

THE ART OF EASY

Vaddio Cameras Used for Webcasting at Palo Alto University

Highly-automated webcasting systems the focus of classroom upgrades

Media Center

1 Lecture Capture

2 Live streaming

3. Amotation

PRODUCTS FEATURED IN INSTALLATION:

WALLVIEW 70 PTZ CAMERA KIT 999-2704-000

AUTOVIEW IR SENSOR KIT 999-1701-100 "The installation," Dave Leavitt, PAU's Director of Information Technology adds, "has been fantastic. The video is really good; the streaming is working great; we have good buy-in and feedback from faculty and students. I'm really happy that we made this investment."

Palo Alto University is anything but average.

At this private Silicone Valley institute, there are more graduate students than undergrads. There's a higher faculty to student ratio than on most campuses. Because they keep their focus tight, the school offers a better education in one area, clinical psychology, than other universities can offer in many.





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Yet there are some downsides. "Because our students all live off campus, it can be harder for them to attend every class and harder for them to seek help after hours," explains Dave Leavitt, PAU's Director of Information Technology. So when Leavitt and a faculty task force were studying ways to improve classroom technology, they decided to include lecture capture and webcasting in their new AV systems.

"We helped the university upgrade their classrooms in a number of ways," says Murray Lewis, Account Executive at Beaverton, OR-based CompView Audio Visual. "We added SmartBoards and document cameras, and we upgraded their projection, sound and control systems. Still, the most powerful technology we installed was lecture capture based on a MediaSite RL recording device from Sonic Foundry and robotic cameras from Vaddio.

Flexibility crucial

One of the challenges that Lewis and CompView systems integration manager Phil Dusold faced in designing these systems was that they were not exactly sure how faculty would use the new systems. Glenn Saito, Instructional Designer and Media Specialist for the university, would start a pilot program in lecture capture once the new systems were installed.

Lewis and Dusold responded by including manual controls that allow each professor to start and stop classroom recording from an Extron TLP 1000MV touch panel mounted in the classroom lectern. If they wish, they can control camera presets and other functions from the panel as well.

In practice, however, faculty participating in Saito's pilot have all chosen to rely on the system's automated controls. Normally the professor and Saito schedule class recording in advance, and the system starts and stops itself automatically. A Vaddio Overhead IR sensor, mounted in the ceiling, registers whether or not the professor is standing at the lectern. If so, it signals a Vaddio WallVIEW PTZ camera, mounted at the back of the room, to zoom in close. If he or she moves away from the lectern, the sensor signals the camera to switch to a wide shot which encompasses an 87" Smart Multi-Touch Interactive White Board.



At the same time, the system feeds an input from either a rack-mounted PC or the professor's laptop into the MediaSite recorder. The system records two streams, from the camera and the computer system, and both automatically go to a video-on-demand server powered by MediaSite EX server software. Students watching the streams later as a webcast will see a picture in picture image, or they can choose to enlarge either the professor's image or the computer image to full screen.

Since the SmartBoard is essentially a computer peripheral, images it generates show up in the data window. Students can choose to watch instructors writing on the board via the Vaddio camera, which is sharp



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enough to capture clear images of them and what they write, or switch to the data stream to see only the text they create (or the original projected image and their markups). The webcast, of course, includes spoken and program audio as well—the lecture as well as any sound included with the visuals. If professors show video from the

document camera, a DVD player or VCR, the system also routes these images into the data window.

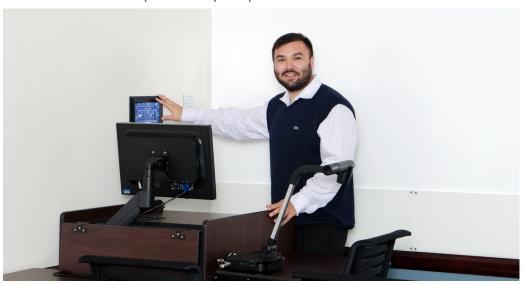
Saito says he hopes PAU faculty will use the system to expand their teaching beyond traditional methods. "We're looking at the 'flipped classroom' method, where we ask students to watch lectures before class, then devote class time to discussion or clinical activities." He feels that lecture capture, used in this way, has the potential to significantly improve educational outcomes.

Installing the systems

Leavitt says he was surprised how quickly and smoothly the AV installation went, once the decisions were made on what to install. "From start to finish the project took just six weeks, and that was for six classrooms on two campuses." CompView finished the install in time for fall, 2011 classes, and after a year of use, Leavitt says he's seen only minor maintenance issues. He has never had a system or system component unusable for a class.

Lewis explains that a large part of this near-

perfect track record comes from using only proven equipment vendors such as Vaddio and Sonic Foundry. Part of the system's success, too, was a forgiving design that anticipates user errors. For example, for the best possible audio, CompView included a wireless Shure lavaliere microphone in each classroom, but if the professor forgets to use it or does not wish to, a podium mic and ceiling-mounted Shure MX202 microphones will pick up his or her voice.



"We installed the ceiling mics primarily to capture questions from students sitting in the classrooms, but they have this fail-safe function as well," Lewis explains.

Building a failure-proof AV system can be somewhat more costly than one that is not, but Lewis feels it's well worthwhile. "The Vaddio camera, for example, is a better camera than others we might choose, but its extra cost is low compared to the total for the classroom system."

Leavitt says his only regret is in not installing two cameras in each classroom, with the second picking up images of the students as they ask questions or otherwise participate. "That would be especially helpful now, as we're looking at adding two-way video so that guest speakers can address our classes without having to travel to campus."



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Lewis, on the other hand, says accommodating this need will not be a problem. "Plans change and ideas grow once people start using new technology, but that's OK. We build flexibility into our designs, and we can easily add another camera or a video conferencing codec."

Leavitt believes the new systems are proving themselves every day. "Ours can be a tough curriculum and classes can be intense at times. Having the ability to review a concept as many times as you need to is a valuable resource."

"The installation," he adds, "has been fantastic. CompView did a great job. The video is really good; the streaming is working great; we have good buy-in and feedback from faculty and students. I'm really happy that we made this investment."



About Vaddio

Vaddio is the premier global manufacturer of PTZ cameras, specialty camera control systems and professional USB peripherals for the audiovisual, videoconference and broadcast marketplaces. In applications ranging from distance learning to corporate conferencing and television production, Vaddio products bring class-leading capabilities, convenience and flexibility to you and your customers alike—elevating the science of communication with the Art of Easy. To learn more or to become a dealer, contact Vaddio sales at 1 (800) 572-2011.

CompView is a leading audio visual integrator with over 20 years of experience. We provide the audio video technology expertise and services to create rooms that drive performance.



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