



THE CHANGING FACE OF TEACHING



An analysis of nearly 30 years of data on the teaching force sheds new light on the makeup of the occupation—and on staffing priorities.

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Several years ago, the three of us embarked on a research project to explore demographic trends in the elementary and secondary teaching force since the late 1980s. We discovered that the teaching force had been changing dramatically—in ways that had significant implications for school leaders and education policy-makers.

Our analysis was based on data from the federal Schools and Staffing Survey (SASS) and its supplemental Teacher Follow-Up Survey (TFS).¹ When we originally undertook our study, six cycles of SASS/TFS had been administered over a 20-year period—1987–88, 1990–91, 1993–94, 1999–2000, 2003–04, and 2007–08. In 2010,

we summarized what we found in an article for *Educational Leadership* (Ingersoll & Merrill, 2010) and, in 2014, in a longer report published by the Consortium for Policy Research in Education, a research institute with which we are affiliated.

Since then, two more cycles of the survey have been conducted, in 2011–12 and 2015–16, so we recently decided to take another look at the data to see if the trends we identified have continued. We found that, in most cases, they have, and that some important new patterns have emerged as well. Together, these trends shed tremendous light on the teacher pipeline today and can offer insights on teaching-staffing issues, even as they raise important policy questions.

Trend 1: Ballooning

K–12 teaching, one of the largest occupational groups in the United States, has grown dramatically over the past three decades. Although public elementary and secondary student enrollment has risen 24 percent since the late 1980s, the number of teachers has increased at a far faster rate, growing 65 percent (see fig. 1)—up from 48 percent in 2008.

Some explanations for this rate of growth in the teaching force that we've uncovered include smaller class sizes (particularly at the elementary level) and an increasing demand for teachers in special education, math and science, and ESL/bilingual education (Ingersoll & Perda, 2010). Other factors remain unconfirmed and bear further examination.

FIGURE 1. Percent Increase in Public School Students and Teachers by Field, from 1987-88 to 2015-16

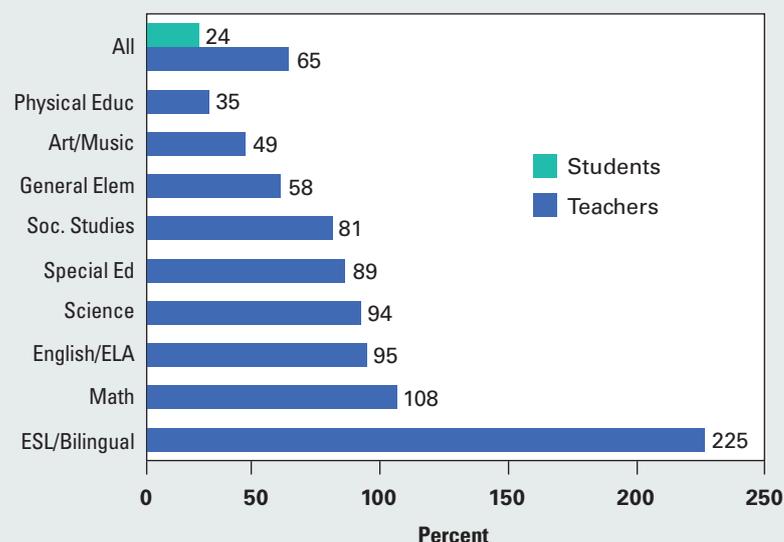
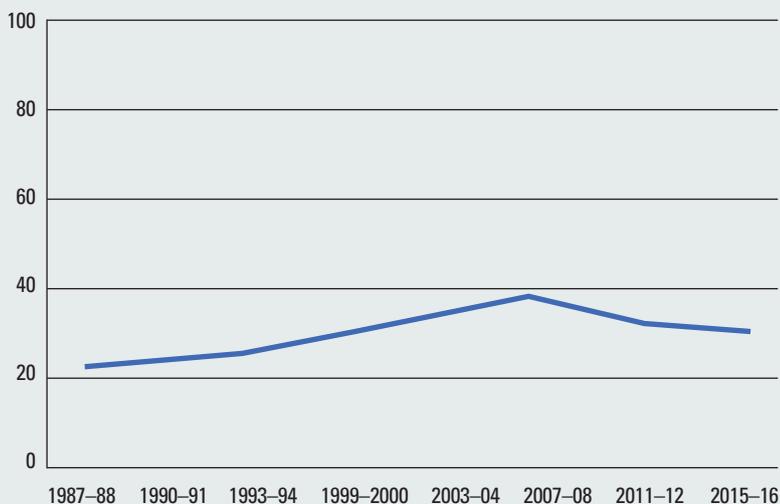


FIGURE 2. Trends in the Percent of Public School Teachers Age 50 and Older: 1987-88 to 2015-16

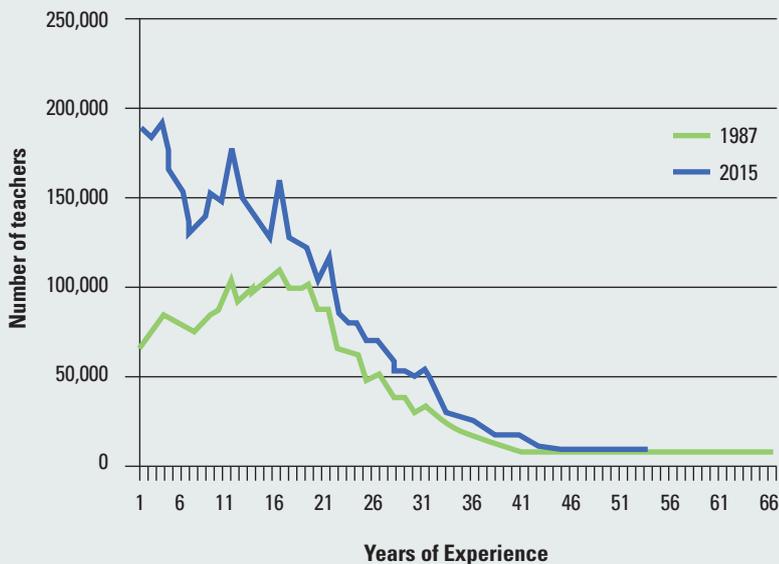


Trend 2: Graying (But Not for Long)

There has been an aging of the teaching force over the past three decades, with the modal, or most common, age increasing from 41 in 1987–88 to 45 in 2015–17. As a result, public school teacher retirements increased, from 35,000 in 1988–89 to 99,000 in 2012–13 (the most recent data available).

However, our analysis also shows that the aging trend has most likely peaked and may now be on the downswing. From 1987–88 to 2007–08, the number of public school teachers 50 years or older increased from about 470,000 to 1.3 million. But by 2015–16 that number had decreased to about 1.1 million (see fig. 2 for percentage changes).

FIGURE 3. Teaching Experience of Public School Teachers: 1987-88 and 2015-16



Trend 3: Greening

Graying is not the only age-related trend affecting teaching; an opposite trend has been taking place simultaneously—a “greening” of the teaching force, with more younger people now represented in the field.

As Figure 3 shows, the teaching force has also become less experienced. The ballooning of the teaching force has resulted in a surge of beginning teachers (which include not only young teachers, but also a growing number of older career switchers). In 1987–88, the modal teacher had 15 years of teaching experience under his or her belt. By 2015–16, the modal teacher was not a gray-haired veteran, but a beginner in her first to third year of teaching.

Trend 4: Becoming More Female-Dominated

Teaching has traditionally been female-dominated, and interestingly, it has become even more so, despite the growth in other career options available to women. SASS data, as well as National Center for Education Statistics’ Common



Core of Data, show that the proportion of public school teachers who are female increased from over 66 percent in 1980 to over 76 percent in 2015–16 (see fig. 4), although the rate of increase has slowed slightly in recent years. This change in the female-to-male ratio has not been caused by a decline in the number of males entering teaching—that number has grown by 31 percent since 1987–88. But the number of public school female teachers grew over twice as fast during the same period, with the growth concentrated at the secondary level.

The reasons for this trend are not totally clear—but possible contributing factors include the growing proportion of adult women entering the paid workforce during this period and work-family balance considerations (given that teachers have regular seasonal breaks and, at least ostensibly, early-ending work days).

Trend 5: More Racially-Ethnically Diverse

There’s been considerable concern over the last three decades that, ethnically speaking, the teaching force looks less and less like the United States and, in particular, less and less like the students in our schools. And that’s true, but it’s decreasingly true. In defiance of conventional wisdom, our research on minority teachers reveals a hidden success story (see Ingersoll, May, & Collins, 2017). While the proportion of minority students in schools is still far greater than that of minority teachers, between 1987–88 and 2015–16, the number of minority teachers increased faster than that of white non-Hispanic teachers and that of minority students (see fig. 5). Since the late 1980s, the number of public school minority teachers has more than doubled, jumping from about 290,000 to 762,000.

The data thus suggest that minority teacher recruitment efforts have made real progress—and are something of an unheralded success. Yet that success is



FIGURE 4. Trends in the Percent of Female Public School Teachers: 1980-81 to 2015-16

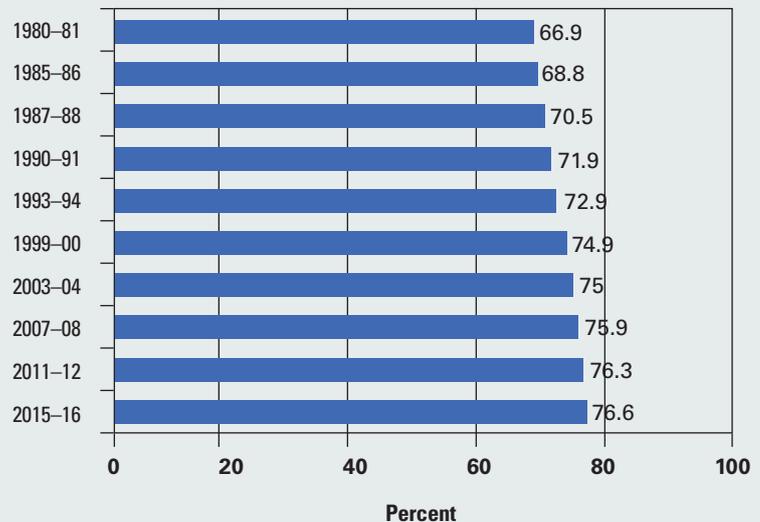
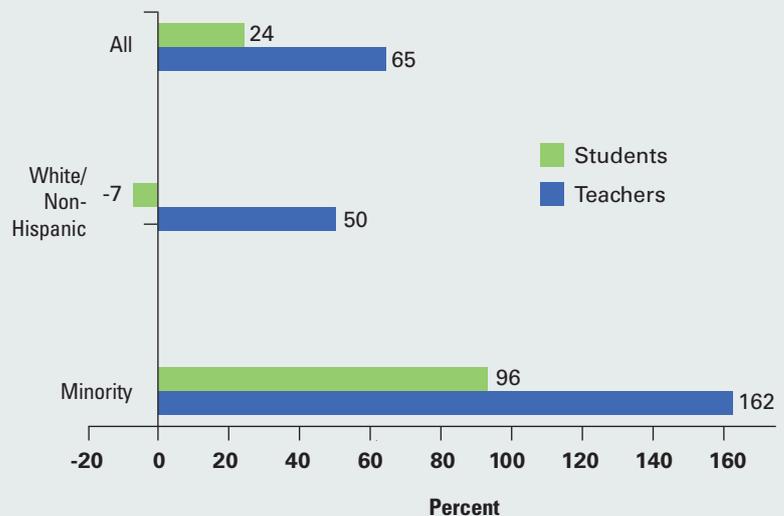


FIGURE 5. Percent Change in the Number of Public School Students and Teachers, by Race/ethnicity, from 1987-88 to 2015-16





threatened by the turnover rates of minority teachers, which our research shows are much higher than those of white, non-Hispanic teachers, and have also increased in recent years (Ingersoll, May, & Collins, 2017).

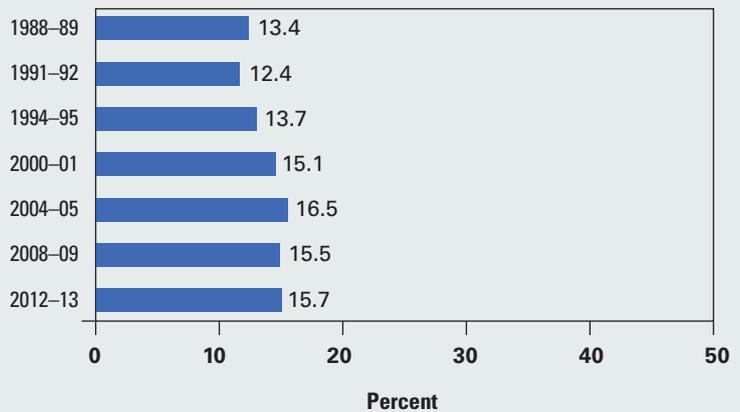
Trend 6: Less Stable

Over the past three decades, the teaching occupation has seen an increase in overall teacher turnover, which includes both teachers who move between schools and teachers who leave teaching altogether. As shown in Figure 6, average turnover rates for public school teachers fluctuate from year to year, but overall they have increased since the early 1990s by 27 percent (from 12.4 percent in 1991–92 to 15.7 percent in 2012–13). And the increase in the annual percentage does not tell the whole story. Since the teaching force has grown dramatically larger, *numerically* there are far more teachers departing schools every year now than in the past.

But it's important to note that these overall figures mask large differences in turnover rates between different types of teachers and between different types of schools. For example, departures are far higher for beginning teachers—now the largest group of one of the largest U.S. occupations. Using national longitudinal data, we've estimated that between 40 to 50 percent of those who enter teaching leave teaching altogether within five years (Ingersoll, Merrill & Stuckey, 2014). There is also some evidence that beginning teacher attrition dropped considerably between the 2008–09 and 2011–12 school years, during the economic recession. But subsequent data from the 2012–2013 year suggest attrition rates of all teachers (see fig. 6), and also beginners, have gone back up as the recession receded (Ingersoll, Sirinides, & Collins, 2017).

Teacher turnover is also not equally distributed across states, regions, and school districts. For instance, our analyses show

FIGURE 6. Trends in the Percent of Annual Public School Teacher Turnover: 1988-89 to 2012-13



that annually about 45 percent of all public school teacher turnover takes place in just one-fourth of public schools, with high-poverty, high-minority, urban, and rural schools experiencing the highest rates of turnover.

Some Implications

Our updated analysis shows that the U.S. teaching profession has continued to undergo significant demographic shifts, with many of the trends we identified in 2010, along with a few new ones, changing the makeup of the occupation. These changes have important implications for school leaders and policymakers.

The ballooning trend, for example, has obvious cost and recruitment implications, given that teacher salaries are the largest item in school district budgets. How will districts sustain this growth? Why do shortages persist in fields like math, science, and ESL/bilingual education, even in the face of dramatically increasing teacher hires in these fields?

Likewise, the graying trend has had large cost implications for both school budgets and for state pension systems. But in discussions of the future for pension systems, the greening trend should not be overlooked. As retirees are replaced with large numbers of newcomers, who generally earn lower salaries, and who also pay into state pension plans, pension shortfalls could be lessened.

But the redistribution in teachers' age and experience levels has other implications. New teachers can be a source of fresh ideas and energy. On the other hand, in many schools and school systems, veterans may become scarce, with increasingly fewer teachers able

to provide mentoring and leadership.

The increase in the proportion of female teachers also has implications. It appears that this trend has slowed slightly in recent years, but if this longer-term trend line does continue, at some point more than 80 percent of teachers in the United States will be female. An increasing number of students may encounter few, if any, male teachers during their elementary and secondary school careers—a significant issue considering teachers' influence as role models and mentors.

Finally, the data in trends 5 and 6 suggest that greater attention to retaining first-year teachers, minority teachers, and teachers in disadvantaged schools should be a key teacher-staffing priority of school leaders and policymakers. 

¹Information about the Schools and Staffing Survey and the Teacher Followup Survey, including methodology and results, is available at <http://nces.ed.gov/surveys/SASS>. The 2015–16 data collection cycle was renamed the National Teacher and Principal Survey.

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