

Glendale Community College

Streaming and on-demand video for training of nursing students



Organization

Glendale Community College

Industry

Education and Training

VBrick Products

- VBrick Windows® Media Encoders
- VBrick Video-on-Demand Server
- VEMS Product Suite
- VBrick Digital Signage

Applications

- Enabling solitary practice simulations for nursing students
- Better management of student and faculty time and resources
- Video-on-demand content for training and certifying nurses

VBrick Technology Partner

ID Solutions Inc.

As demand for licensed registered nurses rises, there is a corresponding increase in enrollment in nursing programs. That's a good thing, although it also presents challenges for faculty members who must review and grade the individual performances of hundreds of nursing students.

Video technology helps. Glendale Community College in Glendale, Arizona, for example, recently built a state-of-the-art nursing school building that incorporates four cutting-edge observation rooms – each equipped with touch screen controls, video cameras and simulated patients.

These lifelike mannequins can be preprogrammed by instructors to pose select clinical scenarios and respond appropriately to the treatment a student decides to apply. They also provide nursing candidates with hands-on training, without putting real patients at risk. One of the most helpful features to both students and faculty is the opportunity for students to practice on the mannequins without having an instructor present. Students are able to record demonstrations of skills and the faculty may then download the recording on demand and grade behaviors without having to be physically present. This has been a huge time-saver for faculty and students alike.

The Challenge

Find a supremely intuitive video on-demand platform to allow nursing students to record their simulations as simply as possible

Glendale Community College has 400 nursing students, and only 22 full-time instructors and 2 Lab Coordinators. Most of the curriculum is taught en masse, but nursing students must also prepare to screen, query and treat patients by themselves. Hence, the nursing facility's new observation rooms recreate a realistic environment where students make decisions and perform procedures alone.

"If there's a faculty member present, the student may defer to them. But when they're alone, they're with a real situation," said Scott Kozakiewicz, Glendale's Coordinator of Media Services. "The exam room enables the student to practice as long as they need to ensure competency, and then record their performance when they're ready."

Glendale designed its facility to make this as efficient and easy as possible. The challenge was to find a video capture-and-delivery platform that was as easy and intuitive for the college to implement as it was for students and faculty to use.

The Solution

A VEMS system designed to deliver live and stored video

Time was short when Kozakiewicz began his search for a suitable video management platform. It was August, and construction on Glendale's new nursing school was already well underway.

VBrick was among the early candidates. Glendale Community College had been using the company's VEMS portal for years to push video and digital signage to several campus buildings. Kozakiewicz inquired whether the existing platform could be expanded to the new nursing facility.

The Solution, continued

Within a few weeks, he received a proposal that met the needs of students and faculty and was very easy to use with little training necessary. It required eight compact VBrick Encoders – one for each simulation bed – as well as an on-demand server and supporting video distribution components. Also, unlike competitive solutions, the VBrick encoders stored captured video in a Windows® Media format, which made it a more adaptable and significantly less expensive solution.

Glendale purchased the solution in October, and by November it cleared the way for work to begin. Despite the holidays and ongoing construction, the system was up and running by January.

“VBrick technology takes a very straightforward approach, and the system was adapted quickly to our requests,” said Kozakiewicz. “For example, the faculty asked for some last minute changes to how the system stored captured video. Instead of using student ID numbers to set up a file system, they instead wanted to categorize videos by skill set.”

VBrick’s VEMS (VBrick Enterprise Media System) system had the capability to make such changes quickly. Now, faculty can selectively search for videos of students starting an IV, or demonstrating CPR.

The Benefits**Seamless capture, storage and access of video content, and the ability to easily scale the technology elsewhere on campus**

One sign of an effective technology is how invisible it is to the people whose lives it simplifies. Nursing students at Glendale now log in, key in the simulation they intend to practice, and the VBrick system automatically begins streaming audio and video to the video distribution server. In turn, faculty can access and review the video with the click of a mouse from any location that provides Internet access.

“The key thing is that this technology creates a more realistic setting for the student to practice in, and streamlines the recording process,” said Deborah Pool, Glendale’s Department Chair for Nursing. “Before, we recorded students with a camcorder, and then we’d have to search through the tapes. Access to a VCR was required to view the tapes, and faculty found themselves moving 20-30 videotapes back and forth from home to office.”

The automated nature of the system enables students to come in whenever the lab is open. For their part, faculty can choose to stream video to a debriefing room to view with other students, or access recorded content at their desk to provide feedback to a particular student.

“It’s a much more efficient and practical system,” said Pool. “It’s not always cost effective to have one student and one faculty member in the room at the time.”

Since Glendale opened its new nursing facility, representatives from other schools have come to review the observation pods. “They remark on the ease of the technology,” said Kozakiewicz. “The faculty and students don’t need to focus on the video recording technology. Once they hit the touch panel, the focus is on the simulation. That’s a big, big benefit.”

Looking ahead, Glendale is considering expanding its campus VBrick platform to its Communications and Emergency Medical Technician programs.

“The technology can grow or shrink based on your needs,” said Kozakiewicz. “Once you’ve established the main portal and on-demand servers, you can scale the system by adding more ‘Bricks. You don’t need to recreate a portal, or add new formatting or build infrastructure. It’s a very simple step to grow.”

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