

# 21st Century Classroom Demonstrates Model Learning Environment

- Feb. 25th, 2009

**The next generation of students will be very different from those of today.** They will have grown up using cell phones and laptops. Communicating with others through digital technologies will be as natural as breathing. How should schools tackle the challenge of teaching these “digital natives?” And how can teachers engage students in ways that are familiar to them, as well as harness the power of these technologies to prepare youngsters for an increasingly complex world?

These questions were explored at the 21st Century Classroom, a major exhibit at the 2009 annual meeting of the Association of Teacher Educators (ATE), which took place in Dallas, Texas, February 14-18, at the Hyatt Regency Dallas. The classroom was presented by the ATE’s Committee on Technology and the Future of Teacher Education, chaired by Learning Technology Center Director Paul E. Resta. The 21st Century Classroom displayed a model learning environment for using a variety of technologies to teach 21st Century skills. More than five hundred attendees visited the classroom, many participating in a variety of learning activities, over the four days of the meeting.

The 21st Century Classroom presented five learning areas, each specifically designed for a particular instructional or collaborative activity. Seating around an interactive board facilitated knowledge-building in the Collaborative Area. A Science Area was equipped with a handheld digital microscope and a 360° close-up camera to permit detailed examination of objects or documents. The room also included Group Work, Brainstorming, and Lecture areas.

The classroom was equipped with Promethean’s Activclassroom interactive white boards, Activexpression student response system, and Activesound system. Apple laptop computers were used throughout the room to model the one-to-one computing environments that are emerging in classrooms across the country. Seats and tables were provided by Herman Miller Furniture, and the Academic Superstore provided the document camera, digital microscope, and other equipment for the facility. (See the 21st Century Classroom diagram for more detailed information.)

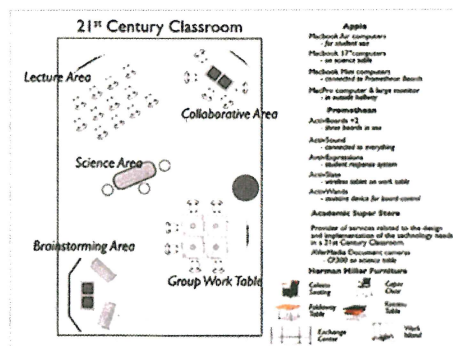
Dr. Resta explained how the 21st Century Classroom modeled the characteristics and capabilities of the next generation of learning environments. These include:

- *Ubiquitous access to 21st Century learning tools* including computers, interactive white boards, student response systems, portable document cameras, digital microscopes, and emerging technologies. These tools were in constant use throughout the conference to support a variety of interactive sessions and workshops.
- *Software tools to support a range of learning activities*
- *High-bandwidth connectivity* to the Internet. Web-based resources in the room were constantly accessed and live interactive videoconferencing sessions were held with remote exemplary schools modeling 21st Century learning activities.
- *A comfortable learning environment.* A 21st Century Classroom differs from the Industrial-school model by providing an environment that is comfortable for students, including soft seating for students. Conference participants commented frequently about the comfortable seating.
- *Spaces for small-group collaborative learning activities and whole class instruction*
- *Flexible learning spaces.* Furniture for a 21st Century Classroom should be light and on wheels, allowing the room to be quickly and easily reconfigured to support a wide range of learning activities. During the conference, the room was quickly rearranged for large group presentations and, just as quickly, returned to smaller group spaces to support multiple interactive activities.
- *A sound system that enables all students to clearly hear the instructor* using a normal speaking voice. A wireless microphone allowed presenters to move around the 21st Century Classroom while conducting learning activities.

As demonstrated throughout the conference, these technologies bring the world into the classroom, foster collaboration, and empower teachers to motivate and prepare learners for a complex 21st Century. Perhaps more importantly, they provide a vital connection between school and the digital lives of students.

Dr. Resta thanked the generous corporate partners that made the 21st Century Classroom possible: Apple, Inc., Promethean, Herman Miller Furniture, and Academic Superstore.

A talk by Tim Magner, former Director of the Office of Technology in the U.S. Department of



[\(Click to Enlarge\)](#)

The 21st Century Classroom’s five learning areas are designed for specific instructional activities.



A Promethean Activclassroom interactive board facilitates work in the Collaborative Area.



Barry Adams, right, of Apple, Inc. works in the Brainstorming Area with attendees.



Collaboration is facilitated at the Group Work Table.