

Advocating for Young Adolescent Learners in the 21st Century

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College students are majoring in fields that didn't exist 10 years ago.

If MySpace were a country, it would be the 8th largest in the world.

There are over 600,000,000 Internet devices worldwide.

There are 1,000,000,000,000 Web pages in the Google Index.

94% of American teenagers use the Internet.

(Sources: Pew Internet and American Life Project, Official Google Blog, & Did You Know video by Karl Fisch & Dr. Scott McLeod)

Young adolescents are growing up in a rapidly changing social, business, cultural, and educational environment. Sometimes schools are slow to adapt to these changes. The Partnership for 21st Century Skills, which consists of business, education, government, and community leaders, fears that "There is a profound gap between the knowledge and skills most students learn in school and the knowledge and skills they need in typical 21st century communities and workplaces." They also feel "U.S. schools must align classroom environments with real world environments by infusing 21st century skills." (<http://www.21stcenturyskills.org>)

Added to this changing landscape is the fact that young adolescents are experiencing immense intellectual, social, emotional, and physical changes. The transformation from childhood to adolescence requires that schools pay close attention to the research on developmental needs and ensure that programming is appropriate. It is incumbent on the adults in these students' lives to advocate for the type of curriculum and instruction that meets both the challenges presented by the developing teenager and our changing world.

Fortunately there is an obvious intersection between the key research-based approaches to teaching and learning for young adolescents and the 21st century skills of information and communication competencies, problem solving, global and financial awareness, and civic literacy. Exemplary middle level practices have always included an emphasis on literacy and communication, experiential and authentic learning, and challenging, collaborative work. The connection between 21st century skills and effective middle school practice is the integration of technology, and its ability to bring the world to our students.

The Digital Age

Many students enter middle school already using computers, already engaged in creating and sharing digital multimedia on their own Web sites or on social networking sites. This is another important reason for schools to integrate technology and 21st century skills. Our current students have grown up in a digital environment and in many cases have advanced in some skill areas beyond their parents and teachers. Communities and schools need to adapt to this digital environment and use its capacities to engage all students in developing the intellectual, social, emotional, and even physical aspects of their lives in positive ways.

By now most educators have heard that technology use needs to be all about teaching and learning and not just about the hardware, software, networks, and the Internet. It is crucial that educational leaders provide much more than lip service to this admonition. They need to address what excellent teaching and engaged, rigorous learning looks like in a ubiquitous digital learning environment. Leaders and community members

must also anticipate, overcome, and work around roadblocks to effective implementation and support of learning technology. Three areas that schools and communities need to address as digital learning becomes the norm are instructional use, social networking, and safety.

Technology in the Classroom

Almost overnight, the explosion of information technology has changed the source of expert knowledge, information, and opinion from the singular "sage on the stage" to wide ranging, multiple sources with varying levels of expertise and validity. There's a greater need for higher levels of critical thinking including making comparisons, sorting, analyzing, and synthesizing many pieces and sources of information. Therefore, young adolescents must become adept at information literacy skills such as accessing, evaluating, and managing all types of information both in school and their personal lives.

Instantaneous access is available to rich and valuable content as well as some that is at the very least, dubious. Young adolescents might use the Internet to research topics from different perspectives on cloning, to movie reviews, to fashion advice, to primary sources like the diaries of John and Abigail Adams. Political campaigns are managed and waged via the Internet these days. Fifty-seven percent of adolescents online have created Web content (Pew Internet and American Life Project). Schools must ensure that information literacy skills are seamlessly woven into their curriculum and instructional practices across grades and content areas. A one-time project using the Internet does not provide the level of expertise students need to acquire to use these resources well. Students need to learn to effectively "mine" and evaluate Web content, not just surf it. Information literacy skills are basic life skills in the 21st century.

Too often, young adolescents start to disengage from school in the middle years because they see no connections between what they are studying and their own lives. Sometimes they are just bored silly. Once again it falls upon the shoulders of the adults in these children's lives to ensure that the school experience is engaging and meaningful as well as intellectually stimulating. Communities must insist that digital resources allow students to chat live with scientists and other experts around the world, investigate and solve authentic problems in their community, and work collaboratively with students in other states or countries on projects. Digital tools such as enhanced podcasts allow students to access information from teachers anytime, anywhere, and as many times as they need to. E-mail makes it easy to ask a question and not feel foolish in front of one's peers. Furthermore, digital resources and equipment like scientific probes allow students to create and analyze new knowledge, not just read about it.

Also, students are quickly discovering that the Internet is a place where they can create for truly authentic audiences. Their thoughts, feelings, images, stories, and ideas can be shared with audiences much greater and more significant to them than just their teacher or classmates. They can communicate instantly to a worldwide audience that is immensely diverse. They can, if they wish, receive feedback from that audience. The emergence of Web 2.0, where they can have a direct hand in creating the content of the Web is inherently engaging to young adolescents who are invariably curious and social. Creating on the Web is a quantum leap from simply going out onto the Internet to find a wide range of topics via surfing, or even "mining" the Internet by digging down into a topic.

Students are working at the highest levels of critical and creative thinking when engaged in looking for solutions to authentic problems or developing a new perspective on a timeless issue. This digital access is a right and an immediate need of each young adolescent so that they are prepared for their future. It is not just something communities should aspire to in five or ten years. The Department of Labor forecasts that current students will hold 10–14 different jobs before they are forty and many of those jobs have yet to be

invented. Therefore this access is a necessity now if our communities, states, and nation are going to be economically sustainable and competitive. We need to ensure our students are invested in their own education while creatively and collaboratively solving problems through accessing and evaluating information. If that "profound gap between the knowledge and skills most students learn in school and the knowledge and skills they need in typical 21st century communities and workplace" is to be closed, middle grades schools must integrate digital learning within developmentally appropriate practices such as experiential and project-based learning that capture the interests of the student and encourage them to soar beyond their own and their teachers' expectations.

These strategies did not exist until recently, so digital classrooms look unfamiliar and make some people uncomfortable. However, these capabilities provide teachers many more options for differentiating and addressing individual student learning needs. This flexible and responsive classroom model must become the norm.

Social Networking

Outside of school, young adolescents have become enamored of the social networking available through Web 2.0 tools. According to research done by the Pew Trust, 94% of teenagers go online (Pew Internet and American Life Project). They chat online, share pictures, create personal spaces, express personal opinion through blogs, and check out entertainment sites among other things. These sites are also places to try on different personas which young adolescents do naturally as they work to figure out their emerging sense of self. Their friendships do not reside in the local neighborhood anymore; their neighborhoods span continents and cultures.

Businesses are now using these same tools in their work. Secure wikis are used by businesses that wish to interact with their clients 24/7. Video chatting is readily available and so the conference moves from a single room to cyberspace, and people collaborate on documents and presentations using various digital tools whether they are in the same office, across the country, or on the other side of the planet. Tom Freidman, in his book *The World Is Flat*, has opened our eyes to these phenomena. Being skilled at collaborating with digital tools is becoming as important as traditional reading and writing.

Some social networking is scary to adults. There is a feeling of not understanding this world plus the fear of losing touch and control of where the kids spend their time. Sometimes the reaction is to lock everything down and try to ban access. Every new generation's reaction to the forbidden is to find a way to experience what adults say is bad or dangerous. This approach does not work. Instead schools and parents need to think in a more positive vein. Young adolescents, for the most part, love to socialize. The question becomes, how can the adults guide their students and children to enriching experiences with social networking? The opportunities are huge. There are online spaces where 10- to 15-year-olds can safely share their poetry, artwork, movie and book reviews, and other creative endeavors. There are interest groups on a multitude of topics such as anime, stamp collecting, and football, amongst others.

Even gaming is not to be feared. The rapid development of popular online games and virtual environments designed to engage young adolescents is changing the way young adolescents engage in learning and challenging them in progressively more rigorous settings. Gamers learn to problem solve, to persevere, and to improve their skills. Educators are beginning to formulate effective instructional strategies by observing and talking with players of virtual games who place themselves in situations where they purposefully lose so they can develop strategies to overcome obstacles and advance to a higher level. The game provides instant

feedback, and other than needing to start at the point where they were defeated, there is no penalty for learning from their mistakes.

The trick is to help the young adolescent transfer positive skills gained from the gaming world and social networking sites to real life. That transfer will happen when the adults in the child's life take a genuine interest and the time to chat in non-confrontational ways about online activities. Needless to say, the adults also need to model positive online behaviors. Young adolescents need adult support and guidance as they learn to navigate this new cyber neighborhood, which is changing all the time.

Guaranteeing Student Safety

A school's responsibility for the safety and well-being of students entrusted to their care is well established. A social and legal requirement, this is embodied in the term "in loco parentis", meaning "in place of the parent." The school's role of acting in place of the parent balances the rights of parents and students with safety and learning at school. The increasing presence of digital technology has complicated the in loco parentis responsibilities of schools.

When it comes to technology, safety, and learning, two things are clear. Advances in technology are inevitable. In fact, technological change is expanding and accelerating. Additionally, the need for control and safety should not be an excuse for ignoring or avoiding the integration of technology in teaching and learning. Such a response wastes valuable resources and denies students crucial 21st century skills, placing them at a disadvantage when they meet and compete with students in other schools and countries. Keeping technology wrapped up, unplugged, or disconnected from the Internet may be safe, but the cost will be very high for future generations.

A ship in harbor is safe, but that is not what ships are built for.
—John A. Shedd, *Salt from My Attic*, 1928

So how do we think about and deal with keeping our students safe as we teach them to set sail or "surf" on the vast ocean that is the Internet? The basics of Internet safety can be found in the wisdom of our parents and even from our children's daycare providers. When children first left our direct supervision to toddle off to daycare, preschool, kindergarten, and elementary school they were admonished not to talk to strangers who approach offering enticements or to share secrets. This advice holds true for staying safe online. A similar approach for addressing inappropriate interaction with peers also makes sense. If certain types of activities are unacceptable in the presence of one's parents or teachers, it should be considered off limits online. The key is to be aware of what is out there, to engage students in conversations about what is acceptable and what is not. Then to be sure that students and parents understand the consequences for knowingly engaging in unacceptable behavior. A good piece of advice for raising children and safe Internet use is to communicate, trust, and verify.

Middle schools often use Internet filters to block Web sites with inappropriate content. Although this is generally prudent, there is a balance between unfiltered, wide-open access and completely locking down the system, thereby negating any educational benefits for the students. Decisions about access, control, and safety as they relate to educational technology should be in the hands of educational leaders, just as with any other curricular or programmatic issue. Technical complexity or administrative red tape should not be excuses for limiting appropriate access to educational resources. The following quote illustrates the educational leader's role as an advocate for students.

I need to make an effort to become more tech savvy. A world of resources is just clicks away and it is unacceptable to ignore it. I need to not accept excuses from those who wish to limit access to these resources and insist that we work to improve technology for staff and students. After all, I am the educational leader and I can't allow our school and students to suffer because someone does not want to take the risk.

—Troy Eastman, Assistant Principal, Oxford Hills Middle School, Maine

Both educators and parents need to be aware of Internet safety issues. Parents and educators should communicate and collaborate to provide guidance and oversight of student computer use. As with any activity, they need to be aware of how much time is being spent online. Adolescents experience changing sleep patterns and increased time online can contribute to sleep deprivation. Recent news headlines remind us that students and adults should understand that inappropriate online activities might have negative offline consequences.

Here are some steps adults can take to ensure that young adolescents have a clear and common understanding of safe and appropriate uses of technology:

- Establish clear expectations for Internet use amongst students, faculty, school administration, and families. One of the first conversations might be around the development—with student involvement--of an acceptable use agreement. Topics such as student and adult roles and responsibilities and setting clear boundaries for acceptable and unacceptable use should be established. Immediate, logical consequences should be clearly described both in writing and in conversation.
- In the event that boundaries are tested, adults must follow through calmly and fairly in accordance with the acceptable use agreement.
- Keep current on how online predators seek out and engage unsuspecting minors.
- Monitor and address inappropriate interactions with peers such as cyberbullying.
- Model effective and responsible use of technology. It's absolutely true that children will learn from what they observe of adult behavior as much as from what they hear.
- Place computers in a common area or public place where what's on the screen can be easily monitored.
- If passwords are used to log onto the computer or access websites, parents should know these.
- Parents should become familiar with ways to track computer use through the browser history and other security settings. This will enable adults to monitor where children are going as well how much time is spent in front of the computer.
- Regularly talk with children about time and computer use, and particularly how it relates to time for schoolwork and recreation.
- Discuss short- and long-term consequences of posting personal information on the Web.
- Learn about what's out there; visit sites that students frequent for work, socializing, and recreation. Think of becoming familiar with these sites as the 21st century version of getting to know the families and neighborhoods of your child's friends before setting a play date!

It may be useful to think of being on the Internet as being similar to standing on the busy corner of a large international city. Although we would want our children to learn about the wonderful resources available, we would not consider leaving a young adolescent alone in New York City or Calcutta, India, nor should we leave children completely to their own devices on the Internet.

If students are to successfully make the journey from engaged learners to contributing world citizens they will need adult advocates and educational champions at their sides. Just as the most skilled and determined mountain climbers challenging Mount Everest depend on teams of fellow climbers and Sherpa guides who are familiar with the challenges of the terrain, students will need to depend on one another, parents, and educators to support and advocate for them. As everyone works together toward the pinnacle, the benefits of the journey become clear. Engaged students benefit from enriched learning experiences, new skills, and increased self-confidence. The "gap between the knowledge and skills students learn in school and the knowledge and skills they need..." will be closed. Our communities, our states, and our nation will continue to be characterized by innovation, collaboration, and creative problem solving. In addition, this current generation of young adolescents will be empowered to seize 21st century opportunities and chase their dreams. Their success is imperative; our future depends on it.