

Fill in the Blank: "Without this Technology, My Students Simply Cannot ____."

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Fill in the Blank: "Without this technology, my students simply cannot ."

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y first thought about the National Educational Computing Conference (NECC) was that I needed a personal trainer to schedule the sessions best suited to my needs. A record 18,500-plus educators and exhibitors attended the 30th annual NECC event in Washington, DC, in June. Conference chair Leslie Conery called it an "odds-defying" accomplishment in difficult economic times and lauded educators for their energy and commitment. She might have added kudos to anyone getting through the four-day event with energy to spare.

The NECC is held annually by the International Society for Technology in Education (ISTE). It draws teachers, administrators, library media specialists, technology coordinators, and teacher educators from all over the globe, as well as decisionmakers from industry and government. Among this year's events were the following:

- Hundreds of concurrent sessions, plus showcases, galleries, and poster sessions
- Advocacy and policy events at the Library of Congress, US Senate and House offices, and the National Press Club
- Hands-on workshops with more than 2300 ticketed participants
- An exhibit hall with 1253 booths and 439 companies, from giants such as Google to midsized Open Text to upstarts such as Infinite Campus, displaying tools and services designed to improve education and school administration
- Social media channels tracking, tweeting, blogging, and live-streaming conference activities to thousands of off-site participants from dozens of countries

In his opening keynote address, noted author and journalist Malcolm Gladwell centered on creating meaningful learning environments. "When it comes to learning," Gladwell said, "what you get is a simple function of what you put in. Sometimes the struggle to learn something is where the actual learning lies." He also contrasted two teaching strategies: capitalization, or focus-

ing on student strengths, and compensation, or aiming efforts at weaknesses. Gladwell contends that too much time is spent on capitalizing when compensation offers more success. "We should embrace failure because that's how we learn," he said. Following his talk was an audience debate on the topic "Bricks and mortar schools are detrimental to the future of education." Attendees concluded that bricks and mortar schools should not be allowed to fail, that they have value if these schools embrace 21st-century technology and pedagogy.

So how do you go about bringing everyone up to speed on educational technology? Duquesne University has come up with an interesting model. Its Instructional Technology department has teamed up with the School of Education to reshape the course work for preservice educators. The Student Internship Program for Instructional Technology has these educators share technology skills and strategies with classroom teachers at local schools. It's a win-win situation for all the partners in the university's model. Teachers get training and support where they most need it-in the classroom. The preservice educators of Duquesne University get real-world experience by providing classroom teacher and student training. In one experience, university interns taught second graders to use netTrekker for their animal research project, helping them download pictures and gather online information. If the elementary students had reading problems with any online resources, they took advantage of netTrekker's audioreader feature. The students then submitted their research reports as PowerPoint presentations.

Science teachers and preservice educators looking for more ideas had other technology choices. In one workshop, Harvard professors and researchers illustrated their design for EcoMUVE—a multiuser virtual environment—to support student learning

about the complex causal relationships in ecosystems. EcoMUVE adds dimension to learning by illustrating the geospatial relationships in an ecosystem and providing interactive, immersive depictions of plant and animal behavior. In another session, University of North Texas educators presented results from SimMentoring, a content-based tutorial for mentoring preservice science teachers; SimMentoring uses activities based on SimSchool, an online classroom simulator.

The ISTE's Emerging Technologies Task Force is building an online, interactive database of best practices that have produced positive effects on learning through the use of emerging technologies. To make the database useful for everyone and to allow users to search for tools that work in circumstances similar to their own, the task force is correlating successful uses of emerging technologies with demographics such as grade level, size of district, and infrastructure.

"Here's the bottom line," wrote high school Webmaster Art Lader in the online journal Education World (www.educationworld.com/a_tech/tech009.shtml): "'Without the appropriate technology, my students simply cannot .' If teachers cannot fill in this blank with something truly important to their students and themselves, they will not make the use of technology in the classroom a priority. If teachers can fill in this blank with something truly important to their students and themselves, they will find ways to get training, to obtain software and hardware, to mobilize colleagues, to motivate students." It would help to fill in the blank when planning a personalized NECC schedule, too.

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