

Texas

Preparing Teachers for a New Era

What will it take to prepare a new generation of teachers who are able to work successfully with an increasingly diverse student population and help their students achieve new rigorous learning goals? What are the key features of teacher education programs that can provide the public schools with such teachers? And what are the implications of our best answers to these questions for state policy? For state policymakers, university leaders, and district officials charged with ensuring that all children are taught by highly qualified teachers, it is imperative to answer these questions about teacher quality. Finding the answers and acting on them require the commitment, collaboration, and coordination of a number of public and private institutions and agencies, and of multiple levels of government. Access to a high-quality teacher education program can affect teachers' productivity, the longevity of their careers, and the quality of the learning opportunities provided for their students.

Through its Teachers for a New Era (TNE) initiative, Carnegie Corporation of New York, with support from the Annenberg and Ford Foundations, is stimulating a thoughtful search for answers by supporting ambitious reforms in selected teacher education programs across the country. Drawing on the wisdom of national professional organizations, reform commissions, and the research community,

2003–2004 Snapshot

Approved Teacher Preparation Programs:	143
Initial Teacher Certificates Issued by the State:	22,175
K–12 public school teachers:	294,741
K–12 Public School Enrollment:	4,311,502

Carnegie is challenging these institutions to develop exemplary teacher preparation programs based on three design principles:

1. **Decisions Driven by Evidence.** The new teacher education programs would be guided by a culture of evidence. Program content and pedagogical practice would be based on credible evidence drawn from research literature and from the experience of their students. Program effectiveness would be determined by the impact of their graduates on student achievement, and these data would drive the continuous improvement of their programs.

2. **Effective Engagement of Arts and Sciences Faculties.** The education of prospective teachers would include the full engagement of faculty in the disciplines of the arts and sciences (A&S) to ensure teachers obtained the depth of subject-matter understanding and pedagogical content knowledge needed to understand and address students' learning needs. A&S faculties would collaborate with teacher educators to ensure that prospective teachers were well prepared to teach the curricula of the public schools served by the institution.

3. **Emphasis on Teaching as a Clinical Practice Profession.** Teacher education would integrate academically rigorous experiences with immersion in clinical practice. This would entail close cooperation between colleges of education and K–12 schools, use of exemplary K–12 teachers as clinical faculty

appointed to the college of education, and support for residency programs for beginning teachers over a two-year period of induction.

With support from Carnegie, 11 institutions in 10 states are redesigning their teacher preparation programs according to these three design principles. They are critically reconsidering their use of the knowledge base, their collection and use of evidence, their curriculum and standards, and their school-based relationships in order to produce higher-quality teacher candidates. It is hoped that the accomplishments of these institutions will offer interested policymakers, university leaders, and state education officials blueprints and tools to help them develop improved teacher preparation programs. Such programs will be capable of producing the teachers we need to raise the performance of the public schools and close the achievement gaps that perpetuate social inequities.

Clearly, states have an important role to play in this work. Through leadership, policymaking, resource allocations, and oversight, state governments shape the environments in which public and private teacher preparation programs operate. They can encourage and support efforts by these programs to restructure so as to foster a culture of evidence, engage A&S faculties, and provide prospective teachers with the rich and sustained clinical experiences and support they need.

For each of the 10 states in which TNE institutions operate, CPRE has developed a policy profile that explores the interaction of state policies and programs with the core ideas and practices associated with Carnegie's three design principles. For each state, we first provide a brief description of how the TNE institution is acting on the three design principles. Then we describe the current policy context for teacher preparation and the state

role and policy strategies for improving and ensuring teacher quality. Next we explore specific policies and programs in the state related to the three design principles to identify those that are supportive, those that may need strengthening, and those that need reconsideration by policymakers, state department officials, and teacher preparation institutions. This profile focuses on Texas, and where appropriate we offer concrete examples from the restructuring now under way at the University of Texas–El Paso (UTEP), one of the 11 institutions to receive a TNE grant.

The University of Texas–El Paso

The College of Education (COE) at UTEP enrolls over 1,800 undergraduate and 1,200 graduate students. UTEP has a special stake in teacher preparation as its students often begin their education careers in the public schools serving El Paso. The relationship between UTEP and regional schools is viewed as a “closed loop” since almost 70 percent of teachers working in the public schools in the El Paso area hold one or more UTEP degrees.

At the undergraduate level, the COE offers programs designed to provide students with opportunities to attain the knowledge, values, and skills needed to enter the teaching profession and to receive an initial Texas teaching certificate. For prospective elementary teachers, a bachelor of interdisciplinary sciences degree (BIS) is offered through the college of education. Secondary preservice teachers must earn a degree in their content and a minor in education. At the graduate level, COE offers Master's degrees in education as well as graduate level courses leading to advanced Texas licensure.

In addition, UTEP offers an Alternative Certification Program (ATCP). Designed for individuals who already hold a bachelor's

degree in a field other than education, the 12 month program involves work and study. Candidates in ATPCP work as paid teachers while taking UTEP courses and complete 45 hours of observation in the area in which they are seeking certification.

In 2003, UTEP received a \$5 million challenge grant from Carnegie Corporation's TNE initiative. A key focus of activity through the UTEP-TNE initiative is the development of an "emerging model," which connects academic coursework, clinical practice, and supports provided to preservice teachers through the university. This model is guiding the redesign of educator preparation at UTEP. It recognizes the interrelated and important role that each of these areas serves in preparing highly qualified teachers who will educate students in the El Paso area and elsewhere.

Like other TNE institutions, UTEP has organized work groups around the three TNE principles. For example, as part of its commitment to make decisions driven by evidence, UTEP has expanded efforts to collect, analyze, and report data that informs institutional and program level decisions. UTEP is piloting a pupil learning growth model to examine the relationship between teacher preparation and knowledge and student learning in mathematics. Lessons from the pilot will inform the development and implementation of a larger scale effort to measure pupil learning growth in the classrooms of the teachers graduating from UTEP programs.

In addition to the learning growth pilot, nine faculty teams are conducting research focused on the content and pedagogical knowledge required of new teachers through research and development mini-grants. These mini-grants address questions such as the impact of oral reading activities on the development of second language emergent readers, and the

impact of studying in a second language on memory performance. These grants also focus on the development of curricula that are aligned with state K-12 standards and with nationally recognized best practices in the field. One team, for example, is conducting a feasibility study of the design and adoption of a capstone course for preservice middle school mathematics teachers.

UTEP has also developed and administered a survey to secondary science teachers in the El Paso area to determine the preparation of high school science teachers and to understand their perceptions of the strengths and weaknesses of their preservice preparation and current professional growth opportunities. Additionally, the UTEP-TNE Induction workgroup has developed surveys for new teachers, mentor teachers, and school level administrators working in school districts across the El Paso region to examine strategies for addressing their needs. The results of these surveys will inform the design and implementation of programs at UTEP and ensure that the University's efforts complement those under way in the districts.

Finally, UTEP has undertaken an examination of state assessment data to identify gaps in student performance that might result from deficiencies in teacher content knowledge. For example, a decline in middle school mathematics scores among students led to the development of the capstone course for candidates seeking certification in middle school mathematics.

The increased engagement of Liberal Arts and Science faculty has been another key element of the redesign of educator preparation at UTEP. Although there was a history of interdisciplinary collaboration among faculty before TNE, UTEP has stepped up its efforts to foster and support collaboration among Education, and Liberal Arts and Sciences

faculty. They are being encouraged to revise content courses for teacher candidates and to model the best pedagogical approaches to teaching the content. TNE work groups are focusing on the improvement of teacher preparation in core content areas (English/Language Arts, Fine Arts, Mathematics, Science, and Social Studies) and include faculty from across the UTEP Colleges of Education, Liberal Arts and Science, as well as colleagues at the El Paso Community College from which many preservice teachers at UTEP earn their credits in the core curriculum.

Site-based clinical practice has long been an important component of educator preparation at UTEP and continues to be emphasized. Through the TNE grant, a three-year university-school induction and residency model is being developed. In addition to providing increased support for both new and mentor teachers, this new induction model will engage school and district leaders in the examination of the impact of local policies and practices on the effectiveness of new teachers.

Education Policy Context

Demographic Trends. Texas public school enrollment grows by approximately 75,000 students per year, an increase of about 2 percent annually. Students requiring special services such as bilingual or special education constitute the majority of the increases in enrollment.

In addition to the press of increasing student enrollments, Texas is faced with increasing teacher attrition. The State Board for Educator Certification (SBEC) estimates that in the 1998-99 school year, Texas school districts had to fill more than 63,000 teaching positions, but only 5,700 of these positions were created to accommodate increasing student enrollment. The majority of vacancies

were the result of teachers leaving the profession (46,600) and teachers retiring (11,000).

For the 2004-05 school year, the Texas Education Agency (TEA) designated special education, mathematics, science, foreign language, bilingual education, and low-income schools with greater than 30 percent of enrolled students from low-income families as areas of teacher shortages.

Political Climate. School finance policy continues to dominate and divide the Texas Legislature, making it more difficult to galvanize support and resources for addressing issues of educator preparation and teacher quality. However, recent efforts to enhance teacher quality and teacher preparation have been under way over the past five years, as described below:

- In 2001, the 77th Texas Legislature directed the Texas Higher Education Coordinating Board (THECB) to develop a strategic plan, in collaboration with various state agency and policy stakeholders, to address the teacher shortage issues;
- In 2005, the 79th Texas Legislature charged the Subcommittee on Higher Education with studying the relationship of College of Education coursework to teacher effectiveness and student performance; examining the state role in holding teacher preparation programs accountable for delivering instruction strategies demonstrated to be effective by scientifically-based research, particularly in the area of reading; examining past and current studies linking teacher preparedness with student performance and identifying any barriers to conducting such research; and making recommendations for legislative changes to improve teacher preparation programs;

- In August 2005, Texas Governor Rick Perry signed an executive order directing school districts to implement the *65 Percent Solution* which requires districts to put at least 65 percent of their budgets into the classroom (i.e. salaries for teachers and aides, extracurricular activities, etc.). Supported generally by Republicans, the effort is being promoted as a way to improve education without increasing taxes; and,
- In November 2005, Governor Perry signed an Executive Order for a grant program to provide performance incentives to reward Texas educators. The Governor's *Educator Excellence Award Program* authorizes rewards for teachers, and other school personnel, at high poverty schools reporting high levels of improvement in student achievement through a new TEA incentive pay plan. Under the proposed plan, teachers at selected schools will be eligible to receive salary bonuses for raising student performance levels. Schools will be eligible if they receive the top academic ratings awarded in the state's accountability system, or have shown strong performance gains in the areas of mathematics or science. The incentive plan recommends bonuses of \$3,000 - \$10,000 per individual.

Governance Landscape. Texas has a complex teacher education system with multiple university systems and several public educational agencies charged with responsibility for various aspects of teacher education and teacher quality. At the post-secondary level, there are six university systems each with its own governing board: University of Texas, Texas A&M, Texas State, University of Houston, University of North Texas, and the Texas Tech University System.

The THECB, created by the Texas Legislature in 1965, provides leadership and coordination for the Texas higher education system. The THECB consists of 13 members, a chair, and vice chair—all appointed by the governor for six-year terms.

The TEA is the administrative unit for primary and secondary education, and is comprised of the commissioner of education and agency staff. The State Board of Education (SBOE) is linked to the TEA, and consists of 15 elected members representing different regions of the state. One member is appointed chair by the governor. Together, the TEA and SBOE guide and monitor activities and programs related to P–12 public education in Texas.

Since 1995, The State Board for Educator Certification (SBEC) has been charged with the approval of, and accountability for, all educator preparation programs. SBEC is also responsible for regulating certification. In an effort to enhance the effectiveness of the coursework required for certification, the Texas Legislature asked the THECB to work with SBEC in 1999 to develop and adopt educator preparation coursework guidelines that promote the integration of subject matter knowledge with classroom teaching strategies. SBEC was recently placed under the Texas Education Agency although the SBEC Board remains in place with all its responsibilities in tact.

To enhance cooperation between the THECB, TEA, SBEC, and the Texas Workforce Commission (TWC), a joint P–16 Council was first formed in 1998, and then formally created in 2003, by the Texas Legislature. The Council is required to meet quarterly.

Teacher Preparation. In Texas, 15 universities and colleges are authorized by the SBEC to operate teacher preparation programs, and there are 143 approved teacher

preparation programs. In the 2003-04 school year, 22,715 initial teacher certificates were issued by the state. In the same year, there were approximately 294,741 teachers and 4,311,502 students in Texas schools.

State Role in Teacher Preparation

The current state vision for teacher quality and teacher preparation has its roots in major public school reform efforts undertaken in the 1980s. In 1984, House Bill 72 framed rigid guidelines for teacher certification and initiated competency testing and a career ladder for teachers. The career ladder tied salaries to years of experience and educational degrees. Stricter attendance rules for students also were enacted, and the Bill legislated the “no-pass, no-play” rule, which prohibited students scoring below an acceptable level on state tests from participating in any extracurricular activities. National norm-referenced testing was mandated, and new equalization formulas for state financial aid were adopted.

In 1987, landmark legislation was passed (Senate Bill 994) forbidding degrees or majors in education and limiting the number of semester credit hours in education for teacher candidates to 18. By the late 1990’s, adjustments and enhancements were made to these policies, as described below.

Program Accreditation. Consistent with national trends in program approval, Texas adopted a performance-based accountability system for educator preparation in 1995-96. The Accountability System for Educator Preparation (ASEP) represents a departure from the previous system of accountability that relied on procedural compliance for approval of programs (including components such as number of semester hours in each subject area necessary for certificate completion, faculty qualifications, course curricula and physical

facilities requirements). The previous system also used different approval processes for each of the three major pathways to teacher certification (undergraduate degree preparation programs and graduate programs offered through institutions of higher education, alternative certification programs for individuals with a bachelor’s degree, and centers for professional development and technology).

Under ASEP, annual accreditation ratings are based on the combined performance of teacher candidates on the assessments required for certification, as well as the disaggregated performance by gender and ethnicity. To be accredited, an educator preparation program must achieve at least a 70 percent initial pass rate (assessments taken during the candidate’s final year in the program) or an 80 percent final pass rate (based on performance over the final and subsequent year). The first ASEP ratings were issued in 1998.

Teacher Certification Policies. There are three requirements for being certified to teach in Texas. First, a prospective teacher must hold a bachelor’s degree from an accredited college or university. Texas institutions do not offer degrees in education so that a teacher must have an academic major as well as teacher training courses. At UTEP, and possibly other institutions, however, students seeking certification to teach grades P–4 and grades 4–8 may earn a bachelor of interdisciplinary studies degree from the college of education. Second, teachers must complete an approved program of teacher training. Third, teachers must complete and pass two tests: a pedagogy and a content area examination.

In 1999, SBEC began to develop new standards for Texas educators that delineate what beginning educators should know and be able to do. The new standards form the basis

for the new statewide certification testing program, the Texas Examinations of Educator Standards (TExES). Each set of content-area standards is aligned with the Texas Essential Knowledge and Skills (TEKS), the state's required curriculum for public school students.

The TExES examination system is comprised of two tests: a pedagogy examination known as the Pedagogy and Professional Responsibilities (PPR) exam and the appropriate 8-12 content area exam.

In 1999, Texas also introduced a new certification system that includes a *Standard Classroom Teacher Certificate*, that must be renewed every five years with 150 hours of professional education to remain valid and a *Standard Master Classroom Certificate* that is also renewable every five years with 200 hours of continuing professional development. These replaced the lifetime Provisional and Professional certificates. Many certified educators were “grandfathered” which means they hold certificates that do not require renewal. It is the responsibility of the school district to provide educators with the annual professional development required by the Texas Education Code.

Routes to Educator Certification.

There are several routes to acquiring certification in Texas. Traditionally, university-based teacher education programs are usually delivered as part of a bachelor degree program. However, most colleges and universities also offer programs designed to prepare people who already hold bachelor's degrees and want to obtain educator certification.

Prospective teachers may also seek certification through alternative routes; an option that has become increasingly popular since such programs were introduced in the 1980s. Some regional education service

centers and some private entities offer alternative programs of preparation in addition to those offered by institutions of higher education and large school districts. These programs may involve university coursework or other professional development experiences as well as intense mentoring and supervision. During the last decade, there has been substantial expansion of private entities that offer an alternative certification pathway.

Texas also offers a *Temporary Teacher Certificate* to individuals who hold a bachelor's degree or higher degree from an accredited institution of higher education with an academic major that is related to at least one area of the Texas public school curriculum, and related to current 8-12 certification structure. In addition, individuals must complete and pass the appropriate TExES content and pedagogy examinations.

Finally, teachers coming to Texas from other states who hold a valid standard certificate or credential from that state that is recognized as equivalent to a credential offered by SBEC may be eligible to apply for and receive a one-year, non-renewable certificate.

These various alternative routes to certification are affecting the market for highly qualified teachers as increasing numbers of prospective teachers are attracted to them. Many in the higher education community believe that students are opting to acquire certification through one of these alternative paths described above because they are less expensive and less time-consuming. There is growing concern among these community members that some of these new teachers are being placed in classrooms without any opportunity for supervised clinical practice.

Induction. In 1999, SBEC initiated a pilot induction program—the Texas Beginning Educator Support System (TxBESS). This is a

comprehensive induction program that includes mentoring, professional development, and formative assessment for beginning teachers in Texas. The explicit objectives of the TxBESS are to (1) increase teacher retention, (2) assist teachers in developing teaching practices that support high quality instruction, and (3) improve student performance. In testimony to the Texas State Education Committee in 2004, one official commented that TxBESS is “more than just a buddy system. It is an induction program focused on instruction and improving student achievement.”

The 2001-02 school year marked the end of the three-year pilot for the program, funded in part by the U.S. Department of Education. While the general consensus was that the scope of services provided by the TxBESS to beginning teachers was of high quality, the pilot program was not funded for scaling-up in Texas.

Since the pilot program ended, the provision of induction programs for new teachers has been a local responsibility and the level and quality of support has varied widely. However, SBEC is requesting approximately \$18 million for the support of beginning teachers in its Legislative Appropriations Request for Fiscal Years 2006 and 2007.

The Role of Institutional Partnerships in Teacher Preparation. In 2003, chancellors of the three largest university systems in Texas signed an agreement to create a collaborative research center for the enhancement of teacher education programs across Texas.

The Center for Research, Evaluation, and Advancement of Teacher Education (CREATE), established through funding by the Houston Endowment, involves a partnership among the Texas A&M System, the Texas State System, and the University of

Texas System. CREATE’s mission is to systematically explore quality and effectiveness issues related to teacher preparation, retention, and student achievement. Its five research priorities are (1) models of teacher preparation; (2) teacher induction and support; (3) leadership and teacher preparation programs; (4) professional development and continuing education for teachers; and (5) demographics of teacher production, placement, and retention.

These three partner universities account for more than 60 percent of all the new teachers produced by higher education institutions in Texas so the work of CREATE is far reaching and establishes an infrastructure for collaboration across institutions.

Developing a Culture of Evidence

TNE institutions are expected to foster a culture of evidence within their teacher education programs. State leadership can facilitate this work in two important ways. First, policymakers can create conditions that promote the generation and use of data within the state’s teacher preparation community. Second, policymakers can take action to ensure that state data systems have the capacity to provide teacher preparation programs with meaningful information about the location and performance of their graduates.

New performance-oriented certification and program approval policies are creating a demand for data about teacher, student, and program performance in many states including Texas. These practices are consistent with the TNE focus on development of a culture of evidence. However, the strength of this emerging culture will depend, in large part, on state actions to improve the quality, accessibility, and integration of their data resources and support for their use by

institutions of higher education, and in particular by educator preparation programs.

Building High Quality State Data Systems.

Texas has served as a model for other states in terms of the collection and use of data to inform educational practice. The policy framework guiding teacher preparation and development is increasingly coherent, comprehensive, and focused on generating useful program data for institutions. These state policies are consistent with the TNE principles. A challenge for state leaders will be to continue to provide strategic support for institutions as they continue to build and refine their internal data management and assessment systems.

Texas has a substantial data infrastructure that has been in place for some time. The information currently collected by the state, however, does not always reflect the data that institutions of higher education need for program improvement purposes. Also, institutions face challenges in accessing and using these state data. Unlike some states, Texas has well-developed protocols for sharing data that often make it hard for institutions to obtain the data they want in a timely manner. At the same time, technical difficulties create barriers to linking individual student data to individual teachers. There are also on-going debates about the benefits and risks of making such links. Further, the TEA does not appear to have sufficient capacity to provide the technical or financial support that educator preparation programs may need to make full use of available state data.

Texas Data Landscape. Texas has a rich data environment with three major separate state databases that stores information on teacher preparation, licensure, and where teachers teach. However, these databases cannot easily be linked or integrated. Nevertheless, a number of researchers have been able to

conduct analysis of teacher qualifications, placement, and retention by school and preparation institution. There has been some pressure from the P-16 Council to integrate these databases and to enable institutions and researchers to make better use of it.

The main barrier to integration appears to be the lack of resources to pay for it. Data linking individual teachers with student assessment results are not available at the state level, but this link can be made by school districts. However, this will be difficult for many districts to implement given the wide variation in local capacities for data management. Therefore, despite heavy pressure from state policymakers to link these data sets, it may not happen unless it is made a priority by the state and unless there is some additional investment.

Currently, the TEA does not gather teacher identification numbers with state student assessments. Therefore, the TEA typically does not tie individual student assessment data to teachers because the way in which these records are assembled makes it difficult for TEA staff to determine which teachers are responsible for which students.

There are two primary state-level databases from which teacher data may be obtained. The first is the Teacher Assignment Records database, which is part of the Public Education Information Management System (PEIMS) managed by TEA. These records contain the following information about teachers:

- Social security number,
- Experience,
- Name,
- Current teaching position,
- Subjects taught by FTE, and
- Demographics (age, race, gender).

This database does not link teachers to individual courses and students.

The second major state database is the licensure database managed by SBEC. It holds about 750,000 entries of data on everyone who applies for a license or permit, including institutions of preparation and scores on the state teaching tests. This database allows the user to look up individual certification level by name.

The SBEC licensure database includes:

- Social security number as primary identifier;
- Demographics (e.g., age, race, gender, address, e-mail address);
- Certification type, subject matter area;
- Licensure test scores (scores by domain);
- Professional development taken as part of re-licensure. The database does not have what courses are taken—rather faculty report hours by approved provider;
- Process data on fees, fingerprints, notes, and requests; and
- Education level (i.e., institution, degree and when received).

However, the database does not include information about whether an individual is currently teaching or where they are employed.

The SBEC also gathers information about teacher candidates from the higher education institutions through ASEP. ASEP includes individual records for people who are in (or have completed) teacher education programs. The SBEC then gives the pass rate data from ASEP to the THECB for use as needed for new program approval.

In addition to the TEA and SBEC databases, the THECB has individual records for all higher education students using a unique identifier that is their social security number.

These records contain:

- Semester credits, but not individual courses;
- Major if declared;
- Demographics (age, gender, ethnicity);
- Status (freshman, sophomore, etc.);
- Alien status (if graduated from TX high school);
- County of residence;
- Transfer (institution previously attended); and
- SAT score (as of Fall 2004).

Under the No Child Left Behind (NCLB) Act, all districts must complete surveys to determine how many teachers are highly qualified at the district level. This data is compiled at the district level, and is not available for individuals. Districts then inform TEA how many of their teachers are highly qualified. The TEA then reports the data on their website.

Data Systems Compatibility. The SBEC licensure database is not integrated with the TEA Teacher Assignment Records (i.e., the PEIMS). There is neither the time nor the resources needed to write and maintain the software required to integrate the two databases. However, the databases have been integrated for special purposes in the past. At least one researcher indicated that it could be done using social security numbers without too much difficulty or great cost.

There is some interest among policymakers in being able to follow students from graduation with the THECB data through certification at SBEC and then into teaching using TEA data. However, this capacity is not likely to be

available soon for two reasons. First, The THECB does not have data on teachers who are prepared in private universities or on the rather significant number who are prepared in alternative certification programs. Such tracking is currently conducted by school districts, service centers, or private organizations. Second, the NCLB highly qualified teacher requirements provide states with significant flexibility so there is little incentive for the state to track college graduates through certification into practice.

Effective Engagement of Arts and Sciences Faculties

Stronger collaborative relationships between A&S and education faculties can help teacher education programs strengthen the content knowledge of their graduates. The education reform movement of the early 1980s in some ways reduced the role of A&S faculty in the training of teachers by focusing on educational methods and competency testing for educators. Since the late 1990s, however, there has been more collaboration across colleges (education and A&S), among departmental college faculty, and respective college deans. In part, this increased collaboration can be attributed to the development of the new standards in the TExES certification system. This type of collaboration is being supported, the institutional efforts to sustain it are sincere, and collaboration continues to increase.

Alignment of Teacher Standards with Texas Essential Knowledge and Skills (TEKS).

The incentives for strengthening connections between A&S content expertise and education also have been increased by the alignment of the teacher standards with the TEKS. Although the teacher standards vary by content area, SBEC requires all teacher standards to be aligned with the required statewide public school curriculum, with a focus on not just the

knowledge, but the skills that students must master in each subject area.

Academic Major Required. Like many other states, Texas requires an academic major for undergraduates who wish to become teachers and has required one since 1987. This policy has helped foster the collaboration among Education, and A&S faculty.

Program Approval and A&S Collaboration.

Program approval standards are a weak mechanism for fostering the kinds of meaningful cross-faculty collaboration envisioned by TNE. Without additional leadership or policy supports from within the institutions, the current reliance on regulatory standards may only promote superficial and short-lived communication. However, it is likely to be primarily driven by the program review cycle and focused on paper reviews of coursework against the K–12 content standards. The TNE institutions are expected to encourage both A&S and education faculties to take responsibility for teacher candidate performance on subject-matter assessments and for supervising student teaching as candidates learn to teach their subject. Institutions of higher education pursuing this TNE principle will be interested in fostering ongoing professional dialogues across these faculties that are firmly grounded in evidence on current teacher candidates' understanding of disciplinary knowledge and related pedagogy.

At UTEP, Liberal Arts and Sciences faculty are actively engaged in the TNE work groups that are addressing the curricular content required of preservice teachers in their courses, particularly those offered in the core curriculum. For example, the TNE Core Curriculum Work Group is designing a pilot to develop and test new learning models for courses required in the Core Curriculum. The

El Paso Community College and area school districts are involved in this work.

UTEP is also developing capstone courses for prospective teachers—one for social studies designed and implemented by the College of Liberal Arts and one for middle school teachers designed by the Mathematics Department. Additionally, the Anthropology and Political Science faculties are incorporating opportunities to observe and assist teachers in K–12 classrooms through courses in their disciplines.

The partnership between UTEP and the El Paso Community College is further strengthening the network of inter-disciplinary collaboration.

For the TNE principles to be successfully enacted in Texas, key issues require the attention of institution leaders and state officials. First, adjustments are needed in the institutional incentive systems so that A&S faculty contributions to teacher preparation are valued and rewarded. New incentives would address faculty load, promotion-tenure-reappointment requirements, and the university and college mission. Second, as A&S faculties have not viewed teacher preparation as their role, effective collaboration requires the cultivation of shared accountability between education and A&S faculties for teacher candidate content knowledge and instructional performance. This also may require policy changes within institutions.

While the UTEP experience may not reflect the current norm among Texas institutions of higher education, it has demonstrated how an infrastructure can be created to organize work groups of A&S and education faculty and strengthen collaboration and shared responsibility for the preparation of teachers.

Conceptualizing Teaching as a Clinical Practice

Another focus of TNE is increased emphasis on teaching as a clinical practice profession. University programs should work in partnership with school districts to provide settings for high quality clinical experiences, and faculty should be actively guiding the work of teacher candidates in clinical settings (e.g., schools and classrooms). These experiences should be designed to hone candidates' skills in managing classrooms, assessing student needs, and designing effective curriculum and pedagogy. Institutions with a strong conception of teaching as a clinical practice will develop residency or induction programs and take responsibility for improving the performance of beginning teachers.

Supports for Teacher Induction. As indicated above, teacher attrition contributes to the challenge of staffing schools with highly qualified teachers in Texas. Most of this attrition occurs in the first few years of teaching as beginning teachers are a particularly vulnerable group of professionals. In 1999, SBEC reported that the three-year attrition rate for beginning teachers in the 1995-96 school year was nearly 43 percent.

Teacher induction programs have the potential to significantly reduce the teacher turnover problem. Research done by the National Center for Education Statistics has shown that the attrition rate among teachers who participated in an induction program was only 15 percent in the first three years.

TxBESS is an exemplary induction model. Effective use of the program involves partnerships among various state agencies and institutions. Regional Educational Service Centers (ESCs) must provide training to educators and partners while school districts

must allocate resources for mentor stipends and release time for beginning teachers and mentors.

Educator preparation programs must provide faculty and staff who serve on the support team for beginning teachers, and who serve as observers in the formative assessment of these teachers. Institutions of higher education also must incorporate standards from the TxBESS framework into educator preparation and educational administration programs in the design of coursework and classroom experiences. It is this explicit involvement of educator preparation programs in the TxBESS induction program that is envisioned by the TNE initiative.

While there is a state-endorsed induction program in Texas, the concept of teaching as a clinical skill is not fully articulated in the Texas education code per se. The provision of effective residency programs and clinical practice experiences for preservice teachers is left to the preparation institutions working in cooperation with local school districts. State policy as it relates to supporting beginning teachers in Texas, and in many other states, is limited to teachers who have already left their institutions of higher education.

Towards Supporting, Spreading, and Sustaining TNE Reforms in Texas

State policies in Texas regarding teacher licensure, program standards, and induction are in many ways supportive of the TNE principles and the work under way at UTEP. To further strengthen and deepen the move towards a performance-oriented, clinical practice focused system of teacher preparation and induction, a number of issues require the attention of policymakers, state officials, IHE leaders, and stakeholder groups responsible for ensuring teacher quality in the state.

Linking Student Achievement Data to Individual Teachers. The greatest challenge to this endeavor is reaching consensus among various stakeholders about whether linking these databases is desirable—and how will the linked data be used, and by whom. Without such consensus, there will not be the “political will” to provide the state with the resources or capacity to make it possible.

Improving the Quality and Uniformity of the Alternative Paths to Certification. In the past decade, the expansion of alternative certification programs has occurred at the same time as education programs were being asked to meet higher standards. There is a sense among some in the education community that some of the alternate route programs are low quality “store-front operations” which provide a “quick fix” to the teacher shortage dilemma in Texas.

Competition from alternative certification programs is not likely to wane. Alternative certification received the NCLB imprimatur as an effective method to train teachers and several federal efforts provide support for individuals seeking alternative certification. For example, the *American Board for Certification of Teaching Excellence*, created by the U.S. Department of Education in 2001, offers a non-traditional route to certification. In 2003, Congress appropriated approximately \$42 million to the *Transition to Teaching* program, an initiative that recruits and trains mid-career professionals into the teaching professions through alternative paths to certification. Also in 2003, the U.S. Department of Education provided support to launch the National Center for Alternative Certification, a clearinghouse for information about alternative certification programs in the United States.

With federal endorsement of alternative certification programs and unprecedented growth, many states—including Texas—struggle to oversee the quality of preparation offered by such programs to prospective teachers to ensure that they meet the same standards to which traditional educator preparation programs are held.

Teacher Retention. The teacher shortage problem in Texas has provided the impetus for many of the recent reforms, especially the TxBESS initiative. According to SBEC, average school-level teacher attrition rates between 2001-2004 were as high as 56 percent in some schools and rates for out-of-field teaching were as high as 66 percent in others.

While some argue that growing student enrollments are responsible for teacher shortages, others suggest that the standard practice of hiring teachers late in the summer or even after the start of the school year, and the failure to provide adequate induction programs contribute more to the problems of teacher turnover and out-of-field assignments. Given the uncertainty about student enrollments as a result of substantial mobility rates (estimated by the TEA at almost 20 percent on average) and unpredictable levels of immigration, there is an incentive for school districts to hire teachers as late as possible. Nevertheless, the evidence suggests that teacher shortages are driven by attrition, not student growth, and over 75 percent of the demand for new teachers is due to attrition.

Summary

In Texas, a culture of evidence has existed for many years. A significant amount of data is collected at the student, teacher, and institution level. The challenge in Texas will be to galvanize sufficient political will and resources to integrate existing student and teacher databases.

Some policy incentives exist for collaboration among education and A&S faculty, such as the content major required for prospective teachers, the required alignment of teacher standards with the TEKS, and new standards in the TExES certification system. Institutions of higher education are also actively engaged in promoting and studying models of collaboration among education and A&S faculty through consortia like CREATE. There is, however, no explicit state mandate for such collaboration.

A teacher retention dilemma has affected the market of teacher preparation programs. The growth of alternative certification programs meets the needs of prospective teachers because such programs most often offer an easier, faster, and less expensive route to certification for teacher candidates. However, it is among teachers who were trained through alternative routes who have the greatest rates of attrition from the teaching profession. The role of induction programs such as the TxBESS model will be critical to retaining new teachers in Texas.

Resources for Additional Information

Teachers for a New Era (TNE)
<http://www.teachersforanewera.org>

Teachers for a New Era at the University of
Texas – El Paso
<http://academics.utep.edu/Default.aspx?tabid=31474>

The Center for Research, Evaluation and
Advancement of Teacher Education.
<http://www.createtx.com>.

State Board for Educator Certification
<http://www.sbec.state.tx.us>

Texas Education Agency
<http://www.tea.state.tx.us>

The Texas Higher Education Coordinating
Board
<http://www.thecb.state.tx.us/>

About CPRE

The Consortium for Policy Research in Education (CPRE) studies alternative approaches to education reform in order to determine how state and local policies can promote student learning. Currently, CPRE's work is focusing on accountability policies, efforts to build capacity at various levels within the education system, methods of allocating resources and compensating teachers, instructional improvement, finance, and student and teacher standards. The results of this research are shared with policymakers, educators, and other interested individuals and organizations in order to promote improvements in policy design and implementation.

CPRE unites five of the nation's leading research institutions: The University of Pennsylvania, Harvard University, Stanford University, the University of Michigan, and the University of Wisconsin-Madison.

For more information about CPRE, visit
www.cpre.org