Appendix B
Case Study of University of Texas at El Paso

Overview

The University of Texas at El Paso (UTEP) is located in the city of El Paso in far-northwestern Texas across the Rio Grande from Juarez, Mexico. El Paso has a population of 800,000; El Paso and Juarez together form an interconnected metropolitan area of 2.5 million people. More than 70 percent of UTEP’s 16,000 students are Hispanic, and most are first-generation college students who come from the El Paso community. The UTEP College of Education prepares about 600 candidates each year for initial certification through the undergraduate program. Approximately 60 percent of these graduates come from the community colleges feeding into UTEP and enter at the junior year. Another 150 are prepared through the Texas Alternative Certification Program, in which candidates teach full-time in an elementary, middle, or secondary school while employed by a public school district, and complete a one-year internship plus 20 semester hours of university coursework.

More than 70 percent of the teachers prepared at UTEP are Hispanic, making UTEP one of the largest entities in the country that prepare Hispanic teachers. The link to the local community is strong: Approximately 60 percent to 80 percent of the teachers in its partner districts come from UTEP. The faculty counts as an indicator of success not just the fact that districts seek out UTEP graduates, but also that they are told that teachers prepared at El Paso become the change agents for other teachers in area schools.

Partnerships between the university and the local schools are central to the mission of the University of Texas at El Paso. The College of Education’s Web site indicates the commitment to serving the Hispanic community: “The mission of the College of Education is to prepare effective teachers, counselors, diagnosticians, and school administrators, who successfully address the problems of schools and other youth-serving agencies, especially in communities with a significant Hispanic population” (University of Texas at El Paso, 2001).

Leadership’s Impact on Partnerships and Technology

Long-term leadership at the university has provided a history of support for the partnerships found at UTEP. The president, Dr. Diana Natalicio, has championed service to the El Paso community since her appointment almost 15 years ago. The provost, Dr. Stephen Riter, has been at UTEP for eight years. Both Dr. Natalicio and Dr. Riter have also been supportive of the College of Education in its role preparing educators for the local community. As of the writing of this report, one of the four major headings on the home page for the UTEP Web site (www.utep.edu) is “Teaching as a Career,” signaling the importance placed on teacher education at UTEP.

The College of Education also benefited from continuity in leadership as it built up its programs. Dr. Arturo Pacheco was dean for 10 years and served as chair of the Teacher Education Department. Dr. Jorge Descamps was at UTEP for 28 years, the last 10 years serving as assistant dean of the College of Education and the chair of Teacher Education. However, both of these leadership positions changed in 2002. Dr. Josefina (Josie) Villamil Tinajero, former associate
dean and a member of the administrative team, was serving as acting dean at the time of the visit and in the summer of 2003 was appointed permanent dean. Dr. Tinajero also directs the nationally acclaimed Mother-Daughter/Father-Son programs with the local community. Dr. Tinajero is a noted author and featured speaker in the field of bilingual education and in the recruitment and retention of Hispanic students in higher education.

Dr. Elena Izquierdo has taken Dr. Descamps’ place as chair of Teacher Education. After working in the K–12 environment as a teacher, assistant principal, principal, and director of civil rights, she returned to El Paso—“home” and a community where she believes she can make the greatest impact.

Dr. Tinajero stated her intention to expand the emphasis on community partnerships and on technology in the college. Her first action as acting dean was to provide a summer retreat for faculty, in which technology was, as she put it, “the number one issue.” One of the UTEP technology “superstars,” Dr. Henry Ingle, led the discussion on how faculty can better integrate technology into their teaching and the development of online courses. The campus technology support director, Eldon Posie, also attended the faculty retreat, along with a new faculty hire, Carol Awalt, technology integration specialist, whose job it is to work with faculty in technology integration. Awalt conducted a survey of faculty needs and concerns and is working with faculty on a one-on-one basis with appropriate hardware and software. She sees her job as getting staff up to speed to the point that some time in the future a separate course will not be necessary. She wanted to focus on assisting them with lesson plans and using technology for specific learning concepts. She noted that alternatively certified teachers are almost always better prepared.

Dr. Tinajero’s leadership in her year as acting dean was important in securing funding for technology in the face of state budget cuts impacting all parts of the university. The state cut the College of Education’s budget by 7.5 percent (as a result, the hiring of new or replacement faculty was cut from eleven to four positions) and the technology budget by 50 percent. Nonetheless, Dr. Tinajero was able to get a higher technology allocation from the university administration this past year than in the previous year. In fact, the technology allocation for the College of Education is the highest in the university, and in this past year all the college’s funding requests for technology from the university have been approved. Much of the technology in the college needs upgrading, and Dr. Tinajero was pleased when she was able to get approval for doubling the student technology fee making it possible to focus on upgrading technology in the college.

Despite the ending of several grants that had supported technology initiatives in the past (e.g., the five-year Technology Innovation Challenge grant from the U.S. Department of Education), half the technology efforts in the college continue to be funded by outside money. A $100,000 grant from the Texas Infrastructure Fund has made it possible to put wireless hubs throughout the education building. Additional funding from the El Paso Partnership made it possible to increase funding for hardware acquisition. Two new staff have been hired with primary responsibility to assist faculty and school partners with the integration of technology. And, a recent $29-million grant from the National Science Foundation’s Math/Science Partnership will create a new emphasis on using technology to support the teaching and learning of mathematics and science in the partnership schools. While not a technology grant per se, UTEP’s selection as one of the Carnegie Corporation’s grantees in the Teachers for a New Era program will also extend the
visibility and support for strong K–16 partnerships between the university (both in teacher education and the arts and sciences) and the local school districts.

Dr. Tinajero believes that leadership “from above” is important to convince faculty to seek out grants with technology as a focus. It is also necessary to have this top-down encouragement for faculty to redesign courses to better employ technology. For example, she is urging faculty to submit courses to the statewide higher education group that is promoting the use of online courses across the system. With design and proposal assistance from Dr. Ingle and his staff, ten College of Education courses have each received $15,000 to $17,000 to redesign their courses for online delivery.

Dr. Tinajero also believes that UTEP has a special niche in its expertise in bilingual education that will serve it well in the outreach it can offer through online courses, especially as expectations grow among those who live and work in the many rural areas far from the university. Some online courses will be aimed at helping paraprofessionals meet the certification requirements of the No Child Left Behind Act. However, faculty concerns about the courses are similar to what was heard by researchers in other case site visits, such as these: Will sufficient students enroll? What might be the impact on faculty workload and on their work in the schools? Will teaching quality suffer?

**Partnerships With Local Schools**

El Paso County has approximately 135,000 students attending public schools. More than 80 percent of these students are Hispanic, and nearly 75 percent qualify for free or reduced-price lunch. A large number have limited English proficiency and require bilingual or English-as-a-second-language instruction. The overall dropout rate is approximately 30 percent, although pupils in the region generally score at the state average in achievement tests.

The UTEP College of Education prepares a significant number of beginning teachers for the districts in the metropolitan area. During the case study visit, it was not possible to observe student teachers or to meet with them, because classes at UTEP had ended for the semester. However, the research team met with recent UTEP graduates now teaching in El Paso schools, teachers completing their two-year certificate program funded under the 1998 Technology Innovation Challenge grant, and visited three of the El Paso Partnership schools. The El Paso Partnership was created in 1996 with support from the first U.S. Department of Education $3.5-million Technology Innovation Challenge grant awarded to the district. This five-year grant, awarded in 1995, was followed in 1998 by a $10-million Challenge grant, which ended in 2003.

The College of Education is expanding its partner school network to bring 12 local schools in the El Paso Partnership into a Professional Development School (PDS) status, where teacher preparation classes are taught and serve as centers for professional development and research. University faculty from the School of Arts and Sciences are also involved in teaching in the schools for the secondary education majors.

The PDS model, however, is expensive and creates a problem for faculty because it requires them to spend so much time off campus and out in the schools. As has been noted in the literature about partnerships, faculty express concerns about finding time for publication, research, and graduate-
level guidance in the context of increased time demands for time spent in local schools. In the face of budget cutbacks, there has been some pressure from the provost to reconsider whether the intensive field-based model is worth the extra expense and effort. Dr. Tinajero is trying to work out a model that will have faculty rotate through work in the partnership schools. The real question is yet to be answered: Does the intensive, field-based model create better teachers? The research to date is inconclusive.

Partnerships and Technology

Interviews with recent graduates and the faculty in partnership schools suggest that graduates of the UTEP College of Education enter the classroom well prepared to begin teaching in the El Paso schools. The new graduates were satisfied with the methods courses in their teacher preparation program as well as clinical preparation they experienced. They also graduated feeling ready to teach with technology. The biggest challenges these students faced in their first years of teaching were not technological concerns, but rather knowing how to deal with the problems the students bring with them from home. Graduates noted that they would have preferred to have more information on appropriate agencies to which they can refer students when particular social problems are identified.

The Challenge Program, funded through the 1995 and 1998 U.S. Department of Education Challenge grants, has been the major technology professional development program for teachers in the El Paso Partnership. (Five teachers from each of the participating schools volunteer to participate for this two-year program.) There have been nearly 500 teacher technology leaders and 200 master teachers with master’s degrees trained through these programs to date.

During the case visit, interviews were held with a focus group of seven of the teacher technology leaders completing the final year of the program. Several recent UTEP graduates who participated in the Challenge Program described it as one of the best programs they have ever experienced. They believe the program, with its student-centered, constructivist approach to using technology, taught them practical skills and gave them quality experiences in using technology to help advance student learning.

In the Challenge Program, teachers learned to use various software packages and technology for problem-based science activities. They also mentioned a number of Web sites their instructors shared with them as being helpful in their teaching. The Challenge Program enabled them to learn how to use software including BIOSIMS, WebQuests, Geometry, and Sketchpad, as well as National Geographic and language-arts Web sites that could be used in lessons supporting content needed for the Texas Assessment of Knowledge and Skills (TAKS) state test. They also learned to use computer-based laboratory probe ware to collect and analyze information, and they created a parent-awareness Web site. These teachers noted that they especially appreciated the opportunity for self-reflection and the help in learning which teachers to draw upon as sources of information and resources.

The goal of the Challenge Program is for teacher technology leaders to learn technology-integration skills over a series of monthly meetings and to become informal mentors to other teachers in their schools. Teachers participating in the program receive a laptop that can be used
as long as they remain in their school, and they receive a certificate at the completion of the program.

The teachers from the Challenge Program reported that they chose to be part of the program for a variety of reasons. Some had never been trained with technology, and this was the first chance to learn. Others had some experience but wanted to improve their skills and deepen their knowledge. Teacher skills in technology at the completion of the program ranged from novice to experts. While the time commitment was considerable for participating teachers, they all reported it was worth the time spent. The mentoring commitment varied in terms of how it was structured at each of their schools, and in the amount of support provided by administrators to enable them to conduct any mentoring activities. In most cases, this technology mentoring was informal with little time set aside during the school day to assist their school colleagues and with no funding set aside for hiring substitutes for classroom visitations or in-school training time.

Three Partnership Schools

Three partnership schools were visited as a part of the case study: Canutillo Elementary, Ysleta Middle School, and Bowie High School. In each of these schools, strong principals and staff have been instrumental in employing technology to give students positive experiences that enhance their self-images and help them gain confidence in themselves. These partnership schools may not be typical of what is found around the district, but they were made available to the research team in order to demonstrate sites that are exemplary in the ways they use technology.

Canutillo Elementary. Canutillo Elementary School serves a low-income community of 800 students, 94 percent of whom are on free or reduced-price lunch. Now in his sixth year as principal, Hector Girón immigrated to the United States from Mexico and is working on a doctorate in education at UTEP. Describing himself as dedicated to the improvement of all children, Girón is a technology advocate. He oversees two buildings, a PK–4 school wired with an average of four computers per classroom and an older building housing the fifth and sixth graders also containing considerable technology. The school has received computers from various federal and state grants but is facing problems found at several sites in this case study: replacing aging equipment as well as meeting the increasing expectations of both students and teachers as they become more sophisticated with technology. At the time of the case visit, Canutillo had submitted a grant proposal to the Beaumont Foundation for additional funds for hardware. The school is moving toward a greater emphasis on the use of laptops because they can be moved from class to class via a mobile lab, can take advantage of the wireless network, and are particularly important for project-based learning activities, which the school emphasizes.

Canutillo is a Professional Development School for UTEP and last year hosted 22 student teacher interns in the fall semester and 16 in the spring. The student teachers observe modeling of technology integration in the classroom. Twenty-five of the 45 teachers on staff at Canutillo have participated in six-day workshops on technology integration provided by the school.

Girón believes that technology is a powerful tool for all children and that it is critical that children from poor families have access to and the ability to use technology in their learning. One of the
most powerful uses of technology at Canutillo has been to help make all students competent in both English and Spanish. Students use both English and Spanish Web sites with instruction emphasizing cognitive understanding of both languages, not just conversational knowledge. Teachers at Canutillo integrate technology into the curriculum and almost all content areas by including Web page development and information gathering on the Web in classroom instruction. Teachers feel this use of technology helps students develop social skills as well as achieve better on state achievement tests. Wherever possible, teachers make a great effort to make learning experiences relevant and useful to solving real problems, and they believe technology helps them do that.

Technology is also used at Canutillo to reach out to the broader community, and computer labs are open for parents one day a week. Parent involvement “at their own comfort level” is emphasized at Canutillo; parents may come with their children to the library, to computer labs, or just to sit in on class to observe. It is not unusual, according to Girón, to find parents in the cafeteria eating with their children. Once a month, there are parent meetings for which parents set the agenda. In early May 2003, the school hosted a technology fair, and 300 parents attended. Canutillo administrators and teachers believe that technology plays an important role in their students’ education, and they see technology as a positive factor contributing to the school’s high (80-percent to 90-percent) passing rate on state exams. They believe that community members understand this important contribution by technology.

\textit{Ysleta Middle School.} At Ysleta Middle School, where a similar percentage of students are on free or reduced-price lunch, the principal, Barbara Trousdale, a 12-year veteran, has also been very resourceful in finding ways to support technology initiatives in the school. Site-based control of the budget has been helpful because it has allowed flexibility in how the school uses its resources. For example, building funds and other resources have made it possible for Ysleta to wire all of its classrooms, provide all teachers with laptops, and equip two computer labs. Mobile laptops have also been very important here. On the other hand, much of the equipment is aging and needs upgrading, and replacement will be a significant issue for the school.

The faculty at Ysleta cited several technology initiatives as especially valuable to them: UTEP’s 1995 Challenge grant program, the Netschool Laptop Initiative, and the 1998 Challenge grant program for technology leader teachers and master technology teachers. Even though the school is well equipped by most standards, one of the mathematics teachers noted, “We have labs and I have three machines in my room, but it is never enough because if I had more I would find even more uses.” Faculty are also aware that the technology is coming to the end of its useful life, and that budgets are so tight that replacements are unlikely soon. This is a worry for teachers who have grown accustomed to integrating technology into instruction.

When asked about the value of the partnership with UTEP, the educators at Ysleta reported that the partnership has expanded their horizons and introduced them to more research on student-centered practices, which has led to greater student motivation and fewer classroom disruptions. They maintain that the partnership works to the mutual benefit of the university and the school.

\textit{Bowie High School.} Bowie High School, located in South El Paso, just over the border from Mexico, also serves students who are predominantly from high-poverty backgrounds. A
substantial number of Bowie students are recent immigrants from Mexico. Technology is spread throughout the buildings on the campus, but most of the school’s computers are clustered in content-area labs. In the literacy wing, a computer lab is heavily used for developing English literacy skills. A mix of computers of varying ages and brands are employed to assist students on their language and writing skills as well as learning core content. Students are asked to create reports using Microsoft® Word®, PowerPoint®, and HyperStudio®. Teachers commented that combining technology tools with specific assignments improves student learning of the content and their ability to use appropriate English words and grammar.

Another example of technology supporting content was demonstrated in the math computer lab managed by a former mathematics teacher. In this lab, students use or develop lessons that expand and support content in the mathematics curriculum. One mathematics teacher has worked closely with students on a project in which they researched various careers on a Web site and used a spreadsheet to enter data on the skills required in their chosen field, its entry-level and average pay scales, and other relevant information. According to the math computer lab teacher, the hands-on involvement of this teacher (the district’s first National Board Certified teacher) in creating and overseeing the technology-supported activity in the lab was unusual. She found that it was more often the case that classroom teachers fade into the background or even leave the lab while the computer teacher conducts the math lab activities.

Bowie will house a new program, the International Business and Public Affairs Academy, taking 60 students per year, starting with the freshman class in the fall of 2003. Funded through the district, the academy builds on the international flavor and many international resources in El Paso. Bowie also has a modern, state-of-the art technology center on its campus, with classrooms for computer-assisted design, television production, graphics, and other classes about technology. At the time of the case visit, Bowie had made the network and computers in the technology center available for specially trained district teachers who were creating online courses for student remediation in the El Paso Online Academy. The Online Academy makes it possible for teachers to assign whole courses, course sections, or course modules that students can study online as needed for extra help or when they must repeat courses. The Online Academy is seen as a different way to help students master needed content in a self-paced manner, presented in a format that goes beyond the content found in textbooks in face-to-face classroom courses.

**Challenges for the Partnership**

School and higher-education personnel interviewed for the case visit reported that the El Paso School District has a serious problem with teacher retention. In this, the district mirrors the nationwide problems noted with new teacher attrition: Nationally, 40 percent of all teachers leave teaching by their fourth year of teaching (National Commission on Teaching and America’s Future, 2003), and El Paso is no exception. According to Dean Tinajero, the numbers are similar in El Paso: Forty percent of new teachers leave by their fourth year of teaching. Dr. Tinajero believes that teachers leave the profession because they are not supported in their schools and experience unsatisfactory working conditions and low pay. Many leave teaching for higher-paying jobs in immigration and security work in the expanding employment market along the Mexican border. As one way to help stem this tide, the UTEP College of Education is working with
districts to develop a teacher-retention plan. As a first step, they created a retention institute that
researches the reasons teachers leave the profession.

**Concluding Comments**

UTEP is an example of a teacher education program highly integrated into its
community—candidates are recruited from the local area and prepared as high-quality teachers
committed to returning to teach in their local schools so that the next generation of students will
be successful learners. UTEP faces many challenges in accomplishing this task but has been
successful in attracting major new sources of funding (e.g., the NSF math/science grant and the
Carnegie Teachers for a New Era grant) that will help position the institution as it continues to
move forward as a college of education that builds successful partnerships to support technology-
competent teachers.
References
