

7 THINGS YOU SHOULD KNOW ABOUT SMART CLASSROOMS

SCENARIO

Professor Diment brought her computer into the smart classroom. There were only a few minutes left before class started—but she wasn't worried. She set her laptop computer down and plugged it in, then picked up the credit-card sized projector remote and pressed the power button. Her computer was quickly running, with its screen being projected in front of the classroom. Norman, a student who always sat in the back, pointed out that it was hard to see. Diment dimmed the lights slightly, making sure it was still light enough for her students to take notes.

A quick glance at her computer clock told her that it was time to start class. Her students were already using their individually registered CPS response pads to signal that they were in attendance. She started her biology lecture by talking about insects. She took a piece of Styrofoam with a dozen insects pinned to it and put it on the document camera. Every student in the room could see, in full detail, every insect on the board. Diment took a snapshot of the image, and then took her Symposium stylus and drew on the screen, marking distinguishing features of each specimen and labeling them.

Looking over the class, she thought it was time to see if they had been paying attention. She cleared the annotations and labeled four of the bugs: A, B, C, and D. She gave the class a name and asked them which insect it was. They raised their response pads and the answers came in. Only about half of the students picked the correct answer.

"What's the difference between B and D?" Norman asked. Diment used the document camera and zoomed in on the bugs in question. Now they could more easily see the distinguishing characteristics as she pointed them out on the screen. After taking some more questions and watching a short video on the DVD player, the class did well on the quiz she had prepared for them—she knew, because she

could see the results instantly, thanks to the software she had in her smart classroom.

WHAT IS IT?

Gradually, classrooms across campus are being upgraded and remodeled to become smart classrooms. Some classrooms have been completely upgraded, while others may have one or two new features. "Smart" classrooms at Ferris State University have at least some of the following features:

- Redecorated interiors
- Enhanced lighting controls
- A gyro wireless mouse to control the computer and projector from anywhere in the classroom
- Switching controls to easily change projector output between the PC, laptop, document camera, and DVD/VCR
- New projectors
- Laptop plugs so you can bring your own computer and hook it up instantly
- A document camera to show transparencies, papers, or small objects on the projector and even take snapshots of them
- A SMART Symposium that allows you to make electronic notes and images appear
- The Classroom Performance System (CPS) to get real-time answers from your students in class by means of wireless multiple-choice response devices.

WHO IS USING IT?

Professors are able to enjoy greater freedom and control over the classroom with more user-friendly technology. It's very easy for a professor to bring their own computer into a classroom (or access their data from a network drive, USB key, CDs, etc.), adjust the lighting, and walk and talk while controlling the presentation. The goal

is to simplify life for professors so they can focus on teaching and keeping students more involved.

On the other hand, other people making presentations—faculty, staff and students—enjoy the vast array of new possibilities presented by a smart classroom. Using the document camera, an art professor can quickly put student’s sketches up for all to see, or a chemistry professor could project a small plastic model of a molecule onto the screens. Then the professor could take a snapshot on the computer and use the SMART Sympodium to make annotations on the screen to label parts of the image. Then the CPS could be used to deliver a pop quiz to students or survey them to keep the students involved.

WHY IS IT SIGNIFICANT?

Today’s students and businesses are rapidly becoming more and more technologically inclined. Students adapt quickly to new technologies, just as they will be expected to in the professional world. Cameras, remotes, and wireless devices are all common technologies that result in more engaging learning for students and adaptation to a variety of learning styles.

WHAT ARE THE DOWNSIDES?

A smart classroom may not be available during the time a professor would like to use it. The technology, although user friendly, still does necessitate a small learning curve. All the different new features put together can be a little overwhelming at first without assistance in understanding the “smart” classroom.

HOW DOES IT WORK?

Read tips about using smart classrooms at <http://www.ferris.edu/tac/LabsClassrooms/classroominstructions.cfm>

When the document camera is turned on and the “doc cam” button is pressed on the

professor’s station, whatever the camera sees will be routed to the projector.

Some classrooms have SMART Sympodiums instead of document cameras. They act like a regular computer monitor, but when the SMART Board software is running, the stylus can be used to “draw” on the special Sympodium monitor, left-click, or erase.

After the Classroom Performance System “response pads” are purchased and registered online for the course, they can be used in the room where the computer is registered and the software and receiver are installed. The professor can have students start pressing buttons to show their presence or answer a verbal question, or questions can be prepared ahead of time for surveys and quizzes that can be instantly graded in class by the computer software.

WHERE IS IT GOING?

As time goes on, more and more classrooms should be converted and upgraded. Professors will need to know how to use these features, and students will come to expect the same equipment in every classroom. Smart classrooms will become commonplace, an essential component of Ferris classes.

WHAT IMPLICATIONS ARE THERE FOR TEACHING?

The components of a smart classroom allow professors more freedom, save time, and make some teaching aids possible that were not before. Classrooms will become more interactive. Professors will be able to teach more efficiently and more effectively.