

Creating Synergy in a Distributed Environment

IT staff at the University of Northern Iowa focus on collaboration and service

by Shannon Burgert

When a new PC moved into Eunice Dell's office eight years ago, she didn't exactly open her arms in welcome. In fact, she held on to her trusty mainframe terminal for more than a year—just in case. Today, the dusty terminal is long gone and Dell—now on the project management team for an enterprise system (ERP) implementation—is what she calls a user advocate.

An assistant vice president for administration and finance and budget director at the University of Northern Iowa, Dell is now somewhat evangelical about the efficiencies the technology will create. The Modern Executive Management and Financial Information System (MEMFIS) is a joint effort of Administration and Finance and Information Technology Services (ITS) and has a target first-phase rollout of July 2001.

A 23-year employee of UNI, Dell works with users to make sure their needs are met and their voices are heard as their financial and human resource legacy systems are replaced. After all,

she knows what it's like to hesitate in the face of new technology when the old technology works just fine. Dell is also aware that over a three- to four-year implementation, it's easy to burn out. So she is careful to help the group keep its perspective. "I've taken that on as my personal assignment," she says.

This kind of attention to the end user is typical in projects at UNI, and for the IT staff, it's just one of many collaborative relationships.

Strong Foundations

Established in 1876, the University of Northern Iowa enrolls more than 13,000 students, and 19 out of 20 are state residents. Though the university now boasts five colleges, it has roots in teacher education, and that emphasis is still evident in the high percentage of teachers it produces as well as in the number of outreach projects devoted to preK-12 education.

The institution's annual budget is \$124 million, 6 percent of which is earmarked for technology. The university is putting the finishing touches on its third five-

year strategic plan; an accompanying plan outlines a framework for the use of technology in supporting the university's mission. That plan's goals and objectives are routinely updated.

UNI maintains a distributed computing environment. In 1996 three separate technology units were combined to form the central ITS unit under Academic Affairs. At the same time, Garry Bozylin-sky was hired into the new position of associate vice president for information technology, overseeing ITS and providing leadership to other technology organizations on campus.

The central unit now consists of four departments: Educational Technology, Information Systems, Network Services, and User Services. ITS maintains responsibility for all administrative systems of institutional scope, the network infrastructure, telephone services, campuswide student computer facilities, video and multimedia production, and technology training.

The relationship between ITS and its distributed cousins is a close one.



UNI Office of Public Relations

Faculty are well-trained to incorporate technology into their courses at UNI, through the Center for Educational Technology.

Bozylinsky explains that while individual units may contract with ITS or outside of the university, his department works with them to understand the total cost of ownership of a project.

User support is coordinated centrally; calls are tracked and help tickets are generated automatically, routed to individual departments as appropriate. Those waiting for help can use the Web to look up their place in the queue. Tom Peterson, director of User Services, explains that the number of calls has decreased 40 percent over the last few years, thanks to distributed support, more intuitive and consistent software, and improvements on the department's Web page, where traffic has increased—the site gets half-a-million hits a month. While in a lab, a student need only click her mouse for help, and a lab attendant will respond.

Network Services is responsible for

major inter- and intra-building cable projects, campus backbone upgrades, and network infrastructure support. Departments are responsible for the acquisition and support of local resources as well as smaller, ad hoc networking projects. The cost of local network connections is shared on a 50/50 basis with ITS.

UNI has made exceptional use of its solid network infrastructure, which won an honorable mention in this year's EDUCAUSE Awards for Excellence in Campus Networking. UNI-NET is based on single and multi-mode fiber optic cable extending to all campus buildings. Currently, says Network Services Director Steve Moon, 75 percent of faculty, staff, and classroom connections have been upgraded to 10Mb/100Mb switched technology. Last year more than 50 percent of the students living in

residence halls took advantage of a free 10Mb Ethernet connection.

The university relies on the Iowa Communications Network (ICN) as its primary carrier for off-campus voice, data, and video communications; UNI uses the ICN to transmit and receive numerous educational programs and conferences. Moon is excited about a joint project with the Physics Department to pilot a wireless lab; the lab is shaping up this semester, and he anticipates that it will be used as an example for other units on campus.

Serving the Student

ITS is working with the Student Services division to create an integrated, "one-stop" student services center combining academic and administrative functions. Dennis Lindner, director of Information Systems, notes that the center will

include an electronic component, allowing expanded hours and self-service, and enabling students to submit applications, complete forms, pay bills, and purchase transcripts.

Renee Romano, vice president for Educational and Student Services, explains that the goals are to empower students and to work with them holistically. The process of redesign is not painless, admits Romano, and she says she's learning a lot about change management. But the seamlessness afforded by technology can't be passed up. And, she adds with a grin, "We want to be the best."

Representatives from ITS serve on the planning and electronic committees for the integration. Coordinating the redesign with ITS has been crucial, and the collaboration has gone smoothly. Says Romano, "Sometimes, when I close my eyes, I think ITS folks are Student Services people because they're so cognizant of student needs." Romano's division has also benefited by gaining a technology coordinator; that person brings a big-picture, strategic approach to using technology within the unit.

The online student services go hand-in-hand with a student portal rolling out this semester. The university constructed its own portal framework despite the downside of higher maintenance, but the portal has a strong foundation. Access UNI, a concept encouraged by President Robert Koob, has provided increased access to university information through the Internet for a few years.

Another project in the works is called Program of Study. Introduced by Koob, the idea is to enable students to schedule their coursework more deliberately and with less stress. The first phase of the project, already completed, allows students and advisors to access degree requirements and find

out, hypothetically, how changing majors would impact graduation requirements. Program of Study software will enable departments to project the number of courses they will need to provide each semester by gathering from students information about tentative future course schedules. Eventually, the system will be integrated with registration, including a prioritization for getting into courses.

The library supports distance learners with a full-time librarian and an extensive Web site.

Technology in Teaching

UNI provides faculty training for teaching technologies, such as WebCT. (The university is the only institution in Iowa certified by WebCT to provide training on its products.) UNI this year offered its first May Institute, a month-long workshop for faculty to explore the use of technology in a general education course. Humanities, typically offered by multiple departments, was the focus for the first institute. Offered through a collaboration of the Center for the Enhancement of Teaching and the Center for Educational Technology, future institutes will continue to focus on courses within the general education offerings.

Harry Brod, an associate professor of philosophy and religion, was impressed with the institute's results: "I got a real sense that bringing 10 people together to work on this is a lot more rewarding

than 10 people doing it individually." In addition to creating more individual Web sites, the group produced a collective Web site for the humanities course. The faculty are meeting as a group every two weeks this semester to refine their new courses, and next semester they will implement them.

Marilyn Drury, director for the Center for Educational Technology (CET), notes that UNI's dedication to teaching with technology also expands beyond the university into the preK-12 level. CET is involved in a number of grant-funded projects that emphasize the use of technology in preK-12 classrooms.

Through a \$2.3 million grant from the U.S. Department of Education, UNI's College of Education is the project leader for INTIME, Integrating New Technologies Into the Methods of Education. In its first of three years, the INTIME project addresses deficiencies in preparing teachers to use technology through teacher education programs. Through the project, videos are created of teachers using technology effectively in their classrooms. These videos, available online, will serve as models for teachers to emulate and share best practices with colleagues.

Through another grant, from the US West Foundation, the Iowa Educational Technology Training Institute at UNI instructed teachers on how to use computers and computer conferencing. The institute so far has reached more than 5,000 teachers, and it will soon reach out to superintendents and principals with an emphasis on technology leadership.

Branching Out

UNI has extended its scope through distance education and currently offers 14 complete degree programs at a distance. Most courses are delivered via the ICN, and the library supports distance learners with a full-time librarian

and an extensive Web site.

For some courses, the distance is great. While the university pours most of its resources into students within Iowa, partnerships have encouraged online relationships around the world, particularly in Russia. For more than 10 years UNI has fostered partnerships with Moscow Linguistics University, in Moscow, and Russian State Pedagogical University, in St. Petersburg. The relationships have resulted in exchanges for students, faculty, and even IT staff. Since 1997 the IT staff in both countries have worked to use technology such as videoconferencing to enhance their communications, and Russian faculty have participated in CET's Courseware Camps, weeklong training sessions for faculty to develop courseware and learn more about instructional technologies. Last year, six UNI students traveled to St. Petersburg to conduct a month-long seminar on the use of technology in Teaching English as a Second Language. The workshop was so successful that the students were invited to return.

Staffed for Success

The university's information technology staff provide top-notch service and synergy in their partnerships. Significantly, the staffing crisis that is leaving few without a mark has left UNI untouched. So how does UNI pull it off?

Salaries are competitive and the university has flexibility in its compensation policies. In 1997 Bozylinsky worked with Human Resources to conduct a comprehensive review of salaries and make increases based on the market.

IT staff are able to take advantage of at least one significant and usually a few local workshops or conferences. Employees are given authority and autonomy. Bozylinsky believes that

President Robert Koob: Technology Rises to the Top

Thirty-three years after graduating from the University of Northern Iowa (then the State College of Iowa) with a bachelor's degree in education, Robert Koob decided to return. In 1995 he became the first alumnus to serve as the university's president.

Koob, who completed a doctorate in chemistry, is credited as instrumental in UNI's successful use of information technology. He explains his philosophy: "The question isn't 'How much does the technology cost?' The question is 'How much does it increase the value of service?'"

Koob likes to stay on the leading, but not the bleeding, edge of IT developments. At UNI, he says he's found no resistance to innovation; at other institutions, resistance has been a barrier.

"There are two things I hear complained about most nationally: There's never enough help and there's never enough money," Koob says. "These haven't become issues for us. If what we're trying to do with technology is important enough, it will rise to the top of the investment stack. There's always enough money and there's always enough help. It's a matter of priorities."



cutting-edge or unusual projects may provide opportunities that the staff won't find elsewhere—travel to Russia, for instance.

But the reasons above seem to give only half of the answer—many universities offering the same benefits and stimulating projects are still struggling. The bigger picture illustrates that the university as a whole has low staff turnover. While new blood is valued, many staff, like Eunice Dell, have been with the university for 20 to 30 years. For that, some credit the location. The Midwest is often considered a good place to raise a family, so people stick around. Iowa is also a state dedicated to education and literacy. According to the state's Web site, Iowa-educated youth have led the nation in SAT and ACT scores for the past two decades.

UNI's strong leadership could also play a role in employee retention. President Koob is said to be encouraging and one who breaks down barriers. Bozylinsky leads from the background: "I like to provide direction and then get out of the way and let people work." He admits that he tries to stay out of the limelight, but others credit him as a key facilitator, enabling his staff.

Some suggest that the university is simply a great place to work. Bozylinsky agrees, saying, "Not just in the technology area, but across the university, my staff have the opportunity to interact with highly competent, dedicated staff. There's a lot of collaboration and very little politics."

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