



## Features

 [PRINT THIS PAGE NOW](#)

---

# Des Moines Area Community College: Tying Learning to the Gaming Generation

11/26/2002

Administrators at the Des Moines Area Community College had a rare opportunity for higher-ed professionals interested in technology and learning: The chance to put the latest educational-technology tools in place by building a new campus from the ground up.

The newest of the college's six campuses, the West Campus, was built in October 2001 as a beta-test site for a number of technology companies. Cutting-edge hardware and software were used in the classroom and other campus environments to enhance learning.

"We designed this campus from scratch with a whole different paradigm in mind," said Anthony Paustian, executive dean for the West Campus. "We did it in such a way that we not only focused on technology from a training and education standpoint, but also on technology from a usability standpoint. We deliver everything on this campus through all forms of technology, and that's the root of this whole campus structure."

The campus has its own wireless infrastructure. It uses eBooks in many of its programs. Class syllabi, assignments, quizzes, handouts, and other materials are available to download in electronic form. Each student uses a Compaq iPaq handheld to access e-textbooks, syllabi and class materials, and to take notes and exams. In the classroom, faculty use smartboards that work like giant touch screens.

"With a smartboard, faculty can pull up content on a giant projection-based touch panel. They can make notes on it, give examples, then save it all. Then they can put the content of the entire lecture on the server for students to download later," said Paustian. "So students in class can focus on the faculty member and what they're saying, and go to their notes later."

Similarly, students can do their work and then upload it back to the server for faculty to evaluate. For example, students can take a quiz in real time on their iPads. A professor can immediately see how everyone scored and where the group needs additional learning. Then the faculty member can focus the next day's teaching based on those results, rather than revisiting the materials days later after the quizzes have been graded manually.

In the future, technology for in-classroom learning will be even more interactive, according to Paustian. "We'll be taking e-content to the next level, trying to incorporate more video and audio. Instead of reading about the signing of the Declaration of Independence, students will be able to see it on screen. With virtual reality, they can actually be there. It will be a much more dynamic learning experience."

Paustian believes that high-end graphics and audio are essential to appeal to the learners of today and tomorrow who were raised on software games. "The gaming impact is huge. If you put a text-based program in front of these learners, you'll bore them to tears. The higher-education process typically isn't very fun, and the process doesn't help. But the more fun we can make it, the better students will do in the process. They'll work harder."

Interactive technology also makes the teaching process more effective for faculty, says Galen Briggs, telecommunications instructor at the West Campus. "Mobility has made it easier for me as an instructor to deliver content, to excite the student about the content, and to drive key points home. Mobile and wireless activity allows students to experience content as opposed to just reading it in [a] book. It better suits different learning modalities."

The college also uses technology so students can meld learning more easily into their lives, rather than vice versa. Although the College initially focused on delivering services via handheld tools, it has since broadened its approach to be non-hardware dependent.

"We designed the campus to be very mobile. We want to give information to students when they want it, how they want it, where they want it, and the way they want it. In order to help students adapt to today's mobile culture in business, we're building it into the classroom and into the educational experience," said Paustian.

For students, the technology-infused campus is a welcome experience. "I really enjoyed the change. It opened up my ability to use technology," explains Robert Dyer, a transfer student. "I use the technology everyday from school to personal use. With a PDA, you can go throughout campus and use it to its full potential. I use it for everything from going online and researching, to retrieving a file."

While Dyer, a telecommunications major, enjoys leaving his heavy books behind, he appreciates even more the long-term benefits of using the technology. "If you don't have the technology accessible to you, you can't necessarily learn it. Having it available to me lets me learn state-of-the-art technology and really puts me ahead of everybody else in the field. My expectation is that my campus provides me with what I will need on the job when I get out of school."

All data, including each student's work, is kept on the school's storage area network and

is accessible through the Web. A memory module slides into the back of each iPaq and stores student work that can be synched with a home computer or laptop.

However, the process of synching was not always that easy. "When we started, there wasn't much out there, and we didn't have the expertise to make the synching happen," recalls Paustian. "The way we were doing it was very cumbersome. Users had to put iPaqs in cradles to synch the data. It had become a problem."

Paustian and others were at a trade show when they saw SCT demonstrating its forthcoming PocketCampus product. SCT had developed the technology to readily synch data between a handheld tool and an institution's database through any Internet connection. "We were totally impressed," says Paustian. "Soon after, SCT collaborated with us to develop a new product so we can synch up through our wireless network ... It makes students' lives easier, which technology is supposed to do."

The college also uses SCT Banner as its administrative system. "We do everything in Banner," says Paustian. "We keep adding more and more functions to Banner, to do both remotely and on site. Now we're looking to add more functions to do more through Banner through the iPaqs." Those activities include continuing to migrate some of the technology tools used at the West Campus to the college's other five campuses. The college also is driving an initiative to have the entire Des Moines metro area wireless.

"In the future, we will see greater emphasis on mobility," predicts Briggs. "Students will have the ability to take class anywhere, anytime, through different wireless technologies. They'll have access to their professors and their professors' notes 24x7."

"Students expect to use technology at all levels of life," notes Paustian. They have a real easy time using new things, and they expect other things to have the same level of interaction."

For more information, contact Anthony Paustian, executive dean for the West Campus, Des Moines Area Community College, at [adpaustian@dmacc.cc.ia.us](mailto:adpaustian@dmacc.cc.ia.us).

Proposals for articles and tips for news stories, as well as questions and comments about this publication, should be submitted to David Nagel, executive editor, at [dnagel@1105media.com](mailto:dnagel@1105media.com).