

Texas Institute for Education Reform

www.texaseducationreform.org

Texas Public Schools Today and Tomorrow: Call to Action and Agenda for Success

Effective Educators for the Schools We Need

**Policy Series, Issue 6
January 2007**

Good Teaching Matters

“Look around the world. In country after country, the most vibrant and stable economies draw their strength from a well-educated, highly skilled citizenry. This should serve as a reminder that teaching, our nation’s most valuable profession, is vital to our continued economic well-being and civic stability.” The Teaching Commission, 2006¹

The future of Texas rests in the hands of the 294,258 teachers in Texas public schools today. It will be teachers who determine if students are equipped with the skills they need to realize their dreams, if Texans can build the educated workforce required to compete nationally and globally, and if we are to prosper in the 21st century.

The importance of teachers is enormous and cannot be overstated. Over the past two decades, research has developed the capacity to measure the impact of teachers on student achievement and isolate what teachers contribute toward student learning from other important influences—peers, family income, and parental education.

Gone is the paradigm, outlined in the landmark Coleman Report of 1966, that assumed that the impact of an educator in the classroom was to a large extent limited by the socio-economic and cultural environment from which the children came. This assumption has been superseded by the wealth of evidence demonstrating the primacy of the skill sets that the individual educator brings to bear on individual student achievement, regardless of background. This shift was highlighted by Daniel Fallon, Chairman of the Education Division of the Carnegie Corporation in an address to the Education Commission of the States in November 2003, and he emphasized that the new paradigm “puts the spotlight squarely on teacher education programs.”²

In short, we now know just how much teachers contribute to student learning. Some research attributes fully 40 percent of the difference in a student’s annual academic achievement directly to the teacher—and when this number is combined with the

influence of previous teachers, prior achievement, and classroom peers—the impact of schools far exceeds this number.³ In researching student achievement in Tennessee public schools, William Sanders attributes 65 percent of student achievement to the student’s classroom, 30 percent to the student’s campus, and 5 percent to the school district. And for students in the lowest quintile of performance, classroom influence was even higher.⁴

In a study of Texas public schools, researchers demonstrated that the most effective teachers are able to boost their students’ learning by a full grade more than students taught by the least effective teachers. In addition, the achievement gap between low and high income students can be largely reduced if not eliminated by replacing an average teacher with a highly-effective teacher.⁵

The powerful influence of teachers is documented in study after study. The most extensive research—Sanders’ examination of the entire Tennessee public school system—shows that students who are matched with strong teachers for three consecutive years achieve 50 percent more than students who are assigned to weak teachers. In fact, students who remain with strong teachers erase the achievement gap associated with race, ethnicity, and income within three to five years.⁶

Matching students with effective teachers provides stronger gains in academic achievement than any of the countless reforms introduced to public schools over the past century.⁷ Even the impact of reducing class size—one of the few reforms that researchers have associated with student gains under certain circumstances—pales in comparison. Studies show the academic benefit of transferring a student from an average teacher to a highly-effective teacher is twice as large as the effect of a 10 percent reduction in class size.⁸

Good teaching matters, and it matters even more for underachieving students. Although all students benefit from effective teachers, some students benefit more than others. Research provides evidence that low-performing students achieve significantly greater academic gains from highly-effective educators than students of average or high ability.⁹ The impact of effective educators is so powerful that it overcomes the disadvantages associated with race, ethnicity, and income—characteristics that are often erroneously thought to doom students to failure.

Weak teaching also matters. Studies clearly show that the least effective teachers can harm students academically, even students of average ability. While students assigned to classrooms led by highly-effective teachers make significant academic gains, students with weak teachers demonstrate significant test score *losses* relative to students with similar prior achievement and demographics.¹⁰

Our expanding knowledge about the powerful connection between teachers and student achievement furnishes the means to build the schools we need. However, this knowledge represents more than just a means. It also confers the enormous responsibility of ensuring all students are taught by effective teachers—teachers who have already demonstrated that they can boost student achievement. For poor, Hispanic, and African-American

students, this responsibility must be taken especially seriously. Often starting behind, disadvantaged students underachieve in school because schools often fail to provide the most important resource they need to reach their potential: highly effective teachers.

This paper outlines the reasons why educator effectiveness is vitally important to Texas public schools, provides evidence for the need to significantly bolster the number of effective educators in classrooms today, and identifies the reforms for Texas to grow the supply of effective educators necessary to allow each student to realize his or her potential.

“A decade ago... we believed that what students learned was largely a factor of their family income or parental education, not of what schools did. But recent research has turned these assumptions upside down. What schools do matters enormously. And what matters most is good teaching.” Kati Haycock, Education Trust, 2001¹¹

More Highly Effective Teachers are Needed

There is no stronger evidence of the need for more effective teachers than is furnished by the performance of students in Texas public schools. Texas students are *not* making the academic gains that are associated with effective educators. (Achievement of Texas public schools is detailed in Issue Paper 2 of this policy series.)

Although achievement is improving for elementary and middle school students, too few students are reaching levels of academic proficiency and almost none are gaining the annual one to two years of academic progress above and beyond grade level that is associated with highly-effective teachers. Although the achievement gap is slowly shrinking in elementary and middle schools, at the current pace of improvement we will not close the achievement gap for at least *60 years* unless we intervene and provide disadvantaged students with more effective teachers.

The most critical need for improved teacher effectiveness is evident in our high schools. One in four students fail to graduate from Texas high schools—a rate that is far higher in urban schools—and less than one in five students graduate with the skills to succeed in college, vocational training, or the skilled workplace.

A widely used indicator of teacher quality is the percentage of teachers in Texas classrooms who are either uncertified or teaching “out of field,” a term that means outside their area of certification (such as teachers certified to teach physical education assigned to high school math classes). An “out of field teacher” is unqualified by definition.

On this basis, according to the State Board for Educator Certification, the following unqualified teachers were leading classrooms in Texas public schools during the 2004-05 school year:¹²

- 30.8% Pre-Kindergarten and Kindergarten teachers were not qualified,

- 16.5% Elementary teachers were not qualified,
- 33.6% Middle school teachers were not qualified, and
- 37.5% High school teachers were not qualified.

The shortage of qualified teachers—teachers lacking certification in the field they are teaching—is most critical in the areas of Bilingual/ESL, math, and science classes, where the percentages of unqualified teachers range from about 30 to 60 percent.¹³ Shortages are most acute in small, rural districts, and high-poverty, urban schools.¹⁴

It would be a grave mistake, however, to link certification or licensure with teacher effectiveness for either potential or experienced teachers. Overwhelmingly, the preponderance of research on the relationship between certification (based on completion of an approved teacher preparation program) and student achievement strongly demonstrates that certification (or licensure) offers absolutely no assurance that an individual will be, or is, an effective teacher.¹⁵

Linking teacher effectiveness with state and federal definitions of highly qualified teachers would also be a mistake. With the *No Child Left Behind Act (NCLB)*, the federal government requires all teachers of core academic subjects to be highly-qualified, and determines highly-qualified teachers as those who have: (1) a bachelor's degree or better in the subject[s] taught, (2) full state teacher certification, and (3) demonstrable knowledge in the subject[s] taught.¹⁶ Some flexibility is given to states for interpreting these requirements.

For the purpose of complying with NCLB, Texas determines a teacher qualified if he or she has: (1) 24 semester hours in a subject area, with half completed at the junior or senior level; and (2) a standard, life-time, or temporary teaching certificate with a probationary certificate connected to participation in an alternative certification program.¹⁷ For rural school districts, Texas defines teachers who teach several subjects as highly-qualified if they become fully qualified to teach all these subjects within three years after being hired.¹⁸ Texas considers teachers fully competent if they have at least one year of experience (in the specific subject, for secondary teachers) plus a combination of teaching experience, college coursework, and professional development.¹⁹

Based on state definitions of highly-qualified teachers for NCLB compliance, only 2.29 percent of elementary classes and 6.34 percent of secondary classes statewide were taught by unqualified teachers during the 2004-05 school year.²⁰ These percentages are dramatically different from State Board of Educator Certification percentages for the same year that are listed above.

Which numbers are right? How many teachers in Texas public schools are highly qualified? These questions are complicated by different definitions of what it means to be highly qualified. Although it is not clear what percentage of classrooms in Texas public

schools are led by qualified teachers, it is very clear that neither the state nor federal government connect teacher quality to student achievement.

Instead, current thinking about teacher quality focuses on inputs—such as degrees completed, seniority, and professional development—to help define, identify, and try to enhance the caliber of prospective and experienced teachers. This thinking is built on the premise that a qualified teacher necessarily is, or will be, an effective teacher—one who succeeds in helping students reach academic goals and realize their educational potential. However, this thinking is gravely flawed.

Several decades of research on teacher quality furnish substantial evidence that neither teacher qualifications nor certification have a direct correlation with teacher effectiveness, as measured by impact on student achievement.²¹ Instead, the best, most reliable way to identify and predict teacher effectiveness is actual measurement of teacher impact on student achievement over time.²²

Consequently, to improve student learning, it is necessary to move beyond the regulatory definitions to a focus on teacher effectiveness, and to develop reliable, consistent measures of teacher performance.

Characteristics of Effective Teachers

Although teacher effectiveness is best identified by gains in student achievement, there are some things that prospective teachers can bring to the classroom, and experienced teachers can acquire, that have been associated with a teacher's capacity to impact student learning.

A high level of literacy, verbal and cognitive skills, and overall academic ability are the strongest characteristics of effective teachers. Effective teachers generally have strong academic credentials—as measured by SAT, ACT, GRE, and grade point average.²³ Subject area knowledge is also very important for teacher effectiveness; effective teachers have a solid background in the subject area they teach—as measured by a college major or minor in the field.²⁴

Experience contributes to teacher effectiveness, but experience is less important than other teacher attributes. Once teachers achieve proficiency (some research suggests this is at five years and others at 10-12), there is no evidence that teachers become increasingly effective each year they are in the classroom, and some evidence indicates that effectiveness *declines* after 20-24 years.²⁵

Teacher certification/licensure based on traditional preparation programs are not directly related to teacher effectiveness. Neither assures a teacher will be effective in the classroom and significantly contribute to student achievement.²⁶

Some research indicates that teachers from alternative preparation/certification programs perform equally as well as, and sometimes better than, traditionally prepared teachers.²⁷ Advanced degrees generally do not increase a teacher's effectiveness, nor do they result in higher student achievement (the only exception may be for high school math teachers with advanced degrees in that subject).²⁸

Race and ethnicity may contribute to a teacher's capacity to impact student achievement. Some studies show that matching teachers with the race/ethnicity of their students positively impacts student achievement.²⁹

Hands down, the best predictor of teacher effectiveness in practicing teachers is the impact teachers have made on student performance during previous years. Highly-effective teachers tend to remain highly effective, while the opposite is true of teachers who do not exert a high impact on student achievement.³⁰

The Current Status of Educator Preparation

"The current scarcity of good teachers is in itself a reason to question current policies."
Koret Task Force on K-12 Education, 2004³¹

Rod Paige, former Secretary of Education noted in his first annual report to Congress on *Meeting the Highly Qualified Teacher Challenge in 2002*, that the teacher preparation system in the country is "broken" and, although Texas has done a better job than most states in raising teacher preparation standards and accountability, based on the deficiencies outlined in his report, Texas is no exception to this generalization.³²

In a recent critique of teacher preparation,³³ Sandra Stotsky notes that it has become clear that colleges of education, as they now function, are a major part of the problem, and not the solution to improving public education and narrowing the gaps in student achievement. She cites their responsibility for three major problems facing public schools today. First, colleges of education supply far too many teachers with an inadequate background in the subjects they are licensed to teach. Second, they no longer supply public schools with enough academically qualified teachers for the subjects that must be taught in secondary schools. And third, they do not train prospective teachers how to teach, especially beginning reading.

The challenge before us is to completely transform educator preparation programs into customer-driven institutions with assessments grounded in output- and performance-based criteria. Achieving this goal, we will make Texas the national model for new educator preparation programs, as well as a model for the use of value-added evaluations as the means to identify productive practices that can inform the preparation of highly effective teachers.

In recommendations for reforming education in Texas, the Koret Task Force articulated one clear aim for policies that regulate the teaching profession: differentiating between people who teach well and those who do not.³⁴ The Task Force advocated a similar goal

for policies that regulate school principals and other administrators: differentiating between people who lead schools effectively and those who do not.³⁵ Licensing or certification, the Task Force cautions, should be used only as warranted by evidence of their effects on educator effectiveness.³⁶

Barriers to Improving Teacher Effectiveness

In crafting an agenda for improving the effectiveness of our current teaching workforce and recruiting more able, better prepared teachers for Texas public schools, it is important to recognize the barriers to be surmounted:

- Traditional methods of preparing teachers limit the number, as well as the qualifications, of prospective teachers.
- Colleges of education, the largest single source of educator preparation today, severely constrict the profession's pipeline and supply. High-ability students are discouraged from entering a field of study characterized by low academic standards, weak academic content, and instruction that lacks clear relevance to classroom realities,³⁷ while too many of the teachers coming out of colleges of education programs lack essential skills, are unprepared to step into the classroom, and rapidly exit from the profession.
- The hurdles of current state licensure/certification requirements, although these regulations for teacher preparation confer only marginal value, at best, toward ensuring academic quality, discourage entry to the profession by many otherwise qualified individuals who cannot afford the cost and time.
- Typical assignment practices of schools—placing the new and least experienced teachers with the most educationally disadvantaged students, particularly in high-poverty urban schools³⁸—encourage teachers to leave the profession.
- Attrition diminishes the supply of all teachers, including potentially effective teachers. In 2005, the retention rate for teachers in Texas public schools was only 58 percent (with the lowest rates for math and science teachers).³⁹ Approximately 43 percent of new teachers leave Texas public schools within the first three years of teaching.⁴⁰
- The shortage of teachers in certain subject areas including math, science, and bilingual education—particularly in rural and high-poverty, urban schools⁴¹—severely hinders teaching and learning.
- Teacher turnover diminishes the capacity to build the supply of potentially effective teachers needed by Texas public schools. A little over 18 percent of Texas teachers decide to leave the school at which they are teaching each year—about two-thirds moving to another school or district and about a third leaving public schools entirely.⁴²
- State policies that establish a pay scale for teachers that is primarily based on seniority and professional development inputs is discouraging to those whose

aspirations as professionals lead them to career pursuits with more competitive merit-based compensation structures.

- Efforts to improve potential teacher effectiveness are also undermined by state policies that institutionalize highly questionable and dubious ideologies about teaching and learning. Our current state system for preparing, certifying, training, and evaluating teachers is based on *Learner-Centered Schools for Texas*, a document produced in 1997 by the State Board for Educator Certification.⁴³ *Learner-Centered Schools for Texas* bases teacher policies on the ideology of constructivism—the belief that students should discover knowledge and skills for themselves—in defiance of the research evidence showing that direct, systematic instruction results in the greatest academic gains for students, particularly disadvantaged students.⁴⁴
- The supply of future teachers, particularly the most able prospective teachers, is in jeopardy. Today the teaching profession is attracting fewer high-ability individuals at the same time that the percent of *all* college students who chose teaching has been falling.⁴⁵ Considerable research has been conducted to determine why so few individuals, particularly high-ability individuals, are becoming teachers, and two primary reasons have been found: low annualized salary and limited career opportunities.⁴⁶

Effective Teachers + Good Leadership = Enhanced Educator Effectiveness

Although teachers are the most important influence on student achievement, improving teaching and learning cannot be achieved by solely focusing on teachers. School administrators, particularly principals, must also be engaged in this effort.

After teachers, principals make the next largest contribution to school success.⁴⁷ The intimate connection between principals and teachers must be recognized and enhanced by policies to align the efforts of both groups. Teachers and administrators must work more effectively as partners if Texas public schools are to reach new, higher standards for student achievement.

To increase overall educator effectiveness, principals must be given more authority over personnel decisions—hiring, assignment, firing, and promotion—and more responsibility for teacher and student performance. At the same time, principals must provide teachers the leadership and tools they need to perfect their skills by providing performance data—both student and teacher—mentoring, scientifically-based professional development, and time for teachers to mature their craft. Principals should also create school environments that encourage teachers to engage in decision-making about instructional policies.

We must also change state policies to expand the capability of principals to lead schools. At the same time, principals must be equipped with better human resource skills and the training necessary to transform both teaching and learning. By improving the preparation

of principals and broadening principal recruitment to talented, non-traditional candidates, Texas can develop new leaders for the schools we need in the 21st century.

Expanding Current Efforts

A number of innovative efforts are already underway to improve teacher quality and effectiveness in Texas public schools. In November 2005, Governor Perry issued an executive order creating a grant program to furnish rewards to, and incentives for, teachers who help economically disadvantaged students close the achievement gap.⁴⁸ This program offers salary bonuses of \$3,000 to \$10,000 to teachers in 100 schools throughout the state.

House Bill 1, passed by the 3rd Called Session of the 79th Texas Legislature in June 2006, introduced landmark reforms to improve educator quality and effectiveness by:

- Creating a state-funded mentor teacher program and directing the commissioner to develop rules pertaining to the qualifications and duties of mentors;⁴⁹
- Expanding the Governor’s Grant Program by establishing a teacher incentive program for high poverty campuses with high levels of achievement and improvement—including incentive funds that may be used to reward leadership, teacher mentoring, and research-based professional development;⁵⁰ and
- Further expanding the Governor’s Grant Program by establishing an incentive program to provide funding to any district that wants to establish a local incentive program—including incentive funds that must be used to reward educators, principals, and other school staff, as well as funding for mentoring, teacher stipends, and principal awards.⁵¹

These recent reforms offer a platform for developing a comprehensive plan for system-wide changes to improve educator effectiveness.

Recommendations for Improving Educator Effectiveness

The shortage of qualified, effective teachers in Texas public schools today represents a crisis for public education. This “shortage” results from: (1) an insufficient supply of qualified teachers in specialized areas for both high- and low-performing students, (2) the inadequate distribution of those found to be effective teachers to disadvantaged students, (3) weak overall preparation of newly licensed teachers, and (4) low productivity of the current teaching workforce in terms of student outcomes.

Meeting these challenges and improving educator effectiveness will require a multi-faceted approach. These reforms should improve effectiveness at the front end of the teaching chain—by enlarging the pool of prospective teachers, replacing unnecessarily complex and cumbersome regulations for entry into the profession with fewer and stronger requirements for demonstrated proficiency in subject matter knowledge, creating

incentives for improvement, and focusing on education outcomes. The following recommendations are offered as a starting point for building an agenda for increasing educator effectiveness.

- Develop consistent and reliable measurement of teacher performance and evaluate teachers using multiple measures of teacher performance on the job.
- Create a set of meaningful state standards that specifies what it demonstrably means for a teacher to be *effective* in relation to student performance (standards that are distinctly different than state/federal standards for “qualified teachers”). Reserve the term “effective” for teachers with at least three years experience who consistently produce more than one year of student achievement gains in every school year over time.
- Set goals and a timetable for ensuring all classrooms in Texas public schools are led by an effective teacher, and hold teachers accountable for demonstrating at least one year’s academic growth for students annually.
- Assign a mentor to every new teacher and ensure mentors have received mentor training and are highly effective teachers in the subject taught by the new teacher.
- Establish professional pay for educators:
 - Decouple pay from seniority, phase out the state salary schedule, and provide performance-based pay to align teacher pay practices with those of like professionals;
 - Base a significant portion of teacher pay on student achievement, using value-added evaluations;
 - Provide individual and campus-based awards for achieving goals for improving student achievement;
 - Differentiate pay based on experience, effectiveness, and position held/job responsibilities;
 - Establish incentives for high-performing teachers in high poverty schools; and
 - Expand the salary *range* of teachers and compensate teachers at a rate that is competitive with professionals of similar qualifications.
- Encourage school districts to provide incentives for teacher assignments that match teachers with student needs.
- Create career paths, like the Teacher Advancement Program (TAP),⁵² that allow teachers to remain in the classroom while advancing professionally with higher levels of responsibility and compensation as their skills and effectiveness increase (becoming mentors and master teachers).
- Create a rigorous, supportive educator evaluation system that is based on growth in student achievement as measured by value added assessments, and uses multiple measures of on-the-job performance.

- Improve teacher effectiveness through carefully and independently evaluated professional development that focuses on academic content knowledge, is driven by student needs, incorporates research-based teaching techniques and instruction, and is evaluated for classroom results.
- Implement the Koret Texas Task Force recommendation to establish professional contracts that allow educators to qualify for initial exemptions from current training and certification requirements based on a combination of cognitive aptitude, achievement in college/work, and required subject-area knowledge, and to earn continued exemptions based on student outcomes.⁵³
- Improve academic effectiveness by reforming teacher preparation and certification requirements:
 - Aggressively expand alternative routes for preparation and certification;
 - Require prospective teachers to acquire the academic background knowledge needed for effectively addressing the state curriculum standards and rigorous content knowledge that students must acquire in Texas public schools, as determined by academically rigorous licensure tests of subject matter knowledge;
 - Ensure that teacher preparation provides information about the instructional methods and programs that research has scientifically proven effective, particularly for disadvantaged students—including direct instruction and phonics;
 - Provide pedagogical training in the classroom as on-the-job training;
 - Require prospective teachers to complete a full-time student teaching assignment for six to 12 months before acquiring certification;
 - Require all teachers new to the profession to complete a one to two year apprenticeship in schools under the intensive direction of a highly-qualified mentor or master teacher;
 - Strengthen the Accountability System for Educator Preparation by adding value-added assessments of the graduates of each preparation program based on student achievement and make this a condition for accrediting programs;
 - Revise the guidelines for teaching developed in 1997 by the State Board for Educator Certification's, *Learner-Centered Schools for Texas*—a document that promotes an ideology of constructivism rather than research-based practices⁵⁴ and is detrimental to student learning, particularly for disadvantaged students,⁵⁵ and revise all teacher policies that are based on these guidelines—including teacher evaluations, preparation, certification, and professional development;
 - Make the state licensure requirements uniform with credentials established by the American Board of Certification for Teacher Excellence (ABCTE),⁵⁶ credentials that are both portable and national, and require a passing score on a rigorous content test; and

- Make full or standard licensure/certification available to beginning teachers after two years of satisfactory evaluations by a school supervisor and require renewal every five years based on *continuing effectiveness*.
- Reduce overall teacher turnover by improving working conditions – strengthening administrative support, improving school discipline, and engaging educators in decision-making.
- Aggressively recruit prospective teachers for shortage areas such as math, science, and Bilingual/ESL; establish compensation and benefits packages that are competitive with private sector jobs that are available for graduates with technical degrees; and bypass traditional certification requirements through professional contracting.
- Develop expert or subject specialist teachers to teach reading, math, and science in upper elementary grades—4th and 5th grade on—in subject-divided days, or for all grades (similar to teaching practices in China).
- Build better data systems for teachers and students that can be linked to identify the impact of individual teachers to the academic performance of individual students over time and match teacher capacity with student needs.
- Identify ineffective teachers, assign mentors, require mandatory remediation, and establish a schedule for improvement; remove ineffective teachers from the classroom after an established period of intervention.
- Enhance the effectiveness of campus leadership by:
 - Giving principals the authority to make all human resource decisions;
 - Providing training in management skills and instructional leadership for principals currently in Texas public schools;
 - Working with New Leaders for New Schools, a national nonprofit organization that finds talented individuals from within and outside the education sector, to become urban school principals;⁵⁷
 - Focusing certification requirements for principals and superintendents on instructional, management, and leadership skills;
 - Aggressively recruiting non-traditional leadership for school administration;
 - Creating alternative pathways for prospective principals and superintendents to enter the education workforce; and
 - Holding principals accountable for recruiting and retaining effective teachers.

To summarize, efforts for improving teacher effectiveness and the number of effective teachers in Texas public schools must include:

1. Reducing the barriers to entry into teaching;

2. Establishing high academic requirements for prospective teachers that are measured by a highly rigorous test;
3. Replacing unsound pedagogical ideas in preparatory education coursework and state policies with those that are evidence-based;
4. Developing new policies to entice high ability individuals to the profession of teaching, and new policies to entice and reward high performing new teachers to remain in the classroom;
5. Creating incentives and rewards to retain effective teachers and encourage effective teachers to work in high poverty schools and with disadvantaged students;
6. Evaluating and retaining teachers on the basis of classroom performance and impact on student achievement;
7. Giving school principals the authority, training, and information to make human resource decisions and responsibility for teacher effectiveness; and
8. Obtaining, disseminating, and using reliable, consistent information (particularly value-added data) about student and teacher performance.

Synthesizing these reforms into a comprehensive, multi-faceted agenda to improve educator effectiveness poses a massive challenge. However, this challenge stands shoulder to shoulder with the magnitude of improvement possible for Texas public schools and the promise of economic vitality to be gained from a highly educated citizenry. Improving educator effectiveness is the first, as well as the most important, step we will take in creating the schools we need.

“We must invest in the future of our children and our nation by ensuring that all students have the best teachers possible.” The Teaching Commission, 2006⁵⁸

For more information, visit TIER at www.texaseducationreform.org.

Acknowledgements: TIER is indebted to Chris Patterson for drafting this paper, and to the following individuals who served as reviewers, provided valuable input and assistance, and generously shared their expert knowledge of public education research and practice: Chrys Dougherty, Dianne Johnson, Don McAdams, and Sandra Stotsky. TIER is solely responsible for all interpretations of fact and any possible error.

Endnotes

¹ *Teaching at Risk: A Call to Action*, The Teaching Commission, 2006, pg. 12, http://www.theteachingcommission.org/press/FINAL_Report.pdf.

² Daniel Fallon, *Case Study of a Paradigm Shift: The Value of Focusing on Instruction*, Education Commission of the States, Fall Steering Committee Meeting, Richmond, VA, November 12, 2003.

³ Grover Whitehurst, "Research on Teacher Preparation and Professional Development," U.S. Department of Education presentation, White House Conference on Preparing Effective Teachers, March 3, 2002, pgs. 3 & 4.

⁴ William L. Sanders, *A Summary of Conclusions Drawn from Longitudinal Analysis of Student Achievement Data Over the Past 22 Years (1982-2004)*, Presentation to the 2004 National Governors Education Symposium, Asheville, NC, June 10-12, http://www.sas.com/govedu/edu/hunt_summary.pdf.

⁵ *Teaching at Risk: A Call to Action*, pg. 15.

⁶ William L. Sanders and June C. Rivers, "Cumulative and Residual Effects of Teachers on Future Academic Achievement," *School Improvement in Maryland*, 2002, http://www.mdk12.org/practices/ensure/tva/tva_2.html.

⁷ *Teacher quality and student achievement research review*, The Center for Public Education, http://www.centerforpubliceducation.org/site/c.kjJXJ5MPIwE/b.1510983/k.2A6A/Teacher_effective_and_student_achievement_Research_review.htm.

⁸ Andrew Leigh and Sara Mead, "Lifting Teacher Performance," *Policy Report*, Progressive Policy Institute, April 2005, http://www.ppionline.org/documents/teachqual_0419.pdf.

⁹ Eric A. Hanushek and Steven G. Rivkin, "How to Improve the Supply of High Quality Teachers," *Brookings Papers on Education Policy*, May 21 and 22, 2003, pg. 12, <http://edpro.stanford.edu/Hanushek/admin/pages/files/uploadTeacher%20effective.Brookings.pdf>; and *Teacher Quality Improves Student Achievement*, North Central Regional Educational Laboratory for the Institute of Education Sciences, U.S. Department of Education, 2005, <http://www.ncrel.org/effective/qkey8/>.

¹⁰ Robert Gordon, Thomas J. Kane and Douglas O. Staiger, *Identifying Effective Teachers Using Performance on the Job*, The Hamilton Project, The Brookings Institution, White Paper 2006-01, April 2006, http://www.brookings.edu/views/papers/200604hamilton_1.pdf.

¹¹ Kati Haycock, "Closing the Achievement Gap," *Educational Leadership*, Association for Supervision and Curriculum Development, 2001, <http://www.nea.org/teachexperience/gapk050707.html>.

¹² Analysis of data published online by the Texas State Board for Educator Certification, performed by Omar Lopez, Corporation for Public School Education K-16, Austin, TX, July 2006.

¹³ Ibid.

¹⁴ Karen S. Hubert and Michael S. Ramsey, "Teacher Turnover and Shortages of Qualified Teachers in Texas Public School Districts 2001-2004," State Board for Educator Certification, Report to the Senate Education Committee, Austin, TX, September 2004, pg. 8; and "Teacher Attrition: A Costly Loss to the Nation and to the States," Alliance for Excellent Education, Washington, DC, August 2005, pg. 1.

¹⁵ "Report Finds Teacher Effectiveness Not Linked to Certification," *Front and Center*, NGA Center for Best Practices, National Governors Association, April 2006; "Indicators of Teacher Quality," *ERIC Digest*, No. 184, July 2003, http://iume.tc.columbia.edu/eric_archive/digest/184.pdf; and *Increasing the Odds: How Good Policies Can Yield Better Teachers*, National Council on Teacher Quality, Washington, DC, 2005, http://www.nctq.org/nctq/images/nctq_io.pdf.

¹⁶ *Highly Qualified Teachers For Every Child*, U.S. Department of Education, August 2006, <http://www.ed.gov/nclb/methods/teachers/stateplanfacts.html>.

¹⁷ *Guidance For The Implementation Of NCLB Highly Qualified Teacher Requirements*, Texas Education Agency, October 2005, pg. 16, <http://www.tea.state.tx.usnclb/hq.guidance.070705.web.pdf>.

¹⁸ Ibid, pg. 42.

¹⁹ Ibid, pgs. 45 & 46.

²⁰ *State Plan for Meeting the Highly Qualified Teacher Goal*, Texas Education Agency, July 2006, pg. 8. http://www.tea.state.tx.usnclb/PDF/Texas_Revised_HQT_Plan.070706.USDE.pdf.

²¹ *Identifying Effective Teachers Using Performance on the Job*, pg 5.

²² Ibid, pgs. 7 & 8.

²³ *Increasing the Odds: How Good Policies Can Yield Better Teachers*; and *Teacher quality and student achievement Review*.

²⁴ Ibid.

²⁵ *Increasing the Odds: How Good Policies Can Yield Better Teachers*; and Theodore Hershberg, Operation Public Education (University of Pennsylvania) presentation to the Senate Education Chair's Teacher Pay Task Force, Austin, TX, 2006 (based on data in Sanders, William L., "A Summary of Conclusions Drawn from Longitudinal Analyses of Student Achievement Data over the Past 22 Years,

-
- 1982-2004," Presentation to Governors Education Symposium, Asheville, North Carolina, June 10-13, http://www.sas.com/govedu/edu/hunt_summary.pdf).
- ²⁶ "Report Finds Teacher Effectiveness Not Linked to Certification;" "Indicators of Teacher Quality;" and *Increasing the Odds: How Good Policies Can Yield Better Teachers*.
- ²⁷ *Teaching at Risk: A Call to Action*, pg. 43.
- ²⁸ *Increasing the Odds: How Good Policies Can Yield Better Teachers*.
- ²⁹ Ibid; and Omar Lopez, *The Effect of the Relationship Between Classroom Student Diversity and Teacher Capacity on Student Performance* (submitted for publication), Corporation for Public Education K16, Round Rock, TX, 2007.
- ³⁰ "Identifying Effective Teachers Using Performance on the Job," pg. 8.
- ³¹ *Reforming Education in Texas: Recommendations from the Koret Task Force*, prepared by the Koret Task Force on K-12 Education, Hoover Institution, Hoover Institution Press, Stanford University, Stanford, CA, February 2004, pgs. 49.
- ³² *Meeting the Highly Qualified Teacher Challenge, The Secretary's First Annual Report on Teacher Quality*, U.S. Department of Education, Washington, DC, 2002.
- ³³ Sandra Stotsky, "Ed Schools: The Real Shame of the Nation," *Academic Questions*, Summer 2005, 18 (3), pgs. 44-53, http://www.educationnews.org/writers/Sandra/Ed_Schools_The_Real_Shame_of_the_Nation.htm.
- ³⁴ *Reforming Education in Texas: Recommendations from the Koret Task Force*, pgs. 48 and 49.
- ³⁵ Ibid.
- ³⁶ Ibid.
- ³⁷ *Teaching At Risk: A Call to Action*, pg. 34.
- ³⁸ Heather G. Peske and Kati Haycock, *Teaching Inequality: How Poor and Minority Students Are Shortchanged on Teacher Quality*, Education Trust, June 2006, pg. 2, <http://www2.edtrust.org/NR/rdon/yres/01DB9F-CED8-4D2B-9EOD-91B446746ED3/0/TQReportJune2006.pdf>; and Eric A. Hanushek, John F. Kain and Steven G. Rivkin, "The Revolving Door," *Education Next*, 2004, <http://www.educationnext.org/20041/76.html>.
- ³⁹ Ed Fuller and Barnett Berry, *Texas Teacher and Effective Data: Prospects and Problems*, Center for Teaching Quality, 2006, http://www.teachingeffective.org/powerpoints/20060221_txdata.pdf.
- ⁴⁰ *The High Cost of Teacher Turnover*, Texas Center for Education Research, prepared for the State Board for Educator Certification, 2000, <http://www.sbec.state.tx.us/SBECOnline/txbess/turnoverrpt.pdf#search=%22teacher%20turnover%22>.
- ⁴¹ *Teacher Turnover and Shortages of Qualified Teachers in Texas Public School Districts 2001-2004*; and *Attracting, Developing, and Retaining Effective Teachers*, National Council on Teacher Quality and U.S. Department of Education, prepared for the Organization for Economic Development, 2004, pg. 26, http://www.oecd.org/document/9/0,2340,en_2649_34521_11969545_1_1_1_1,00.html.
- ⁴² Ibid.
- ⁴³ *Learner-Centered Schools for Texas: A Vision of Texas Educators*, State Board for Educator Certification, Austin, TX, 1997, <http://www.esc13.net/statewide/pdas/LearnerCenteredSchools.pdf>.
- ⁴⁴ E. D. Hirsch, Jr., "Reality's Revenge: Research and Ideology," *American Educator*, American Federation of Teachers, Fall 1996, http://www.aft.org/pubs-reports/american_educator/fall96/revenge.html; Bonnie Grossen, "Making Research Serve the Profession," *American Educator*, American Federation of Teachers, Fall 1996, Vol. 20, No. 3; and Douglas Carnine, *Why Education Experts Resist Effective Practices*, Thomas B. Fordham Foundation, 2000, <http://www.edexcellence.net/doc/carnine.pdf>.
- ⁴⁵ *Attracting, Developing, and Retaining Effective Teachers: Background Report for the United States*, pg. 26.
- ⁴⁶ Caroline M. Hoxby and Andrew Leigh, *Pulled Away or Pushed Out? Explaining the Decline in Teacher Aptitude in the United States*, 2003, http://post.economics.harvard.edu/faculty/hoxby/papers/hoxbyleigh_pulledaway.pdf; and *Teaching At Risk: A Call to Action*, pg. 28.
- ⁴⁷ *Teaching Inequality: How Poor and Minority Students Are Shortchanged on Teacher Quality*.
- ⁴⁸ Executive Order RP51, by the Governor of the State of Texas, October 27, 2005, <http://www.governor.state.tx.us/divisions/press/exorders/rp51>.
- ⁴⁹ House Bill 1, 3rd Called Session of the 79th Texas Legislature, Section 4.07 Mentors.

⁵⁰ House Bill 1, 3rd Called Session of the 79th Texas Legislature, Section 4.08 Student Achievement Awards Program.

⁵¹ House Bill 1, 3rd Called Session of the 79th Texas Legislature, Section 4.08 Educator Excellence Awards Program.

⁵² Teacher Advancement Program, <http://www.tapschools.org/>.

⁵³ *Reforming Education in Texas: Recommendations from the Koret Task Force*, pgs. 50 & 51.

⁵⁴ *Learner-Centered Schools for Texas: A Vision of Texas Educators*. This document identifies proficiencies for teachers and administrator proficiencies that are grounded in the mistaken belief that student learning should be self-generated and discovered. These proficiencies have been translated into practice by Administrative Code regulations pertaining to educator evaluations.

⁵⁵ “Reality’s Revenge: Research and Ideology;” “Making Research Serve the Profession;” and *Why Education Experts Resist Effective Practices*.

⁵⁶ ABCTE is funded by the U.S. Department of Education and sponsored by the Education Leaders Council and the National Council on Teacher Quality.

⁵⁷ New Leaders for New Schools, <http://www.nlms.org/NLWeb/Index.jsp>.

⁵⁸ *Teaching at Risk: A Call to Action*, pg. 10.