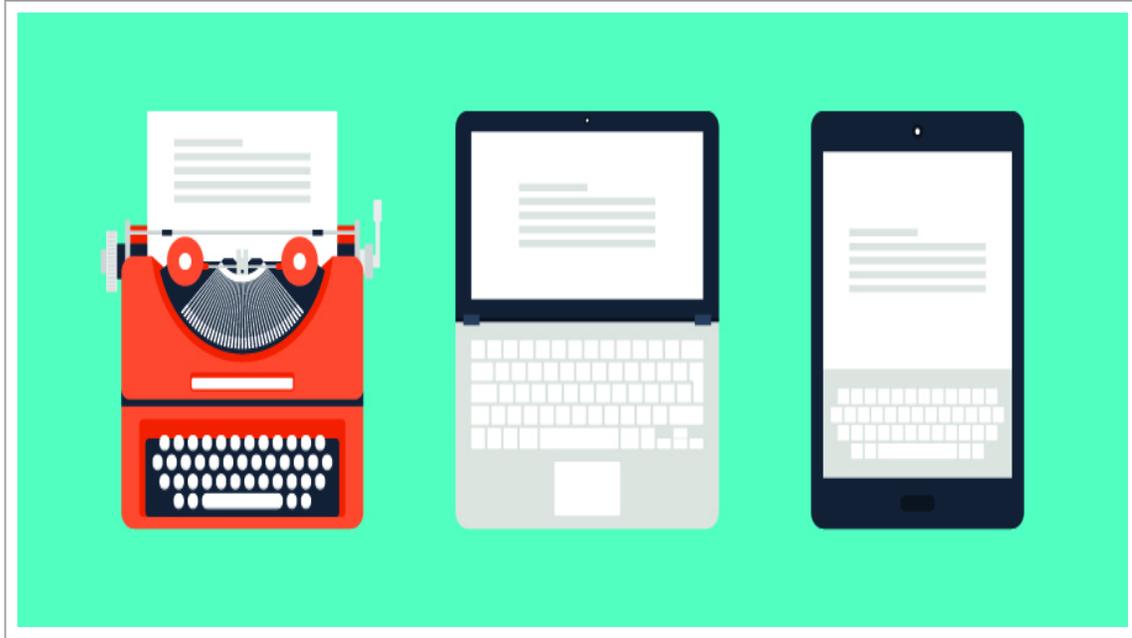


# Electronic School: Technology Evolution



## Updated standards emphasize students as creators, not consumers

*Glenn Cook*

Several years ago, the Los Angeles Unified School District started work on a massive technology project that would put preloaded iPads and laptops into the hands of its 650,000 students. The idea was to give students in the nation's second-largest school district access to technology as well as to learning materials linked to the Common Core state standards.

The ambitious \$1.3 billion program crashed faster than a computer infected with a Trojan virus, plagued by software problems, a botched rollout, and—most important—the lack of a clear plan for how to use the technology to improve student achievement.

L.A. Unified's high-profile failure is the most extreme example of the conundrum school districts face as they try to bring teaching and learning into today's device-filled world. The tools can be terrific—how many times have you heard the phrase, “Technology is great when it works”?—but they have proven time and again to be no replacement for quality instruction.

The International Society for Technology in Education (ISTE) is taking on the conundrum with its second revision of its technology standards for students. Unveiled in June, the “refreshed” standards are “designed to guide learners who live, work, and play in a technology-infused world.”

The standards are “about amplifying learning and empowering the student voice” rather than focusing on the devices they use. In fact, the mention of a cellphone, tablet, laptop, desktop, or other tool is nowhere to be found in the standards, which were first unveiled in 1998 and revised previously in 2007.

“It’s a definite shift,” says Mila Fuller, chair-elect of the ISTE board of directors. “There is a strong focus on the student’s ability to own their own learning through critical thinking and knowledge construction. We want to allow them to truly understand how systems work.”

### ‘Immersed in technology’

The change in the ISTE standards reflects how much has occurred in the ed tech field over the past two decades. The first two sets focused largely on providing direction so students could learn how to use the tools at their disposal, while the third focuses on the skills and qualities they will need to be:

**Empowered learners:** Those who use technology to “take an active role in choosing and achieving and demonstrating competency in their learning goals.”

**Digital citizens:** Students who “recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world.”

**Knowledge constructors:** Students who research and explore real-world issues using a variety of digital tools and resources.

**Innovative designers:** Those who can identify and solve issues “by creating new, useful, and/or imaginative solutions” to problems.

**Computational thinkers:** Students who use technology to develop and test solutions to problems through research, evaluation and curation using technology.

**Creative communicators:** Those who “communicate clearly and express themselves creatively ... using the platforms, tools, styles, and digital media appropriate to their goals.”

**Global collaborators:** Students “who use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.”

The reason for the move in this direction is simple, says Sarah Stoecki, senior project manager in the ISTE Standards Department. Stoecki notes that students “grow up immersed in technology, but they don’t automatically understand its pitfalls. ... Technology is a reality, but students and teachers need ways to envision its purpose and possibilities.”

Since the mid-1990s, Ann Flynn, director of NSBA’s technology programs, has served on committees that contributed to the writing of each set of standards. Each time has become progressively more inclusive, with contributions for the current “refresh” coming from 2,700 people (including 300 students) from 52 countries.

“It really has been an evolution, one that mirrors how schools, teachers, and students have grown over the years with technology,” says Flynn. “What I appreciate with this set is how it looks at learning, and the different types of learners we work with in our schools.”

### Creators, not consumers

Sarah Thomas is a regional technology coordinator in Maryland’s Prince Georges County, just outside Washington, D.C. Named as one of NSBA’s “20 to Watch” for her work around ed tech issues in 2015, her goal is to use social media to connect educators around the world.

“I love the new standards,” she says. “I think they’re exactly where they need to be going, because they put an emphasis on students as creators and not consumers. They want students to connect with others globally, which is exactly where I think they need to be.”

In September 2014, Thomas created EduMatch, a free platform that uses Twitter and other online and social media to help educators from around the world collaborate. The program has taken off, she says, because teachers are hungry to learn new and creative ways to help their students.

“Teachers learn by doing, similar to the ways students would do. It’s one of the best ways to actually learn something,” she says. “When you can collaborate, with an emphasis on peer-to-peer learning, and then pass on those skills to your students, it’s a win-win. Having students create content and share it among their peers is a great way for them to learn.”

As an example, Thomas points to an English learner class she observed where the teacher asked students to shoot and edit videos based on what they were learning in English. The videos were then shared in the class.

“It was helping the students learn vocabulary skills and practice both their reading comprehension and oral presentation,” she says. “It was a great use of technology in the classroom to help them learn the material.”

## Instruction, not tools

ISTE’s embrace of this approach in the new student standards helped persuade L.A. Unified to become the first school district to adopt them. Frances Gipson, who was named chief academic officer after the iPad debacle, says the standards use “the exact same language we were coming to” as the district worked to shift its tech resources to focus on instruction rather than tools.

“We wanted to focus on curriculum and pedagogy,” she told EdScoop during an interview at this year’s ISTE conference, where the standards were unveiled. “We came back to the themes of computational skills, and making sure our students have that productive struggle. We said, ‘This is about instructional vision. You put kids in the center and design backwards from that.’”

What Gipson appreciates about the standards is that they are complex.

“It’s inspiring to teachers to see that it’s about having our students be producers and consumers, and using technology isn’t just for the technology teacher or the computer lab,” she said.

Now the job for ed tech coordinators and officials like Fuller is to show school boards and superintendents how the standards can – and should – be applied in your district.

“These standards are aspirational. This is what is desired and what we want to move toward,” Fuller says. “The bigger question will be for schools and districts that have little access from the resource perspective, but really, for everyone it’s about understanding the standards and seeing examples of them in action. Once those two things happen, there’s no telling where you’ll end up.”

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