Debra Kelsay knew she wanted to study vocational nursing but, because of family commitments, couldn’t leave her hometown to do it. In August 1997 Debra and eight other students from the Fredericksburg, Texas, area enrolled in Austin Community College’s 15-month Certificate of Vocational Nursing program, but they never traveled the 100 miles to the college’s Riverside campus in Austin where the program is based.

Offered through the Austin Community College Open Campus—in partnership with the University of Texas Health Science Center of San Antonio—the Certificate in Vocational Nursing was ACC’s first program deployed entirely through distance learning. Using interactive video classrooms at both the Riverside campus and the Fredericksburg Center, video services staff delivered voice, video, and data from a master control center located at the college’s Pinnacle campus. The students in the inaugural program graduated in December 1998, and all are now licensed vocational nurses. Kelsay gives the program a rave review: “Overall, it was a wonderful way to learn, and the best part was being able to stay in your own town and not drive the distance to classes.”

At Austin Community College the needs of educational programs—and of students to succeed in those programs—drive the planning, funding, and implementation of information technology. Yvonne Van Dyke, coordinator for Vocational Nursing, wrote the initial proposal for her program’s distance learning option and started that partnership—a recurring theme at ACC—to better serve students. Her efforts are but one example of what Richard Fonté, ACC’s president, considers the college’s mandate: to provide education for a diverse community in a booming, high-tech metropolitan area.

ACC touches nearly everyone in the Austin area with offerings that include general education (university transfer), workforce programs, customized training for business, and developmental education. From an original enrollment of barely 1,800 students in 1973, ACC has grown to more than 26,000 college credit students each fall, with nearly 18,000 additional enrollments during the year in continuing education programs.

Despite myriad employment opportunities in the many high-tech and dot-com companies that call Austin home, ACC must continually face the fact that prosperity hasn’t made it to all parts of town. Over the years ACC has collaborated with traditional institutions—local libraries and cable access television—to make sure the ability to take courses is not dependent on having a computer or an Internet connection at home. Even today every new technology initiative at ACC must take this into account. “We are clearly the bridge in the Digital Divide,” states Fonté. “There’s no question that’s a role a community college must play.”

Taking the Lead
Leadership is the key to the success of ACC’s programs, and these programs are led by active partnerships. Since Fonté’s arrival three years ago, he has gone out of his way to build on ACC’s already strong partnerships with the Austin community and to forge new ones that will strengthen the college’s ability to continue to serve the needs of its diverse
constituents. His work with ACC’s Board of Trustees has led to broad policy decisions that guide—but don’t micromanage—the work of his relatively new senior leadership team. A progressive and sanctioned “from the bottom up” culture of collegewide priority setting and technology planning has been in place at ACC since 1997.

Information technology has been reorganized into two primary units. Part of the Instructional Affairs division, Instructional Resources and Technology (IRT), led by associate vice president Ron Brey, includes faculty development, instructional technology, library services, distance learning, video services, and the Virtual College of Texas. ACCNet (the campus network), information and records management, and IT purchasing, programming, and operations are all part of the Information Technology (IT) unit under the leadership of Bill Carter, associate vice president of IT. The IT unit is part of the Campus Operations, Student Affairs, and School Relations division.

A Foundation for Planning and Prioritizing
At ACC, being in different boxes on the organizational chart never gets in the way of getting work done. Staff in Brey and Carter’s organizations function “across the chart” with much cooperation and good will. Their two organizations come together on ACC’s highly effective collegewide Technology Committee—a faculty/administration partnership whose membership includes associate vice presidents, deans, faculty, and network, campus, and student support staff—and numerous other project teams as well. For Brey and Carter, this approach has been successful in large part because they have a workable plan and a process—and adequate, ongoing institutional funding.

Information technology at ACC is centrally funded with a set-aside percentage (4–6 percent) of the overall college budget. Since 1998 implementation of all technology projects has been in the hands of the Technology Committee. Chaired by Carter, the committee actively promotes communication and cooperation across the college. “The committee is not an end in itself,” explains Carter. “We are strictly facilitators. Our goal is to assist people in making good decisions. It helps that President Fonté is committed to finding the people, resources, and funding to do the work we need to do.”

The Technology Committee’s charge is broad and comprehensive and now includes ongoing review of the technology implications of ACC’s comprehensive master plan. It meets monthly to address many diverse topics, from defining ACC-wide standards and guidelines for allocation of IT resources to monitoring expenditures on that year’s priority projects. During annual budget planning, all proposals are openly considered, discussed, and prioritized; the entire process is documented and publicly available on the Web. Once the year’s top priorities are established and the budget is approved by the board, the college can march forward on these projects without revisiting the overall prioritization process. The planning cycle begins again the following year.

Open Campus—Reaching Out to All of Texas
When Brey, a distance learning advocate and practitioner for more than 20 years, wanted to install interactive video classrooms (IVCs) on every campus and at the Fredericksburg Center, President Fonté found the money to make these state-of-the-art installations happen in record time. James Albright, the manager of IRT’s video services group which oversees the IVC network, attributes ACC’s distance learning leadership in part to Brey: “Ron is a visionary, a doer, a collaborator. If people get on board and share his vision, amazing things happen!”

ACC’s live and recorded video networks and programming sources are interconnected at a master control center located at the college’s Pinnacle campus. These networks include a full-time cable television channel, two ITFS channels, satellite uplink and downlinks, H.320 videoconferencing (fiber optic, T1s, and ISDN), Internet streaming media, and television studios.
From a handful of print-based, “correspondence-style” courses and telecourses on a local cable television channel as long ago as 1979, ACC has built an extensive assortment of distance learning options. These now include not only the IVCs but PC-based asynchronous and synchronous instruction, two Instructional Television Fixed Service (ITFS) channels, facilities for live studio Webcasts and satellite teleconferencing, and, in the coming year, streaming media to the desktop.

In fall 2000 there were more than 6,000 enrollments in more than 200 courses in the Open Campus—a number greater than student enrollment at one or two of ACC’s physical campuses! Fifteen classes were being offered solely through the IVC network, and 23 are already scheduled for spring 2001. By fall 2001 ACC’s telecourse library will be converted to streaming media and deployed on PCs in open-access labs and libraries and for use on students’ home machines. Live streaming media classes are in the works too, especially in the area of onsite continuing education for Austin-area businesses and corporations.

A Solid Network Infrastructure
It’s not an accident that ACC is on the cutting edge with innovative programs in distance learning and new plans for the electronic delivery of administrative services or that Austin is the second most wired city in the United States, right behind Seattle. Sufficient bandwidth to an ACC desktop is never a problem, thanks to the college’s participation in the Greater Austin Area Telecommunications Network. GAATN is a joint effort of the Austin Independent School District, Austin Community College, the city of Austin, the Lower Colorado River Authority, Travis County, the state of Texas (represented by the State General Services Commission), and the University of Texas at Austin.

GAATN began construction of a metropolitanwide information superhighway in 1991. The network consists of strands of fiber optic cable connecting the sites of the GAATN participants, all of whom own and manage their own networks. This forward-thinking consortium not only reduced initial construction and ongoing support costs but guaranteed that high-speed network access would be easily available for many institutions in the Austin community who might not have been able to afford such investments on their own.

ACC’s overall fiber network infrastructure investments of $3.8 million have resulted in sole ownership of 18 fibers (to date only 6 have been used!); offices and classrooms wired with either CAT 5 wire or fiber in 1993–94; and since 1995 a multi-ring Optical Carrier 3 (OC-3) ATM network that provides a single communications platform for voice, video, and data. Plans are now in the works to upgrade the campus backbones to Gigabit technology.

Integrating Technology into Classes and Student Research
Instructional support—including faculty development and library services—is a key component of ACC’s master plan and, as such, is intimately linked to the college’s planning and budgeting process. In order to ensure that these areas are represented effectively at the highest levels of planning at the college, Julie Todaro, dean of Library Services, and Richard Smith, dean of Instructional Technology and Faculty Development, have been part of Brey’s IRT group since February 2000.

“Our goal is to make appropriate use of innovative technologies,” says Smith, “to concentrate our energies on what will
truly improve ACC’s teaching and learning environment.” By providing enhanced technology-based library services, public-access computers, and media centers that house the library’s nonprint collections and distance learning materials, ACC provides students the tools they need to be 21st-century researchers and learners. These classroom and research materials are available at any time—in the libraries on ACC campuses and through Internet access to library catalogs and databases.

Helping faculty make the most effective use of technology—with offerings like Blackboard™, a Web-based system for course development and management—brings IT into the classroom too. Staff in Smith’s area offer more than 30 different workshops each semester to help faculty integrate technology into teaching and course materials; this year additional resources have been added in “high-demand” areas such as instructional design.

Administrative Systems and Student Services
Since 1997 staff in the IT unit have been working to convert all of ACC’s administrative systems from mainframe and legacy environments to a comprehensive client-server system. As with every other technology project at ACC, stakeholders from throughout the college were actively involved in planning from the start and had plenty of opportunities during the process to express opinions and concerns as well as determine how the college would make the transition to the new system. Thanks to strong partnerships throughout the project among Datatel, IBM, and ACC, the implementation was efficient, within budget, and on schedule.

For its $2.5 million investment, ACC now has an administrative system that integrates many previously separate operations, uniting the campuses so that ACC truly functions like a single college. “If you cover 80 percent of your business when you purchase a system,” says Carter, “you can deal with the other 20 percent.” And that other 20 percent? IT and IRT staff have already begun to collaborate on the development of Web-based solutions for registration, online advising, e-transcripts, and electronic timesheets to be integrated with the new administrative system. Students will get grades, faculty will get schedules, and staff will review benefits in a secured online environment.

Looking to the Future
“Start here. Get there,” states the ACC Web homepage, where a visitor will find applications and degree requirements, catalogs and schedules, and information about community programs and customized business/industry training. Anyone in the Austin area (and, increasingly, throughout the state) interested in getting an education is welcomed with open arms to “start here.”

Community colleges are the most diverse environment in all of higher education; more and more, they are being challenged to provide not only general education but courses and training that meet the demands of a fast-changing information economy. At ACC information technology is used to leverage existing resources, develop solutions, and enhance already strong academic offerings while maintaining a focus on the most important element in the educational equation— their diverse community of students. With this approach Austin Community College is well on its way to becoming a leading-edge 21st-century educational institution. It’s only a matter of time before they’ll most certainly “get there.”

Endnote:
1. The Virtual College of Texas (http://www.vct.org) is a service of the Texas Association of Community Colleges. VCT makes it possible for member colleges to leverage their distance learning resources to benefit students no matter where they live or where instruction originates. The local college receives the student’s tuition and awards credit for the course. In exchange for an instructional lease fee from the local college, the remote college provides course instruction and administers assignments, tests, and grades.

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