Teacher Recruitment and Retention: Policy History and New Challenges

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Introduction

In this chapter, we consider public policies to attract individuals into teaching and—once hired—to keep them in the profession. We begin by exploring the changing demographics of K–12 classrooms and the teaching force. We then discuss some of the unique characteristics of the teacher marketplace that complicate what may seem intuitive teacher recruitment and retention policy options. Common federal and state teacher recruitment policies are examined in terms of their documented success rates. After putting forward a framework for strong retention policies, we look at statewide programs in California and Connecticut.

We conclude by offering a new policy framework for considering ways to fill classroom vacancies and stem teacher attrition. We argue that teacher recruitment and retention need to be disentangled as concepts and replaced by labor and investment policies. The former would include strategies to give school districts the flexibility to compete in a timely manner for the best possible teachers. Investment policy, on the other hand, would include long-term activities designed to sustain a flow of candidates into the profession and to keep and support them.

Demographics of Classrooms and the Teaching Force

According to the U.S. Census Bureau, a record 49.6 million students entered the nation’s schools in 2003 (Feller 2005). Demographers speculate that this increase is due to birth rates among children of baby boomers and an increase in the number of immigrant families moving to the United States. In addition, the census data present a changing picture of the children who entered school in 2003. During the 1950s, approximately 80 percent of children entering

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school were non-Hispanic whites, whereas in the 2001–02 school year, white students made up 61.2 percent of the school population and Hispanic students, 16.3 percent. In 2003, 60 percent of students were white, 18 percent Hispanic, 16 percent black, and 4 percent Asian (U.S. Bureau of the Census 2005).

It is well documented that the demographics of the teaching force do not mirror student populations in terms of race and gender. Henke, Peter, Li, and Geis (2005) report that “although the population of elementary/secondary level students has become increasingly diverse in the last 25 years in terms of race/ethnicity, elementary and secondary school teachers are, and have been for some time, largely White” (5). They note that in 2000–01, 40 percent of students in public schools were non-white whereas only 16 percent of teachers were minorities. According to Feistritzer (2005), who analyzed data from a random sample of roughly 1,100 teachers in spring 2005, 89 percent of teachers are white and 82 percent are female. These data also show a slight increase in the number of male teachers since 1999, when 91 percent of all teachers were female (U.S. Department of Education 2005).

Data from the Feistritzer study confirm that the teaching force is aging. In 1999, 29 percent of teachers were under thirty-five years old; 42 percent were between thirty-five and forty-five; and 29 percent were over fifty (U.S. Department of Education 2005). However, Feistritzer’s study indicates that 42 percent of teachers are currently over fifty. She further reports that 28 percent of teachers who have thirty years’ experience or more are male. Thus, as those teachers who are over fifty retire or leave teaching for other reasons, there may be a shortage of personnel in general and male educators in particular.¹

Data from the U.S. Census Bureau are useful for identifying areas of the United States where there currently is or will soon be a demand for K–12 teachers. Using census data (available from U.S. Census FactFinder), Table 1 was constructed to show the percentage change in population from 1990 to 2000 and the percent of the population in 2000 under five years of age, the latter being a useful proxy for public school attendance. For the 1990 to 2000 decade, the nation’s population grew by 13.1 percent. In 2000, the percent of students under five years old for the United States was 6.8. Thus, it is suggested that states with growth rates larger than 13.1 percent and with greater than 7 percent of their population under five years of age are likely to experience greater demand for teachers.

¹ We suggest that the increased proportion of men in the teaching force who are over fifty years of age may be an artifact of federal government policy in the late 1960s, which offered draft deferment to men to enter certain professions, including teaching. It is possible that the men who decided that teaching was a preferable option to military service found they enjoyed teaching and, after a career in education, are now at the point of retirement.
### Table 1

**U.S. Population Change from 1990 to 2000 and Percent of Population under Five**

<table>
<thead>
<tr>
<th>State</th>
<th>% Population Change 1990–2000</th>
<th>% Population under Five</th>
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<tbody>
<tr>
<td>United States</td>
<td>13.1</td>
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<tr>
<td>Alabama</td>
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<td>Alaska</td>
<td>14.0</td>
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<td>Arizona</td>
<td>40.0</td>
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<td>Arkansas</td>
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<td>California</td>
<td>13.6</td>
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<td>Colorado</td>
<td>30.6</td>
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<td>Connecticut</td>
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<td>Delaware</td>
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<td>District of Columbia</td>
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<tr>
<td>Florida</td>
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<td>Georgia</td>
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<td>Hawaii</td>
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<td>Idaho</td>
<td>28.5</td>
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<td>Illinois</td>
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<td>7.1</td>
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<tr>
<td>Indiana</td>
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<tr>
<td>Iowa</td>
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<tr>
<td>Kansas</td>
<td>8.5</td>
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<td>Kentucky</td>
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<td>Louisiana</td>
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<td>Maine</td>
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<td>Maryland</td>
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<td>Massachusetts</td>
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<td>Michigan</td>
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<td>Minnesota</td>
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<td>Mississippi</td>
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<td>Missouri</td>
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<td>Montana</td>
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<td>Nebraska</td>
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<td>Nevada</td>
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<td>New Hampshire</td>
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<td>New Jersey</td>
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<td>New Mexico</td>
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<td>New York</td>
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<tr>
<td>North Carolina</td>
<td>21.4</td>
<td>6.7</td>
</tr>
</tbody>
</table>
State | % Population Change 1990–2000 | % Population under Five
--- | --- | ---
North Dakota | 0.5 | 6.1
Ohio | 4.7 | 6.6
Oklahoma | 9.7 | 6.8
Oregon | 20.4 | 6.5
Pennsylvania | 3.4 | 5.9
Rhode Island | 4.5 | 6.1
South Carolina | 15.1 | 6.6
South Dakota | 8.5 | 6.8
Tennessee | 16.7 | 6.6
Texas | 22.8 | 7.8
Utah | 29.6 | 9.4
Vermont | 8.2 | 5.6
Virginia | 14.4 | 6.5
Washington | 21.1 | 6.7
West Virginia | 0.8 | 5.6
Wisconsin | 9.6 | 6.4
Wyoming | 8.6 | 6.3

Source: U.S. Census Bureau

Although the greatest population change occurred in Nevada and Arizona, it is of note that in these states, the percent of the population under five years of age was 7.3 and 7.5 respectively, whereas the population increase in Utah was 29.6 percent, with 9.4 percent of the population under five. Thus, it can be theorized that while Nevada and Arizona are both experiencing extraordinary population growth, there may be somewhat less public support for school construction and expansion than in Utah, which has a higher combination of population growth and children under five. By comparison, the District of Columbia lost population and has one of the smallest proportions of population under five.

Characteristics of the Teacher Supply and Demand Market

The supply and demand forces in the labor market for public school teachers have certain unique characteristics:

- K–12 teaching is a large enterprise, representing roughly 2.7 percent of the U.S. workforce (U.S. Department of Education 2005)
- it is directly impacted by increases or decreases in the school-age population (U.S. Bureau of the Census 2005)
workers are primarily white and female (Feistritzer 2005; Henke et al. 2005)

the demand for teachers is a function of state or local rather than national needs (American Association for Employment in Education [AAEE] 2002, 2004; Murphy, DeArmond, and Guin 2003)

an increased supply of new teachers in one part of the country may not relieve shortages in another geographic area (AAEE 2004)

because teachers must be qualified in each subject they expect to teach, their preparation programs are sometimes more different than similar content and pedagogical preparation programs are influenced by state laws, which also account for a measure of difference among teachers

teachers tend to work in communities similar to and near where they grew up (Feistritzer 2005; Loeb and Reininger 2004)

the majority of hiring decisions are made during a four-month period from late spring to September (Levin and Quinn 2003)

because of state licensure policies, the market is segmented by teaching field

Although teachers represent a significant portion of the nation's workforce, they are not a homogeneous lot. A high school history teacher may feel she has relatively little in common with elementary-level special education teachers. Individuals in urban settings may believe their challenges are fundamentally different from those of teachers in rural schools. Due to the tendency of teachers to accept jobs near where they grew up, and because the K–12 curriculum and standards for teachers are determined by individual states, a level of parochialism develops. This complicates the establishment of a coherent national policy regarding teachers’ qualifications and preparation, as suggested by Darling-Hammond and Sykes (2003).

The concentrated time period during which teachers are recruited and offered contracts is unique to the education field and complicates the ability of some schools to hire the teachers they want. Levin and Quinn (2003) looked at hiring practices in urban school districts and concluded that often the large districts do not offer new teachers a firm teaching position until mid-to-late summer. Or if an offer is made, the teacher isn't told where she or he will teach because the district has to wait until personnel already in the system decide if they want to transfer from one school to another. By that time, the top candidates have withdrawn their applications to take jobs elsewhere. This is a challenging issue because in some districts, one fiscal year ends and the other begins in late summer, so funds can't be obligated until July or August.
Furthermore, in many large school districts, union contracts require that individuals in the system have transfer rights that must be honored before new personnel are hired.

There is an additional aspect of the teacher supply and demand market that often confounds attempts to provide accurate data on the number of individuals available to teach and—from that—to develop coherent recruitment policy. Teachers are encouraged to prepare themselves to teach either multiple subjects or multiple grade levels as a strategy to be more marketable. Either during the teacher’s initial preparation or through continuing course work, a teacher may add what are called endorsement areas to her or his license. With these endorsements, the teacher might be considered qualified to teach special education or a classroom of typical elementary school children. Similarly, at the high school level, a person could teach mathematics and biology or English and world history. In thinking about the supply and demand for teachers, endorsements complicate supply and demand data. If a special education teacher with an elementary endorsement requests an assignment change to teach third grade, the vacancy in special education is generally treated as a supply problem—the school needs to find a special education teacher and that vacancy contributes to data on the overall shortfall of these teachers. In reality, the number of qualified teachers is unchanged. To the extent that the number of teachers who are available to teach is calculated on the basis of the number of individuals holding licenses and endorsements in particular fields, the supply of available teachers may be skewed.

Much has been written about teacher attrition, the rate at which they leave the profession, and why they do so (Billingsley 2004; Darling-Hammond and Sykes 2003; National Council on Teacher Quality 2004; Ingersoll 2001; Luekens, Lyter, and Fox 2004), and it is generally accepted that about half of new teachers will leave within the first five years of teaching. The rate of attrition is substantially higher in certain fields, such as special education (Billingsley 2004; AAEE 2002, 2004), and among new teachers in high poverty schools (Loeb and Reininger 2004; Guin 2004). When individuals leave teaching, the reasons for doing so have been relatively similar over time: lack of planning time, heavy workload, low salary, student behavior, unsupportive administrators, lack of resources, school bureaucracies, classroom interruptions, and personal safety (AAEE 2002; Billingsley 2004; Feistritzer 2005; Luekens, Lyter, and Fox 2004; U.S. Department of Education 2005). In recent years, several new items have shown up on the lists of reasons teachers decide to leave: state mandates, federal mandates, testing mandates, and the No Child Left Behind Act (NCLB) (AAEE 2004;
Feistritzer 2005). The appearance of these reasons for leaving suggest that educators are frustrated over what they may perceive as lack of autonomy for what and how they will teach and evaluate their students.

Not all individuals who leave a particular school leave teaching. According to the U.S. Department of Education’s analysis of data from the 1999–2000 school year (2005), approximately 17 percent of all teachers were new hires at their school. However, not all were new teachers. For purposes of looking at hiring patterns, the Department of Education’s data are divided into teachers who are transfers (9 percent), returning teachers (4 percent), delayed entrants or career switchers (2 percent), and recent graduates (3 percent). Even though schools with a large number of low-income students tend to hire a larger proportion of newly minted teachers (Learning First Alliance 2005; Lankford, Loeb, and Wyckoff 2002), nationally, new teachers make up a small percentage of the total workforce. The implications of this experience distribution for teacher retention policy is discussed later.

Since nearly 10 percent of teachers hired each year are individuals who have taught elsewhere, it is useful to explore the characteristics of teacher turnover and its implications for schools and districts. Ingersoll (2001) describes teacher turnover as people transferring from one school to another, migrating to a different school district or state, moving from teaching into an administrative job, or leaving teaching entirely. Lankford, Loeb, and Wyckoff’s (2002) study of schools in New York State found that non-white students, low-income students, and English-language learners generally had less qualified teachers than their more privileged counterparts. They documented that teacher turnover is higher in urban areas and in schools with more challenging working conditions. They determined that “transfer and quit behavior of teachers is consistent with the hypothesis that more qualified teachers seize opportunities to leave difficult working conditions and move to more appealing environments. Teachers are more likely to leave poor, urban schools, and those who are likely to leave have greater skills than those who stay” (54).

Ingersoll (2001) speculates that policy makers have become comfortable with a certain level of teacher turnover. This line of reasoning suggests that decision makers believe it is less costly to replace a given percentage of teachers each year than to invest funds to address the conditions that cause them to leave. A study by the Alliance for Excellent Education (2005) suggests that this is a poor investment strategy. The alliance study applied an employee attrition cost model developed by the U.S. Department of Labor to state teacher-attrition data. This model estimates that the replacement cost for an employee is approximately 30 percent of the leaving employee’s salary—an
amount generally considered to be a conservative estimate (Texas Center for Educational Research 2000). The Labor Department model was applied to data from the National Center for Education Statistics’ Schools and Staffing Survey and the National Education Association’s Estimates of School Statistics. The analysis determined that the cost of replacing teachers who leave the profession is $2.2 billion per year. When the cost of replacing teachers who transfer is included, the total is $4.9 billion annually. The alliance study also presents teacher replacement data by state. The costs range from $8.5 million in North Dakota to over $500 million in Texas. Although this study is significant because it points out that the cost of teacher transfers is equal to the cost of teacher replacement, it limits the calculation of turnover cost to budgets of individual schools and districts. A more realistic estimate would need to include ancillary costs, such as expenses associated with preparing new teacher candidates or processing new teaching licenses.

The impact of teacher turnover goes beyond the dollar cost of recruiting and hiring a new employee. As Guin’s study of elementary schools determined, schools with chronic teacher turnover have a negative school climate (2004). Looking at urban elementary schools, Guin determined that just looking at economic issues associated with teacher turnover “fails to capture the importance of ‘intangible costs’ or those that are difficult to quantify” (3). These include low morale, lack of trust, and strained relationships between teachers. Collectively, this compromises the school’s ability to be a viable organization. Schools with high indicators of negative school climate were correlated with more teacher turnover and lower student performance. Because the leaving teachers were most often first-year teachers, the school was in “perpetual chaos” (10). Veteran teachers were expected to mentor the new personnel and, after a time, began to resent spending time doing so when there was such a strong probability that the novice teacher wouldn’t return after her or his first year. Moreover, when Guin interviewed teachers in the urban elementary schools, they reported that because there were always so many new teachers, the same professional development was offered year after year. Consequently, veteran teachers felt this was repetitive and didn’t attend. As a result, school personnel didn’t receive their professional development as a team. Guin concludes: “schools with high rates of teacher turnover are less likely to have high levels of trust and collaboration among teachers. Additionally, high turnover requires a school to restart their instructional focus each year, resulting in a less comprehensive and unified instructional program” (18).
Clearly, teachers cannot be expected to remain in one school for their entire professional life, nor should they be expected to turn down opportunities to move to schools that offer higher salaries or better working conditions. However, decision makers at the local, state, and federal levels must assess the economic consequences for communities and the educational consequences for children of teacher attrition and turnover.

**Teacher Recruitment Policy Strategies**

The federal government, states, and localities have employed a range of strategies to attempt to equalize the supply of and demand for teachers. The focus has primarily been on the supply side of the equation, with policies enacted to attract individuals into teacher education programs and into difficult-to-staff positions. A review of federal policy over the last two decades reveals that recommendations from Congress and the executive branch have tended to be quite similar over time. Borkow and Jordan’s 1983 Congressional Research Service analysis of teacher supply and demand suggests six federal policy options to increase the number of K–12 teachers:

1. College scholarships and loans repayable by K–12 teaching
2. Financial rewards or bonuses for excellent teaching
3. Federal salary subsidies for teaching in “hard-to-teach” geographic areas
4. Grants to colleges to establish innovative teacher education programs
5. Support of research on the connection between teacher preparation and K–12 student outcomes
6. Doing none of the above because teacher recruitment is a state rather than a federal matter (28–29)

Since the 1983 Borkow and Jordan analysis, the federal role in teacher recruitment has included five of the six policy options offered. Federal loans, forgivable by teaching, have been authorized through the Higher Education Act (McCallion 2004). In 2005, President Bush announced a new initiative to give states funds to reward teaching excellence. Funds available to states under HEA, Title II (Higher Education Amendments 1998), can be used for a variety of recruitment programs, including raising salaries for teachers going into hard-to-staff schools and encouraging institutions of higher education to create new and innovative programs (including alternative certification). In addition, research dollars have been available for a number of years through
the Institute of Education Sciences and its predecessor organization—the Office of Educational Research and Improvement—to study connections between teacher preparation and K–12 student performance. In general, these programs are based on the assumptions that (1) individuals’ decisions regarding teaching as a career and where and how to teach are highly influenced by financial incentives, and (2) programs to prepare teachers are unimaginative and/or unconnected to what teachers need to know and be able to do in K–12 classrooms.

A comprehensive literature review on teacher recruitment programs by Clewell, Darke, Davis-Googe, Forcier, and Manes (2000) looked at state and district teacher recruitment programs, including some that were funded in part or totally by federal funds. They conclude that although states and localities are engaged in a variety of recruitment efforts and many are gathering data on their programs, there is a lack of “evaluation data on the effectiveness of existing models of teacher recruitment” (76) in the research literature. That is, while state and local programs generally gather data about how their program relates to its stated goals, and analyses of these data are of appropriate rigor, they tend not to be done by external evaluators, replicated by other researchers, or published in peer-reviewed journals.

Offering financial incentives to enter teaching is an example of a category of policy that continues to be promoted even though its effectiveness is open to question. At the state and federal levels, one of the most common teacher recruitment strategies is a form of student loan forgiveness for teaching a specified number of years (included in this category are scholarship programs, which carry a requirement to teach for at least the number of years for which students received the scholarship) (Clewell et al. 2000).

Loan forgiveness is a common legislative option for the U.S. Congress. A search of THOMAS, the U.S. House of Representatives Web site, from the 101st Congress in 1992 to the present 109th Congress revealed that nearly three hundred bills were introduced with some form of loan forgiveness for teaching and, of these, nine became law. Given the popularity of loan-forgiveness programs, the central issue is, Do they work? That is, do these programs attract individuals who would otherwise not consider a teaching career? And do individuals remain in teaching after they fulfill their loan or scholarship repayment provisions? Although policy briefs often recommend loan forgiveness as a strategy to recruit individuals into teaching (see, for example, Ingersoll and Curran 2004), there is scant evidence that these programs are effective in the long term.
Clewell et al. (2000) reviewed evaluations of a range of teacher recruitment programs, including two of loan/scholarship forgiveness for teaching conducted by the New York City Board of Education; however, these studies were done in 1992–93 and reported only data from New York City’s program. Darling-Hammond and Sykes (2003) recommend replicating a federal program to entice new physicians into rural or other underserved areas in exchange for medical school loan repayment or as a scholarship with a service component attached to it. However, when Pathman et al. (2004) analyzed sixty-nine of these programs operating in 1996, they found that after four years, 55 percent of the physicians in these programs remained in their practices. Given that approximately half of all teachers leave after five years—whether they receive loan forgiveness or not—the retention rate for the physicians does not suggest a strong endorsement for the program. Going back further, Arfin (1986) reviewed federal policies first enacted in the 1980s that used financial incentives to recruit individuals into hard-to-staff careers. The policies reviewed included the National Direct Student Loan Program and the Health Professions Student Assistance Program. It was found that neither had been particularly successful and tended to be “more of a windfall for those who have already chosen their careers” (418). A similar study by Spiro (1986) found little positive effect of these programs. A 2005 study by the South Carolina Educational Policy Center presents an interesting snapshot of individuals who received forgivable loans to enter teaching but who chose to repay their loans rather than fulfill a teaching obligation. They determined that of those people repaying loans, 44 percent had not entered teaching at all. Of those who entered teaching but did not request that the loan be forgiven, the following were the primary reasons: left teaching, teaching in another state, not teaching in a critical-need school (8). Thus, for some individuals, repaying their loan was a more desirable option than fulfilling the obligation to teach in a high-need South Carolina school.

The possibility that loan-forgiveness programs have not lived up to expectations has not deterred the federal government, which has created the Student Loan Repayment program to attract individuals into civil service careers. The service agreement for individuals who participate in this program is for three years. According to a July 2005 study by the General Accountability Office (GAO), there was only anecdotal information about the value of the program because no baseline data were gathered at the outset. The GAO found that federal agencies thought the three-year service requirement was too long and should be reduced to a year or less. The report concluded that it would be wise to track the attrition rates of participants in the program.
Another program that, like loan forgiveness, has a certain intuitive appeal is providing signing bonuses to lure people into teaching. Liu, Johnson, and Peske (2004) studied the effect of a program established in Massachusetts in 1998. The Massachusetts Signing Bonus Program (MSBP) offered $20,000 signing bonuses to individuals with at least a bachelor’s degree who agreed to participate in an accelerated route to certification. Candidates received an initial payment of $5,000, with the remainder to be paid out over their four-year teaching obligation. Tracking the careers of thirteen of the original fifty-nine signing-bonus recipients, the researchers found that eight left during their first or second year of teaching—prior to getting the full bonus payment. Moreover, they found that of the thirteen, all but one had decided to switch to a teaching career before the bonus program was announced. The bonus was a plus for these individuals because the initial $5,000 payment gave them money to live on while completing the required seven-week accelerated certification program. From interviews with the thirteen teachers, it was determined that “the bonus recipients entered teaching positions in schools that were not organized to support their ongoing learning and address their particular needs as novices. Their schools had structures and norms that supported private, independent practice rather than collaboration, and none had a well-developed infrastructure that ensured frequent, sustained, and meaningful interaction between both novice and veteran teachers” (233).

The matter of salary incentives for teaching remains another area where research does not provide clear policy direction. Goldhaber and Player (2005) used data from the Bureau of Labor Statistics and the American Federation of Teachers to compare salaries of teachers with individuals in comparable fields. They found that teachers’ salaries increased in the 1980s and 1990s to a point where they were nearly competitive with other fields, but that in the mid-1990s, salaries in those other fields increased at a higher rate than those for teachers. They conclude that because teaching markets are local, an across-the-board salary increase would have little impact on the supply of educators. They note that salary incentives should be one of multiple strategies used by school districts to compete for top teachers with neighboring jurisdictions.

One category of program that has received little attention in the research literature is “grow your own.” These programs generally begin to recruit teachers in high school or at a point before they enter college, and target individuals from a specific geographic area in the expectation that they will return to that community after earning a teaching license. These programs are consistent with studies noted earlier that indicate that teachers, as a group, tend to look for employment within 150 miles of where they grew up (Feistritzer 2005). A 1994 study funded by the U.S. Department of Education looked at a
series of programs aimed at preparing Native American teachers (Wechsler et al. 1994). These programs included financial assistance beyond college tuition to include dependent allowances, books, and the like. They also offered job placement or internships during the summer and provided emphasis in the teacher preparation curriculum on Native American culture and language. Participants reported that a strong feature of the programs was creation of a sense of community among the teacher candidates. The study reports that 72 percent of participants received their degrees, and of those, 85 percent went on to work in education and 80 percent took positions in schools with a majority population of Native Americans. This study, like many others, is limited because of its age and lack of data on whether the teachers remained in teaching for a significant period of time.

In 1985, South Carolina established the Teacher Cadet Program, which provides high school students an elective introduction-to-teaching course. According to the coordinating agency—the Center for Educator Recruitment, Retention, and Advancement (CERRA)—the program includes 136 high schools and, in the 2004–05 academic year, provided course work to 2,219 high school juniors and seniors. A survey of students from the 2004–05 cohort yielded 1,898 responses. Of those who responded, 37 percent indicated that they plan to pursue a teaching career. However, no data are presented on the percentage of students who actually complete a teacher preparation program and enter the classroom. The CERRA annual report indicates that there have been over 34,000 students who have been teacher cadets. (Note: This program is supported by an appropriation from the state of South Carolina.)

Teacher Mentoring and Induction

Though aspects of the teacher supply and demand market may be confounding, it is clear that schools will need to hire even more teachers in the next five to ten years. Moreover, schools will feel pressure to retain both new hires and existing personnel. This will increase both the need for quality induction programs and the need for school budgets to support them. According to Quality Counts (2005), eight states currently require but do not fund induction programs for first-year teachers. Sixteen other states provide funding to support their mandates for induction programs, but program length and funding vary.

The existence and adequate funding for teacher mentoring and induction are only part of the teacher retention puzzle. As noted previously, the reasons teachers leave a particular school or the teaching profession as a whole are closely associated with frustration and perceived lack of autonomy, and the general quality of the work environment. Considering both the economic and
the school climate, costs associated with teacher turnover point to the need for a closer look at the breadth of quality induction programs. Replicating quality induction programs may help address both the variety of needs of new teachers and the variety of experience levels of teachers new to a particular school but who are experienced. Finally, if states support limited induction or do not support induction at all, then clearly there are inequities among schools that can afford quality induction programs and those that cannot. This exacerbates the teacher quality inequities cited earlier among poor and rich schools.

Induction is “the process of socialization to the teaching profession, adjustment to the procedures and mores of a school site and school system, and development of effective instructional and classroom management skills” (Recruiting New Teachers 2000). Teacher induction programs use different activities to “orient, support, assist, train, and assess teachers within their first three years of employment in public schools” (Recruiting New Teachers 2000). As such, teacher mentoring is an important component of teacher induction.

According to Recruiting New Teachers (RNT), there are four elements that characterize successful induction programs: (1) orientation to the culture of teaching; (2) training in curriculum and management skills; (3) mentoring; and (4) assessment of new teachers (RNT 2000). A review of the literature and inspection of the California and Connecticut induction models by Curran and Goldrick (2002) reveal several common characteristics that are elements of effective induction programs. These programs:

- provide universal participation for new teachers from both traditional and alternative preparation programs
- use experienced teachers as mentors
- include mentor preparation
- facilitate release time or reduced teaching loads for mentors and beginning teachers
- have earmarked funding from the state legislatures
- are based on clear and established standards
- are structured, defined, and evaluated by input from beginning and veteran teachers
- assess beginning teachers’ performance
- have a subject-specific or content-area focus
- extend throughout the school year and beyond the first year of teaching
provide teachers with workplace conditions that enable them to focus on strengthening their teaching skills, including:

- placement in subjects that teachers are qualified to teach
- placement with students who are not the most challenging
- opportunities to participate in targeted professional development
- opportunities to observe and be observed by veteran teachers

The release time and mentoring components are often cited as the two most important components of effective induction programs. Data from the National Center for Education Statistics (2004) suggest that the mentor-mentee relationship benefits from the amount of time that a mentor and beginning teacher actually spend and work together. According to the National Education Association (1999), 36 percent of beginning teachers who work with their mentor “a few times a year” report substantial improvements in their professional skills. This contrasts substantially with 88 percent reporting that they receive major benefits from the mentor-mentee relationship when they work with their mentors at least once a week. Further, Inman and Marlow (2004) note that when beginning teachers are mentored, they gain a sense of empowerment, feel support from their colleagues, and identify their work environment as positive. In an assessment of the value-added effect of teacher induction programs, Ingersoll and Kralik (2004) note that in particular, mentoring programs have a positive impact on teacher retention.

Including a component of assessing beginning teachers in a teacher induction program is controversial but is part of the model of successful programs. Some are uncomfortable with the concept of combining support and assessment. Others argue that effective induction programs provide inductees with formative and summative performance assessments that are connected to the state professional standards and the state academic K–12 standards (RNT 2000). In the current era of accountability and highly qualified requirements, assessment associated with induction may well be an effective use of resources.

The model induction programs use assessments of beginning teachers as a major component. In California, assessment is primarily used to structure professional development plans for new teachers. The Connecticut teacher induction program uses portfolio assessments during the second year to determine whether teachers receive the state’s second level of certification. The Toledo (Ohio) model uses veteran teachers (as do California and Connecticut) as mentors, who then make recommendations about contract
renewals for new teachers. Without an assessment mechanism in place that measures beginning-teacher performance, induction programs could retain teachers who may not be well qualified.

**Two Induction Program Models**

More than thirty states have initiated new teacher induction programs (Curran and Goldrick 2002). Sixteen states currently require and at least partially fund induction programs for all new teachers (Quality Counts 2005). California and Connecticut have statewide programs that show how states can provide effective induction for new teachers. Both states have documented success in improving teacher satisfaction and retention. Ongoing data collection as a component of both programs provides information on program effectiveness.

**The California Model**

In California, while discussion focuses on improving public education, it also focuses on the concept that “improved schools will come about only in tandem with improved teaching” (Olebe, Jackson, and Danielson 1999). Policies for addressing teacher quality have been in development since the early 1990s, and legislation was enacted in 1998–2000 to continue funding teacher preparation, recruitment, and professional development (Esch et al. 2005). In 1998–99, $67.2 million was allocated to the Beginning Teacher Support and Assessment Program (BTSA).2 The following year, $75 million was allocated, with an additional $80 million allocated for the state mentor teacher program—a key component of BTSA. The 2005–06 state funding based on current projections allocates $3,675 for first-year teachers and $2,894 for second-year teachers (http://www.btsa.ca.gov/).

According to Curran and Goldrick (2002), there are ten defined goals for BTSA:

1. Provide an effective transition to teaching
2. Improve educational performance of pupils through improved training, information, and assistance for new teachers
3. Enable more effective teaching of culturally, linguistically, and academically diverse students
4. Ensure professional success and teacher retention

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2 Although the full name is the Beginning Teacher Support and Assessment Program, the program is referred to as BTSA in California.
5. Provide individualized support to new teachers
6. Improve the consistency and rigor of teacher assessments
7. Establish an effective and coherent system of performance assessments for teachers that is based on the California Standards for the Teaching Profession, which encompass the necessary skills, abilities, and knowledge of teaching
8. Offer every new teacher an individual induction plan based on ongoing assessment
9. Ensure continuous program improvement
10. Assure the public that veteran teachers are competent instructors

As of 1999–2000, the program was undergoing reform with the establishment of changes in the credentialing system. This includes a full two-year induction program for a final professional credential (Olebe, Jackson, and Danielson 1999). The focus on beginning teachers is an effort by state policy makers to set new standards of teaching and to assist new teachers in examining their teaching in relation to standards for student achievement. However, though the California program requires and finances mentoring for all novice teachers for two years, there is not state-mandated nor financed time set aside for professional development (Quality Counts 2005). Thus, although mentoring is mandated and financed, professional development for all teachers is neither mandated nor financed for all districts. Since professional development is a key component for both experienced teachers new to a school and experienced teachers who are mentors, state policies should include consideration of professional development for funding.

The California program was developed jointly by the California Commission on Teacher Credentialing, the California Department of Education, and the Educational Testing Service (ETS). A unique tool, the California Formative Assessment and Support System for Teachers (CFASST) emerged from this joint policy effort. CFASST is a formative assessment implemented within the context of local programs. The purpose of CFASST is to support beginning teachers and to improve practice; CFASST is not used for formal evaluation purposes. There are two main components to CFASST, both of which are assessment processes used for collecting evidences of teaching practice.

The first component is formal peer observations and structured inquiries. There is an initial self-assessment of teaching practice centered on a collegial exchange between veteran and new teachers. This exchange is expected to be focused on the common language contained in the California Standards for the Teaching Profession.
The second component is an “individual induction plan,” which maps out future professional development based on the individual needs of the new teacher. Teachers follow a cycle of planning, teaching, reflecting, and applying as they assess their teaching with their support providers. Current proponents of data-driven decision making advocate just this type of cycle when assessing both teacher and student performance (Olson 2004). Individual needs of the teacher are based, in part, on a common rubric or a set of scales that describe professional teaching practice at different levels in conjunction with the teaching standards. ETS helped develop this rubric, called the Descriptions of Practice, which includes thirty-five elements from the standards. There are four levels of defined practice, ranging from “practice not consistent with standard expectations” to “experienced practice that exemplifies the standard.”

The teaching standards combined with the practice descriptions provide a structure around which teachers can understand their work, framing metacognition on the complex act of teaching. Although many states and school districts have standards and scaled rubrics for defining levels of practice, standards and assessment rubrics alone are not enough to make an exemplary program.

In addition to these critical components, there is an ongoing systematic approach to examining teaching in relation to student learning. “Teaching flourishes when teachers constantly reflect on their daily practice, when they have a means of knowing whether an instructional strategy worked, whether individual students as well as the whole class have met the intended learning goals, and how to make specific connections between their teaching goals and student outcomes” (Olebe, Jackson, and Danielson 1999, 43). California has just such a system—the CFASST.

Support providers participate in more than fifty hours of professional development training (Olebe, Jackson, and Danielson 1999). Training is provided by various state agencies and includes how to mentor a new teacher, how to use the teaching standards, and how to use the formative assessment system. These veteran teachers gain new skills in observing, examining products of teaching, and assessing teaching practices as related to student achievement.

BTSA encourages local school districts, county offices of education, and colleges and universities to work collaboratively to provide continuously improving new-teacher induction programs. Further, ongoing evaluation of the program provides valuable data about components of the program and how it is serving teachers as well as how the model in general is working. Each local program is expected to design its own local evaluation plan. For example,
data collected and analyzed in 1998 demonstrate that a “positive context for local BTSA program operation has a dramatic and consistently positive effect on all of the fundamental elements of program implementation” (Mitchell et al. 1998, 16).

BTSA is unique for many reasons. A highlight of the program is its retention rate. In California from 1988 through 1992, the California New Teacher Project achieved significantly better retention rates for participating teachers than for non-participating teachers (Curran and Goldrick 2002). In 1999–2000, 129 of the 133 California BTSA local programs reported collective retention rates of 96 percent for first-year teachers and 94 percent for second-year teachers (California Commission on Teacher Credentialing 2002). In contrast, the attrition rate among new teachers not participating in BTSA or a similar induction program in California was 37 percent—a 63 percent retention rate.

Also unique to California are the impact of California’s class-size-reduction initiative and the rapid growth of the state’s school-age population. BTSA has grown dramatically since its inception in 1992. Thus, program growth itself has become an issue in evaluating the quality of BTSA. Mitchell et al. (1998) studied program quality as related to the more than doubling of program grants between 1996 and 1998, providing strong empirical evidence regarding the extent to which beginning teachers, their support providers, and site administrators recognize specific induction support needs, and the extent to which various mixtures of support lead beginning teachers to function more comfortably and effectively in their teaching assignments. Currently, however, teacher development programs have encountered setbacks (Esch et al. 2005). Budget cuts have reduced the funding for many programs and eliminated others altogether. This, coupled with the growing demand for teachers over the next ten years, is a major policy concern.

**The Connecticut Model**

Connecticut’s Beginning Educator Support and Training (BEST) program has been evolving since the 1980s. In 1986, the Connecticut state legislature passed the Education Enhancement Act, which raised expectations for quality teacher performance and provided funding for both assessment and professional development. BEST was also initiated at that time and has evolved into a comprehensive two- or three-year (depending on teacher need) program of support and assessment for beginning teachers. Currently, Connecticut requires and finances mentoring of novice teachers for a minimum of one year, requires districts to set aside time for professional development, but does not finance professional development for all districts (Quality Counts 2005).
According to Curran and Goldrick (2002) and Miller, Worley, and Westwater (2002), the purposes of BEST are to:

- provide support for beginning teachers
- support content-specific pedagogy that reflects state teaching standards
- emphasize the connections between effective planning, instruction, and student learning
- emphasize the importance of reflection for professional growth
- connect authentic professional assessment with licensure mandates
- connect teacher standards to national standards and the state's curriculum and student performance standards
- provide intensive mentorship experiences to new teachers
- require every new teacher to complete a portfolio assessment in his or her first two years of teaching

These comprehensive education-reform initiatives in Connecticut have contributed to increases in student achievement as measured by the National Assessment of Education Progress (Wilson, Darling-Hammond, and Berry 2001).

In Connecticut, the assessment of teachers begins prior to admission to the professional preparation program and extends throughout teachers' careers. This assessment and training approach begins at the undergraduate level, where prospective teachers must meet rigorous standards for admission to professional preparation programs. Once the preparation program is completed, the focus of this approach is on novice teachers. A series of professional development activities is provided, including professional development seminars that provide opportunities for teachers to experience different models of teaching and learning, share ideas, reflect on practice, and explore the meaning of the state standards of teaching within a specific content area. The professional development activities also assist with the preparation for the submission of a comprehensive teaching portfolio. Every new teacher is required to complete a portfolio assessment in his or her first two years of teaching (Curran and Goldrick 2002). New teachers must complete the program successfully within three years of beginning their first teaching job in order to move beyond an initial teaching certificate.

During this process, school districts must provide experienced, exemplary teachers as mentors—trained by the state—to each new teacher. Mentors work with first-year teachers to help develop basic teaching abilities such as
classroom management skills and instruction and assessment skills. Mentors assess new teachers’ attainment of the state’s essential teacher competencies using a state-developed instrument (Curran and Goldrick 2002).

During the second year, beginning teachers focus on developing teaching strategies and preparing the content-specific portfolio that documents planning, teaching, and student learning. Portfolios contain videotapes of classroom practices; samples of student work; and teacher commentaries, reflections, and self-assessments. Trained assessors—who are experienced, exemplary teachers—evaluate and score the portfolio submission (Curran and Goldrick 2002).

Beginning teachers who receive passing scores earn the state’s second level of certification. Those who do not pass may be eligible for a third year in the program and another opportunity to submit a portfolio. If a beginning teacher is not successful on the first or second attempt, the candidate is denied certification to teach in the Connecticut public schools. The state predicts a 98 percent success rate when third-year candidates are reexamined (Barnett, Hopkins-Thompson, and Hoke 2002).

The annual cost for the BEST program is about $3.6 million for 2,800 teachers, or about $1,300 per new teacher. This includes small stipends to local districts to help pay for professional development seminars, mentors, and portfolio assessors. Some local districts invest more money and appear to have more success (Barnett, Hopkins-Thompson, and Hoke 2002). The return on the invested dollar appears to be high.

By the year 2010, 80 percent of Connecticut’s teachers will have participated in the content-specific portfolio-assessment system—as licensure candidates, mentors, or assessors. Connecticut’s portfolio system is reminiscent of the National Board Certification program and was developed and implemented slowly over an eight-year period, growing gradually, content area by content area. The gradual implementation created the opportunity to build the capacity and the infrastructure—including data management—to ensure successful policy implementation. “Connecticut’s sustained effort is the most ambitious undertaking in any state to use high-leverage, performance-based teaching assessments as a tool to transform professional practice” (Barnett, Hopkins-Thompson, and Hoke 2002, 14).

Connecticut’s BEST program is unique in part because of the initial and up-front considerations of validity within its system of evaluation of teacher competence. For example, since 1986, the Connecticut Teacher Assessment Center Project has been developing a teacher interview protocol in mathematics
to evaluate beginning teacher competence. Various strategies for validation of the project’s performance tests are employed (Pecheone and Carey 1990). Furthermore, the BEST system is unique because in 1999, Connecticut became the first state to implement mandatory portfolio assessment as a component of its teacher certification program (Muenzen 2001).

Professional consensus was one method of validating competencies for use in training and certifying prospective public school teachers in Connecticut. A two-phase study was used to “content validate” these competencies (Streifer and Iwanicki 1985). In phase one, a two-round modified Delphi approach was used to bring a panel of experience and recognized Connecticut educators to consensus as to which competencies were important measures of teaching effectiveness.

In phase two, a statewide survey of a random sample of 2,743 Connecticut teachers and administrators was conducted to determine whether they perceived those competencies identified by the Delphi panel as important measures of teaching effectiveness. As a result of this study, eighty-five generic teaching competencies were identified. These eighty-five competencies were agreed on as important by teachers and administrators, were not grade specific, and were not subject-matter specific. Furthermore, teachers and administrators agreed that the behaviors described by forty-five of the eighty-five competencies were directly observable by an evaluator. Finally, the construct validity of these competencies was supported by factor analysis. This assures that there is a link between Connecticut teaching competencies and the literature on teacher effectiveness.

Another study examined the outcomes for teachers and the benefits gained from the BEST program. Yosha (1991) gathered data to determine whether the BEST program intent to improve the quality and value of first-year teaching by way of intensive, ongoing support by a mentor was being met. Both mentors and beginning teachers were surveyed and questioned using telephone surveys, focus-group discussions, and site-visit interviews. Results indicated that the quality and value of first-year teaching improved as a result of intensive, ongoing support of beginning teachers by mentors. This conclusion was reached based on firsthand evidence from novices who believed they benefited from the assistance of trained mentors. Equally important, there is evidence that the quality of teaching by mentors has improved.

**Impact of Induction Programs**

“Induction programs can make a tremendous difference not only in the kind of teacher produced but also in the learning experiences their students have”
RNT claims that induction programs help reduce new-teacher attrition rates. Furthermore, national, state, and local studies have produced findings suggesting that induction programs significantly increase the likelihood that new teachers will stay in the profession (Curran and Goldrick 2002). “Well crafted induction programs can improve teaching quality, help staunch the flow of novice teachers from the profession, and decrease the overall cost of recruiting, preparing, and developing teachers (Barnett, Hopkins-Thompson, and Hoke 2002, 7). According to the National Center for Education Statistics, of the new teachers participating in an induction program, 15 percent had left the profession after four years compared with 26 percent who had left after four years but had not participated in an induction program (2004).

Few state or local teacher induction programs have the long-term impact data of California and Connecticut. But other programs have collected data that show positive impacts on new-teacher retention rates. The Montana Beginning Teacher Support Program retained 97 percent of participants in the teaching profession after one year as compared with only 71 percent retention for non-participants. Seventy-five percent of the participants in Wisconsin's Teaching Incentives Pilot Program indicated they planned to be in teaching in five years, compared with only 25 percent of non-participants; 100 percent of program participants completed their first year, while only 83 percent of non-participants finished out the year. The Santa Cruz New Teacher Project has had a 95 percent retention rate over twelve years. Induction programs in Toledo and Columbus, Ohio, as well as in Seattle, Washington, have been attributed with increasing retention rates to 90 percent and above. In addition, induction programs can have positive effects on recruiting new teachers; teacher quality; student achievement; K–12 curriculum, instruction, and assessment; and professional development of veteran teachers (Curran and Goldrick 2002; Miller, Morley, and Westwater 2002; Chauncey 2005).

Policy Conclusions and Recommendations

Our review of education policy to recruit and keep excellent teachers has revealed what we consider policy miscues. There is an assumption embedded in federal and some state actions that retention policy can actually serve as a recruitment tool. We suggest that this is wrong because finding and hiring someone to take a teaching job is essentially a labor issue, while teacher retention is an investment issue. Although there is an intuitive appeal for such programs as loan forgiveness and signing bonuses, there is little empirical evidence that they work. Although some of these programs have been studied, few have undergone external evaluations. Moreover, studies of these incentive
programs omit two key questions: (1) Did people who received a loan or signing bonus intend to go into teaching anyway? and (2) Do people who take signing bonuses and loan-forgiveness opportunities tend to stay in teaching longer than those who do not? Essentially, do these policies merely pay people to do what they planned to do anyway?

At the core of our argument is the belief that decision makers need to disentangle teacher recruitment and retention. Finding and hiring good teachers is a form of labor policy, whereas keeping excellent teachers requires a form of investment policy. Labor policy and investment policy are quite different. Labor policy needs to be nimble; it needs to be able to respond quickly. By quick response, we don't mean six months or even three months; we mean possibly three days. There is no other field where almost all new employees are hired within a four-month-or-less window. The school districts that can offer the contract first or that are such attractive places to work get the pick of available teachers. This works to the advantage of wealthy school districts. If it is late August and a principal doesn't have a teacher for a classroom, long-term strategies such as loan forgiveness are not the answer. Labor policy is targeted, meaning it involves negotiation between an individual teaching candidate and a school. Therefore, it needs to be highly individualized and short term. What is an effective labor-policy tool one year may not work in subsequent years. The associated policy tool to enable labor policies to work would involve using federal and state funds to build the capacity of localities to offer the kinds of incentives that will attract strong candidates to their schools. If labor policies are going to be supported by federal and state funds, they will need to be targeted to the school districts with the greatest financial need rather than to wealthy school districts.

By comparison, investment policy needs a measured, long-term response. Investment policy would support loan forgiveness for teachers if strong evaluations of these programs showed their merit. It would include support for teacher education programs, K–16 partnerships, and teacher mentoring and induction. The essence of investment policy is that public funds are being directed to strengthen the professional infrastructure of teaching. Like labor policy, investment policy needs to be targeted, but in this case it is targeted to the individual, the school, the preparation program, and the school district.

As we consider investing in teacher retention, we argue that retention programs must be universally available, not just offered in wealthy school districts. This suggests the need for statewide funding but also local flexibility in terms of how a particular retention program is operated at the school itself. We suggest that by reframing policies related to preparing, hiring, and
keeping good teachers as either nimble labor policies or long-term investment policies, a different picture of how governments should structure incentives emerges. In addition, this framework suggests different evaluation strategies to determine the success of the programs. Labor policy can be studied using economic models and lends itself to quantitative methods that analyze the cost and success of various hiring incentives for teachers. Investment policy could also draw on quantitative tools but would need a qualitative component. This might include doing case studies of individual teachers to find out what influenced their decision to enter and remain in teaching, and would include studying school climate and determining the characteristics of schools with low turnover.

We conclude by reiterating the importance of teacher mentoring and induction programs. Investing $3,000 to $4,000 per new teacher for two years is wiser fiscal policy than expending $20,000 or $30,000 to replace a teacher. Induction programs should be universal, linked to state standards for K–12 schools, and flexible enough to meet the needs of teachers new to the profession, experienced teachers who transfer from another school district or state, and individuals who enter teaching through career-switcher programs.

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Teacher Recruitment and Retention: Policy History and New Challenges


