A World Away

By Gary Pallassino

SU’s distance education programs reach around the globe to students who want to learn on their own schedules.

A Saudi prince earns a master’s degree in social science from the Maxwell School of Citizenship and Public Affairs. A mother of four working as a nurse in the Middle East studies for a family nurse practitioner certificate through the College of Nursing. And a college network systems administrator in Massachusetts earns a master’s degree in telecommunications and network management from the School of Information Studies. What do they have in common? Each completed the bulk of his or her studies at home, far away from Syracuse, participating in Syracuse University’s flexible, limited-residency Independent Study Degree Programs (ISDP). “These courses are designed so students can tailor their work to their own schedules,” says Robert Colley, director of marketing communications and distance education at University College. “Some get up in the middle of the night and work on their assignments, some get up early, some do it during their lunch hours. Many do their work on laptops,
on planes, and in hotel rooms. It doesn't matter where they are—once the residency period is over they can complete their work from anywhere, as long as they are in touch with their professors.”

Offered through nine of the University's academic divisions, SU's ISDP is one of the three oldest distance education degree programs in the country. Graduate students can earn master's degrees in advertising design or illustration, business administration, information management, library science, telecommunications and network management (TNM), communications management, engineering management, nursing, or social science (which counts among its alumni Prince Alwaleed Bin Talal Bin AbdulAziz Alsaud G'85 of Saudi Arabia). Undergraduate programs include bachelor's and associate degrees in liberal studies. A certificate of advanced study for family nurse practitioners is also available. University College, SU's continuing education arm, offers credit and noncredit courses over the Internet in African American studies, engineering, English, geography, investing, management, nursing, philosophy, political science, psychology, religion, sociology, teaching, and writing. The School of Education offers several online graduate courses each year in instructional design, development, and evaluation.

About 1,000 students are enrolled in ISDP, approximately a sixth of whom are international students or Americans living abroad. "I'd always wanted to further my education and become a nurse practitioner, but with four growing children I had not gone back to school for my master's degree," says Wendy DiSalvo '80, who completed the family nurse practitioner program while living in Saudi Arabia, where she has worked as a nurse for nine years. "This program was a perfect opportunity to achieve my goal. You can live anywhere and complete your courses—the Internet allows effective communication with your professors.”

Mark Berman, director of network systems at Williams College in Massachusetts, is a distance student in the TNM program at the School of Information Studies. He chose ISDP mainly because the closest comparable program was more than a half-hour's drive from his home. "The advantages are the convenience of it—the ability to work the program into my schedule and around my children—and gaining contact with people who are also in the program and scattered all over the country," he says. "I developed friendships with people who are in different places, doing very different kinds of things. That's been rewarding.”

The only real disadvantage, he says, is the lack of direct face-to-face contact with classmates and faculty after the initial residency period. Berman says this was not much of a problem for him, having communicated on various networks for almost 20 years, but others in his classes needed time to adjust. Even so, he feels distance education has much to offer. "I'm getting as good an education as I would get in a classroom," he says. "Maybe better, because the online environment forces you to participate more than you might if you were just sitting in a room.”

Patricia Longstaff, an S.I. Newhouse School of Public Communications professor, says she often has more contact with her distance students than with students who are on campus. "They call me more often and send more e-mail,” she says. "They also communicate with each other at least as much as students do in my on-campus classes. These are professionals who are often more demanding of their coursework—and their professors—than other graduate students. They know what they want from their classes and aren't afraid to ask for it. They are good consumers.”

### Distance Pioneer

Syracuse University offered its first external degree program, the bachelor of liberal studies, in 1966. At the time, only the University of Oklahoma and Goddard College in Vermont offered baccalaureate correspondence programs, as they were then known. "There's always been a certain tint to the term 'correspondence program,' even though there are many fine ones still in operation,” Colley says. "The signature of Syracuse was the limited residency model. Faculty felt that combining short periods of in-person student contact as an anchor to the distance portion made a lot of sense.” Limited residency was then incorporated into a cluster of programs that began operating under the ISDP banner, all administered through University College. Since 1996, the School of Information Studies and the School of Management have managed their own distance programs, but seven of the University's schools and colleges still partner with University College. The academic content and program admissions are controlled by these schools, but University College does the marketing, handles registration and advising, and manages budgets for the programs. "We set up the residencies, make logistical arrangements such as hotels and classrooms, and provide technical support

"These courses are designed so students can tailor their work to their own schedules.” —Robert Colley

Residency requirements vary from program to program. Distance students working on a master's degree in nursing come to campus four times during their three-year program to take classes and participate in retreats. "We've often found that students who are on campus for two or three weeks each year know each other better than students who come to class each week,” says Janice Pedersen, director of professional and graduate admissions at the College of Nursing. "These students are extremely focused and career-oriented. They have the opportunity to devote two or three weeks a year to just their educational pursuits. They go home and stay connected by e-mail, listservs, chat rooms, and their online courses.” The last residency coincides with University commencement, in which distance students take part. "That's when they really feel like they're part of the University, when it finally all comes together,” Pedersen says.

Ginny Tierney, a clinical specialist in pediatric cardiology who is studying advanced practice nursing, says her classmates connected from the beginning. "They are the most incredible assortment of individuals I have ever had the privilege to be associated with," she says. "Talented people, one and all, and wonderfully supportive. Having the time together on campus gave us something a strictly online course would not: human faces to go with the names. We have remained connected through the Internet.”
E-mail and other Internet-based tools are the primary methods of communication among distance students today. Colley, who was ISDP director from 1981 to 1996, says written correspondence was used before the mid-'90s, along with "a fair amount" of long-distance telephone calls. "I remember in the early '80s, a guy in the M.B.A. program who was from Indonesia asked if we'd ever considered using the fax as a way of communicating between faculty and students," he says. "I didn't know what a fax machine was. I think about a year later we got our first one at University College. That was a bit of a breakthrough because it enabled people to send us assignments from remote locations." Another breakthrough came in the mid-'90s, with the growth of the Internet. Gradually, web-based programs were introduced to almost all distance programs.

Three software platforms currently deliver distance courses from SU, each serving different needs of the various degree programs. University College uses two course management systems, TopClass and Blackboard, in which faculty members build web pages for their courses. Stuart Williams, who coordinates technical support at University College, says both systems offer tools for creating, managing, and presenting course materials to students, collaborative tools for communication between students and instructors, testing and grading tools, and an administrative structure for managing students and classes. Both run on virtually any computer using a standard web browser such as Netscape or Internet Explorer. "They are different in appearance and, more fundamentally, how they interact with course developers," Williams says. "Blackboard is simpler, more intuitive, and less flexible. This makes it good for most instructors who create and upload their own materials. TopClass is more complex, less intuitive, and very flexible in terms of content creation. We use both at UC because each course and environment has its own requirements and each instructor has different needs and his or her own technology comfort level." The School of Management also uses Blackboard in two of its distance courses.

The School of Information Studies and the School of Education use a third system, called WebCT, which incorporates a sophisticated e-mail program. It features "threaded discussion capability," which means faculty can keep track of online discussions by subject, student, or date. The feature makes it easier to look up discussions about a particular topic or online seminar, or track a particular online student's contribution to the discussion. David Pimentel G'oo, coordinator for academic services at the School of Information Studies, says faculty members often find high-quality discussions taking place in these threads. "Students aren't caught off guard by a question," he says. "They have time to gather their thoughts and words and maybe even refer to that article they're trying to remember. This way they can put together coherent and cogent responses to their classmates' comments." Faculty also find that a reversal of traditional classroom pedagogy adds to the quality of discussions, Pimentel says. "Instead of everyone sitting in a room listening to the 'sage on the stage,' students lead the discussion and instructors don't have to be physically present for students to carry on conversations about important aspects of the course," he says. "Instructors comment regularly and often refocus the discussion or introduce new topics." Many of the distance students are information technology professionals who share their knowledge and bring real-world examples to the theories and ideas they tackle in their courses.
Executive Learning Center connects management students worldwide

Dennis Gillen's image appears in the upper left corner of the computer monitor, in a multipaned window that also contains an outline of key points he's making during a lecture. Gillen, associate dean of executive education in the School of Management, momentarily disappears as a video replaces him in the corner, but his voice can be heard over the new images as he guides students through them. The presentation was created in the school's WebCORE Express Studio from Caliber Learning Network, part of the new Executive Learning Center that opened last fall in the Crouse-Hinds School of Management Building. The studio integrates video production equipment, computing hardware, and Caliber's WebCORE intuitive software tools to create web-enabled training and communications programs. "By creating a studio on campus we have immediate access to a wide spectrum of delivery methods, including Internet, intranet, and digital satellite. The technology allows faculty to present executive education programs live over the Internet at pre-arranged times and dates to corporate desktops or to Caliber learning centers, and to archive the materials for on-demand access via the Internet. "The Executive Learning Center will give our faculty an opportunity to build courseware exclusively for an Internet-based learning environment," Gillen says. "Caliber provides us with the best delivery mechanism and access to premium advisors who understand education on the web. Our M.B.A. Upgrade course modules are perfectly suited for this environment."

The school will continue to present the M.B.A. Upgrade program and course modules using the traditional, in-person seminar model, Gillen says, but converting the program to an Internet-based multimedia format will make the materials available on a much broader scale. "The coming generation of executives perceives the computer and the Internet as an extension of itself," he says. "It's the way they learn and do business."

Judy Holmes

Colley says all three software platforms are generally used asynchronously, or on demand. The Maxwell School and the School of Management also deliver distance courses synchronously, usually through videoconferencing. Maxwell's Global Collaboratory delivers lectures to audiences at the University's Greenberg House in Washington, D.C., while the School of Management has teamed with a company called Caliber to broadcast its M.B.A. Upgrade program over the Internet to students in corporate facilities or Caliber learning centers (see related story at left).

Online Challenges

University College initiated its own series of online courses in 1997. The credit and noncredit courses are offered entirely over the Internet, without a residency period. Last fall, some 300 students enrolled in 19 online classes. Colley says approximately half the students in these classes lived on campus, but chose the online format to add flexibility or variety to their schedules. "They're typically undergraduate, open enrollment courses," Colley says. "We emphasize that these are not easier versions of campus classes, just a different format for certain people with certain needs."

James A. Schwarz, a professor in the L.C. Smith College of Engineering and Computer Science, says students in online courses have even more responsibility to keep up with coursework than students in traditional settings. "Probably the most frustrating thing is not seeing students respond as quickly as I'd like," he says. Another challenge is keeping students' attention. "Things don't happen serially as they do in a classroom; they're intermittent," Schwarz says. "If you let them drift off too much, it takes a while for them to come back in."

Schwarz's course, Everyday Miracles in Science, introduces students to a range of scientific principles and demonstrates their practical uses. Using the TopClass interface, Schwarz posts notes and accompanying illustrations for that week's topic in one window, and assignments and announcements in another. He logs into the system daily, usually from home, to check for completed assignments and messages from students. Though the class never meets face to face, Schwarz keeps things lively for students with a series of interesting experiments. "Remember Mr. Wizard?" he asks. "He would perform some razzamatazz, then actually explain the science behind it. I do it backwards in the web course—I spend the first five weeks going through some basic chemistry and physics. Their assignments are the Mr. Wizard part of things."

One experiment involves a half-liter bottle of seltzer water and a teaspoon of raisins. "I give them specific instructions: Open up the seltzer water, immediately put the raisins into the seltzer, tap the bottle, and tell me what you see," Schwarz explains. "And then tell me why it is you saw what you saw. The why is the important part. They can always tell me what they see." What the students see are raisins floating to the top of the bottle, then sinking, then rising to the top again. The science behind the phenomenon is explained in Schwarz's notes—carbon dioxide gas in the seltzer nucleates, or forms bubbles, upon the dimpled surface of the raisin, causing it to rise and fall as bubbles form and dissipate. Students write reports on their experiments and post them in TopClass for Schwarz.

The assignments have revealed a pitfall of the distance-learning format, Schwarz says. "One of the experiments involved steel wool,
"They know what they want from their classes and aren't afraid to ask for it. They are good consumers."

—Patricia Longstaff

he says. "I have a student from Korea, and he wrote me and said he didn't know what steel wool was. I tried to explain it to him and told him he could probably get it in a hardware store or supermarket, and he wrote back and said he couldn't find any." It took some time, but Schwarz thought of a way to replicate steel wool and wrote back to the student. "I told him to get some iron nails and a metal file—they have those in Korea," he explains. "Then file the nails to collect a pile of very fine particles." The experiment called for iron with a very large surface-to-volume ratio. Steel wool was perfect, but small particles from the scrapings also worked. "You have to be very careful when you give an assignment," Schwarz says. "In some cases, what might be very common to us is not necessarily that common to a student who's halfway around the world."

Optimizing Delivery

Vice Chancellor and Provost Deborah Freund established a committee last year to examine SU's continuing development of online distance education. Three subcommittees are examining specific academic, administrative, and technical questions that have arisen with the growth of distance education programs.

Among the issues: ensuring that the University has an adequate system for assisting distance students with technical problems associated with online course delivery. University College, for instance, has a help desk available five days a week, during regular office hours, for students and faculty involved in online courses. Other concerns relate to the challenges of advising students academically at a distance. Bethaida Gonzalez, assistant dean of student administrative services at University College, says that when she started working with distance students, she worried that she would not be able to establish the rapport with them that she shares with students she advises on campus. "But I found that working with students via e-mail and telephone really was no different," she says. "Giving students a sense that you care about them, that you are sincere about providing them with consistent and correct information, is key. Much of what we do helps students feel comfortable with us and, in the process, makes them feel they are part of the University." Her office has become adept at giving clear and concise information to students. "It is important that telephone calls and e-mail from distance students be handled efficiently and effectively," she says. "We try to minimize the number of calls students make to get the information they need."

Pimentel says distance learning is a good example of a student-centered program. "We try to accommodate the lives and lifestyles of students who have jobs, who have families, and who also want to pursue higher education," he says. "Distance learning allows them a unique opportunity, or at least a new opportunity that wasn't available in the strength and vitality we have now, to pursue graduate education and still live at home, maintain a career, and enjoy all the benefits they've come to expect in their daily lives."