TECHNOLOGY PLANNING & MANAGEMENT

Keeping Control: Integrating Technology in the Classroom

The myriad technology used in today's college classroom is simply managed with the right interface, making professors' jobs easier and lightening IT's workload.

by ELLEN KOLLIE

With 2,100-plus students, Bay Path College (BPC) in Longmeadow, MA, is a small college. Until recently, it suffered the same problem that plagues colleges and universities of all sizes: classrooms outfitted with multiple types of technology, each requiring individual control.

For example, a classroom may have a television, DVD player, laptop, projector, whiteboard, microphone/speakers, and dimmable lights. That is a lot of equipment for a professor to master to present a lesson. "One common problem is audio-video systems that are complicated to operate and not intuitive for most instructors," confirms Mike McMackin, ASTC, principal with Auerbach Pollock Friedlander, a media facilities planning and design firm headquartered in San Francisco. "Audio-video

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PUTTING THE PIECES TOGETHER. Classrooms at Bay Path College were outfitted with a number of technology tools — and controls. A flexible software solution integrated these tools resulting in something easy to use for professors and IT staff.

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To complicate matters, classrooms are not consistently outfitted with the same technology: Room A may have a television and DVD player but no laptop, and Room B may have a laptop but no television and DVD player. Even if they are consistently outfitted, the projector in Room A may not be the same brand as the projector in Room B and, therefore, may operate a bit differently.

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Fortunately, controls are available to integrate all the different elements and bring much-needed and much-desired simplicity at the touch of a button. Sometimes, however, even the controls can be a challenge, as McMackin notes: "The lack of uniform equipment and a uniform user interface means that instructors are required to learn to operate different systems depending on what room they are teaching in."

Integration at BPC

These challenges are similar to what BPC was experiencing. "We have so many disparate control systems on campus, such as Questron and AMX," says David Demers, Ph.D., vice president for Academic and Administrative Technology. "Faculty had to learn how to teach in every classroom in a different manner. It was complicated by an inability to easily swap equipment out because of proprietary controls. This required some down time because, in order to reprogram control boxes, a vendor had to be called in."

Then Demers saw an article in a trade magazine about a control system that was new to him: Santa Ana, CA-based Utelogy. The article included contact information at a campus that was using the system, so he reached out to the contact to discuss the system. "Once I saw that it would be easy to roll out here," he recalls, "I contacted the company and asked for a

demo." In June 2011, he signed a contract for the comprehensive and flexible, pure-software solution for integrated control and management of his AV systems.

For Demers, the benefits were immediate, including no additional hardware costs, upgradable software that keeps up with his evolving AV needs, control over the configuration and customization parameters, management of AV systems can be done from anywhere, and it's scalable to grow with the college. "Because it's menu based and on the network," says Justin LeTellier, manager of New Media Services, "technicians can access the system remotely to troubleshoot and set up the classrooms; we don't have to know the coding."

For BPC instructors, the system makes teaching a breeze. After logging into the instructor PC, they are presented with a dashboard that allows them to control the various devices. The interface is broken into three sections: volume, display, and sources. The volume offers a slider to control the volume level in 10-percent increments. The display section allows the projector to be turned on or off. The sources section details the options, which vary depending on what's available in the classroom that can be shown on the projector. If additional controls are available for the selected source, they appear in this section. For example, if the document camera is available and chosen, the controls appear to alter the zoom, focus, and lights.

After a year of use, BPC administrators surveyed professors who had taught in Utelogy-enabled classrooms. One hundred percent said the system was easy to use, 89 percent said it was much easier to use the enabled classroom than a non-Utelogy classroom, and 77 percent said it allowed them more time to teach. "The most common response," says LeTellier, "was that it was easy to use."

Advice From the Experts

"Standardization is almost impossible to achieve with fast-changing technology," says Nick Deslonde, CTS, president of Aavid Presentation Systems, with offices in Florida and Louisiana, "so the classroom itself has to be prepared to accept all the different devices." If you have that understanding and are ready to integrate your classroom devices to accommodate everyone who doesn't know — but uses — technology, then the experts have some advice.

▶ **1. Design:** If you're able to start at the beginning, then start with design. "Our first question is, 'Does the institution have instructional technology standards?'" says McMackin. "We want a good understanding of how social interaction works in the teaching environment and what is being taught." For example, are chalkboards and whiteboards used in conjunction with electronic images and audio enhancement? Is the room required to support distance learning? Are special teaching tools required, as for a culinary program or a biotech lab? "Then we look at appropriate room design and apply the appropriate technologies," he says.

▶ **2. Budget:** If you want to integrate your classroom technology, says Deslonde, it's best if you know your budget and design an interface solution around that. McMackin agrees, stressing that it's important to have an adequate budget for appropriate technology. He sees two common pitfalls: budgets based on antiquated technology and projects that do not include equipment in the construction budget. Striving for open architecture in the design allows for the anticipation that audio-video systems will change though the building's life; this is one way to stretch the budget.

▶ **3. Support:** Talk with other clients who are using the product you're interested in, asking if they find the tech support department responsive to their needs. "We have found Utelogy tech support willing to help when we have a question," says Demers, "and they're receptive when we desire to add functionality."

▶ **4. Training:** Having integrated controls doesn't mean an educator is ready to embrace the use of technology in the classroom. Here's where training comes in. "If integrators take the time to train the users, then they will learn to love the technology as opposed to hating it, and they will choose to use it," says Deslonde.

When all is said and done, integrating classroom technology should make life easier for everyone and, most notably, it should improve educators' classroom time. "If our educators know an interface is there, we haven't done our jobs well," says Deslonde.

It's working so well for BPC administrators that they're expanding their program, having added more classrooms this past summer. "Setup is easy," says LeTellier. "It's just a matter of copying and pasting, so we can get a classroom up and running quickly. Plus, there are powerful reporting capabilities built into the system, such as device usage and lamp hours left on projectors."

Further, the team has started to deploy the system at one of their two satellite campuses. Demers notes the benefit: "It enables us from a central location to monitor equipment without ever having to drive there, thus saving both time and money." Problem solved. CPM