We want our students to learn the skills needed for the 21st century, but who’s going to get them there? Our teachers, who, like the rest of us, are products of the 20th century.

In preparing students for the realities of a global economy, overlooking teacher training on the effective use of technology is akin to Columbus sailing without a ship. Students need little or no training in how to use computers or the latest Web-based, high-speed gadget; most could tell the teachers a thing or two about how to use them.

So how can we help teachers step forward, not back? Education technology experts agree that effective professional development is a crucial piece to the puzzle, but all caution that districts must consider carefully how that training is offered.

Teachers should be in teams, working collaboratively around problems identified in their schools that are related to their students, says Kathleen Fulton, director of Reinventing Schools for the 21st Century for the National Commission on Teaching and America’s Future.

What doesn’t work anymore, says Fulton, “are one-size fits all courses, the ‘in-service day topic,’ or school problem du jour. Professional development should be time for teachers to work together, not just the typical ‘sit and get’ lessons where someone lectures at them.”

FOCUS ON RELEVANCE

These new ways of offering professional development are more relevant, and they provide a model for teachers to take into their classrooms. “We look at 21st century skills for students, which are all about collaboration and communication across distance, being able to translate data into information in ways that are meaningful, and communicate in a variety of ways,” says Fulton.

“These are all the things that teachers should be doing as part of the way they’re teaching students and interacting with other teachers.”

Fulton says teachers don’t necessarily have to be trained in these skills, but professional development sessions should focus on relevance. Translation: “less stand-and-deliver” professional development workshops and “more opportunities for guided activities around valued and authentic problems” in school.

“With opportunities for teachers to focus on a particular problem related to their students, there’s a sense of shared responsibility in the school,” Fulton says. “Teachers are part of the team that will work with these stu-
dents. Unless teachers are comfortable working in that way, they won’t be engaging students in learning.”

Training also needs to be ongoing to be effective, says Stephanie Hirsh, deputy executive director of the Dallas-based National Staff Development Council. Traditional staff development that occurs on a limited number of days “cannot address the myriad of challenges and expectations we now have for good teaching,” she says.

Giving teachers adequate planning time and making sure they are members of teams that meet daily are two ways to make professional development stick with them, says Hirsh. These teams should be planning lessons, critiquing student work, and addressing the daily challenges of teaching. By establishing and supporting teams, school systems make sure that the strengths of each teacher are shared across teams and schools, she says.

Teachers who are among the converted say that technology makes a huge difference in their classrooms. According to results from the 2005 National Speak Up Survey, 74 percent agree that technology has made their job easier, and 47 percent believe that technology has had the greatest impact in teaching and instructional support.

In regards to student performance, teachers report that students are more active learners with richer, multimedia learning experiences because of technology use in the classroom. While the number one concern for teachers concerning technology is that students spend “too much time on the computer and not enough physical activity,” the top request was for “fast, wireless Internet access throughout the school.”

The survey turned up other teacher attitudes toward technology:
- 62 percent of teachers say technology is an asset to meeting NCLB standards.
- 53 percent say that students are receiving 21st-century-quality science and math instruction.
- 25 percent of teachers would be interested in teaching an online class.

**ONE STATE’S EXAMPLE**

For another perspective on determining what’s relevant in teacher professional development, consider North Carolina’s approach.

In the spring of 2005, Gov. Mike Easley announced the creation of the nation’s first Center for 21st Century Skills in collaboration with the national Partnership for 21st Century Skills. This center is a public-private collaboration housed in the North Carolina Business Committee for Education (NCBCE), a nonprofit agency established to give business leaders a voice in K-12 education policy.

“The center has established partnerships with many other entities in our state focused on the vision that all students will graduate having the knowledge and skills needed for success in the 21st century global society,” says Tricia Willoughby, NCBCE executive director.

North Carolina, like many states, has seen tremendous change in the demands placed on its workforce in the past five years as furniture manufacturing and textile jobs have left the region. “This change has led to urgency for reform in our schools,” says Willoughby.

According to Willoughby, the Center for 21st Century Skills focuses on several areas that affect the types of professional development schools need to prepare students for a global economy. The center urges school boards and administrators to review existing curricula to ensure inclusion of needed 21st century skills and knowledge. Also encouraged is the development of meaningful assessments that can truly measure students’ skill and knowledge acquisition.

A third focus is on the improvement and expansion of teacher training and professional development around the skills and knowledge students need to succeed in the global economy. “These specific skill sets reflect a variety of real-world abilities, including digital literacy,” says Willoughby.

Funds to support digital literacy coaches for North Carolina schools this year came from the governor’s budget. These coaches, in turn, receive professional development through the North Carolina Teacher Academy, an entity that has provided professional development to teachers for many years. After receiving training from the academy, digital literacy coaches share their knowledge with larger pools of educators so that every student has a teacher prepared to help learners gain the skills they need in the real world.

“One way to gauge a school’s 21st century validity is through the use of Easley’s Teacher Working Conditions survey, which has given us data to support the notion that good teacher work environments lead to good student learning environments,” Willoughby says.

In the coming months, the Center for Teaching Quality, through data analysis and case studies based on the Teacher Working Conditions survey, will help leaders in and around education learn more about the degree to which teachers appropriately use emerging technology. Willoughby says the study will “further inform us about specific types of professional development educators will need.”

North Carolina’s progress and commitment to this area are heartening, and can be models for other states to follow. But Willoughby is quick to note that it is just one of many steps states and school districts must make to meet the demands of 21st century learners.

“The reform process,” she says, “is ongoing.”