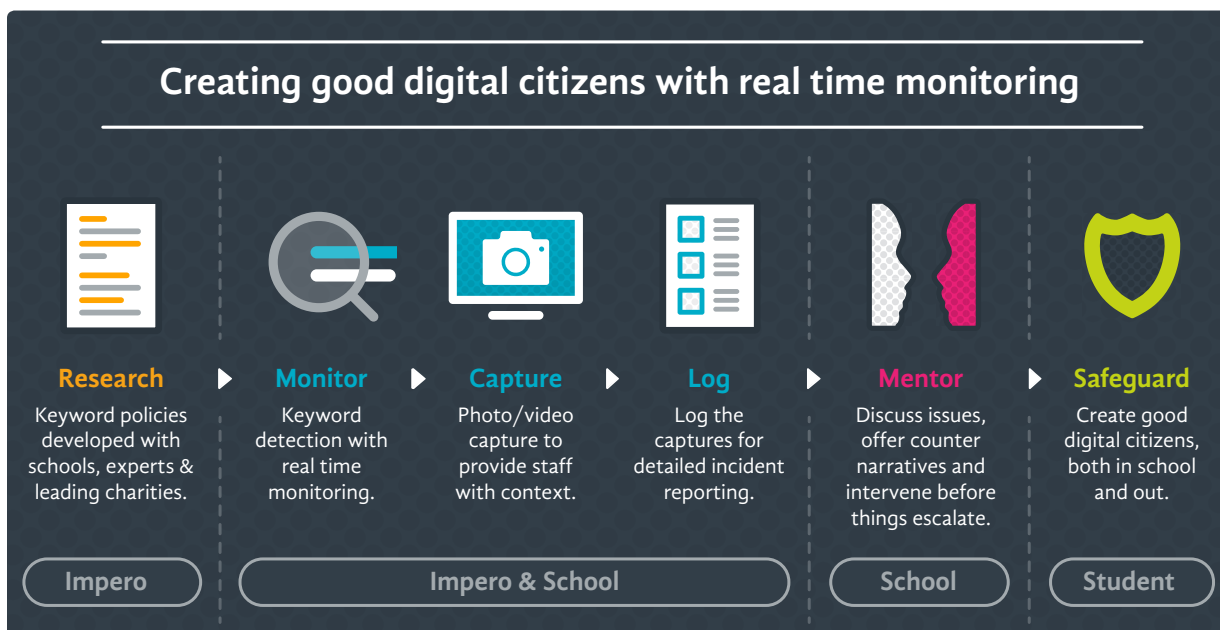
Since Impero works in the education space, the following discussion is a further exploration of monitoring in the education context. However, principles behind the discussion of the benefits of monitoring can apply to both familial and societal settings.

In an education environment, monitoring (as opposed to blocking), allows for safeguarding/pastoral staff to identify any warning signs of risk before an incident escalates, while allowing more access to useful tools for learning. Like a doctor would monitor your physical health, online

monitoring allows school staff to keep students' digital health and attitudes in check. This early detection of risk allows staff to educate children and young people by offering counter-narratives and discussions to resolve the issue and to also plant seeds around positive Digital Citizenship.

Figure 6 below depicts the steps that are involved in digital monitoring; this approach allows students the online freedom they need to grow, learn and survive in a digital world, with a safety net in the form of keyword monitoring to protect against the risks.

Figure 6 – A best practice approach to online monitoring



A good monitoring system acknowledges the abundant and growing risks presented by the online world and understands that no one organization will be an expert in all these areas. Working with schools, young people, charities, and specialist organizations, keyword libraries are developed and built into the monitoring system's database. Definitions of keywords, terms, phrases, abbreviations and acronyms are also included, along with 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 online activity with the keywords in the database, and 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 (and this can be dependent on national laws). Whatever the specific process, the information flagged up by a monitoring system allows adults to open dialogues with students, mentor and educate them in relation to the incident, and help them become good digital citizens wherever they are accessing the internet.

As with prevention science, many risks that children and young people face or express online are often interlinked. For example, victims of cyberbullying may be more likely to self-harm. As has been noted in the prevention science discussion, other risk factors in a child's biological, familial, school, or community environment can also exacerbate the chances that a child will engage in harmful behaviors.

With keyword detection and real-time monitoring, mentors of youth are able to put warning signs of risk into context and look for interconnected risk factor patterns, and work with multiple people who care about the child to open up conversations about patterns of behavior both offline and online.

With a detailed log of online behavior, invested adults are able to make informed decisions and actions to proactively mitigate risk. When the appropriate response has been implemented, actions can be recorded in the system for future reference, further aiding mentors to understand behavioral patterns and responses to them. Adults can then address the issues with one-on-one support, lesson plans, or assemblies based on the relevant issues. This is further explained within [Impero's Online Safety Handbook](#).

In the home, parents are increasingly utilizing monitoring software to keep their children safe. This software allows parents to monitor their child's location and online activity -which - when approached with care and open, ongoing conversation - can help protect children from offline risk. Monitoring can help parents be alert for potential risks such as cyberbullying, grooming and inappropriate content on social media sites. Parents should note, however, that many tools are consistently being developed to circumvent filtering and monitoring software.

Similar to an education setting, with information from monitoring software, parents can be empowered to open dialogues with their children on how to use the internet safely, without blocking out the opportunity to enhance their digital literacy and Digital Citizenship.

Monitoring in practice

A school in the UK implemented monitoring software and within the first month of use were able to intervene in two potential suicides. One of the students in question was an A grade student completely off the school's risk radar; following a conversation with a counselor, a number of issues were uncovered that could then be addressed.

A district of 1,000 students in the US was alerted by its monitoring system to several instances of risk: an employee was accessing sexually explicit material after-hours; a student was selling drugs online; a student was being bullied on a Reddit forum; and a student was accessing a radicalization website. These incidents were able to be addressed, because they were identified by the monitoring system. The district uses monitoring technology to "keep the boat going in the right direction" when students are connected to the Internet.

It cannot be stressed enough that filtering or monitoring without deliberate mentoring (safe settings where conversations and bonding can be fostered and side-by-side learning can take place) is wholly insufficient.

When identifying risk offline, those who have witnessed, or have been made aware of the incident, must find ways to offer a counter-narrative or supportive discussion in order to mitigate the risk. Mentors would also be wise to consider prevention science information about increasing as many protective factors as possible.



When opening up dialogues with people that may be at risk, it is important to remember that:

- Safeguarding issues are complex and may take time
- Planning a conversation will help to respond in a supportive and controlled manner
- Immediate answers may be unclear and different to the end goal
- Respecting the person's views is paramount in progressing difficult discussions
- Stopping the conversation may be necessary to ensure the person is not upset, angered or hurt
- Additional help and services may be needed

Depending on the nature and severity of the issue, external services such as the police and child protective services may need to be involved, in order to reduce the risk of further harm. Through online monitoring and capture logs, incidents can be presented as evidence for such services to gain context.

Impero's approach to opening dialogues includes reaching out to specialist organizations and charities who have given their expert advice on a how to handle difficult conversations on a variety of topics, including radicalization, eating disorders and self-harm. For insights from these experts, see Impero's Online Safety Handbook, which can be viewed [here](#).

Opening up dialogues in practice

A US high school was able to identify a group of students who were accessing violent, extremist content online. Using screen capture functionality through Impero Education Pro, teaching staff were able to present the evidence to the students involved, and present a counter-narrative and tackle the issue before it escalated.

A father noticed on his family's monitoring software that his daughter had been exposed to something that could have put her into compromising social situations. The father used the information from the monitoring software to help empower his daughter to stand up for herself in social situations.

4.3.4 Anonymous reporting channels

With the growth of social networking sites and messaging applications, cyberbullying, hate crime and inappropriate content is becoming increasingly accessible within the home, education setting and on the move.

Global power players in social networking, such as Facebook, Instagram and Snapchat, have identified the benefits of implementing an anonymous digital reporting mechanism for their platform. Through software and apps, schools, communities and governments are also implementing anonymous reporting options for youth in their communities.

Anonymous reporting tools empower users (especially youth, who are usually very tech-comfortable) to express any immediate concerns they may have about themselves, another person, or about content that they have witnessed online. Being integrated into an online platform or device, users are able to report their concerns in real time, allowing for a quicker response or action on the matter. This further allows the receiver to identify emerging risks in an online context.

The anonymous aspect of a digital reporting mechanism provides a safe place for young people who come across inappropriate, abusive or illegal content. By giving people anonymity, risks are more likely to be reported and in turn, acted upon. In these instances, people who may otherwise feel powerless, are given the opportunity to voice their concerns.

Anonymous reporting in practice

A UK secondary school was notified anonymously about a social media page that was setup to intentionally bully and humiliate one of their pupils. School staff were then able to have a conversation with the pupil in question addressing the situation, providing them with the support they needed. The school was able to block and remove the page immediately, while educating students on the issue of cyberbullying.

Multiple cities and states are providing youth with anonymous texting numbers to report suicide risks, abuse, or other problems. This allows youth to use the tools they are familiar with to reach out for help or to share what they are witnessing in their peer groups or family situations without fear of retribution.

⁴⁵Hawkins, Power of Prevention, 9.

4.4 Media literacy as a bridge between prevention science and Digital Citizenship

This paper has sought to make a strong case about the connection between the media and behavioral health risks. The paper also seeks to make a strong case that media literacy, Digital Citizenship, and prevention science fields can work together to help children live healthy and productive lives in their digitally-driven world.

In the prevention science space, “Several preventive interventions have produced positive effects on more than one behavioral health outcome.... Hale and colleagues (2014)...found that 44 universal and selective prevention programs were effective in reducing several problems at once and that effect sizes were comparable to those produced by interventions targeting only a single behavioral health problem.”⁴⁵

Evidence-based programming is an essential part of a good prevention science model. The goal of this paper is to invite further research by experts in all three fields working together so that the benefits of media literacy and Digital Citizenship principles can be considered, assimilated, and studied in a behavioral health context and vice versa.

There is some research that already exists around Media Literacy. As with prevention science, Media Literacy is a field that has existed - largely in the shadows - for decades. As with prevention science, research would indicate that Media Literacy programming also has the potential to help provide some protection against various risky behaviors that are of concern to prevention experts and digital health experts alike.

As more awareness around digital issues grows, Media Literacy could be an important bridge between the prevention science and Digital Citizenship worlds, as efforts are made to increase conversations and collaborative efforts in research, programming, and public education. See, for example, [Italy's recent decision to assimilate Media Literacy education into multiple topics in its school curricula](#).

The following are reports about how media literacy can and should be part of prevention efforts:

From Media Literacy Now's website:

“AAP [recommend\[ed\]](#) that pediatricians:

- Work with local schools to implement comprehensive media-education programs that deal with important public health issues.
- Work with the US Department of Education to support the creation and implementation of media-education curricula for school children.⁴⁶

From the Center on Media Literacy:

American Psychological Association

In its resolution on violence in the media, the American Psychological Association supported the development, implementation, and evaluation of school-based programs to educate children and youth regarding means for critically viewing, processing, and evaluating video and film portrayals of both aggressive and prosocial behaviors. The APA sexualization task force [recommends](#) (APA, 2007) that the APA advocate for funding to support the development and implementation by public agencies and private organizations of media literacy programs, including interactive media, in schools that combat sexualization and objectification.

Recent research in support of Media Literacy education: Journal of Injury Prevention, August 16, 2013:

A longitudinal [evaluation](#) (Fingar and Jolls, 2013) of the Center for Media Literacy's Beyond Blame: Challenging Violence in the Media curriculum by UCLA researchers shows that students of trained teachers who delivered the curriculum: a) agree that media violence may cause adverse effects b) understand CML's Five Core Concepts* of media literacy c) mitigate their media use and d) reduce their aggression. These significant findings demonstrate that media literacy is an effective health intervention strategy, as well as a proven way to enable students to acquire content knowledge.

⁴⁵ Hawkins, Power of Prevention, 9.

⁴⁶ <https://medialiteracynow.org/wp-content/uploads/2014/01/Drawing-the-connection-between-Media-Literacy-and-Public-Health.pdf>

*Five Core Concepts

1. All media messages are 'constructed.'
2. Media messages are constructed using a creative language with its own rules.
3. Different people experience the same media message differently.
4. Media have embedded values and points of view.
5. Most media messages are organized to gain profit and/or power.

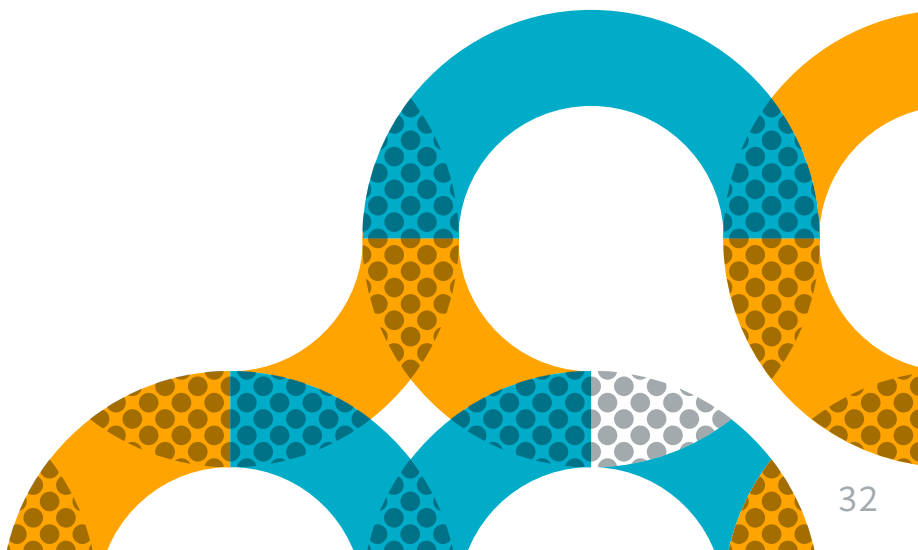
Journal of Communications, April 24, 2012:

Researchers reviewed fifty-one studies of media literacy interventions that were intended to enhance students' critical analysis by increasing knowledge of the media, awareness of the influence of the media, and the ability to assess the realism of the media representation of reality. Media literacy education was **found** (Jeong, et al., 2012) to reduce risky or antisocial behaviors, increase negative beliefs and negative attitudes toward such behaviors, and increase belief in oneself to avoid negative behaviors. Media literacy education was found to be effective for children and youth of all ages, for all topics – e.g. tobacco, violence, sex.

Journal of Children and Media, Feb. 27, 2012:

Center on Media and Child Health **found** (Bickham and Slaby, 2012) that a media literacy curriculum for elementary students developed by Media Power Youth of Manchester, New Hampshire, is substantially effective in achieving its goals of helping young people understand and reduce the impact of unhealthy media messages regarding tobacco, alcohol, fast food and violence."⁴⁷

⁴⁷ <https://medialiteracynow.org/wp-content/uploads/2014/01/Drawing-the-connection-between-Media-Literacy-and-Public-Health.pdf>, 5.



4.5 Applying the Social Development Strategy to Digital Citizenship

4.5.1 CTC's Social Development Strategy

As a review, CTC's Social Development Strategy includes a focus on building opportunities, skills, and recognition in a child's life.

“Opportunities. Skills. Recognition. The Social Development Strategy fosters the success and health of young people from before birth through every stage of development. It's easy to use, easy to remember, and it works!”

“Providing young people with opportunities, skills and recognition strengthens bonding with family, school and community. Strong bonds motivate young people to adopt healthy standards for behavior.”

“This strategy has been tested and proven effective....”

“When you use the Social Development Strategy in daily interactions with young people, it helps keep them on track for healthy development. The strategy has five key components:

- **Opportunities:** Provide developmentally appropriate opportunities to young people, for active participation and meaningful interaction with prosocial others.
- **Skills:** Teach young people the skills they need to succeed
- **Recognition:** Provide consistent specific praise and recognition for effort, improvement, and achievement.
- **Bonding:** Acknowledge a young person's effort and promote positive bonding — a sense of attachment, emotional connection and commitment to the people and groups who provide that recognition. Bonding can occur with a family member, teacher, coach, employer or neighbor.
- **Clear Standards for Behavior:** Through the process of bonding, young people become motivated to live according to the healthy standards of the person or group to whom they are bonded.⁴⁸”

These concepts can be powerful guiding ideas for Positive Digital Citizenship approach, and can help Digital Citizenship experts communicate what is already being done in their space. This paper will now look at each of these elements in turn.

⁴⁸ <https://www.communitiesthatcare.net/how-ctc-works/social-development-strategy/>

4.5.2 Opportunities

Positive Digital Citizenship should include information-sharing and education about avoiding the negatives and deliberate efforts to expand and foster opportunities for mentored, monitored, age-appropriate, prosocial experiences in a digital space. This is an exciting element of Digital Citizenship that has yet to be explored to its full potential.

Many educators are starting to model what this can look like even with young children in what are called “connected classrooms.” As Curran Dee, Chief Kid Officer of DigCitKids likes to say, children need opportunities to “[learn about the world with the world.](#)” Marialice Curran likes to compare this mentored approach with younger children to training wheels for the driver’s ed for the internet. (For thoughts from Marialice and Curran about working side-by-side in this driver’s ed mode, listen to [this podcast.](#))

Parents at home can open up opportunities for children to experience prosocial connections especially with family members. Parents can also create side-by-side learning opportunities to explore how technology can be used to maintain relationships, expand learning, and serve others. These kinds of opportunities can be created with young children as well as teens, and are more about creating a family culture that appreciates and leverages the positives of technology.

4.5.3 Skills

Learning how to reject harmful media and use technology deliberately includes both specific and general information and skills. For example, young children have been taught to “crash and tell” when pornographic content shows up on a computer. But beyond that, children can be taught to understand when their “reptile brain”⁴⁹ or “feeling brain”⁵⁰ is being stimulated versus when they are actively choosing to use technology to facilitate desired outcomes.

⁴⁹ See Tristan Harris’ TEDx talk on how technology can stimulate the reptilian brain here: <https://www.youtube.com/watch?v=C74amJRp730>

⁵⁰ See Good Pictures, Bad Pictures for more on teaching children about the “feeling brain” vs. the “thinking brain”

General media literacy can help children and youth build important skills such as critical thinking, content analysis, proactive content creation, and more. This paper seeks to propose that media literacy be taught as a skill in both the home and school setting as a protective skill against a multiplicity of health concerns.

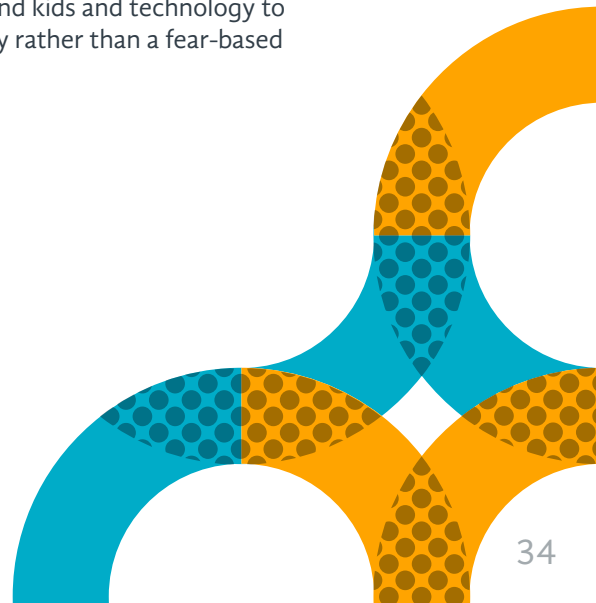
Digital Citizenship builds on a media literacy foundation and teaches skills around the following:

- Rejecting/avoiding harmful, unhealthy, or negative content (digital safety).
- Understanding how technological tool design, thrill or curiosity-enhancing content, and advertising can affect the brain.
- Using technology responsibly (respecting laws and respecting others).
- Using technology to advance one’s learning and (when appropriate, for teens) to build an online presence/résumé.
- Using technology to build relationships and to help others.

Digital Citizenship skills include nuts-and-bolts technological skills (like digital literacy) and human relationship skills. Positive Digital Citizenship also encourages character development, integrity, empathy and prosocial action.

4.5.4 Recognition

See the ‘Community’ subsection below (4.6.5) for more discussion on how recognition is a key part of the Positive Digital Citizenship Movement, not only to help youth at an individual level, but to help with cultural changes around kids and technology to foster more positive energy rather than a fear-based approach to technology.



4.5.5 Bonding

When adults have a negative/fear-based mindset around technology, the likelihood of tension and conflict in parent-child, teacher-student or mentor-mentee relationships is higher. As has been noted before, encouraging a Positive Digital Citizenship mindset should not be misunderstood as avoiding digital safety conversations and education. Positive Digital Citizenship invites parents to teach about safety and to explore and expand horizons together with their children throughout their lives around how technology can be used deliberately for positive purposes. No matter what is being taught, whether safety or positive uses of the internet, side-by-side learning and engagement are key. Those relationship bonds need to be the focus of any efforts to prepare children for living in a digital world. The goal of parenting and education should not be technology management but relationship building that can make teaching more effective and meaningful.⁵¹

4.5.6 Clear Standards for Behavior

Children thrive when there is clarity around standards for behavior. The trick with digital standards is to ensure that they are created from a healthy starting place. Again, when fear is the driver, outcomes are not likely to be positive. Creating family, school, and cultural boundaries can seek to reflect more than just the DON'Ts but also include the DOs is what Positive Digital Citizenship strives for.

For example, could Acceptable Use Policies in schools be more than just lists of warnings about technology use? Can home technology standards also include “how our family chooses to use technology in positive ways”? Can **#NotAboutThemWithoutThem** discussions happen more often when standards and rules are created, so that children can share their perspectives and experiences as inputs, and so that buy-in can be sought through participation rather than just dissemination?

In terms of sexual standards, this paper suggests that current sexual health and education discussions are inadequate to address the complex nature of risks associated with regular exposure to sexualized content and social pressure to engage in sexually-charged ways through electronic means. Digital life has introduced layers that deserve more attention and more clear cultural standards and measures that recognize the challenges children and youth face in a sexualized culture.

4.6 Reducing risk factors and increasing protective factors through Digital Citizenship

4.6.1 Expanding conversations

To this point, Digital Citizenship has mostly focused on digital safety, and has been a topic that has existed primarily in the education sphere. Unless efforts expand beyond the education sector and include the positives and protective factors, the power and potential of Digital Citizenship will remain largely untapped.

The prevention science model provides a framework for considering how to expand Digital Citizenship conversations into all spheres of a child's life, and to not only seek to reduce risks but to also include fostering positive forces in a child's world. Following are some ideas how these concepts could be applied in various domains in a child's world.

4.6.2 Personal/Peer

This paper has already thoroughly discussed ways to reduce exposure to harmful material. There are many other ways to support healthy digital use at the personal and peer level.

So often, unkind and unhealthy interactions with others stem from insecurities, unhealthy comparisons with others, or feeling threatened by ideas that are different than one's own. Technology brings many opportunities for comparison and exposure to a variety of ideas. Often the focus is to reduce participation in social media rather than to help a child gain the skills and understanding necessary to thrive in a media-driven world.

Positive Digital Citizenship (and media literacy) help teach children to be grounded in their own values and to have integrity to them. These frameworks encourage becoming aware of how media affects one's mind and emotions, and practicing healthy personal boundaries when interacting online; healthy and positive interactions with others start with self-awareness and positive interactions and a relationship with one's self. As one young adult recently said, “The Golden Rule begins with ‘do unto yourself as you would want others to do unto you.’”⁵²

⁵¹ See, for example, this podcast for discussion of these ideas of prioritizing relationship in teaching and mentoring around digital technology use. <http://www.ldsperspectives.com/tag/michelle-linford/>

⁵² Ethan Fausett, a young adult who has recovered from pornography addiction, will be sharing some of his thoughts on this at the 2017 DigCitSummit.

Positive Digital Citizenship also invites individuals to be specific and deliberate about how, why, and when to use technology. Using technology to facilitate learning, build relationships, develop empathy, and serve others are healthy reasons to use it. Using technology to escape from life's problems, seek a thrill or power rush (consuming violent or sexual content, bullying others, etc.) not only can hurt others, it can hurt oneself.

Peer groups can also be encouraged to support each other in having healthy boundaries around technology (e.g., "Let's not text after 10 p.m. so we can sleep." "If you need to talk to me about something hard, talk to me in person rather than tagging me on social media." "Let's all agree that we won't send or ask for nude pictures.")

Lastly, there is growing peer reinforcement for Positive Digital Citizenship among youth, young adults, and adults alike, who are realizing the power of using technology in positive ways. This is important to both peer spheres and to society in general. The 2017 DigCitSummit, this paper, and the ongoing **#UseTech4Good** movement seek to encourage this kind of positive peer pressure.⁵³

4.6.3 School

Schools are feeling the weight of trying to provide safe spaces where children are protected from accidental or compulsive access to harmful online content or behaviors. And yet, filtering or rules alone are insufficient to truly help children thrive in a digital world. School cultures need to help foster what can help build internal filters in a child, which includes fostering the individual skills listed above.

A school culture that celebrates age-appropriate, prosocial, positive uses of technology, rather than focusing primarily on punishing delinquent behaviors, is critical. Also, when delinquent behaviors are exhibited, is there support and help for that child, or is the primary focus on imposing negative consequences?

Even though teachers are not experts in mental health, and are sometimes legally restricted from seeking certain information from students, students still need mentors who will listen to and seek to understand their world rather than try only to control it. Healthy boundaries and rules are important, but they should not be at the expense of healthy bonding and side-by-side, mentored learning and a culture around the child that is as encouraging and positive as possible.

Technology can be used in the classroom to enhance the learning experience and help prepare youth for future education and career goals. By encouraging improvement to digital literacy, young people's creative thinking within their problem solving can be enhanced, allowing them to navigate their way appropriately in the digital world. Employers now look for skills in young people that are in pace with the rise of technology, and are now expected to have high digital literacy in order to succeed in a workplace that are utilizing the latest technology.

The internet allows young people to access an unlimited amount of resources in order to inform research for not only schoolwork, but their own external interests also. Young people can now access a variety of materials to aid learning such as video content and educational games to suit all skill and knowledge levels.

4.6.4 Family

Few things have more universal impact on a child's well-being (or a lack thereof) than family culture and relationships. Families that realize the importance of healthy relationships will prioritize family in all that they do. Even before beginning to think about issues related to technology, this foundation is essential. Sometimes parents can get distracted in a digital age thinking that successful parenting is about technology management. At the core, parenting in a digital age is like it has always been: it is about relationship-building and nurturing a child through life.

When it comes to technology in the home, this paper does not seek to outline any specific age requirements for technology except those that are set by law. What the paper does seek to encourage is an understanding of both the need to reduce risks and the need to foster positives in a child's life.

⁵³ For examples of Positive DigCit organizations and efforts, see the Resources section.

As soon as a parent hears a negative story via the news or social media or personal circles about negative risks of the internet, anxiety and fear often begin to lead their thoughts and discussions with their children about the internet, media, and everything having to do with a screen. This is the prevailing theme with most parents, until they come to understand the concept of Positive Digital Citizenship. Once they understand that there is another approach to raising children in the digital age, they realize they no longer have to continually parent in a defensive position. Understanding that they can start now to approach technology from an offensive, positive position (even when teaching about risks) is very empowering. As they open their eyes to the possibilities of staying connected to family and friends - reaching out to experts in any field via social media, starting a petition to create change in their own communities, or even collaborating with people all over the world - they realize they can help their children have developmentally-appropriate and mentored experiences with using technology in positive ways.

Prevention science principles would suggest that a fear-based or reactive mindset has the potential of not only leaving children without positive mentoring or guidance. Such a mindset also increases the likelihood of conflict and threats to bonding that may actually increase the likelihood of negative outcomes occurring. Rather than creating expectations that no mistakes with technology will ever be made, when home is also a safe place to learn from mistakes, children will have increased opportunities to develop resiliency - a critical skill both for all facets of life. Prevention science principles would suggest that family patterns around positive digital use, and parents who look for, create opportunities for, and praise prosocial, deliberate, proactive, positive digital behaviors can have a significant influence on preventing the very behaviors they fear.

A child need not own a device to learn its potential to magnify both the negative and the positive. A balanced, deliberate family culture that recognizes both has the potential to prepare children against harm, while empowering the child to learn how to live and have positive influence in a digitally-driven world.

Parents and schools are encouraged to work more deliberately together toward these ends. Sometimes parents and schools are at odds about digital technology use; further conversations and collaborations are essential.

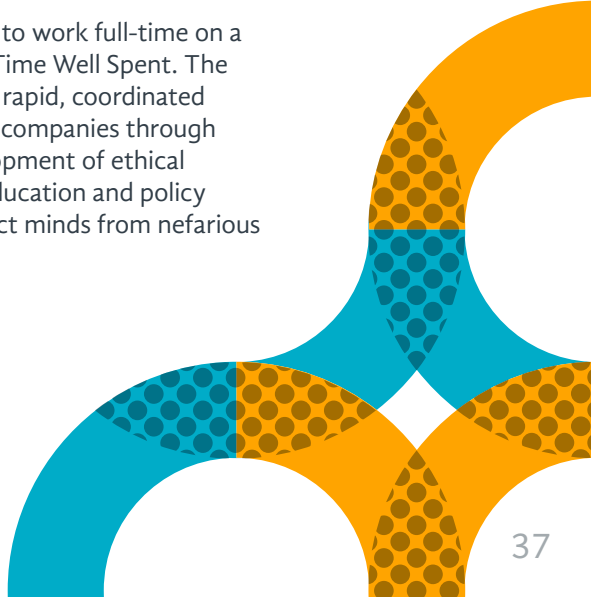
Lastly, parents need to be reminded of their influence and their important role as nurturer and teacher. Their example of how they treat people online, consume media, and balance technology speak volumes to a child. Parents are in need of practicing Positive Digital Citizenship as much as children are!

4.6.5 Community

It's important to note that passive, reactive, or escape-driven uses of technology can increase a sense of isolation. And, as noted, there are many problems in the larger media-driven culture that can increase risks for unhealthy and harmful behavior. The first call to action around community is that technology companies, businesses, and others become more committed to protecting children from violent, sexually-saturated, false, or unhealthy content and products. This call to action includes engaging in conversations about the "[arms race for human attention, the ethics of persuasion, the consequences of having an ad-based economy](#)" and more.

Movements like [Time Well Spent](#), started by Tristan Harris ([see his TEDx talk here](#)), deserve a white paper in and of themselves. Tristan has been called the "closest thing Silicon Valley has to a conscience." He was a Design Ethicist at Google, where he learned how technology manipulates the evolutionary limits and vulnerabilities of the human mind – especially as it relates to addiction, the spread of conspiracies and misinformation.

Tristan left Google in 2016 to work full-time on a non-profit initiative called Time Well Spent. The initiative aims to catalyze a rapid, coordinated change among technology companies through public advocacy, the development of ethical design standards, design education and policy recommendations to protect minds from nefarious manipulation.



The 2017 DigCitSummit shares principles from the Time Well Spent model will be, as well as a theory called [Jobs to be Done](#), which, like time well spent, seeks to invite influencers to think about what truly helps the lives of customers, beneficiaries, etc. to progress. This paper seeks to invite the community around children to think about whether the pursuits of various sectors serve the most vulnerable or serve to only make money or increase power for adults.

When it comes to community engagement and prosocial behavior, mentored, side-by-side Positive Digital Citizenship encourages and seeks to expand the potential opportunities for a sense of connection and belonging. The Positive Digital Citizenship Movement seeks to recognize youth for their desires and actions around the **#UseTech4Good** vision. Collectively, the movement uses hashtags like **#UseTech4Good**, websites like UseTech4Good.com, and social media shoutouts within the Digital Citizenship community on Twitter and elsewhere. The **#UseTech4Good** Youth Extravaganza at the 2017 DigCitSummit (which will be livestreamed) will showcase youth and the ways they use technology in deliberate ways in every sphere.

Another example of community support for Positive Digital Citizenship include the UK initiative, Apps for Good, which holds an annual competition to showcase the top apps created by students. The initiative encourages students to create apps that aim to solve real-world problems. An example of this is the 2016 winning app Lillies, which was created to support young people suffering from bereavement. Such initiatives promote the opportunities and positive outcomes that a digitalized environment can create for children and young people (for more examples of Positive Digital Citizenship community building, see the Resources page).

Story after story reflects that this kind of deliberated, mentored digital engagement with a community outside of a child's peer, school, and family circles can enrich their lives, and sometimes even help reduce risk factors in their lives by increasing opportunities for connection, education, involvement, uplifting stories, and inspirational ideas. Obviously more research needs to be done beyond the anecdotal, but compelling stories are a good start to solid research efforts.

Consistency of positive messaging in the community is essential so that at every touch point in a child's life, he/she is gaining understanding through words and side-by-side mentoring and experiences that technology is just a tool. It's how and why it's used that matters.



5. Call to Action: Expand and Streamline

5.1 How adults can help

This white paper is designed to both share information and to extend invitations to action. Following are some simple call to action for adults who share a desire to help children, adolescents, and young adults live more healthy and productive lives in a digital world.

5.2 Expand conversations

There are many ways that conversations can be expanded. First of all, adults can include youth (and vice-versa) in conversations and actions/initiatives around kids and technology. **#NotAboutThemWithoutThem** is key.

People can share information at personal (one-to-one), B2B (business-to-business/organization-to-organization) and public (one-to-many) levels.

Information in this white paper about prevention science, media literacy, and Digital Citizenship can benefit youth, parents and families. It can also benefit those in educational, nonprofit, governmental, business, health, religious, and other sectors. Talking about even a few of the ideas within this white paper can help expand conversations and knowledge across the board at personal, professional, and public levels.

Eventually, programming and measurements across these realms should be combined to maximize the reach and impact, but it all starts first with conversations, which is a key purpose of this white paper.

5.3 Expand specific partnerships and research initiatives

This paper specifically seeks to invite more deliberate cross-pollination between experts in the public health/prevention science, digital health/citizenship, and media literacy spaces. Streamlining models, measures, research, funding, programming and policy support can help local, state, and national communities work together more effectively to help children be healthy and successful in a constantly changing digital world.

Monitoring systems, research projects, and other initiatives should not only focus on what helps risks in the digital sphere, but also to identify and measure the growth and impact of Positive Digital Citizenship efforts in every context of a child's life.

While this paper recognizes the need for more specific research in the realm of Digital Citizenship programming and principles, it also asserts that efforts do not reinvent the wheel. Prevention science may have things to offer in this regard. The hope is also that prevention science and public health experts will expand their models to include digital facets of key behavioral and public health issues, ensuring that decades-old models account for the complexity that digital life has brought to nearly every facet of life and health. Health models should consider, measure, and teach about the multiple ways digital life can and does impact the health and success of a child -- both in terms of risk factors and protective factors.

In short, more interconnected idea and story sharing, and research efforts, are needed across these intersecting realms.



5.4 Expand whole-community connections and collaborations

The ideal way to help children have the best chance at living healthy and productive lives is if all influencers in children’s lives are working together on their behalf. Because personal, peer, family, community, and society/cultural contexts all interact to impact a child’s well-being, it would follow that deliberate interactions between those within these various contexts is ideal. This includes a **#NotAboutThemWithoutThem** approach of including youth, not just creating policies or programs at, to, or even for them.

As mentioned, this paper includes a call to action to technology developers to consider carefully the impact of the competition for attention that is being addressed through movements like the [Time Well Spent](#) movement.

Using models for cross-sector community collaborations is important because such efforts are complex and can be difficult to sustain.

As an example of such a framework, please refer to the five-step model below for community action from Communities that Care.⁵⁴ This model is for implementing the CTC program and could apply, in principle, to other community efforts as well.



Figure 7 – The five step model for community action

- **Getting Started** includes activating a few community catalysts who can assess community readiness, identifying community champions and gathering cross-sector stakeholders
- **Getting Organized** includes forming a new board or joining with an existing collaborative effort/coalition. Board members get educated on prevention science, create a vision statement, create implementation timelines and organize themselves into workgroups
- **Developing a Community Profile** includes issuing and analyzing surveys that assess specific needs of youth in the community, identifying the risk and protective factors of youth in the community, and assessing what resources the community has, and what resources it needs, to address risk reduction and protective factor needs.
- **Creating a Community Action Plan** includes translating community data and resource evaluations inputs into an actionable plan to reduce risks and foster protective factors. This step includes using data to identify outcomes that are clear and measurable and/or expanding research on evidence-based programs such as those found in [Blueprints for Healthy Development](#).
- In the final phase, communities **Implement and Evaluate** their planned programs through monitoring, measuring, and reporting progress. Outputs from this phase inform the ongoing cycle of work toward continuous community improvement.

Other models for cross-sector community change include collective impact⁵⁵, Healthy Cities, Healthy Communities⁵⁶ and CADCA⁵⁷, to name a few.

⁵⁵ See https://ssir.org/articles/entry/collective_impact, <https://www.fsg.org/publications/collective-impact>, <http://www.collaborationforimpact.com/collective-impact/>, <https://collectiveimpactforum.org/>, and <http://www.tamarackcommunity.ca/>

⁵⁶ <http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/healthy-cities-healthy-communities/main>

⁵⁷ <http://www.cadca.org/>

The following image illustrates this kind of cross-sector community collaboration that the writers of this paper hope to see continue to flourish.



Figure 8 – Cross-sector community collaboration

Ideally, over time, programming within the public health/prevention science space would merge with programming within the digital health/Digital Citizenship/media literacy spaces. Of particular need is more research around programming focused on digital issues, and more consideration of such programming in public health research and funding. At the moment, for example, Communities that Care has a curated list of programs that have been shown to address risk and protective factors in a measurable way. (See [Blueprints Programs](#) for more information.) Note also different types of programs that have proved effective. Those in the digital health/Digital Citizenship/media literacy spaces could consider where their current programming may fall, and how to work together with other organizations to ensure evidence-based universal, selective, and indicated programming is reaching youth.

[The more than] 50 programs which have been found effective in controlled studies of interventions were aimed at preventing behavioral health problems in children, adolescents, and young adults⁵⁸.

Effective preventive interventions have been identified at three levels:

1. Universal programs, which seek to reach all children and youth without regard to level of risk exposure.
2. Selective programs, which focus on young people who have been exposed to elevated levels of risk but who do not yet manifest behavioral health problems.
3. Indicated programs, which focus on youth who evidence early symptoms of behavioral health problems (IOM, 1994).

Evaluations of youth development programs aimed at promoting positive behavior in young people also show positive effects (Catalano et al., 2002; Gavin et al., 2010).⁵⁹

⁵⁸ CSPV, n.d.; NRC and IOM, 2009, Rob Timmerman is the director of the South Salt Lake Coalition for Drug-free Youth. <http://www.ssdugfree.org/about-us/staff-board>, Image: Slide from presentation by Rob Timmerman, November 2016. Shared with permission.

⁵⁹Hawkins, "Power of Prevention," 3.

5.5 Expand international collaborations to explore effectiveness of models/frameworks

This white paper was written with the assumption that core principles of solid models can transcend boundaries of age, culture, race, religion, and so forth. Of course, that assumption needs to be tested over time and across such boundaries. Especially as the Digital Citizenship movement is spreading across the globe, continued international collaborations must continue in the prevention science and in the digital health/Digital Citizenship/media literacy spaces. As noted in a collaborative paper between experts in the Netherlands and the United States;

“The study of cross-national implementation of preventive programs is necessary to identify whether or not differences in national policies, cultures, and contexts lead to major changes during implementation, and to describe the types of adaptations that may occur. Cultural differences are often used as justification for changes in programs, but making such changes could undermine the effectiveness of programs. Thus, it is important to identify the core elements of a program before implementation in different countries, as well as to identify changes in implementation across countries.”⁶⁰

5.6 Expand the use of technology

The wonder of living in a digital age is that the kinds of collaborative connections urged above are even more possible through digital technologies. Expanded cross-sector, multi-level programming (prevention science and digital health & citizenship and media literacy) is also more possible through technology.

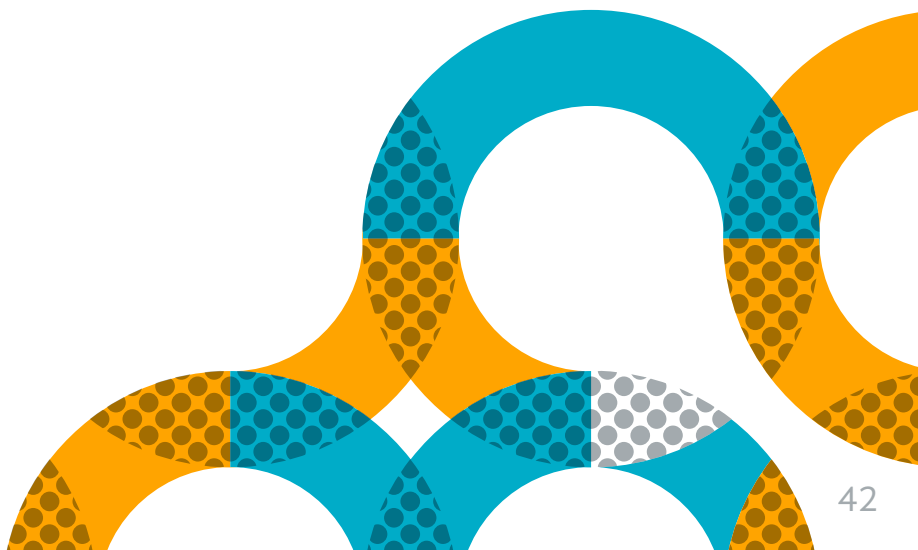
This vision for the “game-changing” potential of using technology to expand reach and impact of child-focused efforts is shared by Dr. Hawkins and his associations in Unleashing the Power of Prevention. As organizations and individuals practice more Digital Citizenship and **#UseTech4Good** principles, the potential for collaborative impact can grow;

“Evaluations of youth development programs aimed at promoting positive behavior in young people also show positive effects (Catalano et al., 2002; Gavin et al., 2010). These programs seek to prepare young people to lead healthy, productive lives.

Advances in technology over the past 30 years offer game-changing potential to scale preventive interventions quickly and dramatically to increase access to gold-standard programs.”⁶¹

⁶⁰H. B. Jonkman, K. P. Haggerty, M. Steketee, A. Fagan, K. Hanson, and J. D. Hawkins, PhD. “Communities That Care, Core Elements and Context: Research of Implementation in Two Countries.” *Soc Dev Issues*. 2009; 30(3): 42–57. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2712284/#R10>

⁶¹Hawkins, Power of Prevention, 3.



5.7 Streamline policies, programs, and funding streams

All other calls to action are about expanding conversations and collaborations. The hope of such collaborative efforts would be eventually to consolidate policies, programs, and funding streams. Prevention science and public health funding, for example, heavily favors addressing decades-old issues like alcohol and drug abuse. In the United States, issues like cyberbullying have gotten more recent attention, but attention to one branch of Digital Citizenship while ignoring others can be costly both in financial terms and also in social terms.

A scenario that plays out regularly in state politics in the United States often looks something like this. This scenario can play out at national levels as well.

- › A problem like cyberbullying or pornography use gains more attention because of research, media headlines, or people's life-changing personal experiences that are shared at the grassroots level.
- › Parents, youth, nonprofits, curriculum-writing businesses, and others clamor for politicians to appropriate funding for mandated cyberbullying programming in the schools.
- › To be responsive to constituents' requests, often with good intention, politicians will often respond to whatever is getting the most attention at the current time.
- › Often little to no consideration is made, however, of all the other programs that are already mandated, and how such a mandate will affect state budgets, taxes, and the time and resources of educators and administrators.
- › As a result, layer upon layer of new programming is added in ways that can hurt the system, tax the taxpayers, and risk keeping children at risk, because they will receive incomplete education unless they receive comprehensive training that addresses shared risk and protective roots (as modeled in prevention science) and that seeks to be more comprehensive (as Digital Citizenship does).

Principles-based programs like Communities that Care can help move beyond focus on any specific problem of the day, looking to more grass root issues that cut across multiple problems.

[Communities that Care]'s significant effects on youth health and behavior problems produce long-term economic benefits. For every dollar invested in CTC, \$5.31 is returned in the form of lower criminal justice system, crime victim, and health care costs, and increased earnings and tax revenues.

This kind of fragmenting pattern that can be seen in policy/politics can also exist when well-meaning people start nonprofits and businesses around an emerging problem without considering what programming already exists, and collaborating with others so that children get the whole of what they really need. If the adults in their lives are all working in competition with each other, or not working in collaboration with each other, are the adults really helping the children? A **#WenotMe** approach is essential if to truly help children navigate their complex, digitally-driven world.

Put another way, what if only a couple of programs or parent nights could ever be provided in a school year? What would the topics need to be? This paper suggests that root-based prevention science principles alongside a comprehensive Digital Citizenship presentation (which includes Positive Digital Citizenship) would be essential.

Fortunately, parents and educators have the opportunity to create cultures in their homes and schools where ongoing efforts around prevention (reducing risks and increasing protective factors) and holistic Digital Citizenship (reducing risks and leveraging the positives) are the norm. The hope of this paper is that creating such a culture in every context of children's lives will be a priority for all.

6. Conclusion

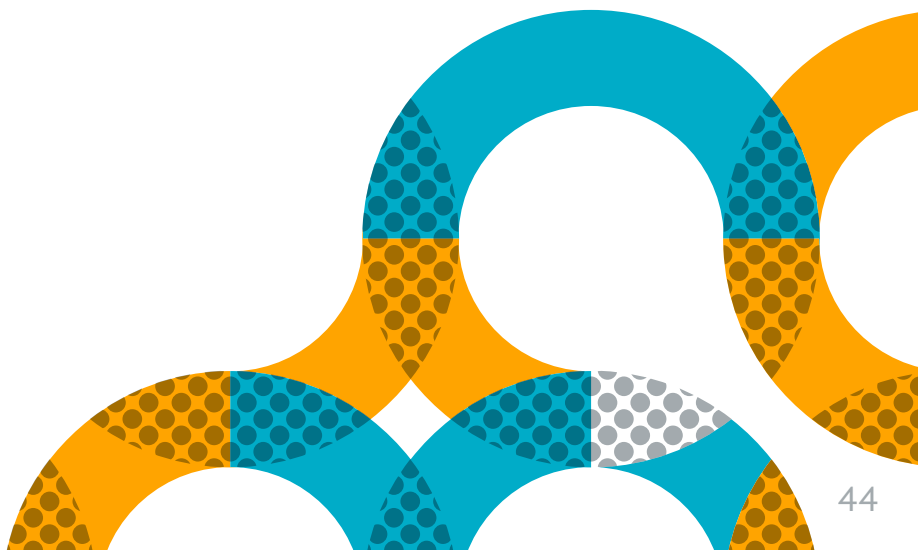
“Unleashing the power of prevention is a call to action that our nation can’t afford to miss... Given its proven ability to dramatically reduce a wide range of behavioral health problems and save billions of dollars year after year, prevention is one of our nation’s most valuable - and underused - resources. It’s time to unleash the power of prevention by creating programs, training, and infrastructures that put prevention to work nationwide for all young people, resulting in healthier lives, families, communities, and economies. Prevention is the best investment we can make, and the time to make it is now.”⁶²

The world is changing at an ever-increasing pace. Approaching children’s health in a reactive, fragmented way is not effective nor efficient. Assimilating prevention science and Digital Citizenship models has great potential to guide adults who care about helping children live and thrive in a technology-driven world. Media literacy is a field that can help build a bridge between these two worlds as they learn about each other’s spaces and how they can connect.

This white paper should not be misunderstood as suggesting the idea that any one program or product can solve all problems in a child’s world or in the world at large. Life is far too complex for such simplistic approaches, which is all the more reason why cross-functional, collaborative efforts are so essential to any problem-solving efforts. However, building programs and products around solid principles can make a difference in the life of a child, in the marketplace, in the nonprofit and educational sectors, and in society in general.

This paper has explored some robust examples of principles applied in programs (like Communities that Care (CTC)) and products (like Impero Education Pro) that seek to expand thinking about prevention of digital and other harms. The paper also urges people away from a fear-based, reactive mindset when it comes to concerns around digital technologies and all other behavioral issues. While safety and reducing risks are essential, initiatives in physical, mental, and digital health must include much more than just trying to control problematic behaviors or limit access to harmful substances or content. As prevention science directs, prevention efforts must also foster positives in a child’s life.

⁶²Hawkins, Power of Prevention, 20.



CTC's Social Development Strategy can inform adults about how to foster behavioral, mental, relational, and digital health in children. The strategy includes the following five elements: 1) providing prosocial opportunities, 2) helping children develop important life skills, 3) reinforcing/recognizing positive behaviors, 4) nurturing healthy relationship bonding opportunities in families and other settings, and 5) establishing [and following up with] clear standards are all powerful ways to help children thrive. When adults and children work side-by-side in learning about and using technology in positive ways (**#UseTech4Good**⁶³), all five of these elements can be fostered.

Positive Digital Citizenship presents ideas about a comprehensive mindset that seems to align well with prevention science. It is an approach that urges beginning with a positive vision of what is possible, while also directly addressing issues of safety and protection – all in a way that fosters cross-generational relationships through side-by-side learning.

The approach of trying to address isolated risks in children's lives is long past. Looking at shared risk and protective factors is essential in being able to help children avoid physical, mental, and digital risks and to live healthy, productive, and service-oriented lives. The time where digital health issues are considered separately from more traditional behavioral health issues is also long past.

Prevention science has already addressed the first issue: presenting the world with solid principles and ideas that can help youth and adults alike. Bold, collaborative efforts between people in all sectors that involve parents and youth (rather than working at, to, or for them) are essential. These collaborative efforts must build their work on timeless principles in ways that also allow for rapid-fire adaptation to ever-changing digital, social, and cultural landscapes. Such grounded, whole-community efforts around and across the globe can help adults and youth alike stand solidly in the 21st century and to prepare for whatever challenges and opportunities the future will hold.

⁶³ The authors of this paper invite all who read it to join in the Positive Digital Citizenship Movement (children and adults working side-by-side to #UseTech4Good) by sharing movement by ideas and experiences using the #UseTech4Good hashtag. Stories may be shared on UseTech4Good.com.



7. Additional reading

From Center for Media Literacy's "Reading Room"

- > [Addicted to Violence: Has the American Dream Become a Nightmare?](#)
- > [Alcohol and Television: And Now for Some Mixed Messages](#)
- > [Alcohol in Prime Time: 10 Guidelines for Writers](#)
- > [Beyond Blame: Media Literacy as Violence Prevention](#)
- > [Blowing Smoke: Can Media Literacy Impact Youth Smoking?](#)
- > [Cancer is an Equal Opportunity Disease](#)
- > [Challenging the Myths of Media Violence](#)
- > [CHILDREN: Helping Children Challenge Male Stereotypes](#)
- > [CML Pilots Media Literacy Unit for Obesity, Nutrition Education](#)
- > [Deadly Persuasion: 7 Myths Alcohol Advertisers Want You to Believe](#)
- > [Gullible Statistics Exercise](#)
- > [Healthcare in the Media Age](#)
- > [Landmarks in the Media Violence Debate: Decade by Decade](#)
- > [Making Connections: Media's Role in our Culture of Violence](#)
- > [Marcus Welby Speaks: Health Messages on TV](#)
- > [Media Literacy: An Alternative to Censorship](#)
- > [Our Culture of Addiction](#)
- > [Selling Addiction to Women](#)
- > [Six Kinds of Screen Violence - And How Children Respond](#)
- > [STARTING POINT: Just Say 'Yes' to Media Literacy](#)
- > [Testimony Reveals Complexity of Sexual Violence Issue in Media](#)
- > [YOUTH: Media Models Say Muscles Make Men](#)

Positive Digital Citizenship Resources: A sampling

- > DigCitKids: <http://www.digcitkids.com/>
- > DudeBeNice: <https://www.dudebenice.com/>
- > eCadet website in the UK: <https://www.ecadet.zone/>
- > Global Maker Day: <http://globalmaker.wixsite.com/globalmakerday>
- > GoBubble, a 13 and under app through eCadets: <https://www.bubble.school/>, where "likes" reflect how much you give and not get
- > iCanHelp: <http://icanhelpline.org/>
- > [KhanAcademy.com](#) (free learning resources)
- > <http://kindassets.kindsnacks.com.s3.amazonaws.com/kscom/kind-schools-challenge-toolkit.pdf>
- > Make Caring Common Project: <https://mcc.gse.harvard.edu>
- > Positively Social mini-documentary (created primarily by students): <https://www.youtube.com/watch?v=BTMIrlyR-nI>
- > [SocialAssurity.com](#) can help youth learn to use social media tools to build their online résumé. See also Mark Babbitt's presentation about social good and social proof referenced earlier.)
- > <https://thebekindpeopleproject.org/>
- > [UseTech4Good.com](#)
- > Upstander Brand: theupstanderbrand.com

Media Literacy and Health

- > [Drawing the Connection between Media Literacy and Public Health @Media Literacy Now](#)

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