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One-to-One Initiatives: Where the Rubber Meets the Road

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One-to-One Laptop Initiatives: Where the Rubber Meets the Road
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More than any other technology initiative, a one-to-one laptop initiative is where the rubber meets the road—a commitment to moving students toward success in the globally-connected, fast-changing 21st century. With a one-to-one initiative, technology access is no longer an issue. Every single student has a personal computing device. Technology now works or it doesn't to improve student learning.

Not. So. Fast. Equalizing access is just the starting point toward positively impacting student learning using technology.

Laying the Foundation with the New Basic Skills
One-to-one initiatives that successfully support student learning in a technology-enriched environment require a firm commitment to laying a foundation with the new basic skills—21st century skills.

These skills, widely identified by both state and local standards, reflect the broad consensus of both educators and businesses of what students need to be able to do in order to succeed in life and work in the 21st century. The new basic skills include collaboration, creativity, problem solving and innovative thinking, information fluency, and online safety and security skills that promote digital citizenship.

CyberSmart! has been in the 21st century skills business since 2002, providing student curriculum and teacher training nationally and internationally. As we have reached thousands of educators over the years, it's become clear that school leaders face two significant, yet manageable, challenges in laying this critical foundation: (1) providing the supportive professional development learning communities necessary for teachers to engage comfortably in the new technology-rich environment and fully grasp the importance of 21st century skills, and (2) maintaining a safe and secure online learning environment to ensure appropriate student laptop use.

Professional Development
Effective professional development to support a one-to-one initiative engages teachers in the same types of learning they are expected to facilitate in the classroom—training in the 21st century skills to effectively teach 21st century skills.

Teachers need hands-on meaningful opportunities for active learning related to their content areas and pedagogy requiring inquiry, reflection, collaboration, and experimentation with Web 2.0 tools (such as blogs, wikis, forums, surveys, collaboration and networking tools). These opportunities should be connected to the day-to-day realities of the classroom and provide a sustained opportunity to dialogue and reflect with other educators.

Teachers should experience first-hand the value of appropriate online learning strategies, in which they construct

their own knowledge in inquiry-based investigations supported by collaborative forums and reflections. Only in this way, within a supportive network of learners, can teachers enthusiastically support student acquisition of 21st century learning skills.

If teachers are to fully embrace the potential of a technology-infused environment to engage their students and transform student learning, they must have a chance to engage in the process themselves, to feel comfortable with their own hands-on experiences, and to reflect and refine their thinking about the process with their peers. Only then will the appeal of using online resources and tools to transform their existing curriculum become an exciting opportunity, not a barrier.

CyberSmart! has seen teachers and administrators excitedly share with their learning group the moment they realize what blogging can do for their student's writing skills or how it can support their home-school connection efforts. And once teachers really feel what it means to have so much information at their own fingertips, they immediately grasp the importance of critical thinking skills over simple retrieval skills. They understanding first-hand why asking students to *use* the facts to develop an argument instead of filling-in-the-blank is so important in a world where easy access to mounds of information demands new skills to make sense of it all.

Maintaining a Safe and Secure Learning Environment
A successful one-to-one initiative also tackles online safety and security issues directly with a strong message of positive empowerment in the context of acquiring 21st century skills. This approach is entirely different from initiatives that focus on alerting educators and students to the dangers of the Internet or the one-time assembly program that scares students and provides them with a list of rules. In fact, research on adolescent decision making and risk-taking behavior suggests strongly that such tactics don't work.

Borrowing from the best practices in the fields of cyber security and character education, it's clear that a continuing program that focuses on educating— not scaring —and teaches critical thinking and decision-making skills is most effective in keeping students safe and their data secure online. Core character values of caring, honesty, fairness, responsibility and respect for self and others are the underlying message.

The Role of Senior Leadership
School leaders can provide the vision required to put a strong foundation in place that supports a successful one-to-one laptop initiative.

Immerse the entire district, or at least a whole school, in the process of learning-by-doing with technology. Emphasize professional development that is practical, ongoing, and sustainable throughout the year. Implement convenient and exemplary online training that educators can access from home or school, anytime and anywhere.

CyberSmart!'s experience shows that it is entirely possible to effectively and directly address all safety and security issues within the larger educational purpose of harnessing the Internet's potential without resorting to scare tactics. School and district leaders should find the time to become 21st century learners themselves, and participate in targeted professional development that will enable them to communicate effectively when parents and the greater community raise concerns about students' safety and data security.

A Model for the Foundation in 21st Century Skills
Drawing from six years of in-school experience and from the feedback of thousands of educators, CyberSmart! has identified five interconnected skills—the S-M-A-R-T skills—that provide a model for the recommended foundation in 21st century skills.

S – Safety and Security: skills for fostering online safety, privacy, and security

M – Manners, Bullying, and Ethics: skills for fostering academic integrity, addressing social and ethical concerns, and encouraging responsible digital citizenship.

A – Authentic Learning and Creativity: skills to facilitate higher-order thinking

R – Research and Information Fluency: skills to search, locate, identify, and evaluate online resources that are appropriate for the learning goal

T – Twenty-First Century Challenges: skills that enable educators in developing new instructional strategies and enable students to meet their own learning needs by utilizing ever-changing technologies.

By focusing on these skills in effective online professional development communities and empowering students to develop their own skills, schools will be in a much stronger position to shine when the rubber meets the road in their 1:1 laptop initiative.

CyberSmart! will be one of the online professional development partners in the new TLN Learning Portal…. Coming soon at www.nsba.org/TLNPD.

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