THE PROBLEM: CAD/CAM is difficult to master in the typical classroom format

CAD/CAM (computer-aided design and computer-aided manufacturing) systems are used to improve the design and creation of dental restorations. A common barrier to using the CAD/CAM system is training, as the techniques can be time consuming to master.

The traditional way of learning the software is an individual student sitting at a CAD workstation and trying to follow what is being demonstrated by an instructor. This allows for plenty of trial and error and can easily lead to frustration.

THE SOLUTION: Connecting the CAD/CAM workstation to the iWall

With the system appearing on the iWall, every student can easily see what is being done, regardless of their seating position. Additionally, mimicking the user interface of the CAD workstation allows for direct student engagement.

The wireless mouse controller can be moved from student to student. While restorations are being designed, students at adjacent stations are able to draw on their Pod screens, which is visible on the iWall. Not only does this allow for whole class engagement, it lets the instructor use the iWall as a visual learning tool and actively notate on the designs to highlight key learning objectives.

By turning a design software exercise into a whole-class interactive process, we are able to share each iteration across multiple learners and reduce overall working time.

» With the iWall’s large, interactive screen, an instructor is able to highlight difficult-to-explain features, such as gingival zenith and heights of contour, on an interactive 3-dimensional model. Students’ designs are also shown on the screen in real time, offering whole class engagement that’s not available with an iPad.

» Interested in using the iWall for your course?

Ask yourself these questions:

What learning content would be richer when viewed on a large screen?

What series of questioning could be modeled to guide student learning?

What images could be used to illustrate these concepts?

Visit unmc.edu/iexcel for more information