



Education Commission of the States

# **Eight Questions on Teacher Recruitment and Retention: What Does the Research Say?**

## **A Summary of the Findings**

At least since the publication of *A Nation At Risk* in 1983, there has been widespread recognition by policymakers, educators and the American public that all children do not have the top-notch teachers they need to realize their full potential as learners. While even children who attend the highest-performing schools have, from time to time, teachers who simply don't measure up, the situation for children from low-income families is often reprehensible. High-poverty, low-performing schools suffer from severe teacher turnover, which increases the atmosphere of failure; they have far fewer accomplished, veteran teachers; and the qualifications of their faculty, especially in science and mathematics, are often marginal at best.

Addressing these problems requires (1) a thorough and accurate understanding of the characteristics of the teacher workforce and the impact those characteristics have on teachers' decisions to enter and remain in teaching and their success in the classroom; and (2) a repertoire of effective strategies for recruiting, supporting and retaining an adequate supply of good teachers and deploying them to every classroom in the nation.

What follows is a summary of the findings of a report by the Education Commission of the States (ECS) designed to do just that: Help policymakers gain a better understanding of both the nature of the teacher workforce and of promising recruitment and retention strategies.

To that end, ECS reviewed 91 studies on teacher recruitment and retention in search of answers to eight questions that are of particular importance to policy and education leaders. While empirical research is not the only important source of information and is not by itself a sufficient basis for policy, policies that are not grounded in the best research are likely to miss the mark and fall short of solving the problems they were intended to address.

The full report, available at [www.ecs.org/trrreport](http://www.ecs.org/trrreport), provides a detailed look at what the research says in response to each of the key questions and what that response implies for policy, and includes summaries of all 91 studies reviewed.

*Eight Questions on Teacher Recruitment and Retention: What Does the Research Say?* is the second in a series of three reports on teaching quality supported by a grant from the U.S. Department of Education. The first, an in-depth review of research on teacher preparation, was published in summer 2003. The final report, to be released in October 2005, will focus on what the research says about teacher licensure and certification.

## Question I:

*What are the characteristics of those individuals who enter teaching?*

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### RELATED QUESTIONS:

*How do the characteristics of individuals who are currently teaching differ from the characteristics of those who are not? What accounts for the demographics of the current population of teachers? What are the characteristics of the reserve pool of licensed teachers who currently are not teaching?*

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The nation's teacher workforce continues to be predominantly white (86%) and female (79%). Although that trend has changed little over the last 30 years, there are several nuances worth noting. The research provides **moderate evidence** that a larger percentage of the most intellectually able women decide to enter careers other than teaching now that more career opportunities are open to them. But there is also **moderate evidence** that one of the reasons for women's strong interest in teaching as a profession is – and likely will continue to be – the opportunity it affords to take time out to raise a family. With regard to the low percentage of minorities in the teaching profession, there is **limited evidence** that one of the reasons is the barrier that teacher certification examinations pose to minority teacher candidates.

Much has been made in recent years of the issue of the intellectual ability of teachers in comparison with other college graduates. The research provides **strong evidence** that those college graduates with the very highest demonstrated intellectual proficiency are less likely to go into teaching than other college graduates. There is also **limited evidence** that poor hiring practices may be, in part, to blame for this.

The reserve pool of teachers also is the subject of much discussion. The research reviewed for this report indicates that between 25% and 37% of those who leave teaching wind up returning at some point. This seems to suggest that the attrition rate of new teachers from teaching is mitigated by the fact that a large percentage of dropouts are only temporarily lost to the profession.

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### POLICY IMPLICATIONS

The research suggests that policymakers should, first of all, intensify their efforts to recruit capable minorities into teaching and to discover what accounts for their underrepresentation in the profession, although the likelihood of increasing minority representation significantly in the profession is small. Similarly, although it seems unlikely that teaching ever will attract a large percentage of the most academically talented individuals, policymakers should continue to seek to attract as able a teacher corps as possible. Finally, policymakers and educators should exploit the reserve pool of licensed teachers as fully as possible.

## Question 2:

*How do those individuals who remain in teaching compare with those who leave?*

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### RELATED QUESTIONS:

*What relationship do the following characteristics have to retention in teaching: age and teaching experience; gender, family and socioeconomic status; race and ethnicity; academic qualifications; intellectual proficiency; demonstrated teaching ability; subject taught; and beliefs, values and attitudes? How does the turnover rate in teaching compare to that in other professions?*

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Research reveals some consistent patterns that confirm statistics commonly cited in contemporary discussions. There is **strong evidence** that teacher attrition is most severe among beginning teachers but the likelihood of a teacher leaving declines significantly after he or she has been in the classroom for four to five years, and then increases again markedly after 25–30 years in the profession. Roughly 50% of teachers leave their initial assignment – but not necessarily the profession itself – in the first five years of their career. There is **limited evidence** that younger beginning teachers are more likely to leave than those who are slightly older.

The literature also indicates younger women are the most likely to leave teaching, and there is **moderate evidence** that pregnancy and childrearing are key reasons why. This means it is possible a significant number of women who quit to raise a family return to teaching once their children are older, a possibility consistent with the limited evidence. Consistent with this possibility, several studies provide **limited evidence** that women who enter teaching at a more mature age are much less likely to leave than those who begin teaching when they are much younger.

The literature reviewed also provides **moderate evidence** that white teachers have greater rates of attrition than either African American or Hispanic teachers, and it offers **limited evidence** that minority teachers are more likely than white teachers to remain in schools with higher proportions of minority students.

With regard to the relationship between academic qualifications and teacher attrition, the literature reviewed provides **limited evidence** that teachers teaching in a field in which they have subject expertise or certification are less likely to leave than teachers with less appropriate qualifications. It provides **strong evidence** that attrition is greater among middle school and high school teachers than among elementary school teachers, and it provides **moderate evidence** that science and mathematics teachers are more likely to leave their jobs than secondary school teachers of other subjects.

With regard to the impact of intellectual proficiency, the literature provides **limited evidence** that teachers with high intellectual proficiency are more likely to leave teaching than teachers with significantly lower intellectual proficiency.

On the relationship of several other teacher characteristics – academic degree; socioeconomic status; and beliefs, values and attitudes – to attrition, the literature is **inconclusive**.

Finally, the literature is **inconclusive** on the issue of how attrition in teaching compares with that in other occupations, and there is no consensus on what a reasonable rate of attrition in teaching might be.

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#### POLICY IMPLICATIONS

In view of the difficulty of significantly increasing minority representation in the teaching profession, it is important to examine more closely the reasons why white teachers leave schools with high percentages of minority students, and to develop strategies that may curb that tendency. Of particular importance is stemming the attrition of teachers – whether white or minority – who teach mathematics and science. Also worthy of study are the reasons for the higher rate of attrition among the more intellectually capable teachers and appropriate policy responses. Some of these many involve fiscal considerations, which will be discussed in Question 5.

### Question 3:

*What are the characteristics of schools and districts most likely to be successful in recruiting and retaining teachers?*

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#### RELATED QUESTIONS:

*Do schools differ in their success at recruiting and retaining teachers based on the following characteristics: geography – urban, suburban or rural; grade level; school type – elementary schools, middle schools and high schools, public versus private? Do student-body composition and performance have an impact on the ability of schools to recruit and retain teachers?*

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The research reviewed for this question provides a stronger basis for some conclusions than for others. It provides **strong evidence** that attrition is greater among secondary school teachers than among elementary school teachers. With regard to the more specific issue of middle school attrition in comparison to high school or elementary school attrition, the literature is **inconclusive**.

Consistent with common perceptions, the research literature provides **moderate evidence** that teacher turnover is greater in schools with relatively higher proportions of low-income, minority and academically low-performing students. The literature also provides

**limited evidence** that the qualifications of teachers in such schools tend to be inferior to the qualifications of teachers in other schools.

Finally, the literature provides **limited support** for the conclusion that teacher turnover is greater at private schools than at public schools, and – somewhat surprisingly in light of the current wave of interest in creating smaller schools – that turnover is also greater in small schools, both public and private, than in larger schools.

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#### POLICY IMPLICATIONS

One of the implications of the research literature is clearly that educators and policymakers must focus particular attention on stemming teacher attrition in secondary schools, and especially in mathematics and science. The literature also confirms the importance of addressing the issue of teacher recruitment and retention in schools with high percentages of low-income and minority students.

Finally, although the reasons are not clear, the fact that attrition in smaller schools is greater than in larger schools and greater in private schools than in public schools should raise a caution among those who advocate for reduction in school size and those who advocate for greater school privatization. While either of these might, all things considered, be reasonable policy alternatives, it is important to try to determine with greater confidence what impact moving in either direction would likely have on the supply and persistence of our nation's teachers.

#### Question 4:

*What impact do the working conditions in schools have on their ability to recruit and retain teachers?*

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#### RELATED QUESTIONS:

*How important are teacher autonomy and administrative support? How important is class size? How important are student characteristics and attitudes?*

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On the whole, the research literature is not sufficiently robust or fine-grained to support more than the most general observations as to the impact of various factors associated with working conditions on teacher recruitment and retention. The research does provide **limited support** for the expected conclusion that schools with greater administrative support and teacher autonomy have lower teacher attrition. The research also provides **limited evidence** that the higher the minority enrollment of a school, the higher the rate of teacher attrition – at least among white teachers. Similarly, there is limited evidence that attrition is greater in schools with higher levels of student poverty and also in schools with low student achievement.

While there remains a good deal of interest in class-size reduction as a means of improving teacher working conditions and thus, presumably, increasing teacher retention, the literature in support of

such a strategy must be judged to be **inconclusive**. Several studies do indeed suggest that class-size reduction stems teacher attrition, but the actual impact reported is extremely small. A reduction in teachers' workload also is often touted as a measure that will increase teacher satisfaction and thereby reduce attrition, but here, too, the literature in support of this contention is **inconclusive**.

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#### POLICY IMPLICATIONS

The research evidence in support of the impact on teacher recruitment and retention of any single factor or set of factors related to working conditions is modest, at best. Still, there is sufficient research to indicate the working conditions of teachers should be an important policy concern, especially in at-risk schools. One measure that seems important in view of the overwhelming percentage of white teachers in the workforce is to provide effective training for white teachers – either preservice or inservice – in handling student diversity. Another measure likely to be helpful, though not discussed robustly in the research literature, is to provide teachers with strong administrative support and adequate autonomy. The fact that “adequate autonomy” is a somewhat subjective determination suggests the importance of considering teachers' perceptions of their working conditions, as well as more objective measures, in setting policy.

Finally, although the research literature provides no guidance on the issue of class size, it seems reasonable to suppose that larger classes are less negative a factor if working conditions are otherwise conducive to teacher satisfaction. This may imply that policymakers should attempt to determine which measures to increase teachers' job satisfaction are most cost effective and most feasible given demographic realities, labor market considerations and the availability of various resources in their particular state or district.

#### Question 5:

*What impact does compensation have on the recruitment and retention of teachers?*

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#### RELATED QUESTIONS:

*Does offering higher salaries increase the quality of teachers who are recruited and retained? How important is teacher compensation in teacher recruitment and retention as compared to other factors?*

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The research provides **strong support** for the conclusion that compensation plays a key role in the recruitment and retention of teachers. Not surprisingly, the research indicates that increasing compensation tends to increase the rate of teacher retention, but this relationship is not a simple one. Compensation has a varying impact on retention depending on other factors such as teachers' gender, level of experience and current job satisfaction. There is moderate evidence that working conditions may, in some cases, trump salary as a factor in teacher retention, and that it is the relative salary between districts that is the important consideration.

The research evidence is inconclusive as to whether limited career-advancement opportunities in teaching contribute to attrition.

With regard to teacher recruitment, there is limited evidence of a positive correlation between recruitment and various financial incentives, including compensation. With regard to teacher quality, the research is inconclusive as to whether financial incentives have an impact.

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#### POLICY IMPLICATIONS

Given the complexity of the issue of compensation and the interaction of compensation with other factors such as working conditions and general job satisfaction, drawing the implications of the research for policy is not an easy matter. The clearest recommendation that can be made is for policymakers to ensure teacher salaries in their state or district are comparable to those in neighboring states and districts. The research does not provide any guidance on the issue of differentiated teacher pay or on across-the-board salary increases. It does indicate clearly, however, it is the local labor market that is the determining factor and not national trends.

### Question 6:

*What impact do various strategies related to teacher preparation have on teacher recruitment and retention?*

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#### RELATED QUESTIONS:

*Is there any significant difference between alternative route and traditional route programs in retention rates of the teachers they prepare? What impact does raising preparation program entrance or completion requirements have on the recruitment and retention of teachers?*

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The research provides **limited support** for the modest conclusion that the retention rates of alternative route graduates can be comparable to, and even exceed, that of traditional route graduates. Given the great variation within both types of preparation programs, however, larger generalizations about their relative success cannot be made. The research also provides **limited evidence** that some alternative programs are successful in recruiting a constituency into teaching that is more diverse ethnically and in age than the profession as a whole.

As far as the impact of imposing more stringent requirements for entrance into teacher preparation, the research literature is **inconclusive**.

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## POLICY IMPLICATIONS

These modest findings support the equally modest policy recommendation that efforts to develop high-quality alternative route teacher preparation programs are worthy of support.

### Question 7:

*What impact do induction and mentoring have on teacher retention?*

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#### RELATED QUESTIONS:

*What are the characteristics of effective induction and mentoring programs?*

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The research reviewed for this report provides **limited evidence** that induction and mentoring can increase teacher retention. The diversity among the induction and mentoring programs discussed in the literature, however, and the difficulty of distinguishing between the specific effects of induction and mentoring and those that might be attributed to other factors means the literature is **inconclusive** as to what precisely makes such programs successful. Thus, those who are considering implementing such programs will have to rely on the consensus of expert opinion.

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## POLICY IMPLICATIONS

Although the literature reviewed for this report does not provide enthusiastic research-based support for this strategy, it does suggest that induction and mentoring may indeed be worthwhile. It is important to recognize, however, that the impact of induction and mentoring programs on beginning teachers is contextual, and likely to be a function of the nature of their preparation program and of the school and district in which they are working. In other words, induction and mentoring may be of much greater benefit, and thus be much more cost effective, for some populations of beginning teachers than for others. Clearly, a good deal of additional research is needed to provide more definitive guidance for educators and policymakers. In the meantime, they must rely on the consensus of experts.

### Question 8:

*What is the efficacy of particular recruitment strategies and policies in bringing new teachers into the profession, including specifically targeted populations?*

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#### RELATED QUESTIONS:

*Are programs that seek to recruit middle school, high school or community college students into teaching effective in increasing the number of students who enter teaching or the subsequent success of these teachers and their rate of retention in the profession? How effective are programs that offer scholarships or forgivable loans to college students who commit to going into teaching? What kinds of recruitment policies and programs are particularly successful in recruiting minority teachers?*

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Except for teacher preparation-related policies discussed in Question 6, there were simply no adequate studies available on the great majority of specific recruitment strategies that have been employed by states and districts. Thus, the research provides no answers to any of the questions asked above. This is unfortunate given the importance of finding effective strategies for recruiting well-qualified individuals into the teaching profession and the significant resources that states and districts currently spend on recruitment efforts.

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#### **POLICY IMPLICATIONS**

Clearly, there is a need to undertake and support more research on, and more rigorous evaluation of, early recruitment efforts, loan-forgiveness programs and the many other specific kinds of strategies that have been employed. Such research should enable policymakers and educators to determine, with confidence, (1) whether less of the target population would have gone into teaching had the programs and strategies in question not been in place and (2) whether any other specific program goals, such as recruitment into underserved schools or a minimum length of stay in the teaching profession, have been met.

On the other hand, given the significant expense and complexity involved in conducting an adequate impact study, it may be advisable to pursue certain low-cost strategies even in the absence of a full-blown study – as long as there is some evidence of a positive impact and no evidence of a negative impact.

## ABOUT THIS DOCUMENT

This summary is based on the report *Eight Questions on Teacher Recruitment and Retention: What Does the Research Say?* and is available on the ECS Web site at [www.ecs.org/trrreport](http://www.ecs.org/trrreport). The report was written by ECS Teaching Quality Program Director Michael B. Allen based on research reviews by Cassandra Guarino, Lucrecia Santibañez, Glenn Daley and Dominic Brewer of RAND, and Richard Ingersoll and Jeffrey Kralik of the University of Pennsylvania.

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The first report in this series – *Eight Questions on Teacher Preparation: What Does the Research Say?* – is posted on the ECS Web site at [www.ecs.org/tpreport](http://www.ecs.org/tpreport). Print copies are available from ECS for \$20 (plus postage and handling) by calling 303.299.3692.

Also available online, at [www.ecs.org/researchprimer](http://www.ecs.org/researchprimer), is a companion document – *A Policymaker's Primer on Education Research: How To Understand, Evaluate and Use It*. A joint effort of ECS and Mid-Continent Research for Education and Learning, the primer is an indispensable resource for anyone who wants to gain a deeper understanding of education research and use it more effectively in making policy and practice decisions.

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