

University of Pennsylvania Scholarly Commons

GSE Publications

Graduate School of Education

11-2004

Why Do High-Poverty Schools Have Difficulty Staffing Their Classrooms with Qualified Teachers?

Richard M. Ingersoll
University of Pennsylvania, rmi@upenn.edu

Follow this and additional works at: https://repository.upenn.edu/gse pubs

Part of the <u>Educational Administration and Supervision Commons</u>, <u>Educational Assessment</u>, <u>Evaluation</u>, and <u>Research Commons</u>, <u>Educational Psychology Commons</u>, <u>Education Economics</u> Commons, and the Teacher Education and Professional Development Commons

Recommended Citation

Ingersoll, R. M. (2004). Why Do High-Poverty Schools Have Difficulty Staffing Their Classrooms with Qualified Teachers?. Renewing Our Schools, Securing Our Future - A National Task Force on Public Education; Joint Initiative of the Center for American Progress and the Institute for America's Future, Retrieved from https://repository.upenn.edu/gse/pubs/493

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/gse_pubs/493 For more information, please contact repository@pobox.upenn.edu.

Why Do High-Poverty Schools Have Difficulty Staffing Their Classrooms with Qualified Teachers?

Abstract

The failure to ensure that the nation's classrooms, especially those in disadvantaged schools, are all staffed with qualified teachers is one of the most important problems in contemporary American education. The conventional wisdom holds that these problems are primarily due to shortages of teachers, which, in turn, are primarily due to recent increases in teacher retirement and student enrollment. Unable to compete for the available supply of adequately trained teachers, poor school districts, especially those in urban areas, the critics hold, end up with large numbers of underqualified teachers. The latter is, in turn, held to be a primary factor in the unequal educational and occupational outcomes of children from poor communities. Understandably, the prevailing policy response to these school staffing problems has been to attempt to increase the supply of teachers. In recent years, a wide range of initiatives has been implemented to recruit new candidates into teaching, especially to disadvantaged settings.

This report investigates the possibility that other factors – those tied to the characteristics and conditions of schools – are behind the teacher shortage crisis. Unlike earlier research, this analysis focuses on those kinds of schools deemed most disadvantaged and the most needy – those serving rural and urban, low-income communities. The data utilized in this investigation are from the Schools and Staffing Survey and its supplement, the Teacher Follow-up Survey conducted by the National Center for Education Statistics, the data collection arm of the U.S. Department of Education. This is the largest and most comprehensive source of data on teachers available.

Disciplines

Education | Educational Administration and Supervision | Educational Assessment, Evaluation, and Research | Educational Psychology | Education Economics | Teacher Education and Professional Development



Why Do High-Poverty Schools Have Difficulty Staffing Their Classrooms with Qualified Teachers?

Richard M. Ingersoll

University of Pennsylvania

Report Prepared for:

Renewing Our Schools, Securing Our Future A National Task Force on Public Education

A joint initiative of the Center for American Progress and the Institute for America's Future.

November 2004





Executive Summary

The failure to ensure that the nation's classrooms, especially those in disadvantaged schools, are all staffed with qualified teachers is one of the most important problems in contemporary American education. The conventional wisdom holds that these problems are primarily due to shortages of teachers, which, in turn, are primarily due to recent increases in teacher retirement and student enrollment. Unable to compete for the available supply of adequately trained teachers, poor school districts, especially those in urban areas, the critics hold, end up with large numbers of underqualified teachers. The latter is, in turn, held to be a primary factor in the unequal educational and occupational outcomes of children from poor communities. Understandably, the prevailing policy response to these school staffing problems has been to attempt to increase the supply of teachers. In recent years, a wide range of initiatives has been implemented to recruit new candidates into teaching, especially to disadvantaged settings.

This report investigates the possibility that other factors – those tied to the characteristics and conditions of schools – are behind the teacher shortage crisis. Unlike earlier research, this analysis focuses on those kinds of schools deemed most disadvantaged and the most needy – those serving rural and urban, low-income communities. The data utilized in this investigation are from the Schools and Staffing Survey and its supplement, the Teacher Follow-up Survey conducted by the National Center for Education Statistics, the data collection arm of the U.S. Department of Education. This is the largest and most comprehensive source of data on teachers available.

The data indicate that school staffing problems are not primarily due to teacher shortages, in the sense of an insufficient supply of qualified teachers. Rather, the data indicate that school staffing problems are primarily due to a "revolving door" – where large numbers of qualified teachers depart from their jobs long before retirement. The data show that high-poverty public schools, especially those in urban communities, lose, on average, over one fifth of their faculty each year. In such cases, ostensibly, an entire staff could change within a school in only a short number of years.

The data show that much of the turnover is accounted for by teacher job dissatisfaction and teachers pursuing other jobs. The analyses indicate that one reason for high rates of turnover in these schools is, not surprisingly, teacher compensation. Teachers in these schools are often paid less than in other kinds of schools and depart accordingly. But, the data also indicate that low salaries are not the only reason for the high level of turnover in disadvantaged schools. Significant numbers of those who depart from their jobs in these schools report that they are hampered by inadequate support from the school administration, too many intrusions on classroom teaching time, student discipline problems and limited faculty input into school decision-making.

From a policy perspective, the data suggest that schools are not simply victims of large-scale, inexorable demographic trends. In plain terms, the data suggest that recruiting more teachers will not solve staffing inadequacies if large numbers of such teachers then leave the profession. This report concludes that if schools want to ensure that all students are taught by qualified teachers, as the No Child Left Behind Act now mandates, then they must be concerned about low teacher retention rates.

Introduction

Few educational problems have received more attention in recent years than the failure to ensure that elementary and secondary classrooms are all staffed with qualified teachers. Severe teacher shortages, it is widely believed, are confronting our elementary and secondary schools. We have been warned repeatedly that "the nation will need to hire at least 2 million teachers over the next ten years" (e.g., National Commission on Teaching, 1997, p. 15-16), and our teacher training institutions are simply not producing sufficient numbers of teachers to meet the demand. At the root of this school staffing crisis, according to the conventional wisdom, are two converging macro demographic trends — increasing student enrollments and increasing teacher turnover due to a "graying" teaching force. The resulting shortfalls of teachers, the argument continues, are forcing many school systems to resort to lowering standards to fill teaching openings, inevitably resulting in high levels of underqualified teachers and lower school performance.

Observers and analysts also argue that the inability of schools to adequately staff classrooms with qualified teachers (hereafter referred to as school staffing problems) is directly connected to societal stratification processes. In this view, access to qualified teachers is one of the most important, but least equitably distributed, of educational resources. Teacher shortages, these analysts hold, disproportionately impact students in disadvantaged schools and are a major factor in the stratification of educational opportunity. Unable to match the salaries, benefits and resources offered by more affluent schools, these critics argue, high-poverty school districts, especially those in rural and urban areas, have difficulty competing for the available supply of adequately trained teachers and, consequently, employ far larger proportions of underqualified teachers. In turn, unequal access to qualified teachers and, hence, to quality teaching, is held to be a primary factor in unequal student educational, and ultimately, occupational outcomes (e.g., Rosenbaum 1976; Oakes 1990; Darling-Hammond 1990; Kozol 1991). Wilson (1996), for example, has directly tied problems of inner-city joblessness and underemployment to a dearth of qualified teachers in urban, high-poverty public schools, resulting from teacher shortages. As a result, in recent years school staffing inadequacies and inequities have been cast as major social problems, received widespread coverage in the national media, and been the target of a growing number of reform and policy initiatives (for a review of this issue, see National Commission on Teaching, 1997).

The prevailing policy response to these school staffing problems has been to attempt to increase the quantity of teachers supplied. In recent years, a wide range of initiatives has been implemented to recruit new candidates into teaching – especially to schools serving low-income students. Among these are career-change programs, such as "troops-to-teachers," designed to entice professionals into mid-career switches to teaching, and Peace Corps-like programs, such as Teach for America, designed to lure the "best and brightest" into hard-to-staff schools. Some school districts have resorted to recruiting teaching candidates from overseas. Many states have instituted alternative certification programs, whereby college graduates can postpone formal education training and begin teaching immediately. Financial incentives, such as signing bonuses, student loan forgiveness, housing assistance and tuition reimbursement have all been instituted to aid teacher recruitment (Hirsch, Koppich & Knapp 2001; Feistritzer, 1997; Kopp, 1992). The No Child Left Behind Act, passed in winter 2002, provides extensive federal funding for such initiatives.

Concern over teacher shortages in turn has spurred interest in empirical research on these issues, but until the last decade such efforts were limited by a lack of data. It was partly in order to address these data shortcomings that the U.S. Department of Education's National Center for Education Statistics conceived the Schools and Staffing Survey (SASS) and its supplement, the

Teacher Followup Survey (TFS), beginning in the late 1980s (Haggstrom et al., 1988). This is now the largest and most comprehensive data source available on the staffing, occupational, and organizational aspects of schools.

Over the past decade I have undertaken a series of research projects using SASS/TFS to examine a range of issues concerned with teacher supply, demand, and quality (for detailed reports, see Ingersoll 2001, 2003b). In this previous research I have focused on the population of schools as a whole and the entire teaching force. Unlike earlier work, here I will focus on those kinds of schools deemed to be the neediest and most disadvantaged – those serving rural and urban low-income communities. I will present new data on the realities of school staffing problems and teacher shortages in high-poverty, rural and urban public schools.

The theoretical perspective I've adopted in this research is drawn from organizational theory and the sociology of organizations, occupations and work. My operating premise is that in order to fully understand the causes and consequences of these educational problems it is necessary to examine them from the perspective of the organizations – the schools and districts – where these processes happen and within which teachers work. Employee supply, demand and turnover are central issues in organizational theory and research. However, there have been few efforts to apply this theoretical perspective to understanding staffing problems in the educational sector. As I will show, by "bringing the organization back in," these school staffing problems can be reframed from macro-level issues, involving inexorable societal demographic trends, to organizational issues, involving manipulable and policy-amenable aspects of particular schools. A close look at the data from this perspective, I argue, shows that the conventional wisdom concerning teacher shortages is largely a case of a wrong diagnosis and a wrong prescription.

The Data

As mentioned, the primary data source for this research is the nationally representative Schools and Staffing Survey (SASS) and its supplement, the Teacher Followup Survey (TFS), both conducted by the National Center for Education Statistics, the data collection arm of the U.S. Department of Education. To date, four independent cycles of SASS have been completed: 1987-1988; 1990-1991; 1993-1994; and 1999-2000. SASS is an unusually large survey. Each cycle of SASS administers survey questionnaires to a random sample of about 53,000 teachers, 12,000 principals and 4,500 districts, representing all types of teachers, schools, districts and all 50 states. In addition, one year later, the same schools are again contacted and all those in the original teacher sample who had moved from or left their teaching jobs are given a follow-up second questionnaire to obtain information on their departures. This latter group, along with a representative sample of those who stayed in their schools, comprise the Teacher Followup Survey. The TFS sample contains about 7,000 teachers. Unlike most previous data sources on teacher turnover, the TFS is large, comprehensive, nationally representative, includes the reasons teachers themselves give for their departures, and includes a wide range of information on the characteristics and conditions of elementary and secondary schools. It is also unusual in that it does not solely focus on a particular subset of total separations, but includes all turnover: voluntary, involuntary, transfers, quits, retirements, etc. In this paper, I present data from all four cycles of SASS and TFS (as of autumn 2004, the 2000-2001 TFS had only been partially released by NCES and data presented here from that cycle are preliminary estimates).

What do the data tell us about school staffing problems and teacher shortages, especially in urban and rural high-poverty schools?

Demand for Teachers Has Risen

The data show that the conventional wisdom on teacher shortages is correct in some respects. Consistent with shortage predictions, data from SASS and other NCES data sources show that demand for teachers has indeed increased in recent years. Since 1984, student enrollments have increased, most schools have had job openings for teachers and the size of the teaching workforce (K-12) has increased, although the rate of these increases began to decline slightly in the late 1990s (Gerald and Hussar, 1998; Snyder & Hoffman 2001, pp. 11). Most importantly, many schools with teaching openings have experienced difficulties with recruitment. For example, the data show that, overall, in the 1999-2000 school year, 58 percent of all schools reported at least some difficulty filling one or more teaching job openings, in one or more fields. However, the data also show that in any given field less than half of the total population of schools actually experienced recruitment problems. Moreover, schools in disadvantaged areas were far more likely to have had hiring difficulties than schools in other areas. For instance, in 1999-2000, 54 percent of secondary schools had job openings for math teachers and about four-fifths of these indicated they had at least some difficulty filling these math openings – representing about 40 percent of all secondary schools. But schools in urban and rural high-poverty communities were far more likely to report they had such difficulties than did schools serving low-poverty communities. Likewise, 45 percent of secondary schools had job openings for special education teachers and about three-quarters of these indicated they had at least some difficulty filling these openings - representing 34 percent of secondary schools. But again, schools in urban and rural high-poverty communities were far more likely to report they had such difficulties.

The Importance of Teacher Turnover for School Staffing Problems

The data also show that the conventional wisdom on teacher shortages is incorrect in other respects. The data show that the demand for new teachers and subsequent staffing difficulties are not primarily due to student enrollment and teacher retirement increases, as widely believed. Most of the hiring of new teachers is simply to fill spots vacated by teachers who departed several months earlier, and although teacher retirements have increased in recent years, they account for only a small portion of the above total departures or turnover. For example, between the end of the 1999-2000 and the beginning of the 2000-2001 school years, about 67,000 teachers retired, accounting for only 24 percent of the 278,000 leavers and only 12 percent of the total turnover of 546,000 during that period. Rather, the data show that the demand for new teachers, and subsequent staffing difficulties, are primarily due to pre-retirement teacher turnover. That is, most of the hiring of new teachers is simply to fill spots vacated by teachers who just departed. And most of those departing are not doing so because of gray hair.

The data show that teaching has a relatively stable annual turnover rate: 14.5 percent in 1988-89; 13.2 percent in 1991-92; 14.3 percent in 1994-95; 15.7 percent in 2000-2001. (See Figure 1; these figures include all schools — public, private and charter). There are two types of total turnover included in Figure 1: movers — those who move to teaching jobs in other schools (often and hereafter referred to as teacher migration) — and leavers — those who leave the teaching occupation altogether (often and hereafter referred to as teacher attrition). Total teacher departures are fairly

evenly split between them. Much of the existing research on teacher turnover does not include the former. Teacher cross-school migration is a form of turnover that does not decrease the overall supply of teachers because departures are simultaneously new hires. As a result, many assume that teacher migration does not contribute to the problem of staffing schools and to overall shortages.

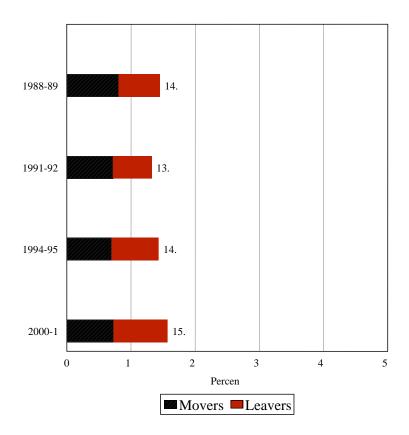


Figure 1: Percent Annual Teacher Turnover

From a macro and system level of analysis, this is probably correct and for this reason educational researchers have often de-emphasized or excluded movers. However, from an organizational perspective and from the viewpoint of those managing at the school-level, movers and leavers have the same effect – in either case, the result is a decrease in staff, who usually must be replaced. Hence, research on employee turnover in other occupations and organizations almost always includes both movers and leavers – and for this reason I include them here. As illustrated in Figure 1, adopting a system-level or an organizational-level of analysis makes a difference – if one excludes cross-school moves, total turnover would appear far less than it is – from the viewpoint of those managing schools.

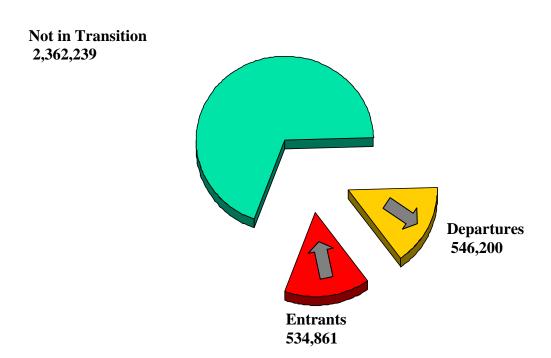
It is also important to note that teaching is a relatively large occupation; it represents 4 percent of the entire civilian workforce. There are, for example, over twice as many K-12 teachers as registered nurses and five times as many teachers as either lawyers or professors (U.S. Bureau of the Census, 2002). The sheer size of the teaching force, combined with its relatively high annual turnover, means that there are large flows in, through, and out of schools each year. The image that

these data suggest is one of a "revolving door" – which I have tried to capture in Figure 2. It shows that for the 1999-2000 school year, 534,861 teachers entered schools, while by the following school year an even larger number – 546,200 – had moved from or left their schools. Hence, in a 12-month period over 1 million teachers – almost a third of this relatively large workforce – were in job transition into, between or out of schools.² This revolving door is a major, but overlooked, factor behind school staffing problems.

The Importance of Teacher Turnover for Organizations

Some job and career changes are, of course, normal and inevitable in any occupation. And there are occupations that have higher levels of turnover than teaching. In recent work I have found that, as one might expect, teaching has higher turnover than some higher-status professions (professors at 9.3 percent; technology and scientific professionals from 3.6 percent to 9.2 percent), about the same as other female semi-professions (nurses at 18 percent) and less turnover than some lower-status, lower-skill occupations (federal clerical workers at 30 percent).³

Figure 2: Numbers of Teachers in Transition During the 1999-2000 School Year



Moreover, not all teacher turnover is detrimental. There is an extensive research literature on employee turnover conducted by those who study organizations and occupations in general (e.g.,

Price 1977, 1989; Mueller & Price, 1990; Bluedorn, 1982; Halaby & Weakliem, 1989; Hom & Griffeth, 1995; Mobley, 1982). On the one hand, researchers in this tradition have long held that a low level of employee turnover is normal and efficacious in a well-managed organization. Too little turnover of employees is tied to stagnancy in organizations; effective organizations usually both promote and benefit from a limited degree of turnover by eliminating low-caliber performers and bringing in "new blood" to facilitate innovation.

On the other hand, researchers in this tradition have also long held that high levels of employee turnover are both the cause and effect of performance problems in organizations. Organizational analysts have also noted that the consequences of employee turnover vary among different types of employees and among different types of organizations. Labor process analysts, for instance, have argued that a major issue, from the viewpoint of organizational management, is the extent to which the organization is, or is not, dependent on particular types of employees and, hence, vulnerable to the disruption caused by their turnover (e.g., Braverman, 1974; Burawoy, 1979; Edwards, 1979). For just this reason the issue of employee "substitutability," or the ease with which organizations can replace employees, is a central concern in organizational management and a central theme in organizational research. From this perspective, employee turnover is especially consequential for work that involves uncertain and non-routine technologies and which requires extensive interaction among participants. Such organizations are often unusually dependent upon the commitment and cohesion of employees and, hence, especially vulnerable to turnover (e.g., Burns & Stalker, 1961; Kanter, 1977; Likert, 1967; Porter, Lawler & Hackman, 1975; Turner & Lawrence, 1964; Walton, 1980).

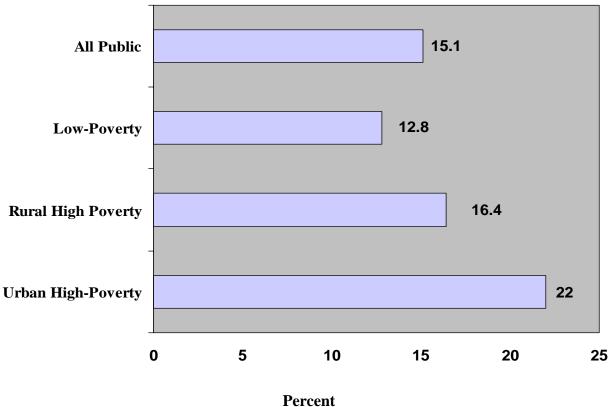
Schools are an example of this type of organization. Education theory and research have long shown that while education is a mass "industry" involving large complex formal organizations, in important ways schools do not fit standard input-output, economic-production models in either theory or practice (Bidwell, 1965; Lortie, 1975; Ingersoll, 2003a). The "raw materials" in schools are children and youth, the "technology" of teaching and learning is often uncertain, ambiguous and non-routine, and the "product" is the growth of youngsters. As a result, while schools in some ways resemble economic-production organizations, in other ways they resemble another kind of institution altogether – the family. Student test outcomes are one of the important output functions of school production. But not surprisingly, similar to families, the presence of a positive sense of community, belongingness, communication and cohesion among members has long been held by education theory and research to be one of the most important indicators and aspects of effective schools (e.g., Grant, 1988; Coleman & Hoffer, 1987; Kirst, 1989; Rosenholtz, 1989).

Hence, from an organizational perspective, some teacher turnover, especially of ineffective teachers, is necessary and beneficial. But from this perspective, turnover of teachers from schools is of concern not simply because it may be an indicator of sites of potential staffing problems and so-called teacher shortages, but because of its relationship to school cohesion and, in turn, performance. Moreover, from this perspective this relationship runs in both directions. That is, high rates of teacher turnover are of concern not only because they may be an outcome indicating underlying problems in how well schools function, but also because they can be disruptive, in and of themselves, for the quality of the school community and performance.

Some of these costs and consequences of turnover are more easily measured and quantified than others. In contrast to the corporate sector, however, there has been very little attention paid to the costs and consequences of employee turnover in education. One notable exception was a recent

attempt to quantify the costs of teacher turnover in Texas; this study concluded these costs to the state run into the hundreds of millions of dollars each year (Texas Center for Educational Research, 2000).

Figure 3: Percent Annual Public Teacher Turnover, by Selected School Characteristics (2000-2001)



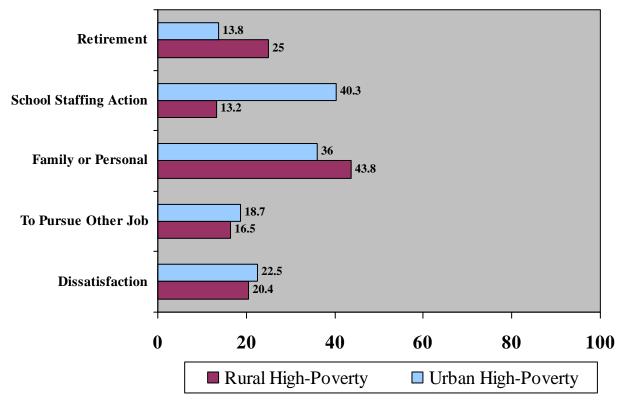
Recognizing the organizational-level consequences of turnover is important because the data also show that the revolving door varies greatly among different kinds of schools. As illustrated in Figure 3, high-poverty public schools have higher turnover rates than do more affluent public schools, and urban high-poverty public schools have slightly more turnover than do rural high-poverty public schools.⁴

The Sources of Teacher Turnover

These data raise an important set of questions: why do teachers depart at relatively high rates and why are these rates higher in high-poverty schools? To answer these questions, I have conducted multivariate statistical analyses of data from different cycles of SASS/TFS to determine which characteristics of teachers and schools are associated with the likelihood of teacher turnover, after controlling for background factors (Ingersoll 2001, 2004). I also have examined data on the reasons teachers themselves give for their turnover. Such self-report data are useful because those departing are, of course, often in the best position to know the reasons for their turnover. But such self-report data are also retrospective attributions, subject to bias and, hence, warrant caution in interpretation.

Nevertheless, I found a great deal of consistency among these different types of data and from different cycles of the SASS/TFS survey. The following section summarizes my principal findings. Figure 4 presents self-report data on teachers' reasons for both migration and attrition. In addition, for all teachers who departed because of job dissatisfaction, Figure 5 presents data on the reasons for their dissatisfaction (definitions of these reasons can be found in the Appendix). ⁵

Figure 4: Percent Teachers Giving Various Reasons for Their Turnover from High-Poverty Schools (1994-1995)



Note: Percentages do not total 100 percent because survey respondents were allowed to cite multiple reasons for their turnover.

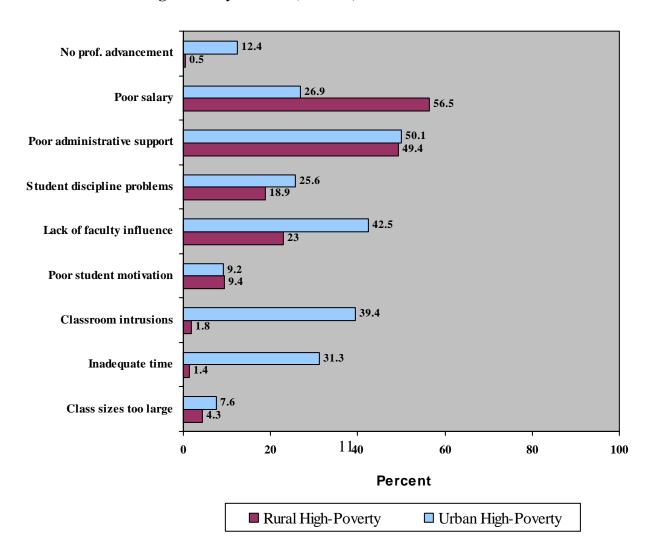
Contrary to conventional wisdom, retirement is not the most prominent factor, especially in urban high-poverty schools. Retirement was listed by only about 14 percent of all those who departed from urban, high-poverty schools and a quarter of those departing from rural poor schools. School staffing cutbacks, defined as departures due to lay-offs, terminations, school closings, involuntary reassignments, and reorganizations, account for a far larger proportion of turnover than did retirement in urban poor districts. Within such districts, there is often a large amount of cross-school migration as a result of staffing actions. A third category of turnover – that which occurs for personal reasons – includes departures for pregnancy, child rearing, health problems and family moves. These account for more turnover than retirement from both rural and urban low-income schools. These types of flows are also common to all occupations and all types of organizations. The

two final sets of reasons are directly related to the organizational conditions of teaching. Combined, these two categories are among the most prominent sources of turnover. About 40 percent of all departures report as a reason either job dissatisfaction or the desire to pursue a better job, another career, or to improve career opportunities in or out of education.

Of those who depart because of job dissatisfaction, there are some interesting similarities and differences between urban and rural high-poverty schools. In the former, teachers most often link their turnover to six factors: a lack of resources, support and recognition from the school administration; a lack of teacher influence over school and classroom decision-making; too many intrusions on classroom teaching time; inadequate time to prepare; poor salaries; and student discipline problems. In contrast, among those who departed from rural poor schools, four factors stand out: salaries; poor administrative support; lack of teacher influence and autonomy; and student discipline problems.

Interestingly, three factors stand out as not being major reasons for turnover in either type of school, according to those who departed: large class sizes, lack of opportunity for professional advancement; and poor student motivation to learn. In general, I found similar kinds of dissatisfactions lie behind both teacher migration and teacher attrition. These findings are important because of their implications for the policy initiatives discussed earlier. Unlike the conventional wisdom that focuses on external demographic trends "out there," these findings suggest there is a role "in here" for the internal organization and management of schools.

Figure 5: Percent Teachers Giving Various Reasons for Their Dissatisfaction-Related Turnover from High-Poverty Schools (1994-95)



Note: Percentages do not total to 100 percent because survey respondents were allowed to cite multiple reasons for their dissatisfaction-related turnover.

Implications for Policy

It is widely believed that shortfalls of teachers resulting primarily from two converging demographic trends – increasing student enrollments and increasing teacher retirements – have led to staffing problems and a negative impact on educational performance, especially in disadvantaged schools. In response, school districts, states and the federal government have developed a variety of recruitment initiatives designed to recruit more candidates into teaching.

However worthwhile these efforts may be, the data suggest that alone, they will not solve the staffing problems plaguing disadvantaged schools. The data suggest that school staffing problems are not solely or even primarily due to teacher shortfalls resulting from either increases in student enrollment or increases in teacher retirement. In contrast, the data suggest that school staffing problems are to a large extent a result of a "revolving door" – where large numbers of teachers depart teaching for reasons other than retirement.

Supply and demand theory holds that where the quantity of teachers demanded is greater than the quantity of teachers supplied, there are two basic policy remedies: increase the quantity supplied or decrease the quantity demanded. The first approach – the traditionally dominant approach – is to increase the quantity of teachers supplied through recruitment. However, this analysis suggests that recruitment programs alone will not solve the staffing problems of schools, if they do not also decrease turnover. States such as California, where class-size reductions have strained the supply of new teachers, pose exceptions. But, for just these reasons, California, like other states, must pay close attention to retention. In short, recruiting more teachers will not solve the teacher crisis if 40 to 50 percent of such teachers then leave within five years, as a number of studies have shown (e.g., Murnane et al. 1991; Huling-Austin 1990; Hafner and Owings 1991). The image that comes to mind is a bucket rapidly losing water because of holes in the bottom. Pouring more water into the bucket will not be the answer if the holes are not first patched.

Teacher recruitment and other supply-side solutions may not only fail to solve the problem, but could also make the situation worse. If recruitment strategies involve lowering teacher standards, or if the effect of increasing teacher supply is to deflate salaries or erode working conditions, then these measures may simply exacerbate the root factors behind school staffing problems.

This situation is analogous to aspects of management-labor conflict in other industries. Critics of business practice argue that industrialists have long used labor supply recruitment as a strategy to undermine worker and union efforts to improve working conditions and wages (e.g. Braverman, 1974; Burawoy, 1979; Edwards, 1979). For example, by bringing in immigrant laborers from eastern and southern Europe at the turn of the 19th century, industrialists, the critics hold, were able to keep wages down, undermine union solidarity and increase profits. One of the downsides of this strategy, from a management perspective, is that it can decrease employee quality and increase employee turnover. Hence, one of the objectives behind the design of the assembly-line model of production used in industry was to increase the ease of substitutability and, hence, insulate the organization from disruption caused by employee turnover.

Similarly, social scientists have long characterized K-12 teaching as a lower-status, easy-in/easy-out, high turnover occupation that has historically relied on recruitment, and not retention, to solve its staffing problems (e.g., Tyack, 1974; Lortie, 1975). Since the inception of the public school

system in the late 19th century, teaching was socially defined and treated as a temporary line of work suitable for women, prior to their "real" career of child rearing. For men, teaching was socially defined as a stepping stone, prior to their "real" career in one of the male-dominated skilled blue-collar occupations or white-collar professions. Indeed, historically there was an ambivalence toward persistors in teaching, especially males, who had to account for why they continued to be "merely" a teacher. Low pre-service training standards and requirements, relatively unselective entry criteria and front-loaded salaries that paid newcomers relatively high salaries compared to veterans, all tended to favor recruitment over retention. Moreover, isolated job conditions, little professional autonomy and little sense of a career ladder all undermined longer-term commitment to teaching as a career and profession. Attempts to upgrade the status of the occupation through more rigorous training and licensing standards or more selective entry gates often resulted in decreases in male entrants to teaching, as they were more attracted to occupations with better rewards attached to rigorous standards (Strober and Tyack, 1980).

It appears that school districts have continued to favor teacher recruitment strategies for many of the same reasons and with many of the same consequences. By widening the entry gate and increasing the quantity of teachers supplied, districts are able to control labor costs and, hence, control local property taxes. The downside of this strategy in schools, as in industry, is that it can decrease employee quality and increase employee turnover. Treating workers as interchangeable, expendable, low-skill workers reduces some expenses, but it is not cost-free. If turnover is at the root of school staffing problems and if the quality of the teaching job is a large factor behind turnover, then policies that further erode the low status of teaching, that undermine salary increases or that undermine working conditions may simply backfire by increasing turnover.

In short, the data suggest that school staffing problems to a large extent are rooted in the way schools are organized and the way the teaching occupation is treated, and that lasting improvements in the quality and quantity of the teaching workforce will require improvements in the quality of the teaching job.

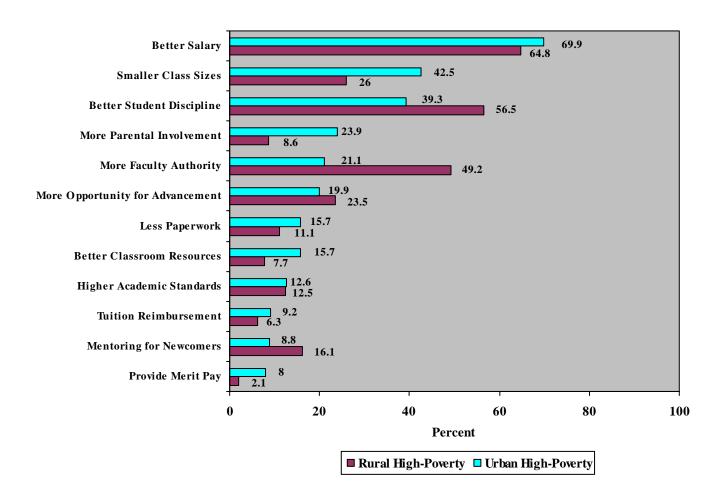
What Is to Be Done?

How do schools improve the teaching job? Teachers themselves have offered some ideas. The TFS asked teachers who had moved from or left their teaching jobs since the prior year to suggest possible steps schools might take to encourage teachers to remain in teaching. The responses from teachers who departed high-poverty schools are summarized in Figure 6 (definitions of these steps can be found in the Appendix).⁶

One strategy to aid retention suggested by departed teachers from both urban and rural poor schools is providing higher salaries and/or better fringe benefits, which are, not surprisingly, strongly linked to teacher turnover rates. But salaries are not the only suggestion, which is important from a policy perspective because increasing overall salaries is expensive, given the sheer size of the profession and the fiscal realities of high-poverty communities.

Class size reduction was also frequently suggested by departed teachers, especially those from urban poor schools, as a step to increase retention, although interestingly, it was not frequently given by teachers as one of the sources behind their turnover related to dissatisfaction (Figure 5).

Figure 6: Of Those Teachers Who Moved From or Left Their Jobs in High-Poverty Schools, Percent Giving Various Steps Schools Might Take to Encourage Teachers to Remain in Teaching (1994 -1995)



Reduction of student discipline problems is another factor frequently suggested by departed teachers. In my separate multivariate analysis of the data, I found that this factor is strongly tied to the rates of teacher turnover, after controlling for other factors; again, not surprisingly, schools with more student misbehavior problems have more teacher turnover regardless of whether they are affluent, poor, urban, rural, large or small (Ingersoll 2001).

One of the factors tied to both student discipline and teacher turnover is how much decisionmaking influence teachers themselves have over school policies that affect their jobs, especially those concerned with student behavioral rules and sanctions. Also, in my separate multivariate analyses of the data I have found that, on average, teachers have little say in many of the key decisions that are concerned with and affect their work, but schools where teachers are allowed more input into issues, such as student discipline in particular, have less conflict between staff and students and less teacher turnover (Ingersoll 2003a). Hence, not surprisingly, in Figure 6 the data show that increasing teacher decision-making power and authority is also suggested by teachers as a step to aid retention. Also revealed in Figure 6 is that almost a quarter of those departing from urban, high-poverty schools suggested increasing parental involvement as one of the main steps necessary for retention.

Finally, it is important to recognize that none of these data suggest adopting any of the above steps will be inexpensive or easy, especially in disadvantaged schools. But from the perspective of this analysis, the data suggest that schools are not simply victims of inexorable demographic trends, and there is a significant role for the management and organization of schools in both the genesis of, and the solution to, school staffing problems. In sum, the data suggest that improvements in the above aspects of the teaching job would contribute to lower rates of turnover, diminish school staffing problems and, hence, ultimately aid the performance of schools in high-poverty communities.

References

- American Association of University Professors. (1989). The annual report on the economic status of the profession, 1988-89. Academe, 75(2), 3-74.
- Bidwell, C. (1965). The school as a formal organization. In J. March (Ed.), Handbook of organizations (pp. 973-1002). Chicago, IL: Rand McNally.
- Bluedorn, A. C. (1982). A unified model of turnover from organizations. Human Relations, 35, 135-153.
- Braverman, Harry. (1974). Labor and monopoly capitalism. New York: Monthly Review Press.
- Burawoy, Michael. (1979). Manufacturing consent: Changes in the labor process under monopoly capitalism. Chicago: University of Chicago Press.
- Burns, T., & Stalker, G. M. (1961). The management of innovation. London: Tavistock.
- Coleman, J., & Hoffer, T. (1987). Public and private schools: The impact of communities. New York: Basic.
- Darling-Hammond, L. (1984). Beyond the commission reports: The coming crisis in teaching. Santa Monica, CA: Rand Corporation.
- Darling-Hammond, L. (1990). Teacher quality and equality. In P. Keating & J. I. Goodlad (Eds.), Access to Knowledge. New York: College Entrance Examination Board.
- Edwards, Richard. (1979). Contested terrain. New York: Basic Books.
- Ehrenberg, R., Kasper, H., & Rees, D. (1991). Faculty turnover at American colleges and universities: analyses of AAUP data. Economics of Education Review, 10(2), 99-110.
- Feistritzer, E. (1997). Alternative teacher certification: A state-by-state analysis (1997). Washington, DC: National Center for Education Information.
- Gerald, D., & Hussar, W. (1998). Projections of education statistics to 2008. Washington, DC: National Center for Education Statistics.
- Grant, G. (1988). The world we created at Hamilton High. Cambridge, MA: Harvard University Press.
- Hafner, A., & Owings, J. (1991). Careers in teaching: Following members of the high school class of 1972 in and out of teaching (NCES Report No. 91-470). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Haggstrom, G. W., Darling-Hammond, L., & Grissmer, D. (1988). Assessing teacher supply and demand. Santa Monica, CA: Rand Corporation.
- Halaby, C., & Weakliem, D. (1989). Worker control and attachment to the firm. American Journal of Sociology, 95, 549-591.
- Hirsch, E, Koppich, J,. & Knapp, M. (2001). Revisiting what states are doing to improve the quality of teaching: An update on patterns and trends. Center for the Study of Teaching and Policy, University of Washington.
- Hom, P., & Griffeth, R. (1995). Employee turnover. Cincinnati: South-Western Publishing.
- Huling-Austin, L. (1990). Teacher induction programs and internships. In W. R. Houston (Ed.), Handbook of Research on Teacher Education. Reston, VA: Association of Teacher Educators.
- Hussar, W. (1998). Predicting the need for newly hired teachers in the United States to 2008-09. Washington, DC: National Center for Education Statistics.
- Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. American Educational Research Journal, 38(3), 499-534.

- Ingersoll, R. (2003a). Who controls teachers' work?: Power and accountability in America's schools. Cambridge, MA: Harvard University Press.
- Ingersoll, R. (2003b). Is there really a teacher shortage? Center for the Study of Teaching and Policy, University of Washington. Available: http://depts.washington.edu/ctpmail/PDFs/Shortage-RI-09-2003.pdf
- Ingersoll, R. (2004). Teacher shortages and educational inequality. Unpublished manuscript.
- Kanter, R. (1977). Men and women of the corporation. New York: Basic.
- Kirst, M. (1989). Who should control the schools? In T. J. Sergiovanni & J. Moore (Eds.), Schooling for tomorrow. Boston: Allyn and Bacon.
- Kochanski, J. & Ledford, G. (2001). How to keep me Retaining technical professionals. Research Technology Management. May–June: 31-38.
- Kopp, W. (1992). Reforming schools of education will not be enough. Yale Law and Policy Review, 10, 58-68.
- Kozol, J. (1991). Savage inequalities. New York: Harper-Collins.
- Lortie, D. (1975). School teacher. Chicago: University of Chicago Press.
- Mobley, W. (1982). Employee turnover: Causes, consequences and control. Reading, MA: Addison-Wesley.
- Mueller, C., & Price, J. (1990). Economic, psychological and sociological determinants of voluntary turnover. Journal of Behavioral Economics, 19, 321-335.
- Murnane, R., Singer, J., Willett. J., Kemple, J., & Olsen, R. (Eds.). (1991). Who will teach?: Policies that matter. Cambridge, MA: Harvard University Press.
- National Commission on Teaching and America's Future. (1997). Doing what matters most: investing in quality teaching. New York: National Commission on Teaching and America's Future.
- Oakes, J. (1990). Multiplying inequalities: The effects of race, social class, and tracking on opportunities to learn mathematics and science. Santa Monica, CA: The RAND Corporation.
- Office of Personnel Management, 2003. Central personnel data file (CPDF). Washington, DC: OPM. Available: http://www.opm.gov/feddata/index.asp
- Price, J. (1977). The study of turnover. Ames, IA: Iowa State University Press.
- Price, J. (1989). The impact of turnover on the organization. Work and Occupations, 16, 461-473.
- Price, J. (1997). Handbook of organizational measurement. International Journal of Manpower. 18: no. 4-6.
- Rosenbaum, J. (1976). Making inequality. New York: John Wiley & Sons.
- Rosenholtz, S. (1989). Teacher's workplace: The social organization of schools. New York: Longman.
- Snyder, T., & Hoffman, C. (2001). The digest of education. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Strober, M. and Tyack, D. (1980). Why do women teach and men manage? Signs, 5: 499-500.
- Texas Center for Educational Research. (2000). The cost of teacher turnover. Austin, TX: Texas State Board for Educator Certification.
- Tyack, D. (1974). The one best system. Cambridge, MA: Harvard University Press.
- U.S. Bureau of the Census. (1998). Statistical abstract (117th Edition). Washington, DC: U.S. Department of Commerce.
- Walton, R. E. (1980). Establishing and maintaining high commitment work systems. In J. Kimberly & R. Miles (Eds.), The organization life cycle. San Francisco: Jossey-Bass.

Wilson, William J. (1996). When work disappears: the world of the new urban poor. New York: Knopf/Random House.

Appendix

Survey Items on Reasons for Turnover

In the TFS, teachers could list up to three choices from a list of 12 reasons for their departures. I grouped the 12 reasons into five categories, as follows:

- Retirement.
- School Staffing Action: reduction-in-force/lay-off/school closing/reassignment.
- Family or Personal: family or personal move; pregnancy/child rearing; health; other family or personal reason.
- **To Pursue Another Job**: to pursue another career; to take courses to improve career opportunities in or outside the field of education; for better teaching position.
- **Dissatisfaction**: dissatisfied with teaching as a career; dissatisfied with the school; for better salary or benefits.

Of those teachers who indicated dissatisfaction, as defined above, as a reason for their departure, they could list up to three choices from a list of 12 reasons for their dissatisfaction. I grouped the 12 reasons into nine categories, as follows:

- Poor Salary
- **Poor Administrative Support**: lack of recognition and support from administration; lack of resources and material/equipment for your classroom; inadequate support from administration
- Student Discipline Problems
- Lack of Faculty Influence and Autonomy: lack of influence over school policies and practices; lack of control
 over own classroom
- **Poor Student Motivation**: poor student motivation to learn
- Poor Opportunity for Professional Advancement
- Inadequate Time to Prepare: inadequate time to prepare lesson/teaching plans
- Classroom Intrusions: intrusions on teaching time (i.e. not enough time working directly with teaching students)
- Class Sizes Too Large

Survey Items on Steps Schools Might Take to Encourage Teachers to Remain in Teaching

Of those teachers who departed their schools, they could list up to three choices from a list of 16 steps. I present data for the 12 steps most often chosen:

- Better Salary: providing higher salaries and/or better fringe benefits
- Smaller Class Size
- Better Student Discipline: dealing more effectively with student discipline and making schools safer
- More Parental Involvement: increasing parental involvement in schools
- More Faculty Authority: giving teachers more authority in the schools and in their classrooms
- More Opportunity for Advancement: improving opportunities for professional advancement
- Less Paperwork: reducing the paperwork burden on teachers
- Better Classroom Resources: providing better resources and materials for classroom use
- Higher Academic Standards: increasing standards for students' academic performance
- **Tuition Reimbursement**: providing tuition reimbursement for coursework required for certification or career advancement
- Mentoring for Newcomers: providing more support for new teachers (e.g., mentor teacher programs)
- Provide Merit Pay: providing merit pay or other pay incentives to teachers

Notes

¹ The most recent data from the US Census Bureau are from 2001: 5,473,000 teachers/135,073,000 total workforce = 4.05 percent. "Teachers" include all Pre-K, K, Elementary, Secondary and Special Education teachers. College and university instructors and professors are not counted as teachers. Counselors and librarians are not counted as teachers.

- ³ Data for professors are from a study sponsored by the American Association for University Professors (1989) and represent annual averages for the period from 1972 to 1989 (Ehrenberg et al., 1991). Data on technology and science professionals, such as engineers, research scientists and software designers represent the year 2000 and are from Kochanski and Ledford (2001). Data for nurses are from the March 2000 National Sample Survey of Registered Nurses conducted by the American Hospital Association. Data for federal employees are from the Office of Personnel Management (2003).
- ⁴ In Figure 3, high-poverty refers to schools in which 80 percent or more of the students come from families below the federal poverty line; low-poverty refers to schools with a poverty enrollment below 10 percent. The middle category of poverty is omitted in the figure.
- ⁵ The data in Figures 4 and 5 are from the 1994-95 TFS because the relevant data from the 2000-2001 TFS were not released as of autumn 2004. Note that the bars displaying percentages reporting various reasons for turnover each add up to more than 100 percent, because respondents could indicate up to three reasons for their departures. The same applies to the bars displaying reasons for dissatisfaction. See Appendix for definitions of these reasons.
- ⁶ The data in Figure 6 are from the 1994-95 TFS, because the relevant data from the 2000-2001 TFS were not released as of autumn 2004. Note that the estimates add up to more than 100 percent, because respondents could indicate up to three steps.

² The data in Figure 2 are calculated at the level of the school. Hence "hires" and "departures" refer to those newly entering or departing a particular school. "Movers" includes transfers among schools within districts. Reassignments within a school are not defined as hires or as departures.