

# THE POST-LECTURE ERA

## UW MADISON SCHOOL OF NURSING MAKES A TOTAL TRANSITION TO ACTIVE LEARNING

By Don Kreski

“It’s wonderful and a little bit scary,” said Jerzy “George” Jura, Director of Academic Technology at the University of Wisconsin-Madison School of Nursing. “We don’t really have traditional lecture halls anymore. Every classroom designed for more than twenty people includes the best available tools for team-based, interactive, problem-based learning, rather than the more traditional lecture-centered approach.”

To make that possible, a team headed by Dean Katharyn A. May spent five years preparing for the change, much of planning a new home for the nursing school, Signe Skott Cooper Hall, now open on campus. Aiding that effort was a technology team including consultant The Sextant Group and integrator CompView Audio Visual.

### ACTIVE LEARNING & NURSING

In recent years the leading nursing schools have taught in three interrelated settings: classrooms, simulation labs, and clinical settings. Doing so provides students traditional instruction, hands-on practice with patient manikins and guided work with real patients in clinics and hospitals. The UW Madison program continues this successful model with partnerships with local hospitals and a large, advanced simulation lab with hospital and home-health settings. Still, it’s the transition to active learning in its classrooms that makes the school unique.

“Having taught for most of my career, I can tell you this is a totally different level of engagement,” Jura said. “The big advantage is that students get far more involved with faculty and with each other. They’re learning collaboration, teamwork, and the ability to solve problems they have not seen before.”

Instead of using traditional lectures, Jura’s Academic Technology group helps instructors offer traditional material using “flipped classroom” methods, asking students to view it online as homework before coming to class. “Because preparing activities is so time consuming,” Jura noted, “we have an agreement that if faculty record their lectures, we’ll excuse them from up to 25% of their classroom time. They also have to agree to break the lectures into shorter pieces, provide some way to ask questions, and provide assessment of how well students comprehend the recorded material.”

Classroom time is devoted to various types of exercises, where the instructor assigns problems for students working in groups to solve. In this way, they have a better chance to understand and remember the key



## AV in Action



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The transition to active learning makes the UW School of Nursing unique.



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concepts at the core of the class, while learning to use this new knowledge to solve problems as a team.

Students are required to bring laptops to class, which they may use to access background material from the instructor, do online research, or simply take notes or create a presentation from their discussions. Most often the instructors will ask students to share their ideas with the class, and each type of classroom includes technology to help them do so.

### THE SEMINAR ROOMS & ACTIVE LEARNING CLASSROOMS

According to Lisa Reese, Facilities Designer for UW Madison, the School of Nursing spent a great deal of time discussing classroom designs with faculty and students. “We even created a mockup of an active learning classroom so instructors could see what we were

talking about and have a chance to try out the technology." User input helped architect Joseph Schultz at Kahler Slater and technology consultant Kevin Givler at the Sextant Group shape three different classroom designs.

For the Doctor of Nursing Practice and Nursing Ph.D. programs, the design team created two seminar rooms that can hold up to 60 graduate students each. "These are the closest thing we have to traditional lecture halls," Reese explained. But there are three crucial differences.

First, these are tiered rooms with three flooring levels, each of which holds two rows of tables. The tables are built so that students in the front-most row can turn around to work in groups with those at the tables behind them. When they do so, they can take notes on an 18- x 23-inch marker board, a low-tech but very useful device that can be shown on one or both of the side-by-side projection screens.

Second, the tables include push-to-talk microphones at each seat. "You can speak in a normal tone of voice, yet everyone can hear you clearly," said Erin Shannon, Audio Visual Designer for CompView Audio Visual.

Third, the rooms include digital recording systems, so that students who miss class or who wish to review what was covered at a later time may do so via UW's video-on-demand server. To facilitate those recordings and classroom-to-classroom video conferences, the microphone buttons each trigger one of three wall-mounted Vaddio cameras to zoom in on the person speaking. (Otherwise the Crestron-controlled system defaults to a shot of the instructor.)

For smaller graduate-level and clinical classes, there are two mid-sized active learning classrooms (ALCs). Like the seminar rooms, these have two Panasonic projectors (although on opposite walls) and a digital capture/streaming device. Here, however, students work in four groups of eight, and

each group has a 55-inch Sharp display to share. Shure push-to-talk boundary mics on the student tables and wireless mics for the instructors make it easy to address the entire class.

A nice touch is a "show me" button CompView installed next to each table-mounted computer input. One-button press triggers the Crestron system to switch that laptop to the Sharp display. There's no need for any kind of control panel for the student groups.

From a 24-inch Crestron touch screen, instructors can choose whether their own or student visuals go to the projection screens and the student screens, and they can annotate over those images. A DigitalMedia 32X32 switcher allows instructors to route any computer or video source to any combination of projectors and displays in the ALC. [Editor's Note—There's so much more to this terrific case study by Don Kreski. Read more about the creative challenges at UW, and how the AV team overcame them, on [www.avnetwork.com](http://www.avnetwork.com).]

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