

# Networking the Bottom Line

Stetson University Has Building-Wide AV on a Budget

by Don Kreski

**W**e all have times when we know what we need to do but are stopped by a lack of funds. Former AV consultant Gerry Ewing found himself in this position when he took on the job of Director of Instructional Technology for Stetson University in central Florida. The budget for Stetson's new School of Business Administration building just didn't seem large enough for the kind of AV systems Ewing wanted to install.

With a \$10 million gift in hand and an aging building that had been originally built as a bank, the school had set out to create a cutting-edge facility. The only problem was, \$10 million was just not very much money for a six-story building, especially if it needed to be taken all the way back down to its structural core. Renovation began in January, 2001 with the removal of the walls, wiring, plumbing, even the elevators, then proceeded with construction of a new brick facade, central atrium, peaked roof, two connected outbuildings and an all-new interior. The plans included 16 classrooms, an auditorium and a distance learning room with networked AV and computer systems, plus three additional floors of office space.

The biggest challenge, says Ewing, was to integrate the 18 new AV systems into a campuswide Crestron e-Control system with no money budgeted for the purpose. The money he had would allow Ewing to equip just four of the new rooms with touch panels. The rest were to use a simple IR control system. But Ewing was not happy with this plan. Though the rebuilt facility would more than double the campus AV inventory, he was not given any funds for additional support staff. There just wasn't any way he was going to support the new building with the staff he had, unless he could bring in networked AV management and diagnostics.

With the help of Tim Philpot and Larry Andrews at deal-



Taking advantage of the high-quality video from a Sharp XG-P20X projector in the Lynn Business Center lecture hall, LMG was able to install an Elmo pan/tilt camera—the PTC-100—as a ceiling mounted document camera.

er LMG of Orlando, Ewing began looking at ways to save money on Crestron components. Visiting the Orlando Home Electronics Show, he found a low-cost mini wall panel, the TPS-2000L, and then asked his cabinet-maker, Derek VanderZyl, to



Teaching consoles like this one are in all 18 of the new rooms, featuring such components as a Crestron touchpanel, wireless mouse and built-in monitors, keyboard and equipment rack.

design a tabletop holder for it. Andrews suggested they share the Crestron controllers—one for every three to four classrooms. They asked a student in Stetson's Digital Arts department to create all of the touchpanel menus and screens. These innovations brought the Crestron costs down considerably, and they ended up with a plan using 15" ISYS panels in four specialty rooms and the mini panels in the remaining 14. But at this point Ewing was still significantly over budget.

Choosing Sharp projectors was the next big step, for two reasons. First, Sharp's video quality allowed Ewing to use s-video document cameras instead of higher-priced RGB units. "Most projectors in a price category," Ewing explained, "are nearly equal for computer display, but they're not equal for video. I've done shootouts, and

they're definitely not equal with a static visual display like a video-based document camera. Sharp is always better."

Taking advantage of this high quality Sharp video, Ewing was able to install an Elmo pan/tilt camera-the PTC-100-as a ceiling mounted document camera. He had originally planned to use a \$7,000 RGB camera instead but could only afford it in three rooms. But the Sharp/Elmo combination was so good that he was able to put cameras in all 18 rooms without raising his costs. "You can hardly tell the difference," Ewing said.

Next, Ewing was able to eliminate the cost of AV switchers in each room. "By using every input and output on the back of the Sharp projector," he said, "we were able to use the projector itself as a switch. Since it's RS-232 controlled, it's more precise than most lower-end dedicated switches." Sharp also uses a discreet control code for each input, and that helps to keep the switching clean. "With some projectors, if you sat down with the remote control and tried to randomly access a source, it would sequentially cycle through all the inputs and you would see a signal from each briefly on the screen. But with Sharp, we didn't have to worry about that problem."

By eliminating the switcher, Ewing found another \$600-\$800 per room that he could use toward the e-Control network.

One of the nicer features of the Stetson classrooms is the custom teaching console Ewing and cabinetmaker VanderZyl designed. This desk-like podium includes the mini touchpanel, a desktop computer with CD/DVD drive, keyboard drawer, wireless mouse, laptop interface, VCR, sound components, and a computer monitor set into the console surface. In two classroom/computer labs, VanderZyl mounted two computers and two monitors inside, the second used to run a Smart SynchronEyes student computer switching system. The ceiling document cameras go a long way toward keeping the console tops clear and ready for professors' notes and teaching materials.

Ewing said he was careful to keep the consoles and the control systems as close to identical as possible, so professors could move from room to room without having to relearn the AV. There are some differences: the computer labs add the SynchronEyes system; the distance learning room has its videoconferencing controls; and the auditorium has wireless mics and a traditional document camera, but aside from these additions operations are identical from the user's point of view. Even the different sized touch panels are set up in the same way, though the larg-



er panels make it easier to navigate those rooms that have the additional functions.

"Most university professors," Ewing said, "end up teaching in multiple classrooms. It's not by choice. But there is research that shows they tend not to use the equipment if it's different in each room. On the other hand, give them systems they're comfortable with and they'll work long and hard to develop PowerPoints and other custom courseware."

Ewing ended very pleased with the new AV systems, in particular the networked control. With only two full-time and five part time staff members, he must support 40 permanently installed AV systems and ten portable systems the part-timers still roll from building to building.

*Don Kreski (dkg@kreski.com) is the president of Kreski Marketing Consultants. He has over 24 years of marketing management experience in the industry.*