An illustration of a city skyline with several skyscrapers in shades of blue and grey. In the foreground, there is a large, lush green tree on a grassy hill. A grey road with white borders curves through the landscape from the bottom right towards the city. The sky is blue with stylized white clouds.

“Technology, with the guidance of teachers and librarians, can be a significant tool in expanding the world of any child who is isolated by poverty.”

– Dr. Richard Long, Executive Director for Government Relations, National Title I Association

Changing the Landscape of Education

Enriched education

It's becoming more challenging than ever to ensure every child experiences success in learning. Shrinking budgets, large class sizes and language barriers mean that teachers and education leaders must reach across these gaps to ensure students' needs are met.

Add the impact of poverty to that equation, and it becomes apparent that educators in **Title I schools** have even greater obstacles to achieving their goals.

But teachers like Joy Weiss say that while it's easy to focus on the difficulties, it's the progress that matters.

"While the challenges can become overwhelming, I think the important things to remember are the successes that are happening every day. Yes, I work hard and my students work harder than most in order to become comparable to their peers. What they can do each year shows their own dedication to learning and being successful," she says.

"These children work very hard each year and deserve the best, regardless of their income. They are just as capable and just as smart," says Weiss, a **SMART Exemplary Educator** who teaches third and fourth grade at **Balsz Elementary** in Phoenix, Arizona.

By Kim Hamill

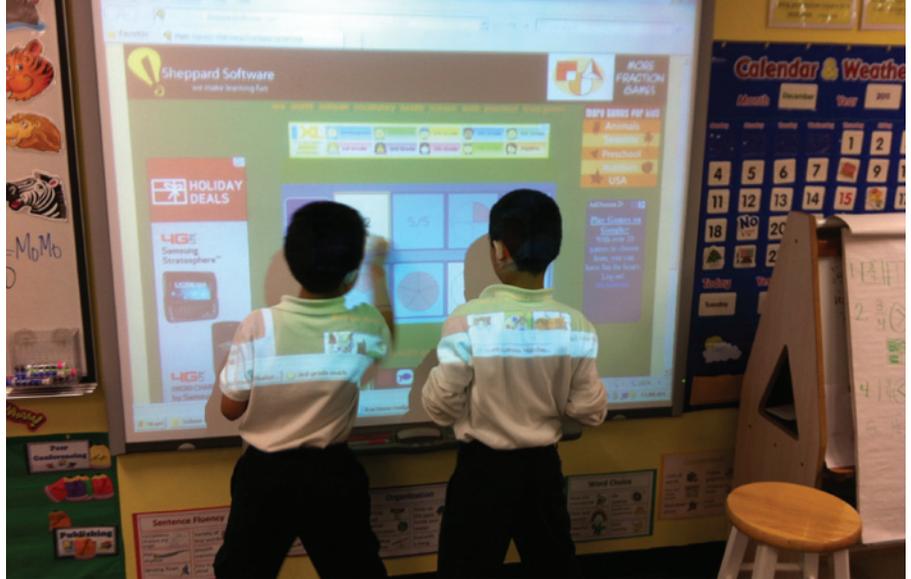
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Balsz is a Title I school where more than 90 percent of the students participate in free or reduced-priced meal programs. The school serves a large population of families with low socioeconomic status, including a refugee population. Weiss says that because of communication challenges in her classroom, she often has to teach language basics before she can introduce grade-level content.



In 2010, she was recognized as the Arizona Teacher of the Year, an experience that Weiss says gave her a more global perspective on improving the effectiveness of education for her students.

“Student achievement is a teacher’s number-one priority, next to instilling a love of self-directed learning to students. I’m not referring to test scores and accountability to state agencies, but student achievement in terms of learning, exploring, enriching our understanding of the world



around us and becoming productive members of society that work together and create democratic communities of people that can move our society forward.”

One of the ways that Weiss feels she is helping her students gain a deeper understanding of the world is through classroom technology, including the **SMART Board interactive whiteboard**, **SMART Document Camera**, **SMART Slate wireless slate** and **SMART Response interactive response system**.

Using these technology products has enabled her to present lesson content in more visual and interactive ways, which helps remove learning barriers in her classroom.

She remembers when she taught first grade and was introducing the concept of alphabetizing. Using her interactive whiteboard and **SMART Notebook collaborative learning software**, she created a lesson showing a road that moved from A to Z. The road metaphor enabled her students to imagine

that alphabetizing was like driving a car, and each letter had a stop. Her students were able to move their spelling words along the road, placing each word in its correct stop on the interactive whiteboard.

“After that, when they needed to alphabetize on paper, it was done with relative ease. I could hear them talk about the ‘road’ that was in their head,” she says.

Dr. Richard Long, Executive Director for Government Relations at the National Title I Association, says that technology, when used effectively, can help teachers provide differentiated **instructional** support to many students.

“The National Title I Association views technology as a key tool to help teachers and administrators to enhance the educational experience for more children,” he says.

Equal opportunities

For Jennifer Harper, a fourth-grade teacher at **Cavendish Town Elementary School** in Proctorsville, Vermont, technology is the key to equitability in education.



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families will never travel out of New England. Now our students can [Skype](#), chat and e-mail around the world with others. Every year I have students who talk about traveling beyond New England and outside the United States. I know that the SMART Board is opening doors for them.”

Dr. Long says that bringing the world into the classroom is one of the biggest advantages of using technology in Title I schools.

“Technology brings in the equality to all my learners. My learners, who have a tough time sitting or standing still, can go to the SMART Board and complete an activity that meets their needs and the curriculum requirements. I take out the fear of getting something wrong in front of others by having students use their SMART Response remotes to enter answers,” Harper says.

With 46 percent of its students qualifying for free and reduced-cost lunch programs, Cavendish Elementary is a Title I school. However, three years ago, it became part of the Title I Schoolwide Program, so that *all* students could benefit from the additional resources, rather than just those students involved in the Title I program.

Harper, who is the 2006 Vermont Teacher of the Year and a SMART Exemplary Educator, says that SMART products play a big role in helping her reach all the students in her classroom. In addition to the SMART Board interactive

whiteboard and the SMART Response system, Harper also uses a SMART Document Camera and a SMART Slate wireless slate in her classroom.

She has found these products are particularly helpful for engaging students with different learning styles. The interactive whiteboard and SMART Notebook software enhance learning for her kinesthetic learners, and the SMART Document Camera engages her visual and auditory learners by enabling a large focal point that spurs discussions. With the SMART Response system, everyone has the opportunity to answer questions without the fear of being wrong in front of others.

But one of the biggest benefits that Harper has seen is how the SMART Board interactive whiteboard has opened up the world to her students.

“During discussions, we can travel on [Google™ Earth](#) to ‘see’ locations and bring the real world to each one of them. Many of our



“An old adage is that a book can take one to places that they have never been and expose them to new ideas. Technology can do that with text, sound and visuals, all in an integrated format,” he says. “Technology, with the guidance of teachers and librarians, can be a significant tool in expanding the world of any child who is isolated by poverty.”

Bright futures

Another way that technology expands opportunities in Title I

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schools is by helping teachers make science and math lessons more engaging. Harper, who won the [Presidential Award for Excellence in Mathematics and Science Teaching](#) in 2003, says that giving young students experiences in these subjects can help encourage them to pursue these areas later in life.

“As future members of our society, students have to see how math and science are a part of so many of our day-to-day jobs, as well as how they can be leaders in these areas,” Harper says.



Creating leaders in science, technology, engineering and math is also one of Pamela Howell's main goals. As Principal of [Roosevelt-Perry Elementary School](#) in Louisville, Kentucky, Howell believes in preparing students for 21st-century careers and opportunities.

“What we're trying to do is continue to break the poverty



cycle by educating and giving kids an even chance. If they don't have this at home, they're going to experience it here and it's going to hopefully get them interested in those types of jobs where they can continue their educational experiences through college or a career,” Howell says.

Roosevelt-Perry is an inner-city school, with 96 percent of its students receiving free and reduced-priced lunches. It's also a school with access to state-of-the-art technology because it has [Jefferson County Public School's](#) only designated elementary technology magnet program.

This means that Roosevelt-Perry has enhanced the regular core curriculum program with components of technology, robotics and engineering to reinforce math and science skills. The school has a technology wing, dubbed the Technology Playground, where Roosevelt-Perry students get hands-on with lessons in STEM areas, whether it's building robots, videoconferencing with [NASA](#) or exploring shapes

on the [SMART Table interactive learning center](#).

The Technology Playground gives teachers and students access to computers, MP3 players, SMART Board interactive whiteboards, SMART Slate wireless slates and other educational technology.

Howell says when students get hands-on with lessons, it ensures that even if they are not confident in their abilities in these subjects, they can still experience success.

“The SMART Board is just a great learning and teaching tool that evens the playing field for those students that may not be able to read or be great at math. Students can actually see examples and work through things at a touch of a fingertip,” Howell says.

Dr. Long says that in high-poverty areas, many students have the perception that they can't excel in these subjects, but having Title I schools provide STEM programs can have a big impact on students' futures.

“For some students, focusing on STEM helps them to break the cycle of poverty, but the reality is that there are few programs that make use of STEM areas linking the academics to the work world over the course of an academic career. This is especially true in the high-poverty schools where we find that even more students believe that they do not have that ‘math gene’ to succeed,” Long says.

“STEM could be a very useful and wide ranging tool in our schools to break the cycle of poverty, but much more needs to be done to take this idea from a few good programs to an area of systemic change.”

Howell believes that exposing students to STEM subjects at a young age will inspire a new generation of engineers, mathematicians and scientists in Louisville. That’s why the school has an affiliation with the University of Louisville’s engineering program.

Roosevelt-Perry held a career day where students from both programs can see the work each is doing in robotics and engineering.

According to Howell, when the elementary students saw what the university students were working on, they said, “Oh my goodness, those are the basic robotic skills that we just learned!”

In addition to the Technology Playground, every Roosevelt-Perry classroom has a SMART Board interactive whiteboard, a SMART Document Camera, a SMART Response interactive response system, SMART Slate wireless slates and a [SMART Audio classroom amplification system](#). The school also has a professional development room where all district teachers are trained to use the SMART products and other educational technology.

“Our attendance has improved and our kids are just more engaged. Student expectations, higher order thinking, and the quality of work that’s being produced here is totally different than it was seven years ago,” Howell says, referring to the transformation the school has undergone since becoming a technology magnet school.

While the challenges of working in a Title I school are big, the successes can be bigger when educators use innovative strategies to teach. Weiss sums it up nicely:

“If we are not providing students quality instruction with proper use techniques with technology, these students will not have the same chance of contributing to society in a meaningful way. Education and technology are not luxuries to be gained, but the right of every person to become productive, educated, lifelong learners.”

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Joy Weiss
Teacher
Balsz Elementary
Phoenix, Arizona