THE CENTURY FOUNDATION
NEW IDEAS FOR A NEW CENTURY

Expanding the Supply of Quality Teachers

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THE IDEA

In order to address the current shortage of qualified teachers, the federal government should promote an initiative for attracting and cultivating them. The first step would be to create a wage structure on par with comparable private sector work, including substantive wage increases based on performance criteria such as peer review. The second step would be to raise teacher qualification standards by requiring prospective teachers to have a college major or minor in the subject in which they plan to teach, plus a year-long program of teaching instruction and classroom experience (during which the prospective teacher would receive full pay).

THE PROBLEM

Quality teachers are in short supply, and the problem is likely to get worse. The current problem was clearly illustrated in April 1998 when 59 percent of prospective teachers in Massachusetts failed to pass a qualifying test.[1] Over the next ten years, projections indicate that the nation will be confronted with 2.2 million teaching vacancies arising from teachers retiring, class-size reduction initiatives, and increased student enrollment[2] (currently there are 2.56 million public school teachers). Although the teacher shortage is a general problem, it is most acute in the fields of math, science, computer science, bilingual, and special education. The relatively low pay afforded teachers is likely to make finding enough teachers difficult, as the average teacher salary is markedly below that of other professions.[3]

Many individuals and groups from across the political spectrum are beginning to agree on two points: teachers should be paid more and teachers should be held accountable for the performance of their students. Unfortunately, with the notable exception of a proposal by Vice President Al Gore, most plans fail to link explicitly the issues of higher pay with higher accountability.[4] Furthermore, many proposals for increasing the number of teachers in the profession often achieve this goal by lowering standards, thus potentially raising the number of unqualified teachers.[5]

Let us consider the two related problems–unqualified teachers in our schools and low teacher salaries–in turn. First, teachers are often placed in classrooms to fill vacancies without completing the standardized state certification required of all prospective teachers. Many teach a subject in which they do not have a college major or minor, called out-of-field teaching (see Figure 1, page 2). Some public school teachers have never taken a teaching course. In 1994, only 63 percent of public school teachers had a regular or advanced teaching license. Of the remainder, 16 percent had an emergency, temporary, provisional, or alternative license, 10 percent had a probationary license, and 11 percent were teaching without a license.[6] These unqualified teachers are not evenly distributed, however. Certain middle- and upper-class school

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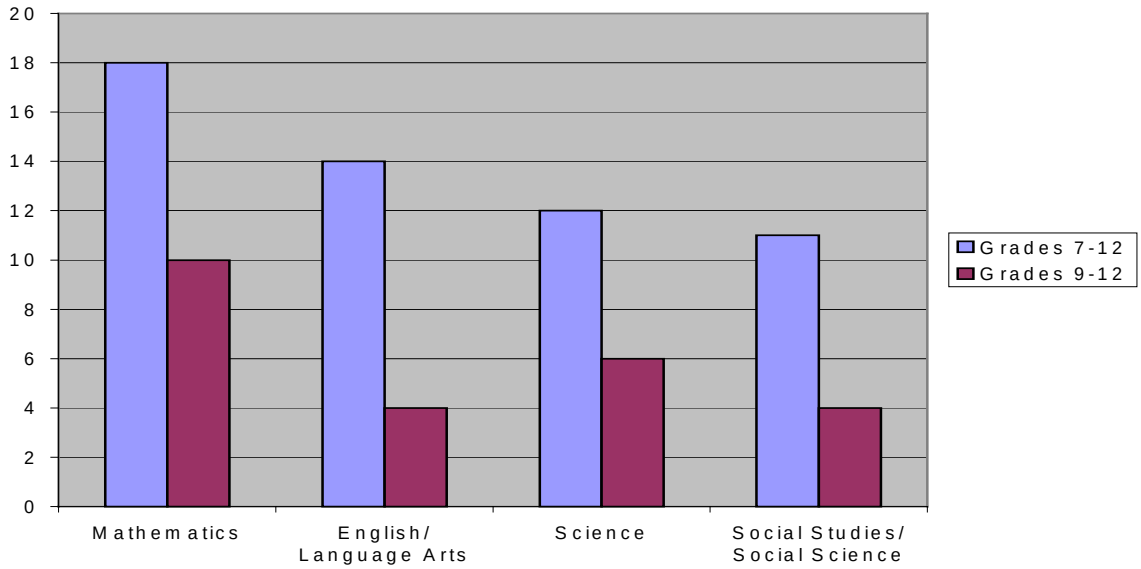
districts have a large applicant pool for a small number of slots, so these schools can choose the best teachers. The same is not true for many inner city and other low-income districts, where acute teacher shortages and the inability to fill needed positions has, on occasion, resulted in the start of the school year being delayed. The unfortunate truth is that the students who need quality teachers the most are most likely *not* to have them.

Figure 1. Percentage of Full Time Public School Teachers Who Did Not Report Having an Undergraduate or Graduate Major or Minor in Their Main Teaching Assignment Field, Grades 7-12, 1998

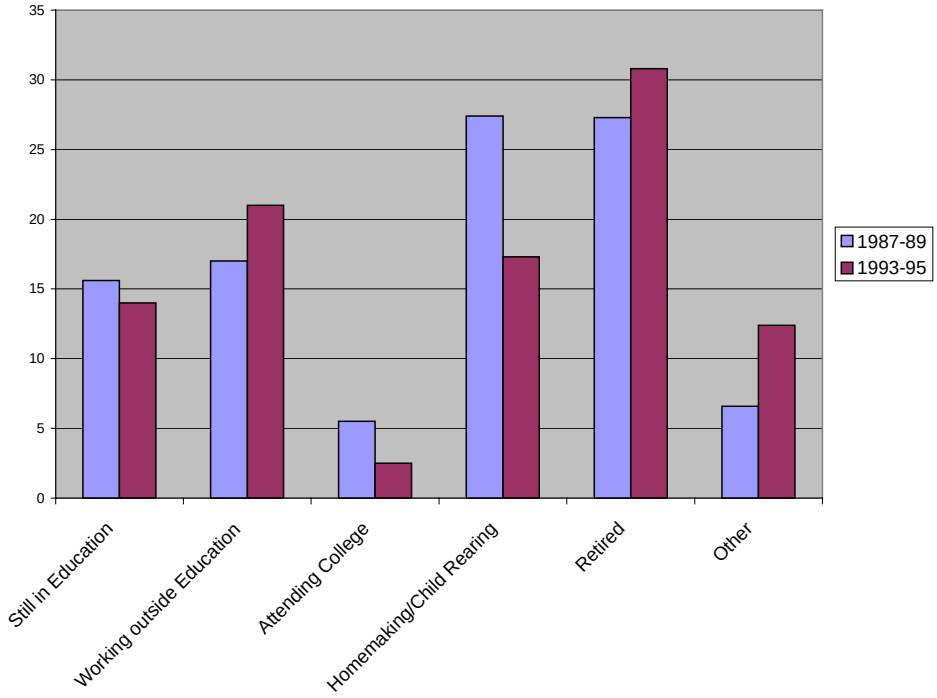


Source: Laurie Lewis et al., "Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers," NCES 1999-080, U.S. Department of Education, National Center for Education Statistics, Washington, D.C., January 1999.

Second, the lower salaries and difficult job environment in which teachers work make teaching unappealing to the kinds of recent college graduates that school administrators need to attract. Although the idea of attracting highly trained professionals who wish to change careers is admirable, the funds are presently not there to lure them away from their more lucrative corporate jobs.[7]

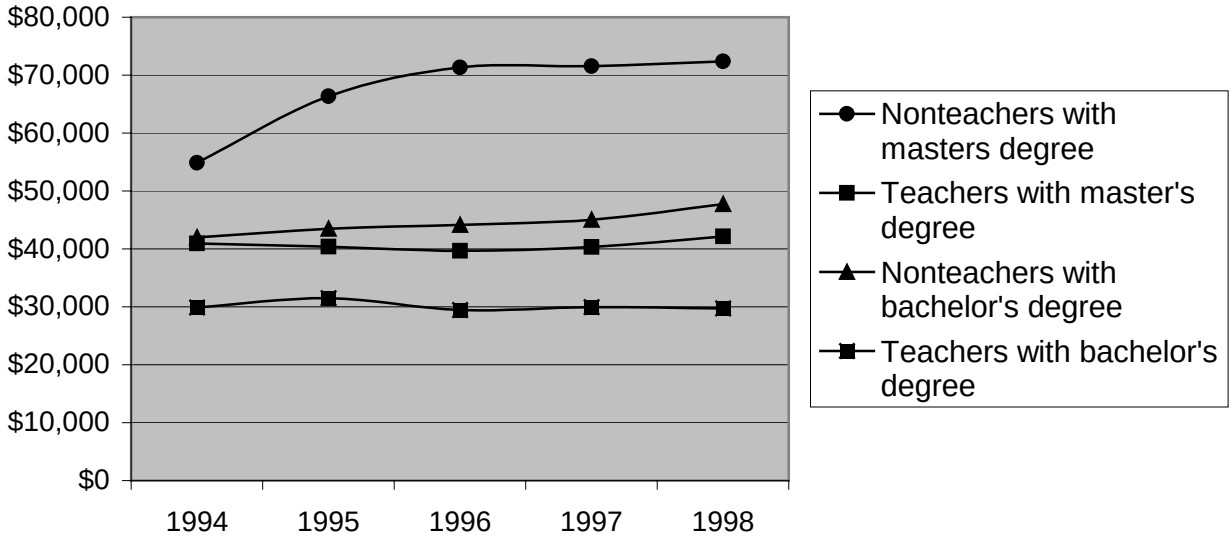
Additionally, once teachers are placed in schools, they frequently do not stay more than a year, due to the difficult working conditions, low level of support and guidance, and the wage disparity between teaching and other professions (see Figures 2 and 3, page 3). Salary disparities between teachers and other college graduates begin immediately. The average teacher earns a salary out of college that is 72 percent of –or $10,555 less than–what other college graduates earn. These disparities remain large after teachers enter the workplace. When teacher salaries are compared to those of other professions, teachers earn between $10,000 and $40,000 less than other professionals.[8] In fact, the average teacher salary in some states is so low that children from a teacher's family would qualify for federal free and reduced priced meal programs.[9]

Figure 2. Destination of Full-Time Teachers Leaving Teaching



Source: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88, 1990-91, and 1993-94, and the Teacher Follow-up Survey, 1988-89, 1991-92, and 1994-95.

Figure 3. Average Earnings of Teachers and Other College Graduates



Source: Lynn Olson, "Sweetening the Pot," *Education Week*, January 13, 2000, p. 30, analyzing data from U.S. Census Bureau, *Current Population Survey*, March Supplement, 1992-99.

Although teacher salaries are low across the nation, the problem is most acute in poorer neighborhoods. Poor communities often lack the tax base to support high teacher salaries, and the need for higher salaries often conflicts with other educational needs in the community. In addition, there are often severe discipline problems in high poverty schools that end up deterring potential teaching candidates. Finally, many poor communities have high concentrations of special needs or non-English speaking children. These teaching positions should be at a higher pay grade to ensure that sufficient quality teachers can be found to staff them. Higher pay also should be implemented for those disciplines that are currently understaffed–mathematics, science, English as a second language (ESL), computer science, and special education.[10] Twelve states currently allow for different pay scales based on performance and marketplace conditions, but because of the restrictions that teachers' unions have put in place to equalize pay for elementary school and high schools, these pay scales are not widely used.[11]

HOW THE PLAN WOULD WORK

Although many in politics are reticent to admit it, the federal government can play an important role in addressing the shortage of quality teachers.

Attracting and Retaining Teachers

First, the federal government can play a critical role in ensuring that teacher salaries are closer to salaries for individuals in nonteaching fields. Local governments are often limited in their ability to raise teacher salaries because they do not have the tax base necessary to generate the needed revenue. States often are unwilling or unable even to make the effort needed to equalize pay among school systems, let alone increase all salaries to levels comparable with the private sector.

The federal government can help to equalize salaries across states, and within states. It can do so in a way that takes into account the fiscal capacities of state and local governments, just as they do with funding the Title I program. In fact, the same criteria for allocating Title I funds could be used to allocate funding for equalizing salaries, as school systems with a high percentage of students living at or near the poverty level have the greatest need for supplemental salary dollars.

One key component to this plan would be the inclusion of mechanisms to ensure that federal funding for teachers supplemented, not supplanted, existing state and local salaries for teachers. Some communities might be tempted to use the federal teacher salary supplements as a way of lowering local contributions to public education. However, this program is not meant to replace the traditional role that state and local governments play in financing public education. One possible means of ensuring that teacher salaries are truly supplemented would be to pay the additional amount directly to teachers, as California Governor Gray Davis proposed in his failed attempt to exempt teachers from certain state income taxes.

Increasing teacher salaries would create greater incentives for existing teachers to remain in the field. In addition, it would also make it easier for individuals in nonteaching fields to move into education, especially if their experience outside education was factored into the wage determination process. Many mid-career professionals who would like to change to the teaching field find it prohibitively low-paying, a particularly vexing problem since these professionals are typically highly trained and frequently in the science, math or computer fields that face the most acute shortages of quality teachers. Of course, it is imperative that teachers entering the field from other professions have the necessary pedagogical training and pass the same certification standards as other teachers.

After creating higher-paying jobs, the teaching field must remain competitive, with wage increases based on performance reviews. These reviews might include peer evaluations and allow problem teachers to be identified and targeted for remediation. Effective peer review and remediation programs have been implemented in several cities, such as Toledo, Ohio and Rochester, New York.[12] Additionally, if some component of the increases in pay is linked to performance-based factors, the economic disincentives could encourage poor teachers to leave the teaching profession on their own.

Ensuring the Quality of Teachers

The federal government also can work with states to develop uniform standards for certifying teachers. Uniform certification standards, administered by the states, would ensure that a school can hire a certified teacher from anywhere in the country knowing that the teacher is qualified for the job. Any standardized certification should require that all teachers in secondary education have majored in college (or at least minored) in the field in which they plan to teach.[13] This would eliminate out of field teaching, and ensure that all teachers have in-depth training in the subject matter they teach. Out of field teaching should be eliminated, if possible; otherwise, it should be made exceptionally difficult for teachers to receive emergency credentials.

Prospective teachers should have at least one summer's worth of intensive training in general pedagogy. This should be followed by a year-long apprenticeship, working with an established teacher.[14] These courses should be designed jointly by the school district and local two- and four-year colleges, based on nationally uniform certification requirements. Prospective teachers should get a salary for this year-long program roughly equal to their school-year pay. Participation in this program would be transferable from state-to-state.

The development of standards for hiring teachers should be coupled with high standards for teachers once they are in the job. Guidelines and procedures should be developed for sanctioning teachers who fail to meet the established standards. These guidelines might include giving the teacher a warning, then placing them on probation, followed by termination. These guidelines also should include mechanisms for ensuring that teachers who are having problems in the classroom receive assistance from their colleagues, through mentoring or additional training.

EVIDENCE THAT THE PLAN WOULD WORK

The contention that higher quality teachers would have a beneficial effect on student achievement is well-supported by current research. That research suggests that teacher quality is a key determinant of achievement, especially for at-risk students. Indeed, a definitive recent review of this research states that "Of the inputs that are policy-controllable . . . improving the quality of teachers in the classroom will do more for students who are most educationally at risk."[15]

Historically, it was not necessary to provide high pay in order to procure high quality teachers. Social convention kept many highly qualified women from entering corporate America, and these women instead entered the teaching profession. Today, the teaching profession has to compete with all other professions for this pool of talented individuals. The subsidy that resulted from the inability of women to enter into other professions is now gone and raising teacher salaries is a critical component to attracting the highest quality women and men to the profession.

The state of Connecticut is an excellent example of how raising both pay and standards results in the ability to attract a large number of highly qualified teachers. Teachers in Connecticut note that it is not just the high salaries that have attracted them to the state. In addition to high salaries, teachers want to be treated like other professionals, including being held to higher standards and being called upon to accept more responsibility for the performance of their students.[16] The high standards begin with entry into the teaching profession in Connecticut and continue throughout a teacher's employment. Getting a teaching certificate in Connecticut requires the teaching candidate to demonstrate that he or she was a high performing student in college. Keeping a teaching job requires demonstrating performance in the classroom. Connecticut's experience suggests that when a state treats teachers like true professionals–in both pay and responsibility–it increases both the ability to attract new teachers and to retain existing ones.

Perhaps the greatest strength of this proposal is that it combines aspects of proposals made by players on both the liberal and conservative ends of the political spectrum. This is not to say that all groups support higher teacher pay, as conservatives often argue that there is not a significant link between per pupil expenditures and education performance. Teachers' unions also have historically been a strong opponent to programs such as differential wages among teachers and increased teacher accountability. There has been concern among unions and teacher advocates that the "blame the teacher" syndrome overlooks the difficulties associated with teaching. It also can lead to teachers being blamed for any decline in student achievement, which is often a very nuanced problem.

However, Sandra Feldman, the president of the American Federation of Teachers (AFT), has come out in support of a ten-step teacher standard plan, which has important similarities to the program sketched here, including required academic majors, and courses in pedagogy that accompany the academic requirements. The AFT also advocates that these courses in pedagogy be nationally uniform, to eliminate the dual certifications that have to be completed by teachers changing states. These guidelines further call for a stronger introduction into teaching by having prospective teachers apprentice to other teachers while still in the learning phase and by pairing new teachers with mentors for their first year of teaching. Finally, the AFT supports the idea of paying teachers different salaries based on the need for those teachers. Thus, the political situation, in this sense, is becoming more favorable to the approach sketched here.

Equally important, both the Democratic and Republican presidential candidates have taken policy positions supporting the need for both increased accountability and increased salaries for teachers. However, both candidates have been reticent to see a federal role in these activities, leaving most decisionmaking up to the states and local school boards. This is problematic, as state and local governments often are unwilling or unable to take the steps necessarily to increase teacher salaries in addition to toughening standards.[17]

THE COST

Improving teacher quality clearly requires more funding. Simply bringing *new* teacher salaries in line with what their peers in nonteaching fields earn would cost, on average, $10,555 per teacher. With about 220,000 new teachers entering the workforce every year in the next decade, such an initiative would total $2.3 billion a year. However, the inequalities do not stop there. Because of the growth of the economy and the technology sector, the income for nonteachers with master's degrees rose by $17,505 from 1994 to 1998. For teachers with master's degrees, it rose less than $200. Additionally, teacher salaries, often capped at around $60,000, rise much more slowly than those of nonteachers.

These disparities suggest the need to adjust the average salaries of all teachers so that they are in line with those of similarly educated nonteachers. This would be much more costly than just raising new teacher salaries, but it would be more equitable and undoubtedly more effective in attracting and retaining quality teachers. With 52 percent of teachers with a bachelor's degree (average raise necessary: $18,000) and 47 percent with a master's or other advanced degree (average raise necessary: $30,000), and 2,560,000 teachers in the workforce, this could end up costing an additional $60 billion, a huge increase considering that currently only $75 billion is spent on teacher salaries. Even if one takes the view that teachers have the summer off and that therefore not all of this gap–perhaps only half--should be erased, increasing teacher salaries to that level would still cost approximately $30 billion per year.[18]

Given that all schools and teaching fields are not created equal, these funds should be allocated more toward high-poverty schools with difficult working conditions and toward fields that suffer the gravest teacher shortages. Otherwise, teaching will not attract the talented and highly trained individuals needed in low-performing schools and in technical disciplines. States and local school districts also should be willing to pay for experience, and to offer financial incentives to work in the difficult working environment that high poverty schools often have. These financial adjustments also would make the field more attractive to highly trained mid-career professionals who would like to enter the teaching field, but are deterred by the low pay and time-consuming licensing programs.

Finally, increasing teacher salaries to the level of their peers who work fifty-two weeks a year could be the first step toward keeping schools open year round. Teachers currently work approximately forty weeks a year, based on the agrarian education calendar used in the United States in previous centuries. Increasing teacher salaries to a level comparable with other professionals who work year round would provide a basis for all year schools (as discussed in Century Foundation Idea Brief no. 8, *All-Day, All-Year Schools*).

MORE INFORMATION

Education Week (http://www.edweek.org), in conjunction with the Pew Charitable Trusts, released a report in its January 13, 2000 issue detailing the current climate of teaching. It contains a report card on the quality of teachers for each state.

The National Center for Education Statistics (www.nces.ed.gov) has reports on the current makeup of teachers, including the percentage of teachers with temporary or emergency

credentials.

The National Commission on Teaching and America's Future, and their 1994 report, along with more recent reports, can be found on the web at www.tc.columbia.edu.

The report on teacher quality released by the American Federation of Teachers in April, 2000, is available on the web in pdf format at www.aft.org.

The Quest for Better Teachers, a study by the Thomas B. Fordham foundation, is available on their website at www.edexcellence.net.

The report *Survey and Analysis of Teacher Salary Trends 1999* is available from the American Federation of Teachers website at http://www.aft.org/research/salary/home.htm.

ENDNOTES

1. Jordana Hart, "Nearly Half Fail Second Teacher Test," *Boston Globe*, August 13, 1998, p. A1. Fifty-nine percent of teachers failed the test administered in April 1998 and 47 percent failed the tests when it was offered in July.

2. *Predicting the Need for Newly Hired Teachers in the U.S. to 2008-09*, U.S. Department of Education, National Center for Education Statistics, Washington, D.C., 1998. The anticipated teacher vacancy rate of about 200,000 per year is five times the rate in the recent past.

3. *Survey and Analysis of Teacher Salary Trends, 1999*, American Federation of Teachers, Washington, D.C., 1999, available at http://www.aft.org/research/salary/home.htm

4. As outlined in the Vice President's speech on May 5, 2000, in Lansing, Michigan, available at http://www.algore2000.com/briefingroom/releases/pr_0505_MI_1.html.

5. For instance, many plans for bringing private sector individuals into the teaching profession fail to make explicit the pedagogical training these individuals should be required to obtain before entering the classroom. The plans of both presidential candidates are not explicit on this point.

6. Linda Darling-Hammond, "Solving the Dilemmas of Teacher Supply, Demand and Standards: How We Can Ensure a Competent, Caring and Qualified Teacher for Every Child," National Commission on Teaching and America's Future, New York, August 1999, Chart 5, available at www.tc.columbia.edu/~teachcomm/.

7. The Gore campaign has proposed paying a signing bonus to individuals who come to teaching from the private sector (http://www.algore2000.com/briefingroom/releases/pr_0505_MI_1.html). The plan gives benefits to individuals moving from the private sector that are greater than those who choose teaching as a profession from the outset.

8. The American Federation of Teachers, *Survey and Analysis of Teacher Salary Trends, 1999*. Note that these differences cannot be accounted for simply on the basis of teachers receiving the summers off. Even assuming teachers could make their school year monthly salaries during the summers–which is generally *not* the case–they would still be lagging their similarly-educated peers.

9. Jessica Sandham, "California Sweetens Pot to Ease Teacher Shortage," *Education Week*, July 12, 1999, p. 24. The average teacher salaries are $30,090 in Louisiana and $28,691 in Mississippi, compared to a FARM eligibility cutoff of $30,433.

10. Richard Rothstein, "Blaming Teachers," *American Prospect*, December 6, 1999, p. 40.

11. "The Quest for Better Teachers," Thomas Fordham Foundation, Washington, November 15, 1999.

12. Lisa Birk, "Intervention for Ineffective Teachers," in *Education Digest*, April 1995, p. 48. These programs involve both teachers and administrators, which allows both groups to ensure that teacher evaluations are not mere logrolling by teachers or arbitrary evaluations by administrators.

13. This is practical only in secondary education, because primary education teachers often teach a number of different subjects to the same set of students.

14. The American Federation of Teachers, in its report of the K-16 Teacher Education Task Force, has supported taking a five-year view in terms of teacher preparation. The fifth year would be spent as an internship teaching under the supervision of a mentor. "Building a Profession: Strengthening Teacher Preparation and Induction," American Federation of Teachers, Washington, D.C., April 2000.

15. Linda Darling-Hammond and Laura Post, "Inequality in Teaching and Schooling: Supporting High-Quality Teaching and Leadership in Low-Income Schools," in Richard D. Kahlenberg, ed., *A Notion at Risk: Preserving Public Education as an Engine for Social Mobility* (New York: Century Foundation Press, forthcoming 2000).

16. Jay Mathews, "Connecticut's Education Success Story," *Washington Post*, July 18, 2000, p. A11.

17. Local school systems may not have the ability to raise teacher salaries appreciably because the local tax base cannot raise the revenues. This problem is most acute in areas with the lowest per-pupil expenditures, which have the greatest need for high teacher salaries in order to attract qualified teachers.

18. Cost estimate done by authors from U.S. Census Bureau data, *Current Population Survey*, March Supplement, 1992-99, and U.S. Department of Education, National Center for Education Statistics, *Schools and Staffing Survey*, 1993-94.

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