

Mayville State and Valley City State Universities: Sharing a Vision

by **Shannon Burgert**

When Ellen Earle Chaffee attends a sporting event between athletic rivals Mayville State University (MSU) and Valley City State University (VCSU), the uninformed observer may think her behavior a bit curious. She starts off on the home-team bleachers, but as the game gets rolling, you'll always find her on the side of the team that is behind. And her garb carefully represents both schools. But Chaffee has good reason—the two North Dakota institutions share her leadership as president.

Chaffee has served both institutions since 1993 in a unique partnership that won the Blackburn award for innovative leadership from the American Association of University Administrators in 1996. The alliance, devised by the higher education system in North Dakota to save resources, consists of a handful of shared administrators.

Mayville and Valley City are 75 miles apart in the Red River Valley, and Chaffee commutes every week between the two universities. Mayville's campus—in a town of 2,000—consists of 750 students and a \$5 million annual budget. Valley City State's enrollment is slightly higher at 1,100 students, with a budget of \$7.5 million, and the city's population is 7,000. Business, teacher education, and liberal arts have traditionally been the academic cores for both institutions.

In 1996 Valley City State University



Students are never far from network connections at either campus. A networked lounge at Valley City State University is a popular hangout.

provided laptop computers to all students and faculty, becoming the second notebook computer campus in the nation. A year later Mayville State became the fourth institution to do the same. The efforts are part of a trend at both institutions to become leaders in instructional technology.

So it's unfortunate that when *Yahoo! Internet Life* magazine has distributed surveys for its annual "most wired" list, Chaffee's two institutions haven't received anything in the mail. Yahoo! has limited the scope to those who are most likely to be well wired, including institutions in certain Carnegie classes, state institutions of a minimum size, and technology-focused institutions.

Although the schools could easily reason why they might not be among the well wired—they are in communities in

a rural state with minimal access to advanced networking capabilities and the state's appropriations per student consistently rank among the country's bottom 5—a brief tour of either campus will quickly support campus administrators' estimations that both schools run with the top 10 in the nation.

Universal Computing

MSU and VCSU are in their third and fourth years of their notebook initiatives, supplying ThinkPad computers through IBM. Both universities chose to leap into their implementations with full roll-outs, including all faculty and students from the beginning rather than introducing laptops a class or a discipline at a time. Joe Tykwinski, Valley City's chief information officer, explains, "The classroom instruction

cannot fundamentally change until every student who walks into that class has universal access."

Since network connection is an important component of providing universal access, all classrooms and dorms are wired and, in some cases, rewired, eliminating the need for traditional computer labs. MSU Chief Information Officer Keith Stenehjem notes that though this year the school's answers to the Yahoo! survey will be accepted—the magazine will now allow any school to fill out the survey online—the difficulty is how to give numbers for "computer labs per dorm" when the schools consider every dorm itself to be one big lab.

For high-end capabilities like audio and video capture, multimedia labs are available. Students take advantage of these resources to create CD-ROM portfolios to provide to prospective employers. The PowerPoint-based portfolios typically include work samples as well as audio and video clips of the students and their professors; the presentations give a much more accurate representation of the students' skills than do traditional resumé. VCSU now requires all graduates to have completed a digital portfolio.

A big hit with students and their future employers, the CD-ROM portfolios were launched by a Title III Department of Education grant awarded jointly to the universities. The \$1.7 million federal grant supports instructional innovation and collaboration, including multimedia, and faculty training in the use of instructional technology.

Faculty welcome the support. Another grant, awarded to Mayville State several years earlier by the Bush Foundation, gave the institution funds to train instructors in alternative approaches to teaching, or "cooperative learning." The goal of the plan was to reach half the faculty, but 96 percent participated, and MSU was among the first in the nation to embrace cooperative learning techniques campuswide.

Faculty at the sister institutions also gain skills through collaboration, mentoring one another on new skills and ideas. "There are fundamental things in the academy that we're stepping into courageously, and that's a testament to the faculty," says VCSU Vice President for Academic Affairs Les Wong. "They use a wide variety of approaches to teaching—it's a good biological principle that works."

The Environment

Information technology as a discipline is now a key part of the academic focus at both Mayville and Valley City—Mayville, for instance, was just approved for two new minors, in educational technology and e-business—but the infusion of technology as a tool in the general curriculum, into the hands of nontechnical students and faculty, is noteworthy.

Survey results collected by Professor Kathryn Holleque at VCSU clearly show that students believe having their own computers enhances their education. Both universities receive visitors from all over the country and outside its borders to find out what they're doing right.

But the impact of technology's penetration is felt not so much through knowing the replacement cycle or the ratio of computers to students, which is impressive—MSU has 103 computers per 100 students—or even in numbers of students adeptly using their laptops daily.

The impression comes from hearing student teachers talk about using technology in their own classes as if it were second nature, and from hearing that two-thirds of the VCSU faculty headed back to school a week early one August, without extra pay, to learn more about technology. And it comes from the number and quality of job offers to students before they graduate or finish internships. Wong believes the high level of job offers can be attributed to the technology-infused learning envi-

ronment. He explains, "The skills that students acquire, especially skills for students not trained in a technical field, make them valuable commodities."

Students, faculty, and administrators all confirm that daily life at MSU and VCSU is very different from routines elsewhere, to the extent that they become blasé until they step outside their environments. Says Mayville State Vice President for Academic Affairs Gary Hagen, "There's a whole mindset and vocabulary and way of thinking about things that we've developed through our experiences that other places do not share and do not understand."

Several years ago three Mayville State students planned to appear with Chaffee before the Senate Appropriations Committee to attest to such benefits of their technology-based education. But Blizzard Elmo prevented them from making the trip to the state capitol. Without skipping a beat, the students arranged time on the state's interactive video network to deliver their message with computers and video cameras as if they were in the Senate committee room—to make one of her points, one student even referred to a photo on the committee room wall.

Telecommuting was the answer for current MSU junior Stacy Hall, who is completing an internship with a major defense contractor in Minneapolis that she began there almost a year ago. Using her notebook computer at school, Hall is able to continue work on the project for which she now has full responsibility. Hall also serves as Mayville State's assistant Webmaster.

IT Organization and Planning

Students are critical employees for information technology services at both institutions, especially when one considers the nationwide shortage of IT staff. Students make up the majority of the help desk workers, and a handful of

the permanent staff at each campus are recent graduates.

The full-time technology staff at Mayville can sit around a medium-sized table. Stenehjem oversees the directors of Instructional Technology, the Help Desk, and the Computer Center. The Computer Center comprises two additional staff members, including a recent hire: the first full-time Webmaster. Valley City CIO Tykwinski leads eight staff, including three former students, at VCSU's Information Technology Center, and it also employs 12 current students.

Stenehjem and Tykwinski each report to a vice president for academic affairs. The CIOs are part of their institutions' executive teams, which meet jointly once a month. Stenehjem says, "I think it's appropriate that the CIO reports to Academic Affairs because I see the role first as an academic issue. But it's important to be a part of the discussions of the executive staff as it allows decisions to move forward in a rapid fashion." Stenehjem adds that the small size of his staff creates

a similar advantage for efficiency.

As for planning, each campus has a technology planning committee with wide representation as well as basic IT strategic plans. MSU has recently formed a task force to provide statewide leadership in using computers in education and to help produce a computer-literate workforce.

In 1990 the North Dakota State Board of Higher Education charged VCSU with the mission to become a leader in instructional technology for the state university system. Though the institution quickly pursued its new charge, much of the impetus for the integration of technology on both campuses rose from the grass roots.

The Notebook Initiative

Chaffee explains that students and faculty pushed for the notebook initiatives. "One of the things I learned is that people don't resist change; they resist being changed. And this was a case where resistance to change was absolutely not

present because it was a consensus view," she says.

Gary Thompson, an education professor at VCSU, says that he saw the notebook initiative simply as a logical progression for the university. "The way I see it, we had no other choice," he says.

That buy-in helped the universities succeed in their initiatives despite what seemed to be impossible costs. The state gave no new money for the notebook computer programs. Half of the funds were achieved through reallocation, and the rest were pulled together through bonds, grants, and a new student fee, which students supported to make universal computing possible. Of the \$950 fee, which increased tuition by 50 percent, \$100 is earmarked for infrastructure and the balance is allocated toward lease of the laptop and other direct costs.

The standardization of hardware and software minimized an increase in support costs for the university help desks. Students are responsible for their own laptop insurance, which they are encouraged to acquire through parents' homeowner plans.

The notebook initiative on each campus runs between \$1 million and \$1.5 million per year; the cumulative cost of each notebook initiative over the last three years is nearly equal to the school's entire annual operating budget.

That's why, when Chaffee addressed an EDUCAUSE '99 audience on the topic of universal computing, she said, "If we can do it, so can you."

A Role in the Community

North Dakota claims a population of 640,000 people. Fargo is the largest city at 80,000, and two-thirds of the state's counties are classified as "frontier," meaning you'll find fewer than six people per square mile. While the state is rated top in such areas as safety and educational achievement, North Dakota is expected to lose 25 percent of its high-school graduates in the next few years.

President Ellen Earle Chaffee



From the start, we've been very clear about why we're providing universal student/faculty access to computers. It's to improve learning; technology is a tool. There was a real shared vision about what we should do and why we needed to do it. The initiative developed a life of its own—it was like forming a team to play a game that we were inventing as we went along, but everybody knew so clearly what it should look like that it all fell into place.

We've had benefits beyond what we expected, and we've had problems beyond what we expected, but not with regard to our ultimate goal, just with regard to getting there. It's built up a great deal of self-confidence among the faculty and the staff, and it's built up almost an appetite for change, which is what a learning organization is all about.

I often say that the reason two people used to have this job is that it's just too much fun for one person. I work with people who are passionate about supporting the success of each student and will do whatever it takes. Our students are full partners in the enterprise. Together, they are changing teaching and learning in extraordinary ways.

The state's economy has had to diversify, shifting from a dependence on agriculture and energy.

Technology centers are in the works through both institutions to help bring business into their communities and secure economic stability. Each center will be used as a business incubator and as space for technology training. Using existing facilities, a Department of Commerce grant and support from project partners will help to establish MSU's community technology center. The Valley City-Barnes County Development Corp. is leasing university land to build the Valley City tech center, which will be ready later this year. The building will be the new home for VCSU's Center for Innovation in Instruction (CII), a resource center that trains public school teachers how to use and plan for instructional technology. CII won the CAUSE award for Best Practices in Professional Development in 1996.

Another tenant of the new technology facility in Valley City will be NetWork Center, Inc., a computer hardware company that recently formed a unique partnership with Valley City State. The university and the Fargo-based company will offer training for academic credit at NetWork Center's headquarters. Students can apply the credit toward a bachelor's degree in computer information systems (CIS).

Great Plains Software, also based in Fargo, has a similar partnership with both universities. Offered to CIS and business administration majors, the program trains students through internships that can lead to employment.

Digital Bridges

But Chaffee's visions reach beyond these partnerships, and her ideas have gained attention and support. MSU and VCSU are not lone technology leaders in the Red River Valley. They are neighbors to the University of Minnesota,



MSU students use their university-supplied notebook computers in a class led by Terry Kemmer, a business professor. Kemmer is leading a university task force for academic transformation.

Crookston, and Northwest Technical College; the four institutions are among only a couple of dozen in the nation to fully equip their campuses with notebook computers, which they have all done since 1997 or before. Also within the area are three research universities, a liberal arts college, and another technical college.

Chaffee's first idea, "IT Talent Flows North," uses the Red River as a metaphor. She notes that in addition to the training resources of the nearby institutions, the state is well educated and hardworking and successful information technology business is growing. She suggests that the Red River Valley can become a center for IT-related business success in small towns and rural areas, built by strategic workforce development and training.

Her second challenge, "Digital Bridges," is to make possible affordable high-speed Internet connectivity to every home and business in the state. She again lists the available resources: telephone companies that can work together; local, state, and federal leaders

who are committed to developing information technology; a state-owned bank; and a state where cooperation is both valued and possible.

Each vision, Chaffee says, is only missing a strategy. Neither is impossible, she argues, and both are worthy of the effort. If they work, they can become national models for rural communities.

Chaffee writes a regular column in the Mayville and Valley City newspapers. In a recent column, Chaffee rallies the community by remembering the same excitement and anxiety when Mayville State and Valley City State toyed with the possibility of providing all students and faculty with notebook computers. She writes, "At the time, the challenges were just as complex, the unknowns just as difficult to anticipate."

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