Seven Trends:
The Transformation of the Teaching Force¹

by

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Has the elementary and secondary teaching force changed in recent years? And, if so, how? Have the types and kinds of individuals going into teaching changed? Have the demographic characteristics of those working in classrooms altered? To answer these questions we embarked on an exploratory research project to try to discover what kinds of trends and changes have, or have not, occurred to the teaching force over the past few decades. We were surprised by what we found. We discovered that the teaching force has been and is greatly changing; yet, even the most dramatic trends appear to be little noticed by researchers, by policy makers, and by the public.

To explore these questions we utilized the largest and most comprehensive source of data on teachers available – the Schools and Staffing Survey (SASS) and its supplement, the Teacher Follow-Up Survey (TFS). Unlike many large-scale surveys, SASS and TFS focus on teachers rather than students. These data are collected by the National Center for Education Statistics (NCES), the statistical arm of the U.S. Department of Education. NCES administers questionnaires to a random sample of about 50,000 teachers, representing all types of teachers, schools, districts, and all 50 states in order to be nationally representative. NCES has administered six cycles of SASS over a 20 year period—1987-88, 1990-91, 1993-94, 1999-2000, 2003-04 and 2007-08 (for information on SASS, see NCES, 2005). We decided to take advantage of both the depth and duration of these data to explore our question – have there been changes (or not) in the teaching force and teaching occupation over the two decades from 1987 to 2008? Below, we summarize seven of the most prominent trends and changes we found:

1.) Ballooning
2.) Graying
3.) Greening
4.) Becoming More Female
5.) Diversifying
6.) Not Declining in Academic Ability
7.) Destabilizing

For each of the trends two large questions arise: (1.) Why? What are the reasons for, and sources of, the trend? (2.) So what? What difference does it make? What are the implications and consequences of the trend?

We summarize some possible answers to each of these two sets of questions. But our intent here is not to try to arrive at closure for either – that would require far more extensive analyses than we have yet done. Our objective here is largely exploratory and suggestive, rather than explanatory and evaluative. In short, at this point we ask more questions than we are able to answer. Hopefully, in time further research can rectify that – a line of work we plan to undertake.
**Trend 1: Ballooning**

The teaching force has ballooned in size. The Census Bureau indicates that PreK-12 teaching is the largest occupational group in the nation (Bureau of Labor Statistics, 2011), and it is growing even larger. Growth in the numbers of students and teachers is not new. The numbers of both students and teachers grew throughout the 20th century, and the rate of growth for both groups began to soar in the late 1940s with the post World War II baby boom and the emergence of the comprehensive high school. In 1970 student enrollments peaked and then declined until the mid 1980s. During this period the numbers of teachers similarly peaked and then leveled off. Since the mid 1980s, total elementary and secondary student enrollments have again grown steadily. During this period the teaching force has also been increasing in number. The rate of these increases has not matched those of the baby boom years—with one large difference. The rate of increase for teachers has far outpaced the rate of increase for students—that is, the numbers of teachers are going up far faster than are the numbers of students. As shown at the top of Figure 1, in the two decade period from 1987 to 2008, total k-12 student enrollment in the nation (public, private, and charter combined), went up by 19 percent. In contrast, during the same period the teaching force increased at over two times that rate – by 48 percent.

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**Figure 1: Percent Increase in Students and Teachers, by Field, from 1987-88 to 2007-08**

- **All**: Students 19, Teachers 48
- **General Elementary**: Students 33
- **Elem Enrichment**: Students 111
- **Special Ed**: Students 102
- **All Subjects Middle/Secondary**: Students 50
- **Phys Ed**: Students 12
- **Art/Music**: Students 19
- **Math**: Students 74
- **Science**: Students 86

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Why is this? What accounts for this ballooning of the teaching force? One possible explanation is that a reduction in teachers’ workloads -- class sizes, hours worked, or classes taught per day – has necessitated an increase in the numbers of teachers employed. Upon closer examination, this explanation does not account for the ballooning of teachers.

Elementary level class size did decrease by 20 percent during this period – from an average of 26.2 to 21.1 students per general elementary school classroom. Accordingly, the number of general elementary school teachers increased, and because elementary teachers comprise almost a third of the entire teaching force, their increase explains a portion of the ballooning. But class size is not responsible for as much of the ballooning as one would expect and not as much as other factors.

In contrast to elementary classrooms, typical subject-area courses at the middle and secondary school levels experienced little change in class size during this period. Indeed, during this period there was a slight increase in the workload of subject-area teachers at the middle and secondary school levels – the number of class periods teachers taught per day increased. And, for teachers at all grade levels, the average instructional hours teachers work per week slightly increased.

The data indicate that a significant source of the ballooning has been the growth of special education – no doubt linked to changes in the Individuals with Disabilities Education Act – the main federal special education legislation. As shown in Figure 1, the number of teachers with majors in special education increased by 102 percent compared to 33 percent for general elementary school teachers. Special education classes average about one half the size of those typical in elementary and secondary schools. The increase in special education teachers alone accounts for almost one fifth of the entire increase in the teaching force during that period.

Another source of the ballooning is a dramatic increase in the number of teachers of elementary enrichment classes – by 111 percent since 1990-91. These are instructors who teach only one subject (such as art, music, physical education, computer science, or math) to most of the students in a given elementary school.

As the teaching force has grown, it has also experienced large shifts at the middle and secondary levels. Overall, the number of typical subject-area teachers at the middle and secondary school level has increased 50 percent. But, there has also been a large redistribution of these teachers across fields – with winners and losers. Among the losers are art, music and physical education. Among the winners, besides special education, are math and science. The number of teachers with math or math education degrees has gone up by 74 percent. The number of teachers with degrees in one of the sciences or in science education has gone up by 86 percent. Although there are two and half times as many general elementary teachers as math and science teachers, the latter accounts for almost as much of the overall balloning as does the former. Interestingly, the data also show that the fastest rate of increase in math and science teachers occurred during the 1990s, before the advent of the No Child Left Behind Act.

A major factor in the growth of math and science teachers appears to be changes in high-school graduation requirements across the nation. For core subjects, especially in math and
science, graduation requirements increased during this period. This change resulted in increases in math and science courses taken by students. The data show that students enrolled in math and science classes went up – by 69 percent and 60 percent, respectively – in turn driving the large increase in the employment of teachers qualified in those subjects.

Another potential factor behind the ballooning may be ongoing increases in the overall number and range of programs and curricula offered by schools, especially at the secondary level. Educational historians have told us this programmatic expansion has been going on for a century, as schools are continually asked to take on more and more goals and tasks that were once the responsibility of parents, families and communities (Kirst 1984). However, at this point, we have not uncovered all of the factors behind the ballooning of the teaching force.

And, there are good reasons to investigate the sources of the rapid growth in the teaching force – given the large implications. One sobering implication is the financial cost of this expansion of the teaching force – since teacher salaries are the largest item in school district budgets. How have school systems been able to cope with such an increase in their largest budget item and who pays for it? How much of the increase in special education staff has been covered by federal, state or local funding to schools?

Another implication is for the math and science teacher shortage. We have explored this issue in depth elsewhere (see Ingersoll & Perda 2010; Ingersoll 2011). Among other findings, the data show that, contrary to conventional wisdom, the growth in the new supply and employment of qualified math and science teachers has not only more than kept pace with increases in math and science student enrollments, but also with math and science teacher retirement increases.

**Trend 2: Graying**

The teaching force has been getting older. This fact is a trend we have often heard about because of its link to teacher shortages. Since the mid 1980s numerous highly publicized reports have warned of a coming educational crisis due to severe teacher shortages in elementary and secondary schools (e.g., National Commission on Excellence in Education, 1983; National Academy of Sciences, 1987; National Commission on Teaching and America’s Future, 1996, 1997). These reports predicted a dramatic increase in the demand for new teachers primarily resulting from two converging demographic trends—increasing student enrollments and increasing teacher retirements due to a “graying” teaching force. Subsequent shortfalls of teachers would, in turn, the argument went, force many school systems to resort to lowering standards to fill teaching openings, inevitably resulting in high levels of under-qualified teachers and lower school performance. In more recent years high-profile reports from organizations such as the John Glenn Commission on Mathematics and Science Teaching for the 21st Century (2000), the National Research Council (2002), and the National Academy of Sciences (2007) have directly tied teacher shortages, especially in mathematics and science, to a host of educational and societal problems: from the inability to meet student achievement goals, to low U.S. educational performance compared to other nations, to the minority achievement gap, to national economic competitiveness, and even to the security of the nation.
Our data analyses confirm this demographic trend – the teaching force has gotten older and teacher retirements have steadily increased. But, our data analyses also show that this trend is largely over and the continuing stream of reports referencing the aging teaching force are simply repetitions of an old story soon to be no longer true.

**Figure 2: Age of Public School Teachers, 1987-88 and 2007-08**

As shown in figure 2, in 1987-88 the age distribution of teachers was shaped like a tall peak. The modal, or most common, age was 41. As the years have gone by this group has aged, and as also shown in figure 2, by 2007-08 the modal age of the teaching force was 55. The number of teachers 50 years or older increased, from about 530,000 in 1988 to 1.3 million in 2008. As a result, the number of teacher retirements has also increased – from 35,000 in 1988 to 85,000 in 2008. Our analyses of the data indicate that the modal age of retirement for teachers as been 59, suggesting that the number of teachers retiring should currently be near an all-time high. In fact, we have found that the number of teachers retiring has already begun to decrease – from 87,000 in 2004 to 85,000 in 2008.

What are the implications of this trend?
The aging of the teaching force has large cost implications for both school budgets and for state pension systems -- an issue that has received much media and policy attention in recent years. Veteran teachers earn higher salaries, which, in turn, can strain school and district budgets. Increases in the number of retirees result in greater outlays from state pension plans. But, overlooked in discussions of the dire future for pension systems is another factor; if schools replace retirees with new teachers, who earn lower salaries, and who pay into state pension plans, these additional costs could be lessened. As we will discuss in Trend 3, not only have retirees been replaced with newcomers, the latter flow has become a flood.

Another implication of aging, as noted earlier, is its impact on the supply of teachers. Conventional wisdom has long held that retirements are a major factor behind teacher shortages. But, often overlooked is that teacher retirements have always represented a small portion of all of those leaving teaching – less than a third in recent years. And, when one looks at all departures of teachers from schools (both those moving between schools and those leaving teaching altogether), retirement is only about 14 percent of the total outflows. In our research on the teacher shortage, we have found that not only has the supply of teachers been more than enough to replace retirements in fields such as math and science, but also that pre-retirement voluntary turnover has been a far larger factor behind school staffing problems than retirement has been (see Ingersoll & Perda 2010; Ingersoll 2011) – an issue we will return to in Trend 7.

**Trend 3: Greening**

Graying is not the only change in the age and experience of the teaching force. There has been another opposite, and unrecognized, trend going on simultaneously. As shown in figure 2, by 2008, the teacher age distribution has become bi-modal – two peaked. Besides a large proportion of teachers that are older veterans, there has been a simultaneous increase in the proportion of the teaching force that is beginners. The latter is driven by the ballooning trend – the huge increase in new hires.

Most of these are new hires are younger, but given another trend – an increase in mid-career switching – there are significant numbers of older, but inexperienced, beginning teachers. These many new hires have resulted in a third trend – a dramatic increase in the portion of teachers who are beginners – a greening of the teaching force.

This trend is illustrated by the distribution of teachers by their years of teaching experience. In 1987-88 the modal teacher had 15 years of teaching experience under her belt and the shape of the distribution was a single peak as shown in figure 3. By 2007-08, as also shown in figure 3, the modal teacher was not a gray-haired veteran; she was a beginner in her first year of teaching. In 1987-88 about 17 percent of the teaching force had 5 or fewer years of teaching experience; while in 2007-08 about 28 percent of the teaching force was inexperienced. But, these percentages don’t illustrate the ballooning of the teaching force; since the teaching force has dramatically grown, numerically there are far more beginners than before. In 1987-88 there were about 65,000 first-year teachers; by 2007-08 this number had grown to over 200,000.
What are the implications of this trend?

New teachers can be a source of fresh ideas and energy. On the other hand, for many schools and school systems, veterans are becoming scarce, with increasingly fewer experienced teachers who are able to provide mentoring and leadership.

From a financial perspective, a teaching force with an increasingly larger portion at the low end of the pay scale who are also contributing to pension systems may ameliorate some of the costs of the ballooning trend mentioned above. Analysts of the overall economy have argued there has been an alarming decrease in the ratio of new employees who pay into pension systems and social security compared to retired employees who draw from pension systems and social security. This imbalance does not appear to be the case for teaching – one of the largest groups of employees in the nation. As both figures 2 and 3 illustrate both the ratio and numbers of younger and less experienced teachers to older and veteran teachers has increased, not decreased. Moreover, as we will later show in trend 7, there has been an increase in the early attrition of this growing number of beginners – perhaps meaning that a decreasing number will ever withdraw funds from state pension systems.
Trend 4: Becoming More Female

The teaching force has gotten more female. At first, this finding may seem odd. Over the past several decades, many occupations and professions that were traditionally male-dominant have opened up to women. For instance, data from the Bureau of Labor Statistics (2011) show that in 1972 only 10 percent of physicians, 4 percent of lawyers, 4 percent of architects and 13 percent of pharmacists were female; by 2010 these had risen to 32 percent, 32 percent, 13 percent, and 53 percent, respectively.

With career and employment alternatives increasingly available, one might conclude that fewer women would enter occupations and professions that have been traditionally female dominant. But, this has not happened for teaching. Both the number of women entering teaching and the proportion of teachers who are female have gone up. The SASS data, along with other NCES data, show that since the early 1980s there has been a steady increase in the proportion of teachers that are female – from 66 percent in 1980 to 76 percent in 2007-08. (see figure 4) But, it is unclear why this has happened.

Figure 4: Percent Female Public School Teachers, 1980-81 to 2007-08

The change in the male to female ratio in teaching is not due to a decline in males entering the occupation. The number of males entering teaching has also grown – by 26 percent
– also faster than the rate of increase of the student population. But, females in teaching have increased at over twice that rate.

One factor could be a variant of the above hypothesis – females have other employment opportunities in general, but also growing opportunities within the educational sector. The increase in female teachers is not spread evenly within schools. Increases in the proportion of female teachers have been concentrated at the secondary level – the majority of which were male until the late 1970s. There have been only slight increases at the elementary level – already long female dominant. There have been even sharper increases in the proportion of female school principals (see Figure 5) – over half of whom are now female. The latter sub-trend, especially, could be a factor in not only the recruitment, but also the retention of females, including those of high academic ability – an issue we will turn to in Trend 6. Historians (e.g., Tyack 1974; Strober & Tyack 1980) have long held that when the public school system was created in the late 1800s, teaching was designed to be a female-dominated occupation, while educational administration was designed to be a male-dominated occupation. Part of the rationale for the latter was that the recruitment and retention of capable males required a career ladder with opportunities for advancement and enhancement in status, pay, and authority. Hence, the opening up of educational administration to women – evidenced by the rapid growth in the numbers of female principals in figure 5 – could be one possible explanation of the continuing attraction of teaching and education careers for women, despite the growth of other employment opportunities outside of education.

Figure 5: Percent Increase of Female Teachers and Principals, from 1987-88 to 2007-08

Another contributing factor might be that the proportion of adult women entering the paid workforce, as a whole, has dramatically increased. Hence, while women have more job
alternatives than in the past, the large increase in women seeking employment may be partly responsible for the large increase in females entering teaching.

Moreover, another factor might have to do with negotiating the dual roles of homemaker and breadwinner – the fit between job and family. Historians have long held that one factor behind the high proportion of women in teaching over the past century was the relatively workable fit between the job of teaching and the job of child rearing (Strober & Tyack 1980). From this viewpoint, with shortened days and summers off, caring for a family was more manageable for those in teaching than in many other jobs and careers. This work-day structure may still be a factor attracting women to teaching.

What are the implications of this trend?

If this trend continues as it has, very soon 8 of 10 teachers in the nation will be female. An increasing percent of elementary schools will have no male teachers. An increasing number of students may encounter few, if any, male teachers during their time in either elementary or secondary school. Given the importance of teachers as role models, and as surrogate parents, certainly some will see this trend as a problem and a policy concern.

Moreover, there may be implications of feminization for the stature and status of teaching as an occupation. Traditionally, women’s work has been held in lower esteem and paid less than male-dominant work. If the feminization of teaching continues, what will it mean for the way this line of work is valued and rewarded?

Trend 5: Diversifying

While the teaching force is becoming more homogenous gender-wise, the opposite is the case for the race-ethnicity of teachers. At first this finding may also seem odd. For several decades, shortages of minority teachers have been a major issue for the U.S school system. It is widely held that, as the nation’s population and students have grown more diverse, the teaching force has not kept pace (for reviews, see Torres et al., 2004; Villegas & Lucas, 2004; Zumwalt & Craig, 2005). The result, in this view, is that minority students in the nation’s schools increasingly lack minority adult role models, contact with teachers who understand their racial and cultural background, and often qualified teachers of any background, because white teachers eschew schools with large percentages of minorities (Irvine, 1988; Ladson-Billings, 1995). The minority teacher shortage, in turn, is widely viewed as a major reason for the minority achievement gap and, ultimately, unequal occupational and life outcomes for minority students. In response, in recent decades numerous government and nongovernment organizations have instituted and funded a variety of minority teacher recruitment programs and initiatives.

But, this portrait has changed. Our data analyses do show that teaching remains a primarily white workforce and that a gap continues to persist between the percentage of minority students and the percentage of minority teachers in the U.S. school system. But, the data show this gap is not due to a failure to recruit new minority teachers. Rather, this gap has persisted in recent years largely because the number of white students has decreased, while the number of
minority students has increased. Indeed, over the past two decades, the number of minority teachers has almost doubled, from about 325,000 to 642,000. Growth in the number of minority teachers outpaced growth in minority students and was over twice the growth rate of white teachers (see Figure 6). So, while there is still not parity between the proportions of minority students and minority teachers in schools, the teaching force has rapidly grown more diverse (Ingersoll & May, 2011a, 2011b).

Figure 6: Percent Increase in Students and Teachers, by Race/ethnicity, from 1987-88 to 2007-08

Minority teachers are also overwhelmingly employed in public schools serving high-poverty, high-minority and urban communities. Our data show that minority teachers are two to three times more likely than white teachers to work in such hard-to-staff schools. Hence, the data show that in spite of competition from other occupations for minority college graduates, and in spite of criticisms of barriers to entry into teaching, the widespread efforts over recent decades to recruit more minority teachers and place them in schools serving disadvantaged and minority student populations have been very successful.

However, while minorities have entered teaching at higher rates than whites in recent decades, the data also show that the rates by which minority teachers depart from schools is significantly higher than white teachers and has also been increasing. In the two decades from the late 1980s to 2009, the annual rate of minority teacher turnover increased by 28 percent – undermining minority teacher recruitment efforts. Indeed, the diversification of the teaching
force is all the more remarkable because it has occurred in spite of the high turnover rate of minority teachers. We will return to the issue of minority teacher turnover in Trend 7.

**Trend 6: Not Declining in Academic Ability**

It is widely believed that the "best and brightest" college students find elementary and secondary teaching less attractive than other career and job options. Over the years, data from different sources have seemed to bear this out. From instance, based on the assumption that academic ability is accurately captured by standardized tests, a number of analyses have shown SAT or ACT scores of college graduates going into teaching have long been well below the average for college graduates. In our own analyses of national data from NCES’ Baccalaureate and Beyond Survey for the undergraduate college class of 1999-2000, we found this is especially true for those majoring in Education – who tended to have among the lowest average SAT scores. Moreover, within most fields and majors, we found those who become teachers had lower SAT scores than those, in the same field-major, who do not go into teaching.

Not only do teachers tend to have below average academic test scores, some studies have argued that the academic ability of teachers has been declining over time. That is, it is widely believed that there has been a “dumbing down” of the teaching force – and gender is at the root of the issue. While the quantity of women going into teaching has increased, for reasons discussed above in Trend 4, some have argued that the academic quality of women going into teaching has gone down. With alternative careers and jobs increasingly available, analysts have held that the “best and brightest” women have decreasingly entered traditionally female-dominant occupations and professions, such as teaching. Indeed, some have concluded that women essentially subsidized the education system for most of the previous century because they were relatively high-ability employees at a relatively low wage. But, this argument continues, this subsidy via discrimination is no longer true, and as a result, the academic caliber of the female portion of the teaching force has declined in recent years.

The data, however, appear to be mixed. One study looking at trends in female standardized test scores from the 1960s to 2000 found a decline in the proportion of female teachers who scored in the high deciles (Corcoran et al., 2004). But, another study with data from the Educational Testing Service (ETS) showed no decline in SAT scores of teachers as a whole from the mid 1990s to present (Gitomer, 2007).

Of course, it cannot be assumed the “best and brightest,” or those scoring higher on standardized tests, are the best or the most effective teachers. How to measure either academic ability or teaching quality are both subjects of controversy. Moreover, the relationship between the academic ability of teachers and their quality as teachers is unclear. But, the former is assumed to be an important indicator of the caliber of employees in any line of work and of the attractiveness of an occupation or profession.

We examined these trends using another possible measure of academic ability – the selectivity or competitiveness of one’s undergraduate institution – no doubt correlated with SAT/ACT and other standardized test scores. The measure we used is *Barrons’* six category
ranking of colleges and universities: most competitive; highly competitive; very competitive; competitive; less competitive; not competitive. In 2007-08 the top two categories accounted for 14 percent of institutions and 21 percent of undergraduates. The bottom two categories accounted for 19 percent of institutions and 13 percent of undergraduates.

What did we find?

About a tenth of newly hired first-year teachers come from the top two categories of higher education institutions. About a quarter come from the bottom two categories. Two thirds of first-year teachers come from middle-level institutions. This has changed little in recent decades. From 1988 to 2008, there was a slight decrease in the proportion from the top two categories, a slight increase in those from the bottom categories, and no change in the proportion from the middle categories (see figure 7). But, over these two decades these portions have tended to fluctuate both up and down and it is not possible to conclude there is a trend either way.

Figure 7: Percent 1st-Year Teachers, by Selectivity of Their Undergraduate College/University, 1987-88 to 2007-08

There are, however, important differences by gender.

Interestingly, male teachers have been more likely to be from top ranked institutions than have female teachers but decreasingly so in recent years. For male first-year teachers between 1987-88 and 2007-08, there was a significant decrease in the proportion from the two top ranks of institutions – from 15.5 percent to 10.2 percent. But, nevertheless there continues to be a larger proportion of males than female teachers from top institutions. The data also show far more male teachers coming from the two bottom categories of institutions than from the top two categories. There was a slight increase in the proportion of newly hired male teachers coming
from the two bottom ranks of institutions – from 24.3 to 25.1 percent – from 1987 to 2008 (see figure 8).

**Figure 8: Percent 1st-Year Teachers, with Undergraduate Degrees from Most and Highly Selective Colleges and Universities, by Gender, 1987-88 to 2007-08**

For female first-year teachers between 1987-88 and 2007-08, the proportion from the two top categories of institutions fluctuated from year to year – but overall for the 20 year period there was little change – a drop of less than 1 percent, from 8.3 percent to 7.7 percent. The data also show 2 to 3 times as many female teachers come from the two bottom categories of institutions and this also has shown little change in over the past 20 years – from 23 to 24 percent.

However, these percentages do not tell the whole story. Although the percentage of female teachers from top institutions has not changed much since the late 1980s, since the teaching force has ballooned (Trend 1), and has also become more female (Trend 4), numerically teaching has been employing far more female candidates from all of higher education, including top colleges and universities. For instance, there has been a 59 percent increase in the number of first-year female teachers from the top two ranks of institutions from 1988 to 2008. Moreover, there was 29 percent increase in the number of first-year male teachers from top schools.
Because it is such a large occupation, a very large portion of college graduates go into teaching. For instance, of the college class of 1999, almost one fifth became teachers after graduation. But, it does not appear that teachings’ share of college grads, whether from top, middle or bottom ranked institutions, has increased during this period, simply because the number of graduates of 4-year colleges and universities has also simultaneously gone up – by 57 percent.

Hence, assuming our college selectivity measure of academic ability is valid, our data show there has been a decrease in the proportion of male teachers from top institutions since the late 1980s. But, these data also show this trend has not been true of female teachers. Perhaps we should call the latter a non-trend. And, in sheer numbers, teaching is getting far more of both males and females from top institutions than before. So, contrary to the widespread view that there has been a “dumbing down” of female teachers, our data suggest this story has not been true in recent decades.

Along with the increase in the numbers and proportions of female teachers, we do not know the reasons for the apparent stability, or even improvement, in the academic ability of females entering teaching in recent decades. As we suggested in Trend 4, perhaps the increase in opportunities for women in school leadership and positions in secondary schools (see Figure 5) have been an attractive incentive for capable and ambitious females to enter education.

**Trend 7: Destabilizing**

Elementary and secondary teaching has long been marked by relatively high rates of annual turnover – the departures of teachers from schools (Lortie 1975; Tyack 1974). These departures include both those teachers who move between districts and schools and those who leave teaching altogether. In analyses of national data we have found that, as one might expect, teaching does have less turnover than some occupations, such as child care workers, secretaries, and paralegals, but higher turnover than police, corrections officers, pharmacists and nurses and far higher annual turnover than traditional professionals, such as lawyers, engineers, architects and professors (Ingersoll & Perda, 2012).

Moreover, the data show that the teaching force has steadily become slightly less stable in recent years. This increased instability is found most accurately for the case of attrition – the numbers of those leaving teaching altogether each year has gone up. For instance, from 1988 to 2008 annual attrition from the teaching force rose by 41 percent from 6.4 percent to 9 percent.

But, these overall figures mask large differences in turnover, between different types of teachers and between different types of schools – revealing the need for disaggregation.

The data show that the flows of teachers out of schools are not equally distributed across states, school districts, and schools. The largest variations in teacher turnover by location are those between different schools, even within the same district. The data show that in 2004-05, 45 percent of all public school teacher turnover took place in just one quarter of the population of
public schools. The data show that high-poverty, high-minority, urban, and rural public schools have among the highest rates of turnover. Not only were the rates higher in these kinds of schools, but in the case of cross-school movers, their destinations differed. The data show there is an annual asymmetric reshuffling of significant numbers of teachers from poor to not poor schools, from high minority to low minority schools, and from urban to suburban schools.

The data also show that rates of both moving and leaving differ by the race-ethnicity of the teacher. As mentioned earlier in Trend 5, mostly, over the past couple of decades, minority teachers have had significantly higher rates of turnover than white teachers. Moreover, the gap has widened in recent years. Why do minority teachers leave schools at higher rates? Strikingly, while the demographic characteristics of schools appear to be highly important to minority teachers’ initial decisions as to where to teach, this doesn’t appear to be the case for their later decisions about whether to stay or depart. What does impact their retention, the study finds, are school working conditions. The same difficult-to-staff schools that are more likely to employ minority teachers are also more likely to offer less-than-desirable working conditions, according to the study, and these conditions account for the higher rates of minority teacher turnover, thus undermining efforts to diversify the teaching force (Ingersoll & May, 2011a, 2011b).

Beginning teachers, regardless of race, have long had among the highest rates of turnover. Between 40 to 50 percent of those entering teaching leave within 5 years (Ingersoll & Perda 2012). And these already high levels have been going up since the later 1980s. Rates of leaving for first-year teachers rose from 9.8 to 13.1 percent from 1988 to 2008 – a 34 percent increase (figure 9). However, again, increases in the annual percentage does not tell the whole story. Since the teaching force has dramatically grown, numerically there are far more beginners than before (Trend 3) and hence the actual numbers of teachers quitting teaching after their first year on the job has also soared. After the 1987-88 year, about 6,000 first-year teachers left teaching, and after the 2007-08 year, more than four times as many – about 26,000 – left the occupation. So, not only are there far more beginners in the teaching force, but these beginners are less likely to stay in teaching. In short, both the number of those entering teaching and the numbers of those leaving teaching have been increasing in recent years.

These changes have large implications. Employee turnover in any occupation, such as teaching, has pros and cons, costs and benefits. As mentioned, in our research we have found one negative consequence of teacher turnover is its important, but often overlooked, role in teacher shortages (Ingersoll & Perda 2010). Increases in turnover may further exacerbate these problems. In addition, increases in turnover among minority teachers, as well as in disadvantaged schools, undermines efforts to recruit new teachers in hard-to-staff schools and efforts to diversify the teaching force. Finally, the destabilization of first-year teachers is noteworthy – in short, the largest group within the largest occupation in the nation are leaving at relatively high rates, and these rates have steadily increased in recent decades.
Figure 9: Percent Annual 1st-Year Teacher Attrition, 1988-89 to 2008-09

Conclusion

Has the elementary and secondary teaching force changed in recent years? The answer is most certainly yes—and in a number of ways. It is larger. It is both older and less experienced. It is more female. It is more diverse. It does not be appearing to be suffering from a “dumbing down” of female teachers. It is less stable. For each of these trends, or non-trends, large questions immediately arise.

What are the reasons for, and sources of, the trend? Will the trend continue? For instance, will the teaching force continue to outgrow the student population it serves or will this ratio level off? As the older portion of the teaching force retires, will teaching become an occupation predominantly practiced by the young and inexperienced? Will the teaching force continue to become more female? However, while these trends raise large questions, we have seen little awareness and discussion of most – whether by researchers, by policy makers, or by the public.

But if these trends do indeed continue, the consequences will have serious implications for America’s educational system. Will their impact be positive or negative? Teaching will become a very, very large occupation, dominated by those trained in core academic subjects and special education. Because of the large size of this occupation, teachers’ salaries may likely
decline in real dollars. As the field continues to balloon and the large older portion of the teaching force retires, teaching will be practiced predominantly by beginners and the young. But beginners, the largest group of the largest occupation, are also the least stable and, our analysis also shows, that their instability has been increasing.

Perhaps there is an irony in all of this. Historians tell us that when the public school system, as we know it today, was invented a century ago, the teaching force was transformed into a large mass occupation that was a relatively low-paying, temporary line of work, predominantly for young, inexperienced women, prior to their “real” career of child rearing. (e.g., Tyack 1974; Lortie 1975). Perhaps the changes we have traced represent not an entirely new face, but a return to the old face of the American teaching force.

At the same time, we should beware of taking a deterministic view of history. The similarities between this latter-day transformation of the teaching force to its previous incarnation should not be considered conclusive evidence that the teaching force is incapable of change. The data also suggest an opportunity—the largest occupation in the nation is being expanded, replaced, and re-made. Who will they be?

References


