

Shortchanging Our Kids: How Poor Teacher Quality & Failed Government Policies Harm Students

by Brooke Dollens Terry
Education Policy Analyst

Key Points

- One-third of Texas teachers that entered the profession in 2000 were gone in five years.
- Private schools are more likely than public schools to hire teachers with strong academic records, solid content knowledge, and degrees from selective colleges.
- The public education system has a large monopoly over the education market with 84 percent of all U.S. students and 90 percent of all Texas students attending a government assigned school.
- Texas schools spent \$124.5 million last year to reward teachers for having a master's degree even though it has no correlation with higher student achievement.
- Ninety percent of teachers' master's degrees are in education.

Introduction

The United States' k-12 education system is struggling under the enormous weight of the public school monopoly, poor teacher quality, and failed government policies. Expensive per student costs as high as \$10,000 and \$20,000 per year, stagnant test scores, high dropout rates, growing bureaucracies, low teacher morale, a shortage of good teachers, stagnant student achievement, and grade inflation all afflict American public schools. Who pays the price for failed education policies? Taxpayers and their children.

Education policy in the U.S. does not always put the needs of students first. Current policies such as teacher pay, teacher training, hiring practices, entry into the profession, and lack of competition actually encourage the best and brightest teachers to *leave* the classroom which hurts academic achievement.

The quality of an education system cannot exceed the quality of its teachers.¹ As we look to reform our nation's public schools, putting a quality teacher in every classroom is vital to raising student achievement, as effective teachers can eliminate the achievement gap. In fact, research conclusively finds that the quality of a student's teacher is the single most important school-related factor in raising academic achievement.² Policymakers and parents both want a great teacher in every classroom so that every child is given a chance to succeed. Yet, numerous education policies deter this from happening.

Weak teachers produce weak students because teachers cannot teach what they don't

know. An Education Trust report explains, "We know from research that poorly prepared teachers *do harm*. And they do the *most harm* to the students who have the least support to fall back on for their academic achievement." [emphasis added]³

After studying the best school systems all over the world, McKinsey researchers conclude, "even in good systems, students that do not progress quickly during their first years at school, because they are not exposed to teachers of sufficient caliber, stand very little chance of *recovering the lost years*." [emphasis added]⁴

Thus, children assigned to teachers who do not know their subject matter or to teachers who are ineffective are shortchanged and may never academically recover.

Importance of Quality Teachers

The quality of every teacher is important to student success. Some teachers are more effective than others. For academically struggling students, the effect can be more profound. A Tennessee study found that students with strong teachers for three consecutive years achieve 50 percent more than students with weak teachers.⁵ An Eric Hanushek study found that the difference for a student between an extremely effective teacher and an ineffective teacher can be an entire year of learning.⁶ This means that a student with an extremely effective teacher can gain as much as an extra year of learning over students with extremely ineffective teacher. A similar study by William Sanders found that the

quality of the teacher has more effect on student academic progress than race, socio-economic level, class size, or classroom heterogeneity.⁷ Sanders' research suggests that students can overcome obstacles associated with ethnicity, race, and poverty and erase the achievement gap in three to five years with the help of a strong and highly effective teacher.

Teacher Quality

While America has many excellent teachers, there are simply not enough in our public schools. The bottom line is that our nation suffers from a shortage of top-notch quality teachers in the classroom. In contrast to 50 years ago, fewer bright and talented individuals choose to become teachers and even fewer stick with it.^{*8}

A 2004 report by the National Council on Teacher Quality explains that the profession attracts a “disproportionately high number of candidates from the lower end of the distribution of academic ability.”⁹ Another report finds that “college graduates whose SAT or ACT scores were in the bottom quartile were more than twice as likely as those in the top quartile to have majored in education.”¹⁰ Moreover, “the likelihood that a highly talented female (one ranked among the top 10 percent of all high schoolers) will become a teacher fell from 20 percent in 1964 to just over 11 percent in 2000.”¹¹

The report, “Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce,” sums up the situation,

Many of our teachers are superb. But we have for a long time gotten better teachers than we deserved because of the limited opportunities for women and minorities in the workplace. These opportunities are far wider now, and we are left with the reality that we are now recruiting more of our teachers from the bottom third of the high school students going to college than is wise. To succeed, we must recruit many more from the top third.¹²

Turnover of smart teachers is a contributing factor to teacher quality issues. The U.S. Department of Education reports that college graduates who *left teaching* within four years were far more likely to have scored in the top quartile on the SAT and ACT than those who continued to teach.¹³

Another problem is that good teachers tend to leave inner-city schools and move to easier job assignments in suburban schools.¹⁴ The Education Trust reports that “minority and poor youngsters—the very youngsters who are most dependent on their teachers for content knowledge—are systemically taught by teachers with the least content knowledge.”¹⁵ As a result, those students most in need of highly effective teachers are the least likely to have them.

Texas also struggles with high teacher turnover rates and higher turnover at low-performing schools than high-performing schools.¹⁶ Policymakers might also want to investigate why so many certified teachers in Texas stop teaching. Former state Comptroller Carole Keeton Strayhorn wrote in her 2006 report on Texas teachers, “32.5 percent of [Texas] teachers who entered the profession in 2000 were gone within five years.”¹⁷ The Texas State Board for Educator Certification reports that 843,947 individuals currently have a valid teaching certificate in Texas, while Texas had only 321,730 teachers teaching in public schools in the 2007-08 school year.¹⁸

What Does a Good Teacher Look Like?

Not surprisingly, good teachers are smart. A 2004 National Council on Teacher Quality report by Walsh and Tracy states that teachers with *strong literacy skills* are more likely to make strong teachers and produce large gains in student learning. Literacy skills can be measured by high SAT, ACT, or GRE verbal scores. Walsh and Tracy reviewed research and found that a “teacher’s level of literacy ... affects student achievement more than any other measurable teacher attribute, including certification status, experience, and the amount of professional development that a teacher receives.”¹⁹ Yet, data demonstrates that “students who en-

* The percentage of teachers scoring in the top 20 percent on national achievement tests fell considerably between the early 1960s and mid 1980s. Between 1970 and 1975, the average ACT score for the average man and woman intending to major in education declined significantly (below the male and female mean).

roll in teacher education programs in U.S. colleges tend to have lower scores on SAT and ACT exams than those in virtually all other programs of study.”²⁰

Teachers with strong academic credentials tend to be better at teaching difficult subjects. For example, secondary teachers with strong subject area preparation in math or science were more effective high school math and science teachers.²¹ The Education Trust report “Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap” by Kati Haycock has similar findings. Haycock’s analysis finds that strong verbal and math skills and deep content knowledge (for middle and high school teachers) leads to more effective teachers.²²

However, Texas public schools cannot find enough math and science teachers to teach their students and resort to assigning teachers certified in other subjects to teach math and science. For example, in math, the out-of-field teaching rate was 31 percent in middle schools and 17 percent in high schools. In science, the percentages are worse with 30 percent of middle school teachers and 34 percent of high school teachers teaching out-of-field. This equals roughly 3,900 teachers teaching math and 4,700 teachers teaching science that do not have an expertise in the subject.²³

In addition to math and science, Texas also had teacher shortages in areas of special education, foreign language (languages other than English), bilingual/ESL, and technology applications in the 2007-08 and 2008-09 school years according to the Texas Education Agency. Texas is not short of talent. Texas is short of individuals willing to go through the certification process and short of certified teachers willing to stay in the classroom.

Good teachers also tend to have graduated from a selective college. Researchers Walsh and Tracy determined that “students make greater learning gains if their teachers attended a more selective college.”²⁴ Yet, according to one study, “fewer than 7 percent of U.S. public school teachers graduated from selective colleges.”²⁵

Teacher Certification Does Not Equal Teacher Quality

It is important to note that research does *not* find that courses taken at colleges of education on “how to teach”

or teacher certification policies lead to more effective teachers. In fact, “Education courses completed, advanced education degrees, scores on professional knowledge sections of licensure exams, even, interestingly years of experience—none seem to have a clear relationship to student achievement.”²⁶

Kate Walsh, with the National Council on Teacher Quality, says that possession of a teaching certificate does not necessarily equal a quality teacher because “the certification process is incapable of providing any insight into an individual’s ability, intellectual curiosity, creativity, affinity for children, and instructional skills.”²⁷

Walsh further explains,

“The theory that teacher certification leads to high-quality teaching is based more on what we think ought to be true (shouldn’t coursework in pedagogy and educational methods create better teachers? Shouldn’t teachers have to go through education school, just as lawyers go to law school and doctors go to medical school?) than on controlled experimentation. It is a leap of faith taken without the benefit of supporting evidence. The evidence, it turns out, is astonishingly deficient.”²⁸

Another study finds no difference in student math gains between certified and uncertified teachers. Researchers Thomas Kane, Jonah Rockoff, and Douglas Staiger examined the effectiveness of teachers who entered the classroom through very different pathways. They write, “Simply put, a teacher’s certification status matters little for student learning. We find no difference between teaching fellows and traditional certified teachers or between uncertified and traditionally certified teachers in their impact on math achievement.”²⁹

Researcher Frederick Hess says that “Teacher preparation programs neither screen out nor weed out weak candidates.”³⁰ After evaluating teacher licensing exams from various states, Education Trust researchers concluded that the standards for passage are generally so low that they exclude only the “weakest of the weak” from classrooms. “When one factors in the low passing scores in some states, passing a licensing exam can mean nothing more than a high school diploma. We found no evidence of content at

the baccalaureate level.”³¹ Even the National School Board Association states, “It would appear that traditional certification routes provide no guarantee of teacher quality.”³²

Economist Ballou writes, “Large numbers of teachers have had trouble passing tests of basic skills. Districts that have attempted to upgrade their work force have found that a majority of teacher applicants struggle with the examinations that they expect their own high school graduates to pass.”³³ “Teachers often tell us that they are insulted by the low level of content exams. But the *insults to children are even greater*. Many are being *shortchanged* daily by poorly prepared teachers.” [emphasis added]³⁴

Teacher Preparation

What effect does our system of teacher training have on the quality of teachers? Many teachers do not think their preparation program prepared them for the challenges of running their classrooms.³⁵ According to the Public Agenda survey, “Six in ten teachers believe most new teachers take over classrooms without the requisite experience in how to actually run them.”³⁶ Obtaining a teacher certificate can be a barrier to entry for those wanting to change careers since the opportunity cost is higher as they must spend money on a training program and perhaps forgo the wages they would have made if they were still employed. Fifty-five percent of young professionals, open to the idea of teaching, said they would be more likely to consider becoming a school teacher if they did not have to go back to school.³⁷

The Thomas B. Fordham report, “The Teachers We Need and How to Get More of Them: A Manifesto,” suggests that the “surest way to improve [teacher] quality is to widen the entryway, deregulate the process, and hold people accountable for results.” This well-known report was signed by several officials, prominent education researchers, and veteran practitioners. They state that the

“regulatory strategy being pursued today to boost teacher quality is seriously flawed. Every additional requirement for prospective teachers—every additional pedagogical course, every new hoop or hurdle—will have a predictable and inexorable effect: it will limit the supply of teachers by narrowing the pipeline while having no bearing whatever on the

quality or effectiveness of those in the pipeline ... a better solution to the teacher quality problem is to simplify the entry and hiring process. Get rid of most hoops and hurdles. Instead of requiring a long list of courses and degrees, test future teachers for their knowledge and skills. Allow principals to hire the teachers they need.”³⁸

Interestingly, private schools without these regulatory parameters tend to hire more teachers from selective colleges. Researchers Ballou and Podgursky write, “barriers to entry are also lower for private school instructors.”³⁹

Not Hiring the Best Applicants

With all of the evidence pointing to the importance of teacher quality, the process for hiring teachers warrants close attention. In their study of schools systems across the globe, McKinsey researchers found that “The top-performing school systems have *more effective mechanisms for selecting people for teacher training* than do the lower-performing systems.” [emphasis added] They take each hire very seriously because they “recognize that a bad selection decision can result in up to 40 years of poor teaching.”⁴⁰ It is vital that principals and human resource directors make good hiring decisions as hiring someone who turns out to be an ineffective teacher can impact hundreds or even thousands of children.⁴¹

According to Eric Hanushek and Steven Rivkin, existing research on hiring policies in American schools “suggests that schools are not very effective at choosing the best teachers.”⁴² Research found that teaching applicants from selective colleges were much less likely to be hired than applicants from less selective colleges.⁴³ Research also finds that administrators hire applicants who majored in education over applicants who majored in math or science, “despite a recognized national shortage of teachers who bring those subject-specific skills to the classroom.”⁴⁴

Economists Dale Ballou and Michael Podgursky, in their book *Teacher Pay and Teacher Quality*, discuss the hiring process,

“Unfortunately, little is known about the way school districts screen job applicants. Scholarly research takes the form of case studies and provides scarcely more

than anecdotal evidence. Yet what we know does not inspire confidence. So far as we can tell, applicants for teaching positions are not generally asked to teach a class as part of the interview process. Some research suggests that school recruiters give too much weight to the impression an applicant makes during a job interview, too little to a record of academic achievement assembled over a period of many years.”⁴⁵

Why are some public school administrators not hiring the best applicants for teaching jobs? The incentives are different in a public school and private school system. Public schools are not encouraged to ensure that they hire the most capable teachers. Nor do they face sanctions for hiring ineffective teachers because they have a captive audience. Most students do not have the financial resources to leave and attend private school or be homeschooled.

Private schools face market sanctions if they fail to attract and retain the kinds of teachers that sustain the school’s reputation.⁴⁶ If a parent or student is unhappy with the quality of the teaching staff, they can choose to leave. Thus, it should be no surprise that “private schools place more emphasis on academics and the recruitment of faculty who have strong academic records.”⁴⁷

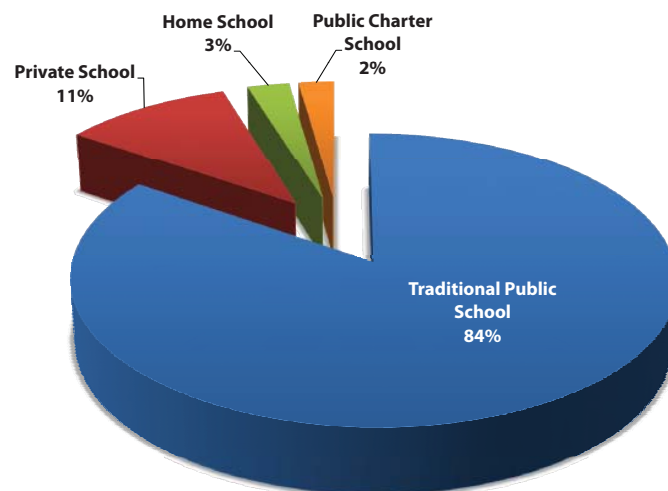
Private schools behave differently than public schools because they are not shielded from competition like the public education system and must answer to their customers.

Public Education is a Monopoly

The simple fact is the majority of students in the United States are educated by a system that has a monopoly over the market. Nationwide, 84 percent of all k-12 students attend traditional public schools, most of which are assigned to them by the government.⁴⁸ This equates to almost 50 million students in a monopoly-run education system.*

As we have seen time and time again when the government creates legal or financial barriers to entry into a specific market, monopolies are inherently inefficient because they are shielded from competition. The current public education system has no incentive to improve because it does not have to compete for students. As a result, many of America’s neediest students may attend school in a one-size-fits-all system of declining quality that does not meet their individual needs.† Ignoring the students most in need of education opportunities does not help kids break the cycle of poverty.

Figure 1: United States Student Enrollment, 2007-08

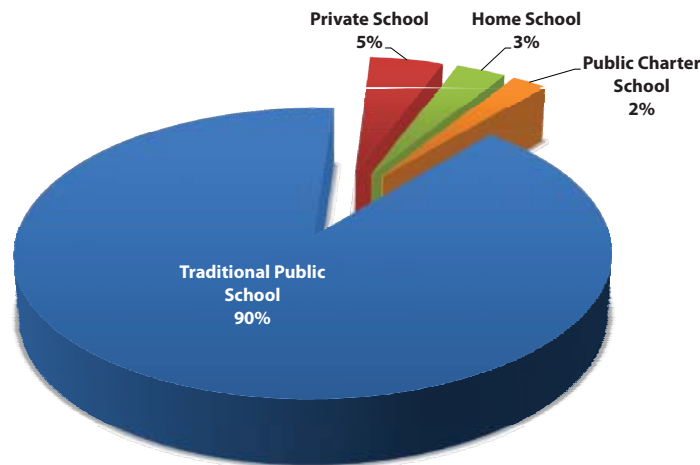


Source: U.S. Department of Education, National Household Education Survey, National Alliance for Public Charter Schools

* Projected student enrollment in United States public schools was 49,644,000 students for the 2007-08 school year.

† Student needs not addressed may include a shorter school day to enable them to work, a longer school day to help them catch up academically, a school environment with a go-at-your-own pace philosophy, a school with various career and technology offerings or AP course offerings, or a special education teacher with expertise in Autism or Aspergers.

Figure 2: Texas Student Enrollment, 2007-08



Source: Texas Education Agency, U.S. Department of Education, and National Home Education Research Institute

While the public school system still holds a firm grip over education in America, its monopoly may be showing signs of weakening. Public charter schools and homeschooling have both seen explosive growth over the last decade as students and parents become more dissatisfied with their neighborhood public school. In fact, almost 9 million students, roughly 16 percent of all k-12 students, are choosing *not* to be educated in a traditional public school. Eleven percent (6 million students) paid for private school, 3 percent (1.5 million students) chose to be educated at home, and 2 percent (1.2 million students) attended public charter schools⁴⁹ (see Figure 1). In addition, 365,000 students nationwide are currently on a waiting list to attend a public charter school.⁵⁰

The state of Texas has an even larger education monopoly. Consider that 90 percent of Texas students are in government assigned schools. While there are more than 4.5 million students enrolled in traditional public schools, many parents and students are choosing other options.⁵¹ Five percent (more than 235,000 students) attend a private school, 3 percent (approximately 160,000 students) are schooled at home, and 2 percent (more than 110,000 students) attend a public charter school⁵² (see Figure 2). In addition, nearly 17,000 Texas students are on a waiting list to attend a public charter school.⁵³

Failed Government Policies

Government policies always have unintended consequences. In the case of education, many education poli-

cies actually put the needs of teachers before the needs of students. Rigid education policies that leave little room for discretion at the local level—such as granting teachers tenure, paying teachers by a single salary schedule, paying an increased salary to teachers with Master’s degrees, and reducing the size of all classes regardless of the quality of the teacher—all harm students.

Tenure and Dismissal

Teacher tenure is a terrible policy for both students and teachers. In many states, including Texas, most teachers are given a teaching contract by a school district after just three years of teaching. These contracts can be for one year, three years, five years, ten years, indefinitely, or any other time frame as the school district sees fit. Giving teachers multi-year contracts or continuing contracts can prevent administrators from managing personnel to fit the school’s needs for that particular year. In practice, teacher contracts are similar to tenure in that the teachers are essentially guaranteed a job for the rest of their career as it is extremely rare not to renew a teacher’s contract. Burdensome documentation requirements, red tape, local politics, and multiple levels of appeal make it next to impossible for principals and superintendents to dismiss a teacher for poor performance, incompetence, or misconduct in a timely manner.⁵⁴ As a result, very few teachers are dismissed and job security prevails over the needs of students.

In Texas, several large school districts have dismissal rates that are a fraction of a percent. For example, over a five

Figure 3: Teacher Terminations by School District, 2001-06

School District	Teachers Fired	Annual Dismissal Rate	School District Teachers	Reasons
Arlington ISD	2	0.01%	4,053	Misconduct
Austin ISD	3	0.01%	5,745	Misconduct or performance
Cy-Fair ISD	1	0.004%	5,260	Performance
Dallas ISD	133	0.24%	10,643	Non-renewal, due to process dismissal, separated for cause
Fort Worth ISD	4	0.02%	4,839	No reasons provided
Houston ISD	88*	0.18%	12,057	Non-renewal
San Angelo ISD	2	0.04%	968	Non-renewal or reduction in force
San Antonio ISD	9	0.05%	3,633	Misconduct, performance, reduction in force
Waco ISD	20	0.36%	1,092	Performance, misconduct, certification

Source: Individual School District Schools

* HISD's numbers do not include the 2001-02 school year.

year time period, Arlington ISD dismissed only two teachers out of the more than 4,000 teachers employed in the district. A large school district in Houston, Cy-Fair ISD, dismissed one teacher out of more than 5,200 employed at the district over five years—a dismissal rate of 0.01 percent per year. Public school districts across the state show a similar pattern as shown in Figure 3. Clearly it is not easy or politically palatable to fire bad teachers.

In New York City, taxpayers are paying more than 1,300 teachers to do nothing, which is costing more than a hundred million dollars a year because rigid state personnel policies and union contracts prevent teachers from being dismissed or having their cases arbitrated in a timely manner.^{55*}

Private schools have less rigid personnel policies and are more likely to dismiss an incompetent teacher (although there is less need to dismiss teachers since they have better hiring policies). Ballou explains, “With the exception of some unionized Catholic high schools, teacher contracts are written for one year and can be renewed or not as the school chooses. There is no tenure for teachers. While non-renewals for unsatisfactory performance are not common, they do occur.”⁵⁶

In many jobs in the private sector and in government, employees can be on probation for their first three months, six

months, or even 12 months on the job. After a probationary performance review, they are reviewed every year. If a weakness is identified when they are reviewed, the employee is usually given until the next review to improve.

“Admittedly, not all private employers terminate their less effective employees. Employees who do not perform up to expectations may remain in entry-level positions, left in the proverbial ‘mailroom.’ Schools are very different organizations from most private firms. Notably, there is no equivalent to the corporate mailroom. Less effective teachers, when they earn tenure, are assigned classrooms of students just like more effective teachers.”⁵⁷

Some teacher personnel policies also lack common sense. Research shows that effective teachers can help erase the achievement gap and that the number of years a teacher has taught has no correlation with whether they are effective. Yet schools lay off teachers based off of seniority without regard for their skill or effectiveness. Recently in California, an 8th grade English teacher was given a pink slip just months before she was named “Outstanding New Teacher” in San Lorenzo, California.⁵⁸

* A union contract requires that roughly 600 New York City school teachers get paid to do nothing and spend their days in Rubber Rooms across the city while they wait an average of 3 years for their case to be heard by an arbitrator. This United Federation of Teachers contract also requires that teachers who lost their jobs due to school closure or scheduling changes get paid regardless of whether they get hired by another school or even apply for another position. This amounts to about 700 to 800 teachers and may exceed 1,100 next year.

Researchers at the New Teacher Project recently surveyed personnel policies at 12 school districts in four states (Arkansas, Colorado, Illinois, and Ohio). Their research compiled in the report “The Widget Effect” reflects roughly 15,000 teacher surveys, 1,300 administrator surveys, and surveys from more than 80 state and local education officials, policymakers, and teacher union leaders on teacher evaluation, compensation, and dismissal policies.⁵⁹ As a whole, the New Teacher Project found very few teachers are being dismissed from the teaching profession. For example, “86 percent of administrators themselves say they do not always pursue dismissal even if it is warranted.”⁶⁰ At least half of the districts studied did not dismiss a single non-probationary teacher for poor performance in the past five years and 41 percent of administrators reported they have never denied tenure to a teacher or “non-renewed” a probationary teacher.⁶¹ Even in low-performing schools, where extremely effective teachers might be able to turn the school around, “on average, over the last three years, only 10 percent of failing schools issued at least one unsatisfactory rating to a tenured teacher.”⁶²

To improve teacher quality, school administrators need a better process for removing ineffective teachers and managing their staff and then need to follow through with that process.

Paying Teachers with a Salary Schedule

Nationwide, 93 percent of public school districts use a salary schedule to pay their teachers.⁶³ This entrenched practice of paying excellent teachers the same as poor teachers harms students. The salary schedule pays teachers according to the years in the classroom, thereby rewarding seniority and ignoring effectiveness. It is an inefficient use of limited resources because it gives all teachers a pay raise every year, is ineffective at improving teacher quality, and prevents local school administrators from using their own discretion on how to best use and spend tax dollars to compensate teachers and improve student achievement. Paying teachers with a rigid salary schedule sends low-performing teachers the wrong message. CATO scholar Marie Gryphon explains that when school districts use salary schedules they “entice lower-ability

workers while driving higher-ability workers away.”⁶⁴ The salary schedule does not reward merit and compresses pay for higher skilled teachers, preventing pay premiums for attending a highly selective college.⁶⁵ Thus, pay premiums are now nonexistent in public schools. “In the early 1960s a female teacher who attended a highly selective college received about a 59 percent pay premium. In 2000, a female teacher who attended a college in the top 5 percent received essentially no pay premium.”⁶⁶

Texas began requiring school districts to pay on or above the statewide minimum salary schedule in 1949.⁶⁷ In 1995, the Texas Legislature rewrote the Education Code and increased the number of steps on the state minimum salary schedule from 10 to 20. State law requires public school districts to pay their full-time classroom teachers, librarians, counselors, and nurses at least the minimum salary specified on the schedule for each step on the 20 step schedule.⁶⁸ School districts may not *pay less* than the minimum salary and thus the salary schedule acts as a type of minimum wage or floor for teachers. School districts typically pay more than the minimum salary at each step and use the state minimum salary schedule as a guide for creating their own salary schedules. The size of salary schedules vary by district with some school districts having as many as 30 or 40 steps.⁶⁹

Paying More for a Master’s Degree

Another ineffective government policy that fails to improve education is the common practice of paying teachers more for having an advanced degree. Having a master’s degree does not necessarily make a teacher a better teacher, as research finds that possession of an advanced degree has no correlation to higher teacher effectiveness or student achievement.⁷⁰ Instead, this one-size-fits-all policy is actually a waste of money and increases debt.⁷¹

One obvious reason that a master’s degree does not increase student achievement is that most master’s degrees are in education administration rather than being focused on a teacher’s content area or focusing on best teaching practices for the classroom. In fact, 90 percent of teachers’ master’s degrees are in education programs and not

* The following school districts participated in the New Teacher Project survey: El Dorado Public Schools; Jonesboro Public Schools; Little Rock, Public Schools; Springdale Public School; Denver Public Schools, Pueblo City Schools, Chicago Public Schools; District U-46 in Elgin; Rockford Public Schools; Akron Public Schools; Cincinnati Public Schools; and Toledo Public Schools.

the subject area they teach.⁷² Most school districts give teachers a financial incentive to attain a master's degree and thus it is not surprising that master's degrees in education had the highest growth rate of all master's degrees between 1997 and 2007.⁷³

In Texas, 27 percent of teachers have a master's degree and, as a result, receive an extra \$1,423 per year on average. This equals more than \$124.5 million spent on an outdated method of compensation that has no bearing on increased learning in the classroom!⁷⁴

Roughly 60 percent of teachers and administrators surveyed by the New Teacher Project said their district is not doing enough to identify, compensate, promote, and retain the most effective teachers.⁷⁵

Class Size Mandates

Another common government policy that does not improve classroom instruction is limiting the number of students in a classroom by mandate. Class size mandates are an unproven, ineffective, and expensive top-down government policy. Class size requirements prevent school administrators from being able to put more students in the classroom of a quality teacher. If a student moves to a new school in the middle of the year and his/her presence in a classroom puts the class size over the mandated ratio, then administrators are forced to start new classes and split up current classrooms, which disrupts learning. Research finds that the quality of the teacher is more important than how many kids are in the classroom.⁷⁶ Some parents know this and push to have their child moved into a different class away from the mediocre teacher while others are left with the bad teacher.

Texas has a class size limit of one teacher for every 22 students in kindergarten through fourth grade.⁷⁷ In addition, public schools are required by state law to have a ratio of at least one teacher for every 20 students in average daily attendance (kindergarten-12th grade).⁷⁸

“South Korea and Singapore recognize that while class size has relatively little impact on the quality of student outcomes, teacher quality does. South Korea's student-to-teacher ratio is 30:1 compared to an OECD average of 17:1, enabling it to in effect double teacher salaries while maintaining the same overall funding level as other

OECD countries.”⁷⁹ (OECD stands for Organisation for Economic Co-operation and Development).

Conclusion

Many well-intentioned and seemingly benign government education policies actually do much more harm than good. These one-size-fits-all policies leave little room for discretion at the local level, do not put the interests of students first, and harm students.

The Chancellor of New York City public schools Joe Klein says, “The three principles that govern our system are lockstep compensation, seniority, and tenure. All three are *not right for our children.*” [emphasis added]⁸⁰

Steve Jobs, CEO of Apple, also sees problems with the current management structure in public schools and suggests giving principals the ability to pay great teachers significantly more money and dismiss ineffective teachers. At a 2007 education conference, he said, “What kind of person can you get to run a small business if you told them, when they came in, they couldn't get rid of people they thought weren't any good in the first place? And they couldn't pay people three times as much when they got three times as much work done? Not really great ones [principals] because if you're really smart you go, I can't win. I believe that what is wrong with our schools in this nation is that they have become unionized in the worst possible way. This unionization and lifetime employment of K-12 teachers is off-the-charts crazy.”⁸¹

In addition, many schools do not use effective teacher evaluation processes and therefore provide very little feedback to help teachers improve or distinguish between the excellent teachers and the struggling teachers. In a recent paper on the teacher evaluation process, researchers at the New Teacher Project write that the system is “disrespectful to teachers ... [and] gambles with the lives of students.”⁸²

After surveying 12 public school districts in four states, including Chicago and Denver public schools, these researchers conclude that the current evaluation system and absence of meaningful feedback it provides does teachers a disservice. They write “evaluations are short and infrequent (most are based on two or fewer class-

room observations totaling 60 minutes or less), conducted by untrained administrators, and influenced by powerful cultural forces.”⁸³ In school districts that use a binary rating system (rate teachers satisfactory or unsatisfactory), more than 99 percent of teachers received a satisfactory rating.⁸⁴ Less than half of all teachers surveyed felt that the evaluation allows accurate assessment of performance and actually helps teachers improve.^{85*} More than half of all new teachers, those with the most need of specific feedback and professional development tied to weak areas, did not have any areas identified on their evaluations in their first three years.^{86†} Some school districts do not track the evaluation data or reschedule missed evaluations. For example, one school district surveyed did not centrally track or record any evaluation data at all and 9 percent of teachers surveyed in all districts appear to have missed their most recent scheduled evaluation.⁸⁷

After decades of education reforms ranging from curriculum rewrites, class size reductions, across-the-board pay raises, tougher accountability, and increased spending, public education has not dramatically improved. Wholesale reform will only come about when policymakers have the political will to take on the education system. It will take bold policymakers to break up the education monopoly and allow schools to compete for kids. Parents need their freedom restored so they can choose the best school for their child. As a result, school leaders will be forced to view education policies through the lens of results and will have an incentive to improve or watch their enrollment decline. School board members can follow the lead of Houston ISD and create an open-enrollment district-wide policy that allows students to attend any school of their choice in the entire school district (with the exception of magnets that have specific entrance criteria).

Needless regulations such as teacher tenure, ineffective pedagogy courses required for certification, and the salary schedule should be repealed. School administrators focused on ensuring every teacher is a quality teacher may need to change their hiring practices. For example, they might consider a teacher applicant’s subject matter exper-

tise more important than whether they have the necessary pedagogy. Another option is to add a component to the interview process that allows them to observe the applicant’s ability to teach and connect with students. This is a best practice in top-performing charter schools like KIPP and YES Prep.

School administrators might want to change the teacher evaluation process to make it count in personnel decisions and raises. Eighty-six percent of administrators in Chicago public schools reported they would “spend more time and effort on the evaluation process if evaluations held more importance for other decisions.”⁸⁸ Another solution might be to train administrators in what to look for when they evaluate teachers and to develop a more sophisticated teacher evaluation rating system than satisfactory or unsatisfactory. The goal is for school leaders to use the teacher evaluation process to honestly evaluate a teacher’s strengths and weaknesses and suggest ways for them to improve with related professional development.

School leaders might start paying their top teachers more money so they don’t lose them and develop a fair process to dismiss chronically poor-performing teachers. In turn, respect for the teaching profession could improve and lead to more qualified individuals pursuing teaching.

Concerned parents, citizens, and policymakers should not tolerate a system that puts its own needs before the needs of kids. A quality education can help kids trapped in a cycle of poverty rise above their circumstances and achieve the American Dream. As U.S. Secretary of Education Arne Duncan says, “The fight for a quality education is about so much more than education. It’s a fight for social justice.”⁸⁹

Recommendations

Lawmakers

- Give parents the freedom to choose any school for their child within the public school system by creating a statewide open-enrollment policy;

* Across all districts, only 42 percent of teachers agree that the evaluation allows accurate assessment of performance and only 43 percent of teachers agree that evaluation helps teachers improve.

† Only 43 percent of teachers in their first three years had any development areas identified—meaning 57 percent of relatively new teachers do not require improvement in any area of performance.

- Raise the cap on the number of charter operators so that the students on a charter school waiting list can attend a charter school;
- Replace the current teacher dismissal process that has burdensome documentation requirements and red tape with more fair and streamlined due process procedures;
- Abolish the state minimum salary schedule, allowing for local discretion;
- Repeal class size mandates, allowing for local discretion; and
- Lower barriers to entry into the profession through changes to the certification requirements.

School Board Members

- Give parents the freedom to choose their child's school within the district by making the entire district open-enrollment;
- Create specialized magnet schools with rigorous curriculum;
- Create district charter schools for special populations such as dropouts (there is no limit or cap on the number of charter schools a district may authorize);
- Do not adopt a school district salary schedule, instead offer teachers a base salary with the opportunity for more money based on area of expertise and performance;
- Do not give all teachers an across-the-board pay raise as it rewards effective and ineffective teachers equally; rather, grant principals the authority to make teacher pay decisions;
- If there is a need to reduce the number of teachers due to declining enrollment or budget constraints, do not dismiss teachers by seniority, instead examine a teacher's evaluation and performance and try to find the least effective teachers to dismiss.

School Leaders/Administrators

Hiring/Firing

- Take the hiring process seriously:
 - Observe a teaching applicant's ability to teach in the interview;
 - Ask other teachers to observe and score each applicant;
 - Hire subject matter experts in all areas, especially shortage areas;
 - Do not assign teachers to teach outside their area of expertise (out-of-field teaching);
 - Make teachers at-will employees instead of on contracts;
 - If you have to give teachers contracts, give them one-year contracts rather than multi-year contracts;
 - Transition teachers on multi-year contracts to one-year contracts when their contract expires;
- Give low-performing teachers specific feedback and recommendations for improvement;
- Assign an ineffective teacher an effective teacher as a mentor;
- Dismiss an ineffective teacher if he/she does not improve by an agreed upon time;
- Consider buying out a teacher's contract if they are chronically ineffective rather than continuing to have them affect entire classes of students; and
- Look at a teacher's evaluation and performance during budget cuts (rather than laying off teachers by seniority).

Pay

- Give principals the ability to manage their own budget by decentralizing the budget to the school level

- and having the funding follow the student to their exact school rather than having a significant portion of funding stay at the district's administrative level;
- Pay teachers differently based on skill level through a merit pay program;
- Pay teachers differently based on expertise using shortage stipends;
- Pay teachers more for a difficult work assignment;
- Do not give low-performing teachers automatic raises (through a step increase on the salary schedule), or across-the-board pay raises; and
- Do not give anyone an across-the-board pay raise, but rather use local discretion in determining how to pay and reward staff.
- Evaluate every teacher every year and possibly multiple times a year and give very specific feedback to help them improve;
- Make the evaluation count by using it in personnel decisions;
- Tie professional development to a teacher's individual needs rather than paying for a one-size-fits all professional development program;
- Provide effective teachers as mentors to new or struggling teachers; and
- Pay some of your best teachers to be full-time mentors to several teachers so they can focus on those teachers and not be distracted by their normal teaching load. ★

Professional Development

- Consider using an evaluation system that has more categories than “satisfactory” and “unsatisfactory” so that the process can be more specific to a teacher's ability;
- Train principals and other school leaders how to properly evaluate teachers;

Endnotes

- ¹ Interview with a South Korean policymaker per “How the World’s Best-Performing School Systems Come Out on Top,” McKinsey and Company, (Sept. 2007) 16, http://www.mckinsey.com/client/service/socialsector/resources/pdf/Worlds_School_systems_final.pdf.
- ² Eric A. Hanushek, John F. Kain and Steven G. Rivkin, “Teachers, Schools, and Academic Achievement” (Aug. 1998) NBER Working Paper No. W6691, <http://ssrn.com/abstract=122569>.
- ³ Ruth Mitchell Ph.D. and Patte Barth, “How Teacher Licensing Tests Fall Short,” *Education Trust*, Vol 3, Issue 1 (Spring 1999) 15, http://www2.edtrust.org/NR/rdonlyres/5F7B8FCA-2400-47DE-9C40-AC948D934836/0/k16_spring99.pdf.
- ⁴ “How the World’s Best-Performing School Systems Come Out on Top,” McKinsey and Company (Sept. 2007) 12, http://www.mckinsey.com/client/service/socialsector/resources/pdf/Worlds_School_systems_final.pdf.
- ⁵ William L. Sanders and June C. Rivers, “Cumulative and Residual Effects of Teachers on Future Academic Achievement,” University of Tennessee (1996).
- ⁶ Eric Hanushek and Steven G. Rivkin, “How to Improve the Supply of High Quality Teachers,” Brookings Papers on Education Policy (May 2003) 15, <http://edpro.stanford.edu/Hanushek/admin/pages/files/uploads/Teacher%20quality.Brookings.pdf> citing Hanushek 1992.
- ⁷ William B. Sanders and Sandra P. Horn, “Research Findings from the Value-Added Assessment System (TVAAS) Database: Implications for Educational Evaluation and Research,” *Journal of Personnel Evaluation in Education*, Vol. 12, No. 3 (1998) 1, http://www.sas.com/govedu/edu/ed_eval.pdf.
- ⁸ Andrew Leigh and Sara Mead, “Lifting Teacher Performance,” Progressive Policy Institute (Apr. 2005) 6, http://www.ppionline.org/documents/teachqual_0419.pdf.
- ⁹ Kate Walsh and Christopher O. Tracy, “Increasing the Odds: How Good Policies Can Yield Better Teachers,” National Council on Teacher Quality (2004) http://www.nctq.org/p/publications/docs/nctq_io_20071129024229.pdf.
- ¹⁰ Sean Corcoran, William N. Evans, and Robert M. Schwab, “Changing Labor Market Opportunities for Women and the Quality of Teachers 1957-1992,” National Bureau of Economic Research, Working Paper No. 9180, 2002.
- ¹¹ Ibid.
- ¹² *Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce*, National Center on Education and the Economy. (San Francisco: Jossey-Bass, 2007) XXIII.
- ¹³ U.S. Department of Education, “Condition of Education,” National Center for Education Statistics (2001) <http://nces.ed.gov/pubs2001/2001072.pdf>.
- ¹⁴ Eric Hanushek and Steven G. Rivkin, “The Revolving Door,” *Education Next* (Winter 2004) Vol. 4, Issue 1, <http://www.hoover.org/publications/ednext/3345156.html>.
- ¹⁵ Katie Haycock, “Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap,” *The Education Trust* (1998) 14, http://www2.edtrust.org/NR/rdonlyres/0279CB4F-B729-4260-AB6E-359FD3C374A7/0/k16_summer98.pdf.
- ¹⁶ Carole Keeton Strayhorn, Texas Comptroller Special Report “The Cost of Underpaying Texas Teachers Updated” (Mar. 2006) 15, <http://www.window.state.tx.us/specialrpt/teachersalary06/>.
- ¹⁷ Ibid.
- ¹⁸ Number of individuals with a valid teaching certificate in Texas through October 31, 2009 obtained by author on October 15, 2009 through an open records request to the Texas Education Agency; “Texas Public School Statistics 2007-08: Pocket Edition,” Division of Performance Reporting, Texas Education Agency (2008) <http://ritter.tea.state.tx.us/perfreport/pocked/2008/pocked0708.pdf>.
- ¹⁹ Kate Walsh and Christopher O. Tracy, “Increasing the Odds: How Good Policies Can Yield Better Teachers,” National Council on Teacher Quality (2004) 8, http://www.nctq.org/p/publications/docs/nctq_io_20071129024229.pdf.
- ²⁰ Dale Ballou, “Addressing the Looming Teacher Crunch: The Issue is Quality,” Progressive Policy Institute (Feb. 1998) 1, http://www.ppionline.org/ppi_ci.cfm?knlgArealD=110&subseclD=135&contentID=1652.
- ²¹ Kate Walsh and Christopher O. Tracy, “Increasing the Odds: How Good Policies Can Yield Better Teachers,” National Council on Teacher Quality (2004) 7, http://www.nctq.org/p/publications/docs/nctq_io_20071129024229.pdf.
- ²² Katie Haycock, “Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap,” *The Education Trust* (1998) http://www2.edtrust.org/NR/rdonlyres/0279CB4F-B729-4260-AB6E-359FD3C374A7/0/k16_summer98.pdf.
- ²³ “Who is Teaching?” State Board for Educator Certification, Texas Education Agency, 2007-2008.
- ²⁴ Kate Walsh and Christopher O. Tracy, “Increasing the Odds: How Good Policies Can Yield Better Teachers,” National Council on Teacher Quality (2004) 9, http://www.nctq.org/p/publications/docs/nctq_io_20071129024229.pdf.
- ²⁵ Ibid.
- ²⁶ Katie Haycock, “Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap,” *The Education Trust* (1998) 13, http://www2.edtrust.org/NR/rdonlyres/0279CB4F-B729-4260-AB6E-359FD3C374A7/0/k16_summer98.pdf.
- ²⁷ Kate Walsh, “Check the Facts: Positive Spin: The evidence for traditional teacher certification,” *Education Next*, Hoover Institution, Stanford University (Spring 2002) Vol. 2, No. 1, 79-84, <http://www.hoover.org/publications/ednext/3368501.html>.
- ²⁸ Ibid.
- ²⁹ Thomas J. Kane, Jonah E. Rockoff and Douglas O. Staiger, “Photo Finish: Certification Doesn’t Guarantee a Winner,” *Education Next*, Hoover Institution, Stanford University (Winter 2007) Vol. 7, No. 1, 61-67, <http://www.hoover.org/publications/ednext/4612527.html>.
- ³⁰ Frederick M. Hess, “Tear Down This Wall: The Case for a Radical Overhaul of Teacher Certification,” Progressive Policy Institute (Nov. 2001) 13, http://www.ppionline.org/ppi_ci.cfm?knlgArealD=110&subseclD=135&contentID=3964.

- ³¹ Ruth Mitchell Ph.D. and Patte Barth, "How Teacher Licensing Tests Fall Short," *Education Trust*, Vol 3, Issue 1 (Spring 1999) 8, http://www2.edtrust.org/NR/rdonlyres/5F7B8FCA-2400-47DE-9C40-AC948D934836/0/k16_spring99.pdf.
- ³² Frederick M. Hess, "Tear Down This Wall: The Case for a Radical Overhaul of Teacher Certification," Progressive Policy Institute (Nov. 2001) 13, http://www.ppionline.org/ppi_ci.cfm?knlgArealD=110&subseclD=135&contentID=3964.
- ³³ Dale Ballou, "Addressing the Looming Teacher Crunch: The Issue is Quality," Progressive Policy Institute (Feb. 1998) 1, http://www.ppionline.org/ppi_ci.cfm?knlgArealD=110&subseclD=135&contentID=1652.
- ³⁴ Katie Haycock, "Not Good Enough: A Content Analysis of Teacher Licensing Exams," *Education Trust*, Vol 3, Issue 1 (Spring 1999) 2, http://www2.edtrust.org/NR/rdonlyres/5F7B8FCA-2400-47DE-9C40-AC948D934836/0/k16_spring99.pdf.
- ³⁵ Steve Farkas, Jean Johnson, and Tony Folena, "A Sense of Calling: Who Teaches and Why," *Public Agenda* (2000) 29, http://www.publicagenda.org/files/pdf/sense_of_calling.pdf.
- ³⁶ Ibid.
- ³⁷ Ibid, 28.
- ³⁸ "The Teachers We Need and How to Get More of Them: A Manifesto," The Thomas B. Fordham Foundation, 2, <http://www.namodemello.com.br/The%20Teachers%20We%20Need.htm>.
- ³⁹ Dale Ballou and Michael Podgursky, *Teacher Pay and Teacher Quality* (Kalamazoo: W.E. Upjohn Institute for Employment Research: 1997) 141.
- ⁴⁰ "How the World's Best-Performing School Systems Come Out on Top," McKinsey and Company (Sept. 2007) 17, http://www.mckinsey.com/client-service/socialsector/resources/pdf/Worlds_School_systems_final.pdf.
- ⁴¹ This is due to the fact that public school teachers are rarely fired.
- ⁴² Eric Hanushek and Steven G. Rivkin, "How to Improve the Supply of High Quality Teachers," *Brookings Papers on Education Policy* (May 2003) 18, <http://edpro.stanford.edu/Hanushek/admin/pages/files/uploads/Teacher%20quality.Brookings.pdf> citing Ballou and Podgursky 1997.
- ⁴³ Dale Ballou, "Do Public schools hire the Best Applicants?" *Quarterly Journal of Economics* 111 (1996) 101.
- ⁴⁴ Marie Gryphon, "Giving Kids the Chaff: How to Find and Keep the Teachers We Need," *CATO Institute* (Sept. 2006) 4, http://www.cato.org/pub_display.php?pub_id=6700 citing Dale Ballou, "Do Public schools hire the Best Applicants?" *Quarterly Journal of Economics* 111 (1996) 120.
- ⁴⁵ Dale Ballou and Michael Podgursky, *Teacher Pay and Teacher Quality* (Kalamazoo: W.E. Upjohn Institute for Employment Research: 1997) 77.
- ⁴⁶ Ibid, 139.
- ⁴⁷ Ibid, 164.
- ⁴⁸ 49,644,000 (all public school students) minus 1,259,571 (charter school students) equals 48,384,429 students in a traditional public school, U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics* (2008) Table 2, http://nces.ed.gov/programs/digest/d08/tables/dt08_002.asp?referrer=report; "Growth and Quality in the Charter School Movement: 2008 Dashboard," National Alliance for Public Charter Schools, http://www.publiccharters.org/files/publications/file_Charter_Dashboard_2008.pdf.
- ⁴⁹ Public school and private school enrollment for 2007-08 school projected. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics* (2008) Table 2, http://nces.ed.gov/programs/digest/d08/tables/dt08_002.asp?referrer=report; "Growth and Quality in the Charter School Movement: 2008 Dashboard." National Alliance for Public Charter Schools, http://www.publiccharters.org/files/publications/file_Charter_Dashboard_2008.pdf.
- ⁵⁰ National Alliance for Public Charter Schools, Benefits and Successes, <http://www.publiccharters.org/aboutschools/benefits>.
- ⁵¹ Enrollment in Texas Public Schools 2007-08, Division of Accountability Research, Department of Assessment, Accountability, and Data Quality, Texas Education Agency (Jan. 2009) http://ritter.tea.state.tx.us/research/pdfs/enrollment_2007-08.pdf.
- ⁵² U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey, 2007-08, Table 15, 20, <http://nces.ed.gov/pubs2009/2009313.pdf>; Texas homeschool estimate from phone conversation with Brian Rey, Ph.D., National Home Education Research Institute; and Texas Education Agency data obtained by the author from the Charter School Division (8 Aug. 2008).
- ⁵³ Brooke Dollens Terry and Michael Alexander, "Calculating the Demand for Charter Schools," Texas Public Policy Foundation (Aug. 2008) 4, <http://www.texaspolicy.com/pdf/2008-08-PP14-charter-bt.pdf>.
- ⁵⁴ Texas Education Code, Chapter 21.
- ⁵⁵ Steven Brill, "The Rubber Room: The battle over New York City's worst teachers," *The New Yorker* (Aug. 2009) 7, http://www.newyorker.com/reporting/2009/08/31/090831fa_fact_brill?currentPage=all.
- ⁵⁶ Dale Ballou, "Addressing the Looming Teacher Crunch: The Issue is Quality," Progressive Policy Institute (Feb. 1998) 6, http://www.ppionline.org/ppi_ci.cfm?knlgArealD=110&subseclD=135&contentID=1652.
- ⁵⁷ Thomas J. Kane, Jonah E. Rockoff and Douglas O. Staiger, "Photo Finish: Certification Doesn't Guarantee a Winner," *Education Next*, Hoover Institution, Stanford University (Winter 2007) Vol. 7, No. 1, 67, <http://www.hoover.org/publications/ednext/4612527.html>.
- ⁵⁸ Dana Mattioli, "A Hard Lesson for Teachers," *The Wall Street Journal* (11 Aug. 2009) <http://online.wsj.com/article/SB10001424052970203612504574342530405184284.html>.
- ⁵⁹ Daniel Weisberg, Susan Sexton, Jennifer Mulhern, and David Keeling, "The Widget Effect: Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness," *The New Teacher Project* (2009) 3, <http://widgeteffect.org/>.
- ⁶⁰ Ibid, 17.
- ⁶¹ Ibid, 4.
- ⁶² Ibid, 12.
- ⁶³ U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 2003-2004, District and Private School Data Files, Tale 33.

- ⁶⁴ Marie Gryhon, "Giving Kids the Chaff: How to Find and Keep the Teachers We Need," CATO Institute (Sept. 2006) 4, http://www.cato.org/pub_display.php?pub_id=6700.
- ⁶⁵ Andrew Leigh and Sara Mead, "Lifting Teacher Performance," Progressive Policy Institute (Apr. 2005) 4-7, http://www.ppionline.org/documents/teachqual_0419.pdf.
- ⁶⁶ Ibid.
- ⁶⁷ Carole Keeton Strayhorn, Texas Comptroller Special Report, "The Cost of Underpaying Texas Teachers Updated" (Mar. 2006) 8, <http://www.window.state.tx.us/specialrpt/teachersalary06/>.
- ⁶⁸ Texas Education Code, §21.401-403.
- ⁶⁹ Brooke Dollens Terry and K. Emma Pickering, "Bringing Teacher Compensation into the 21st Century," Texas Public Policy Foundation (Mar. 2008) <http://www.texaspolicy.com/pdf/2008-03-PP08-teacherpay-bt.pdf>.
- ⁷⁰ Steven G. Rivkin, "Teachers, Schools and Academic Achievement," *Econometrica* 73 (2005) 449.
- ⁷¹ Marguerite Roza and Raegen Miller, "Separation of Degrees: State-By-State Analysis of Teacher Compensation for Master's Degrees," *Schools in Crisis: Making Ends Meet*, Center on Reinventing Public Education (July 2009) 1, http://www.crpe.org/cs/crpe/download/csr_files/rr_crpe_masters_jul09.pdf.
- ⁷² Ibid, 1.
- ⁷³ Ibid, 1.
- ⁷⁴ Ibid, 3.
- ⁷⁵ Daniel Weisberg, Susan Sexton, Jennifer Mulhern, and David Keeling, "The Widget Effect: Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness," The New Teacher Project (2009) 4, <http://widgeteffect.org/>.
- ⁷⁶ Eric A. Hanushek, John F. Kain and Steven G. Rivkin, "Teachers, Schools, and Academic Achievement" (Aug. 1998) NBER Working Paper No. W6691, <http://ssrn.com/abstract=122569>.
- ⁷⁷ Texas Education Code, Chapter 25, Subchapter D, Sec. 25.112.
- ⁷⁸ Texas Education Code, Chapter 25, Subchapter D, Sec. 25.111.
- ⁷⁹ "How the World's Best-Performing School Systems Come Out on Top," McKinsey and Company (Sept. 2007) 21, http://www.mckinsey.com/client-service/socialsector/resources/pdf/Worlds_School_systems_final.pdf.
- ⁸⁰ Steven Brill, "The Rubber Room: The battle over New York City's worst teachers," *The New Yorker* (Aug. 2009) 2, http://www.newyorker.com/reporting/2009/08/31/090831fa_fact_brill?currentPage=all.
- ⁸¹ Attendance at Texas Education Reform Foundation event on February 16, 2007; and April Castro, "Apple CEO lambasts teacher unions," Associated Press, *Houston Chronicle* (16 Feb. 2007).
- ⁸² Daniel Weisberg, Susan Sexton, Jennifer Mulhern, and David Keeling, "The Widget Effect: Our National Failure to Acknowledge and Act on Difference in Teacher Effectiveness," The New Teacher Project (2009) 2, http://widgeteffect.org/downloads/TheWidgetEffect_execsummary.pdf.
- ⁸³ Ibid, 4.
- ⁸⁴ Ibid, 11.
- ⁸⁵ Ibid, 14.
- ⁸⁶ Ibid, 14.
- ⁸⁷ Ibid, 12.
- ⁸⁸ Ibid, 25.
- ⁸⁹ Arne Duncan speech to the National Education Association (2 July 2009) 6, <http://www.ed.gov/news/speeches/2009/07/07022009.html>.

About the Author

Brooke Dollens Terry is an education policy analyst at the Texas Public Policy Foundation. Since joining the Foundation in October of 2006, she has written extensively on the math/science teacher shortage, teacher incentive pay, charter schools, teacher certification, end-of-course assessments, career and technology education, and a host of other k-12 education issues. Her work has been published in numerous publications including the *Dallas Morning News*, the *Houston Chronicle*, the *Fort Worth Star-Telegram*, and the *San Antonio Express-News*. Her research has also been mentioned in *The Economist*, *The Wall Street Journal*, *Education Week*, and other prominent publications. Brooke currently serves on the Education Task Force of the American Legislative Exchange Council.

Before joining the Foundation, she worked at the Texas Workforce Commission in government relations and as a policy analyst for Commissioner Diane Rath. At the Workforce Commission, Brooke researched and analyzed child care, welfare, foster care, food stamps, and a host of other workforce issues.

Brooke spent three years on Capitol Hill in Washington D.C. working for U.S. Senators Phil Gramm, John Cornyn and Richard Lugar as a legislative assistant. During that time she analyzed federal legislation and policy in the areas of abortion, banking, children nutrition, cloning, housing, education, welfare, judiciary, and social issues.

About the Texas Public Policy Foundation

The Texas Public Policy Foundation is a 501(c)3 non-profit, non-partisan research institute guided by the core principles of individual liberty, personal responsibility, private property rights, free markets, and limited government.

The Foundation's mission is to lead the nation in public policy issues by using Texas as a model for reform. We seek to improve Texas by generating academically sound research and data on state issues, and recommending the findings to policymakers, opinion leaders, the media, and general public.

The work of the Foundation is primarily conducted by staff analysts under the auspices of issue-based policy centers. Their work is supplemented by academics from across Texas and the nation.

Funded by hundreds of individuals, foundations, and corporations, the Foundation does not accept government funds or contributions to influence the outcomes of its research.

The public is demanding a different direction for their government, and the Texas Public Policy Foundation is providing the ideas that enable policymakers to chart that new course.

