

The 21st-Century Classroom

by Nancy Knowlton

People often talk about the classroom of the future as something that would be nice to have yet is unattainable today. While we can never discount the affordability issue, the elements to create an engaging, technology-enabled environment that is appealing to 21st-century learners are available today.

Instead of the concept of “the classroom of the future,” we need to talk in terms of “the 21st-century classroom,” which is real today. It can make a remarkable difference in how teachers teach and learners learn. Children have the opportunity to take much more responsibility for their own learning as teachers move from being the sage on the stage to the guide on the side.



This concept is not about learning to use technology. It's about using technology to learn. In these environments, information and communication technology (ICT) becomes integral to the teaching and learning experience in the sense that it helps to define the very nature of the experience, which could not happen without it. So there are tangible and positive effects on teaching and learning.

Let's consider the elements of a 21st-century classroom.

Interactive Whiteboard

The heart of a 21st-century classroom is the interactive whiteboard. It's the largest piece of technology and the focal point for whole-class teaching and learning. A world of information is available at the touch of a finger, whether it's on the Internet or through other media.

Projector

For best effect the projector should be permanently mounted in the ceiling or on the wall. This ensures that the interactive whiteboard and projector are oriented and ready to go every day.

Teacher Computer

The interactive whiteboard and projector connect to the teacher computer.

Student Devices

Whether it's one-to-one computing or several computers or devices available for sharing, the classroom isn't complete without devices for students to use.

Audio System

For excellent quality sound, having a sound enhancement system is a must. Having an audio system for the teacher can save not only her voice from strain, but it can eliminate some of the issues hard-of-hearing students may have that might otherwise be chalked up to learning difficulties.

Interactive Response System

Putting an interactive response system into each child's hands can accomplish a couple of things. First, a teacher can gain immediate feedback regarding student learning each and every day, rather than waiting for periodic test results. If students are not grasping a concept, then the teacher can address the topic again from a different perspective. Second, it can ensure that each child is participating and actively engaged.

Other Devices

Depending on budgets, legacy technology and interest, many teachers incorporate other tools, including document cameras, digital cameras, probes, PDAs, printers, scanners and webcams.

Digital Content

Students learn in different ways. Some read and grasp a concept immediately. Others need some additional explanation from a teacher to help them get it. Still others learn from seeing a simulation or doing an experiment themselves. With myriad digital resources available today, teachers have more chances of addressing the varied learning styles of more of their students.

Modular Structure

These tools for the 21st-century classroom help create a truly modular environment. If an upgraded model of a particular device becomes available, then you simply remove the older model and plug in the new one. Similarly, if new tools become available, offering new functionality, then simply plug them into the system.

21st-Century Classroom ... Today

It should be clear that the 21st-century classroom is available today. But it takes vision, commitment and money to bring it to life.

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