

# Panel: Rethink schools

## *Digital-age learning requires new model*

### **From eSchool News staff and wire service reports**

Educators can't truly deliver 21st-century instruction in schools that reflect Industrial-Age designs, with rigid schedules, inflexible facilities, and fixed boundaries between grades, disciplines, and classrooms, according to a new white paper from the Partnership for 21st Century Skills (P21). Sponsored by Cisco Systems, the paper—titled "21st Century Learning Environments"—describes the kinds of school structures that have been shown to facilitate successful 21st-century teaching and learning: from flexible learning spaces that can be rearranged to fit different class sizes and subjects, to more malleable units of time than the typical 50-minute class period.

While much attention has been paid to improving standards, assessments, professional development, curriculum, and instruction, the white paper argues that learning environments themselves are an essential component to supporting successful 21st-century outcomes for students. "Schools are being designed for a new balance that combines the best of traditional classroom learning with leading 21st-century learning methods and tools," said Bernie Trilling, global director of education strategy and partnerships for the Oracle Education Foundation. "At the same time, federal, state, and local policies must help guide the creation of learning environments that serve all students in every corner of our states."

With tight budgets and worries over the economy, policy makers face tough decisions concerning whether school design really makes a difference in education, the report says. According to Georgetown University researchers, design does have a bearing on achievement, as test scores can increase by up to 11 percent by improving a school's physical environment.

With that in mind, education leaders should design learning environments that incorporate movable furniture and walls, connect with the wider community, and enable collaboration, interaction, and the gathering and sharing of information, the paper says. As important as it is for physical structures to be adaptable, "it is even more important that class time be elastic. Instead of assigning a certain amount of time for teaching one subject per day, teachers need the flexibility of bigger and more adjustable time slots to truly impact learning," said Charles Fadel, global lead for education for Cisco Systems.

"There must be a renewed focus on increasing the quality of teaching by [giving] teachers more time and opportunities to plan, collaborate, and work with advanced technology systems."

In addition, schools cannot continue to use seat time as a measure of academic attainment, the report argues. Instead, measures of learning must include thoughtful assessments of a student's ability to apply and demonstrate knowledge in complex situations.

The report notes that the term “learning environment” has traditionally suggested a concrete place (such as schools, classrooms, or libraries), but in today’s interconnected and technology-driven world, a learning environment can be virtual, online, and remote.

Successful 21st-century learning environments should blend physical and digital infrastructures to seamlessly support learning, the report notes. Students need access to digital tools and resources that will help them explore, understand, and express themselves in the world of the future, and educators need access to tools and resources to share knowledge and practice with other professionals, interact with experts in their field, and connect with their students’ families and communities.

While the connection between physical environments and learning is important, even more important is how—and whether—these environments support the positive human relationships that are critical to education, according to the report. “Too often, schools have been silos of isolation—classrooms isolated from other classrooms, teachers isolated from other teachers, schools isolated from the outside world,” it says. “Research shows, though, that positive and productive relationships within and outside an organization enable it to carry out its mission more effectively.

When people are connected through technology and/or collaborative arrangements, their effect is multiplied, for communities ‘can accomplish goals that would be impossible through more isolated efforts.’”