



The Rise and Fall of the Teaching Profession: Prestige, Interest, Preparation, and Satisfaction over the Last Half Century

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Abstract

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Introduction

Few other occupations in the U.S. are as large or as important as the teaching profession. Today, over 3.7 million Americans teach in K-12 schools – almost 7% of the college-educated labor force (Newburger & Beckhusen, 2022). Teachers have profound impacts on students’ academic, socio-emotional, and life outcomes (Chetty, Friedman, & Rockoff, 2014; Jackson, 2018; Kraft, 2019). Teachers also collectively shape the democratic ideals, social cohesion, and economic competitiveness of the nation as a whole. But despite the central role teachers play in our society, they have long struggled to gain and maintain the status of a prestigious profession.

Lortie’s (1975) characterization of teaching as a “semi-profession” remains as relevant now as it was a half century ago. Teachers are at once heroes and villains, saints and scapegoats. Throughout the history of the common school in the U.S., reforms have repeatedly characterized teachers as both the problem and solution to the perceived shortcomings of public education (Pawlewicz, 2020). As Sykes (1983) described over four decades ago, “Our social history reveals attitudes persistently equivocal towards teachers and a set of decidedly mixed messages about the status and value of this occupation” (p.98). This tension has led to repeated efforts to raise instructional quality by controlling teacher practices with top-down management and standardization, diminishing teachers’ autonomy and disregarding their expertise (Mehta, 2013).

The size, history, and nature of the teaching profession creates a uniquely challenging context for elevating it to the status of more prestigious careers such as doctors – the often cited aspirational goal. The sheer number of teachers needed limits the ability of most educator preparation programs and schools to be highly selective about whom they admit and employ. Every year K-12 schools seek to fill over 200,000 vacant positions. The historical feminization of the profession and its service to children further embattle it (Murphy, 1990). And unlike most

other professions, the public has had ample exposure to what teachers do. Their knowledge is not perceived as exclusive despite the “irreducible complexity” of teachers’ work (Labaree, 2000).

However, it would be a mistake to assume that the teaching profession has held a relatively static position in the public’s eyes or the labor market. The state of the teaching profession has changed dynamically over time in response to a host of influences including macro-economic trends, shifting political narratives, evolving labor movements, and persistent reform efforts. Americans’ ever-changing views about teachers were most recently laid bare by the COVID-19 pandemic. Faced with the challenge of homeschooling their children, the initial weeks of the pandemic saw an outpouring of appreciation from parents about the difficult work teachers do. This newfound respect quickly waned as teachers were cast as the culprits of prolonged school closures. Growing dissatisfaction and burnout among teachers in the wake of the pandemic (Diliberti & Schwartz, 2022) and new state-laws restricting discourse on racism and sexuality in schools (Woo et al., 2022) have also set ablaze a long smoldering question: Who among the next generation of college graduates will choose to teach?

In this paper, we examine how the state of the K-12 teaching profession has evolved in the U.S. over the last half century. Our aims are twofold. First, we aim to better understand the current state of the teaching profession in this emerging post-pandemic era by placing it in historical context. A steady stream of headlines and survey results about teacher burnout and intentions to leave the profession paint a bleak portrait, but these anecdotes and cross-sectional statistics are difficult to interpret in isolation. We seek to answer the question: How does the current state of the K-12 teaching profession compare to prior periods over the last 50 years?

We examine this question by compiling and analyzing time-series data spanning multiple decades that capture four interrelated constructs: professional prestige, interest among students,

preparation to enter the profession, and on-the-job satisfaction. We conceptualize these constructs as a set of overlapping, mutually reinforcing stages in the generational cycle of the teaching career that collectively serve as a barometer of the state of the profession.¹ Public perceptions of the teaching profession shape the formation of students' career interests who then decide to invest in preparing for the profession and ultimately experience its rewards and challenges.

Our descriptive analyses draw on repeated survey measures, primarily from nationally representative samples and population-level data, from more than a dozen distinct sources. We use a combination of original survey administrations, relatively unknown and underutilized sources, and large-scale, federally funded datasets. We focus on national patterns, while recognizing that these trends average across meaningful variation that exists in the teacher labor market at the local, state, and regional levels (e.g., Edwards et al., 2022). Together, our data provide a macro-level overview of the state of the K-12 teaching profession in the U.S. over the past 50 years and serve as an important complement to studies that examine patterns at the more micro-level (e.g., Bacolod, 2007; Lankford et al., 2014; Corcoran, 2007; Master, Sun & Loeb, 2018; Goldhaber & Theobald, 2022; Goldhaber & Walch, 2013).

The time-series figures we present on the state of the teaching profession reveal dynamic and surprisingly consistent patterns across all four constructs. We find compelling evidence of three major periods of change in the status of the teaching profession across the last half century. Prestige, interest, preparation, and satisfaction declined rapidly in the 1970s, rose swiftly in the early to mid-1980s, remained somewhat steady for the next 20 years, and then began declining precipitously around 2010.

¹ Throughout the manuscript we refer to these four constructs collectively as the state, status, wellbeing, and health of the teaching profession.

Across every single indicator we measure, our findings show that the overall wellbeing of the teaching profession today is at or near historically low levels. Perceptions of teacher prestige have fallen between 20% and 47% in the last decade to be at or near the lowest levels recorded over the last half century. Interest in the teaching profession among high school seniors and college freshman has fallen 50% since the 1990s, and 38% since 2010, reaching the lowest level in the last 50 years. The number of new entrants into the profession has fallen by roughly one third over the last decade, and the proportion of college graduates that go into teaching is at a 50-year low. Teachers' job satisfaction is also at the lowest level in five decades, with the percent of teachers who feel the stress of their job is worth it dropping from 81% to 42% in the last 15 years. Although recent attention has focused on how the pandemic has made teachers' work substantially more challenging, most of these declines occurred steadily throughout the last decade suggesting they are a function of larger, long-standing structural issues with the profession. In our view, these findings should be cause for serious national concern.

Our second aim is to identify and explore potential hypotheses to explain the macro-level changes we observe in the state of the teaching profession over time. We focus our attention on eight primary hypotheses that emerge from the scholarly literature and/or public narrative: education funding levels, teacher compensation, outside labor market opportunities, teacher unionism, barriers to entry, working conditions, accountability/autonomy on the job, and school shootings. We explore these hypotheses by synthesizing the relevant literature and compiling additional sources of time-series data to interrogate their validity. While these analyses of national trends cannot identify cause and effect or isolate individual factors from their historical contexts, they do provide direction for future research and policy innovation.

We find suggestive evidence that declining real wages due to rapid inflation and the opening of labor market opportunities for women and people of color might help to explain early declines in the state of the teaching profession of the 1970s. Rising real wages appear to play an equally important role in the swift recovery during the 1980s after the federal report, *A Nation at Risk*, galvanized renewed attention on K-12 education. Explanations for the most recent decline in teacher status appear multifaceted. While declining relative wages may have played a role, accountability reforms, the perceived loss of job security and professional autonomy, and the decreasing influence of unions may have all been salient factors as well.

Our paper makes several contributions to the literature. First, we establish a set of important empirical findings about broad trends in occupational prestige, student interest, preparation for entry, and on-the-job satisfaction of the teaching profession over the last fifty years. Our research extends prior work that examines state-specific or national trends in the teaching profession over shorter time spans, typically examining one construct in isolation (Bacolod, 2007; Bartanen & Kwok, 2022; Lankford et al., 2014; Corcoran, 2007; Master, Sun & Loeb, 2018; Corcoran, Evans, and Schwab, 2004; Goldhaber & Theobald, 2022; Partelow, 2019, Goldhaber & Walch, 2013). In addition to the range of more widely known data sources we compile regarding the state of the profession, we also present original evidence from survey items we commissioned and more novel datasets that have not been previously used to track the teaching profession over time. The juxtaposition of these multiple measures helps to illuminate the stark and consistent patterns that we find in the data.

Second, we contribute to a long tradition of academic research spanning several disciplines that has attempted to understand the ever-evolving state of the teaching profession and the historical, sociopolitical, cultural, and economic forces that have shaped it in the U.S.

(Aldeman, 2022; Drury & Baer, 2011; Pawlewicz, 2020; Goldhaber & Hannaway, 2009; Murnane et al., 1991; Mehta, 2013; Goldstein, 2014; Johnson, 2004; Lortie, 1975; Sykes, 1983; Sedlack & Schlossman, 1986). We extend these studies by examining multiple facets of the status of the teaching profession simultaneously and highlighting new findings during the most recent decade. Indeed, the last dozen years have proven to be a critical period for the profession with steeply falling prestige and new labor supply. While this decline is of considerable concern, the historical perspective our study affords reveals that reversing these trends is possible and, in fact, has been accomplished before. Ultimately, we hope to shine a light on possible paths forward for elevating the state of the teaching profession.

Conceptual Framework

We focus our analyses on four central measures that capture the state of the teaching profession, from broad public perceptions to actual teachers' experiences inside the classroom. While each of these measures is important in their own right, analyzing them together allows us to illuminate how they work together to collectively serve as a well-calibrated barometer of the overall state of the profession. In this section, we briefly describe each of our four core indicators of the state of the teaching profession and synthesize the main findings about these measures from prior literature.

Prestige

Prestige can be understood to mean the reputation and social standing that the profession holds in society as well as the respect and authority workers are afforded as professionals. Sociologists have long been interested in occupational prestige as a lens for understanding social stratification (Blau & Duncan, 1967; Siegel, 1971). High prestige occupations are typically characterized as having: 1) advanced degrees, 2) a well-developed knowledge base, 3)

restrictions on entry into the profession, 4) common norms and standards of practice, 5) a large degree of autonomy over their work, and 6) relatively high compensation (Ingersoll & Collins, 2018; Mehta, 2013). We view occupational prestige as an important and relatively understudied construct for framing the past, present, and future of the teacher workforce.

Sociologists have typically measured prestige as a function of educational attainment, wages, and public perceptions (Warren, Sheridan, & Hauser, 1998). Prior research on the status of the teaching profession has also used measures of teacher aptitude as a proxy indicator for occupational status (Lankford et al., 2014). Taken together, these studies suggest that during the 1970s, 80s, and 90s, the average academic ability of teachers declined substantially, particularly for women (Bacolod, 2005; Corcoran, Schwab, & Evans, 2004; Goldhaber & Walch, 2013; Lankford et al., 2014). However, since the 2000s, several scholars have documented a rise in teacher aptitude as measured by performance on standardized tests, especially in more recent years (Bartanen & Kwok, 2022; Goldhaber & Walch, 2013; Lankford et al., 2014).

Other scholars have taken a broader approach to studying the concept of prestige by examining how teachers fare on a range of indicators from the nationally representative Schools and Staffing Survey. Ingersoll and Collins (2018) find that although schools share some characteristics of professionalized workplaces, teachers' work falls short on many characteristics that are associated with professionalization. They also document that teachers in public schools have a greater degree of professionalization than teachers in private schools (e.g., higher salaries, licensure rates, and professional support), and teachers working in low-poverty schools benefit from higher prestige than their peers working in high-poverty schools.

Interest

Career interests and aspirations often form early in students' academic careers. While these intentions are strong predictors of students' actual career paths, they are also important measures on their own, reflecting the early impressions students have about the desirability of different jobs. Formal decisions to prepare for a career in teaching can happen as early as freshman year of college when students declare their majors. More than half of all public-school teachers earn their teaching credentials as part of a four-year B.A. major in education. Additionally, student interest in teaching serves as a general signal of the appeal of the teaching profession for the future workforce. We see this as a critical component of the state of the profession because occupations must be seen as enticing and interesting to America's youth to attract future workers. Thus, we focus on student interest in teaching as both an early indicator of new teacher supply as well as a measure of the general attractiveness of the profession.

Very recent work has examined changes over time in young Americans' interest in the teaching profession and raised concerns about the declining popularity of education as a career. A Bellwether whitepaper documents broad patterns in interest in the teaching profession among college freshman from 1970 to 2018 using a dataset we describe and analyze in more detail below (McVey & Trinidad, 2019). Bartanen and Kwok (2022) leverage survey data from all applicants to public universities in Texas to explore students' interest in becoming a teacher. They document sharply declining rates of interest in entering a teacher credential program among high school students applying to college between 2009 and 2020.

Preparation

Having a sufficient supply of qualified teachers to staff every classroom has long been a national concern. Fears of teacher shortages have ebbed and flowed throughout the last century with early peaks during World War I and II (Pawlewicz, 2021). Though the exact requirements

vary by state and have changed over time, public school teachers in the U.S. typically complete a certification program, pass required licensure exams, and obtain a state-issued teaching license. Most teachers follow a “traditional” certification pathway that includes teaching-specific coursework at the Bachelor’s or Master’s level. Since the 1990s, however, “alternative” pathways to teaching, such as Teach For America, have trained a growing number of teachers and have become increasingly prominent in the national discourse. Here, we focus on the individuals preparing to enter the profession separate from the number of new entrants demanded in the broader labor market. However, even this number is not a direct representation of teacher supply. Research has shown that only three out of every four teachers who earn a teaching credential end up employed as public-school teachers (Goldhaber et al., 2022). We view the quantity of prospective teachers completing preparation programs and earning licenses as leading indicators of interest in the profession and a ceiling for the number of new entrants.

Most work considering trends in teacher preparation focuses on recent declines in enrollment. One of the most high-profile studies on teacher preparation was conducted by a team of researchers from the Learning Policy Institute. Sutchter, Darling-Hammond, and Carver-Thomas (2016) model and project trends in teacher supply and demand between 2005 and 2025 using data from the Office of Title II, the Common Core of Data, and the Schools and Staffing Survey. They warn of an impending teacher shortage crisis due to a gradual decline and then plateau in new teacher supply and a steadily rising demand for teachers. A Center for American Progress whitepaper also uses Title II data on the number of students enrolling in and completing teacher preparation programs and finds a 33% decline in enrollment and a 28% decline in students completing preparation programs from 2010 to 2018 (Partelow, 2019). Data from the Integrated Postsecondary Education Data System show a very similar pattern (Goldhaber &

Holden, 2021). Taken together, this work highlights concerning evidence of a recent decline in individuals preparing to become teachers.

Satisfaction

Teacher satisfaction is a broad construct that captures their overall experiences on the job and degree to which they find it rewarding and enjoyable. A large body of research has examined teachers' satisfaction with their work, illustrating how job satisfaction is a strong predictor of teacher transfer and quit rates (Madigan & Kim, 2021). Working conditions appear to be important influences on teachers' satisfaction, particularly interpersonal elements of the job like collaboration, respect, and trust (Banerjee et al, 2017; Grissom, 2011; Lopes & Oliveira, 2020).

Two studies have explored trends in teachers' job satisfaction over time. Master, Sun, and Loeb (2018) use the nationally representative 2000 and 2008 Baccalaureate and Beyond surveys to show that teachers' job satisfaction fell during this time period, but to a slightly lesser degree than that of recent college graduates who entered other professions. Grissom, Nicholson-Crotty, and Harrington (2014) examine trends in teacher satisfaction across four nationally representative waves of the Schools and Staffing Survey (1994-2008). They find a pattern of increasing teacher satisfaction overall, with little evidence that the school accountability reforms imposed by the No Child Left Behind (NCLB) Act affected teachers' satisfaction.

Data and Measures

We draw upon more than a dozen large and often nationally representative datasets that have captured repeated measures of perceptions about the teaching profession and labor market patterns across multiple decades. We focus our analysis on data from 1970 to the present because it marks the beginning of a sharp transition in the history of the teaching profession in the U.S., as more job opportunities began opening for women and people of color, the post-WWII baby

boom generation began entering the labor market, teachers' unions increasingly gained collective bargaining rights, and districts began implementing court-ordered desegregation plans. Many of the data sources we draw upon also first began collecting data during this period.

Harris Poll Prestige Ratings (Prestige)

Harris Interactive is a polling firm that administers surveys to nationally representative samples of adults. For nearly each year between 1977 and 2011, they included a question for which they read off a list of different occupations including “teacher” and asked respondents, “would you please tell me if you feel it is an occupation of very great prestige, considerable prestige, some prestige, or hardly any prestige at all?” We commissioned Harris to conduct another administration of this question in July of 2022. We construct a variable that captures the percent of respondents that said that teachers have either “very great prestige” or “considerable prestige” as a measure of public perceptions about the occupational prestige of teachers.

PDK/Gallup Polling of Parent Perceptions (Prestige)

PDK is a professional organization for educators that conducts representative polling on American public attitudes about schooling in affiliation with Gallup. Between 1970 and 2022, they have polled 13 nationally representative samples of adults, oversampling parents as a focal subgroup of interest. One question they ask parents is, “Would you like to have a child of yours take up teaching in the public schools as a career?” with a “yes” or “no” answer choice. We use PDK public reports of the percent of parents that affirm that they would like their child to take up teaching in the public schools as a career as a second measure of teachers' occupational prestige.

The CIRP Freshman Survey (Interest)

CIRP is a national longitudinal study of the American higher education system administered by The Higher Education Research Institute (HERI). Between 1970 and 2017, the

CIRP Freshman Survey has provided annual data on incoming college students' probable careers, as well as their background experiences and characteristics. The Freshman Survey sample includes between 200,000 and 415,000 respondents per year, with weights to make the sample nationally representative. We construct a measure of the percent of first year college students that choose either "Elementary School Teacher" or "Secondary School Teacher" as their probable career from a list of over 30 career options.

Monitoring the Future (Interest)

Monitoring The Future (MTF) is an ongoing study of American adolescents administered by The University of Michigan Survey Research Center. The annual survey has collected responses from roughly 16,000 high school seniors across 133 public and private schools from 1976 to 2020. One item asks students to rate several different settings as places to work on a four-point Likert scale from "not at all acceptable" to "desirable." We construct a measure of student interest in teaching from the percent of students that view working in "a school or university" as "desirable."

NCES Surveys of High School Seniors (Interest)

The National Center for Education Statistics (NCES) is a federally funded entity housed within the Institute of Education Sciences that sponsors and oversees education research in the U.S. NCES supports a range of large-scale data collection efforts on nationally representative samples of high school students. Many of these surveys include consistent questions across cohorts allowing us to construct a time series that compares responses across survey samples. We use a measure that asks students to state the kind of work they expect to be doing when they are 30 years old. This question was asked of high school seniors in the National Longitudinal Study of 1972, High School and Beyond in 1980 and 1982, the National Education Longitudinal

Study in 1992, the Education Longitudinal Study in 2004, and the High School Longitudinal Study in 2012. We use the percent of students reporting that they expect to be a “school teacher, such as elementary or secondary,” as a measure of student interest in teaching.

HEGIS and IPEDS Teacher Degrees Completed (Preparation)

NCES also collects data from all postsecondary institutions eligible for federal student aid in the U.S. as part of the Higher Education General Information Survey (HEGIS) and the Integrated Postsecondary Education Data System (IPEDS). The HEGIS data span from 1970 to 1985 with the IPEDS data continuing from 1986 to 2020. Together, these datasets capture the universe of people enrolling in and graduating from postsecondary educational institutions in the U.S. We use these data to construct two parallel measures to examine trends in teacher preparation. Our first measure is a simple count of the number of individuals who have graduated with Bachelor’s or Master’s degrees in education. However, because overall college enrollment rates have doubled in the last three decades from roughly one to two million (see Appendix Figure A1), we also construct a measure of the proportion of all Bachelor’s and Master’s degree completers who earned a degree in education. This illustrates how the number of education degree completers can be going up at the same time as the percentage of college students who graduate from education programs is going down.

Office of Title II Licensures (Preparation)

The Office of Title II in the U.S. Department of Education collects comprehensive information on new public-school teacher licenses awarded each year. These licensure data are available annually from 2000 to 2020 and capture all new teachers eligible to work in publicly funded schools (traditional or charter), regardless of certification pathway or licensure type. The range of licenses include professional certifications granted to graduates of traditional

preparation programs, initial certifications granted to graduates of alternative pathway programs, and temporary licenses such as emergency, probationary, or intern credentials. We use the count of total teaching licenses awarded and a parallel measure of the percent of Bachelor's degree completers in each year that earn a teaching license as measures of teacher preparation.

Status of the American School Teacher (Satisfaction)

We construct our first measure of teachers' satisfaction with their jobs using data collected by the National Education Association (NEA), the largest teachers' union in the U.S. The NEA's research division began conducting surveys of public-school teachers in 1956 and continued through 2006. They administered their survey roughly every five years to a sample of both union and nonunion members with a two-stage sample design stratified based on district size. Between 1961 and 2006, the surveys asked teachers about their willingness to become teachers if they had to make the choice again with five potential responses, ranging from "certainly would," to "certainly would not." We construct our measure of teacher satisfaction as the percent that "certainly would" or "probably would" teach again.

Survey of the American Teacher (Satisfaction)

MetLife is an insurance and employee benefits provider that commissions Harris Interactive to conduct the Survey of the American Teacher. The survey explores teachers' opinions on a specific theme and related topics, using a nationally representative sample of teachers. In almost every year between 1984 and 2012, they asked teachers about their satisfaction with teaching. The question wording changed slightly over time. In 1985, 1988, 1995, 2003, 2006, 2008-9, they asked "All in all, how satisfied would you say you are with teaching as a career?" In 1984, 1986-7, 2001, and 2011-12, they asked, "All in all, how satisfied would you say you are with your job as a teacher in the public schools?" Then, in 2022,

journalists at EdWeek commissioned a survey of public school teachers which included an abbreviated version of this job-focused question, “All in all, how satisfied are you with your job?” The answer choices remained consistent over time with a four-point Likert scale ranging from “very satisfied” to “very dissatisfied.” We use the percent of teachers that report being “very satisfied” with teaching from both the MetLife and EdWeek surveys as an additional measure of teacher satisfaction, plotting trends in the response patterns for the two questions stems separately to account for the slight changes in item wording used over time.

Schools and Staffing Survey/National Teacher and Principal Survey (Satisfaction)

We construct a third panel of data on teacher satisfaction using the Schools and Staffing Survey (SASS) and the National Teacher and Principal Survey (NTPS). These surveys of nationally representative samples of public and private school teachers administered roughly every four years starting in 1987 provide descriptive data on the context of K-12 education. We plot trends across six items that capture elements of public-school teachers’ job satisfaction. Five of these items ask teachers to respond to a statement on a four-point Likert scale from “strongly disagree” to “strongly agree.” We plot the percent who “strongly agree” with the statement, “I am generally satisfied with being a teacher,” and the percent who “somewhat” or “strongly agree” with the other positive statement, “The teachers at this school like being here; I would describe us as a satisfied group.” We plot the percent who “somewhat” or “strongly disagree” with three negative statements (1) “The stress and disappointments involved in teaching at this school aren't really worth it,” (2) “If I could get a higher paying job I’d leave teaching as soon as possible,” and (3) “I don’t seem to have as much enthusiasm now as I did when I began teaching.” The final item we use is a question asking teachers whether they would “become a teacher or not” if they could “go back to [their] college days and start over again” on a five-point

Likert scale ranging from “certainly would” to “certainly would not.” We report the percent that “probably” or “certainly would” teach again. Across all items we are careful to only report responses for those year in which the items used identical response scales.

RAND American Teacher Panel (Satisfaction)

The RAND Corporation launched the American Teacher Panel (ATP) in 2014 as part of a suite of nationally representative surveys. RAND recruits a standing group of panel respondents among K-12 public school teachers who participate in these online surveys and applies appropriate sampling weights to generate national estimates. We draw on the 2020, 2021, and 2022 ATP surveys that included the following, longstanding items used on the SASS/NTPS: “The teachers at this school like being here; I would describe us as a satisfied group,” “The stress and disappointments involved in teaching at this school aren't really worth it,” “If I could get a higher paying job I’d leave teaching as soon as possible,” and “I don’t seem to have as much enthusiasm now as I did when I began teaching.” We use data from these identical items and response anchors to extend the SASS/NTPS time series to 2022.

American Federation of Teachers Member Survey (Satisfaction)

The American Federation of Teachers (AFT) is the second largest teachers’ union in the U.S. The AFT research division has conducted member surveys since 1991, asking a sample of teachers about their job satisfaction at least 12 times between 1991 and 2022. The AFT member sample is similar to the U.S. teacher workforce in terms of urbanicity (44% suburban, 30% urban, 26% small town/rural). The sample is, however, heavily concentrated in the Northeast (45%) and largely comprised of middle-aged members (members between 40-54 years old are 43% of the sample; members 55 or older are 30%). We measure teacher job satisfaction with the

percent of respondents that chose "very satisfied" on a four-point Likert scale when answering the question, "How satisfied are you with your overall conditions?"

Methods

Time-Series Analyses on the State of the Teaching Profession

We conduct simple descriptive analyses using the data described above by presenting national-level time series with a uniform time range across all figures (1970-2022) to facilitate a common visual comparison. We apply appropriate weights whenever provided to generate nationally representative estimates. We connect data points using line segments but emphasize that it is unlikely this linear representation captures the true dynamic patterns between time points that are farther apart in years. We provide further details about the data in Appendix A.

Exploratory Analysis of Factors that Might Relate to the State of the Teaching Profession

We explore a range of hypothesized factors that might have contributed to the dynamic patterns in the state of the K-12 teaching profession over the last half century. We do so by drawing on the scholarly literature to identify and substantiate eight potential hypotheses. Given the large number of possible explanations, we recognize this list is far from comprehensive. We then present additional time-series data to further examine how these potential driving factors have changed over time in relationship to our measures of the state of the teaching profession (see Appendix B for detailed descriptions of these supplemental data sources).

The complex economic, social, and political forces that interact to shape that state of the teaching profession make this exploratory exercise extremely challenging. Common patterns (or a lack thereof) between a hypothesized factor and our measures might suggest that a relationship exists, but identifying cause and effect in this setting is infeasible given the many concurrent

forces acting on the teaching profession, their interrelated nature, and the lack of any counterfactual for the national trends we observe. We recognize that relationships might reflect reverse causality, simultaneous causality, or they may even be spurious. They might also appear with a considerable lag or appear negatively related if policy follows a countercyclical pattern. Thus, our analyses are intended to inform more in-depth analyses and policy experimentation with leading hypotheses, relevant data sources, and descriptive trends.

Findings

Public Perceptions of Teacher Prestige

Perceptions of prestige have fluctuated considerably over the past half century, illustrating the dynamic ways in which teachers' occupational status can change over time. We find a common pattern where prestige declined precipitously in the 1970s, rose steadily in the 1980s into the 1990s, and remained relatively constant until it began a second prolonged decline in the 2010s. These patterns are clear in Figure 1, which present data from two sources: the Harris Poll and PDK. The Harris Poll captures traditional measures of occupational prestige commonly used in the sociological literature while PDK reflects public sentiment about teaching as a career for one's own children.

Two thirds of respondents to the nationally representative Harris Poll surveys ranked teaching as having at least "considerable prestige" in 1977, but by 1981, this had dropped to just 54%. From there, teacher prestige increased steadily, peaking at 78% in 1998, and then remained relatively high until 2010 when it began to fall more dramatically, reaching 59% in 2022. The PDK survey results follow a remarkably similar trend with three quarters of parents wanting their child to become a teacher in 1969. This figure then fell to just 46% by 1983. By 1993, parents' desire for their children to teach had increased again to above 65%, where it remained until 2011,

but then declined to its lowest recorded levels with just 37% of parents wanting their child to become a teacher in 2022. Strikingly, between 2009 and 2022 the percentage of parents who saw teaching as a favorable career for their children fell by half.

Student Interest in Teaching

Adolescents begin to refine their specific career interests and aspirations in secondary school and college. These ideas are likely shaped by both broader public perceptions of the teaching profession as well as their own interests, opportunities, and family and peer influences. We draw on data from CIRP, MTF, and NCES to track interest in entering the teaching profession among high school seniors and college freshman. Across all three datasets shown in Figure 2, we see a distinctly similar pattern of the decline, rise, and then fall of interest in teaching over the last half century.

The CIRP is the longest-running and most frequently collected survey of student interest in teaching. As shown in Figure 2, trends from CIRP data reveal a precipitous drop in interest from over 22% of college freshman in the early 1970s to only 5% in 1982. We then see a steady rise in the following decade up to 10%, a plateau across the 1990s and 2000s and decline to the lowest levels on record by 2013. Likewise, the time-series trends from the MTF data show that roughly 18% of high school seniors expressed interest in working in a school in 1976. Students' level of interest dropped as low as 11% in the early 1980s and then rose to 19% again in the 1990s. The MTF survey then shows a steady decline since the peak in 1994 down to an all-time low of 11% in 2020. We again see this familiar pattern based on nationally representative datasets collected by NCES. These survey data suggest that 7% of high school seniors expected to be teaching at age 30 in 1970, which declined to less than 3% in 1982 and rose again to almost 7% in 1992 only to fall to around 3% again in the mid-2000s where it has remained.

Preparation for the Teaching Profession

Federally collected data tracking the number of students preparing to become teachers also provides a window into the attractiveness of the teaching profession. We present raw counts of the total number of education degree completers and public school teaching licensures awarded in Panel A and Panel C of Figure 3, respectively. Panel B and Panel D display the percent of college completers who earn degrees in the field of education or earn licenses to illustrate their relative popularity among all college graduates over time.

Overall patterns in the raw counts of education degree completers and licensures issued map onto those for prestige and interest. As shown in Figure 3, we observe a decline, rise, plateau, and fall in education degree completers. Here the decline starts in the mid-1970s and continues through the mid-1980s followed by a steadier and prolonged rise through the 1990s plateauing in the mid-2000s. Patterns in the percentage of college completers who are preparing for teaching are even starker. In the early 1970s, roughly one out of every four college graduates completed an education degree, but this fell to just 12% by 1987, where it remained through the 1990s and most of the 2000s. This number then began to fall gradually at first and then rapidly in the 2010s. By 2019 only 8.1% of B.A. and M.A. degree completers were education majors, a third of the rate from earlier decades.

More recent trends in the number of state-issued teaching licenses to teach in public schools show a similar decline. The total number of licensures issued rose to 320,000 in 2006 and has fallen steadily since, dropping to only 215,000 in 2020, roughly one third less than 2006 levels. Further, at its high in 2006, the number of licenses issued was 22% of the total number of college graduates. In 2020, that number was only 11% of the total number of college graduates.

Job Satisfaction

The majority of students who prepare for a career in teaching end up as classroom teachers and experience the rewards and challenges of the career firsthand. While no single measure provides a complete time-series of teachers' satisfaction over the last half century, we can see clear changes over time in teachers' experiences by looking across multiple datasets in Figure 4. Together these data reveal a pattern very similar to those shown in our previous figures. The NEA survey provides the earliest and longest-running data on teacher satisfaction and shows the familiar, sharp decline in the 1970s followed by a steep rise in the 1980s and a more modest rise from 1991 until 2006. The percent of teachers who indicate they would “probably” or “certainly” choose teaching as a career declined from 74% in 1971 to 46% in 1981 but then recovered to 66% in 2006.

The MetLife Survey of the American Teacher starting in 1984 similarly shows a moderate rise in the percent of teachers that are “very satisfied” through 2008, reaching a high of 62% in 2008. Satisfaction then falls precipitously starting in 2011 to a new low of 12% in 2022, although there is a large gap in the time-series in the 2010s. The SASS/NTPS and AFT datasets serve to fill in the details about changes in teacher satisfaction over the most recent several decades. Analysis of the nationally representative and oft-cited SASS/NTPS data and recent extensions in the American Teacher Panel suggests that, across six different measures of job satisfaction, teachers' job satisfaction reached a peak in 2010 and then has declined steadily. The AFT survey shows a noisy but clear pattern of eroding teacher satisfaction since 2008. Similar to the MET and SASS/NTPS/ATP survey, 2022 represents the lowest levels of satisfaction across the 30-year panel of data collected by the AFT.

Economic, Sociopolitical, and Policy Explanations

Education Funding

The financial investment society makes in public education could play a key role in shaping the state of the teaching profession. A recent meta-analysis of the causal literature on school funding finds compelling evidence that increasing financial resources raises student achievement and attainment (Jackson & Mackevicius, 2021). However, it is unclear how total funding levels are related to teachers' professional status or job satisfaction. To explore this, we draw on data collected by NCES on expenditures per pupil in public K-12 schools in constant 2021 dollars. In Figure 5, we plot current expenditures per pupil from 1970 to 2021. Overall, we see the well-known pattern of steady increases in spending over time, with real per pupil expenditures more than doubling during the last 50 years.

Comparing the growth in education funding in Figure 5 to the dynamic changes in the teaching profession during this period reveals two largely divergent patterns. The steep decline in status during the 1970s and the plateau from the late 1990s to 2010 both took place while funding was increasing. Two periods of notable declines in spending also stand out: the recession of the early 1980s and the years immediately following the Great Recession (2010-2014). The one period of potential convergence is the decline in per pupil expenditures caused by the Great Recession and the beginning of the most recent decline in teacher prestige over the last decade.

Teacher Compensation

Teacher compensation has long been viewed as a driving force in shaping the attractiveness and prestige of the profession. We focus on a simple and direct measure of compensation, the average annual salary of teachers in K-12 public schools, adjusted for inflation. While many scholars focus on relative wages,² we view real wages as particularly

² Teachers' relative wages have been a subject of considerable research and debate. Estimating teachers' wages relative to other professions is complicated by the fact that teachers are paid on a 9- or 10-month contract, often work more than their contractual hours, and typically earn meaningful pension and healthcare benefits. Some studies find a teacher wage penalty (Taylor, 2008; West, 2014) while others find wage premiums after accounting for

salient for three reasons. For one, research documents how salary is rarely the primary driver of teachers' career choices; instead, teachers often view their profession as a calling (Johnson, 2004). Second, real wages are, in part, a measure of material working conditions, indicating the extent to which teachers are fairly compensated for their work. Third, real wages are generally public, so that prospective and current teachers are aware of them. They constitute a visible, tangible measure of the value society places on the profession.

The first striking feature of the trends in average real wages collected by NCES and shown in Figure 6 is the large decline across the 1970s occurring exactly when we see a steep drop in the state of the teaching profession. Rising inflation and stagnant nominal wages led to a decline in real wages of 13% across the decade. The rapid recovery in real wages in the 1980s was spurred in part by the concerns raised by prominent reports including *A Nation at Risk* and *A Nation Prepared*. Salaries rose from \$54,133 in 1980 to \$65,007 in 1990, paralleling the rapid rise in teacher status. This rise and subsequent plateau in compensation across the 1990s and 2000s closely mirrors the patterns in teacher prestige, interest, preparation, and satisfaction over the same time period. We then see a corresponding decline between 2010 and 2014 in the wake of the Great Recession when real wages fell from \$67,228 to \$63,924. This decline coincides with the timing of the recent downturn in the state of the profession, but wages have since stabilized rather than mirroring the continued decline in the state of teaching profession.

Overall, patterns in real teacher wages appear closely related to the overall status of the teaching profession across the first four decades of our 50-year panel. The more modest erosion

benefits (Regmi, 2022; Liu & Aubry, 2021; Richwine & Biggs, 2011). One measure of relative teacher compensation based on the Current Population Survey shows that the weekly earnings of other college-educated workers rose almost 10% between 2010 and 2021 while teachers' wages were stagnant (Allegretto, 2022).

of real wages during the Great Recession may have helped to trigger and sustain the most recent downturn in the state of the teaching profession.

Changing Labor Market Opportunities

Prior research has provided evidence that changing career opportunities, especially for women and people of color, have affected the overall appeal of the teaching profession. Starting in the 1960 and 1970s, the civil rights and women's rights movements helped to open access to a range of professional occupations that were previously only or primarily accessible to White men (e.g., medical doctors, professors, attorneys). Studies have documented how the relative number of high-achieving women and people of color among the ranks of public school teachers declined substantially in the 1970s as outside employment options increased (Bacolod, 2007; Corcoran et al., 2004; Eide et al., 2004; Hoxby & Leigh, 2004; Murnane et al., 1991). At the same time, these changes came on the heels of the mass firing of Black teachers in southern states as districts began closing segregated Black schools after the passage of the 1964 Civil Rights Act (Thompson, 2022).

We explore this hypothesis further by disaggregating interest in the teaching profession from the CIRP surveys of college freshmen by race, gender, and their intersections in Figure 7. Panels A, B, and C illustrate the change over time in interest in the teaching profession among college freshman relative to 1970 levels. We find that declining interest in teaching in the 1970s occurred for both men and women, but that the subsequent recovery in the 1980s and 1990s was more pronounced for men relative to women. The most recent data show that interest in teaching remains roughly 80% lower than 1970s levels for women and roughly 60% lower for men.

Exploring changes in interest in the teaching profession by race also reveals steeper and more sustained declines for college students of color relative to White college freshman over our

fifty-year panel. Between 1970 and 1980, the percent of Black and Asian freshman interested in teaching dropped by more than 80%, while the decline for White students was just over 60%. By 2010, interest among White students had recovered to 53% below 1970 levels but interest among Black and Asian students remained 77% and 71% below 1970 levels, respectively.

When we examine these patterns by race and gender, we find that Black women experienced a steep decline in interest in teaching, and interest for Black women remains the lowest today relative to 1970s levels. Black men experienced a similarly steep initial decline in the 1970s but have recovered somewhat more than Black women. Though White women and men's interest in teaching declined rapidly in the 1970s, it leveled off and rebounded more substantially in the 1980s and 1990s, with White men experiencing the greatest initial recovery relative to their 1970s levels, followed by a more pronounced decline after 2008. Overall, these patterns suggest that changing career opportunities for women and college students of color may have played a key role in triggering and sustaining early declines in the state of the profession.

Teacher Unionism

The role of teacher unions in shaping the status of teacher profession is a topic of considerable debate. On one hand, unionization associates teaching with labor, denoting a working-class dimension that may garner less prestige. For example, the horizontal nature of the profession and fixed salary schedule advanced by unions irrespective of performance may undercut efforts to raise the prestige and appeal of the teaching profession (Hanushek, 2007; Hoxby & Leigh, 2004; Figlio & Kenny, 2007; Podgursky & Springer, 2007). On the other hand, teachers' unions have been key advocates for the profession, raising wages and advocating for greater teacher autonomy (Goldstein, 2014; Murphy, 1990; Rousmaniere, 2005).

In the 1960s and 1970s, teachers and other public sector unions began to gain bargaining rights, tending to favor a more “industrial unionism” approach with a central focus on material benefits (Kerchner et al., 1997). More recently, teachers’ unions have been subject to labor retrenchment efforts such as Right to Work policies that restrict collective bargaining and make union membership more costly (Marianno, 2015). These policies may have spurred a shift towards more bottom-up union organizing. In 2018 and 2019, thousands of teachers in states with more restrictive labor policies engaged in large-scale strikes collectively organized under the hashtag “RedforEd.” These strikes increased support for teacher demands but did not necessarily make the profession more desirable (Hertel-Fernandez et al., 2020).

We explore the relationships between teacher unionization and the state of the teaching profession by comparing the patterns we found above to longitudinal trends in union membership over the last half century. In Figure 8, we present trends in yearly membership counts at the national level from archival NEA handbooks and original data provided to us directly from the AFT.³ Teacher union membership increased rapidly in the 1970s and continued to expand across the next several decades. However, by the 2010s, union membership growth had stalled and even began to decline.⁴ It is plausible that the materially-oriented industrial unionism in the 1970s undercut the state of the teaching profession, but the recent labor retrenchment policies of the 2010s have also further weakened the attractiveness of the profession.

Barriers to Entry

³ These membership counts are not mutually exclusive because the AFT and NEA have merged in several states.

⁴ Membership in the AFT appears to stabilize (rather than decline) in the early 2010s, but this period corresponds with a change in reporting such that the apparent stability probably reflects real declines. Prior to 2013 the AFT reported their membership in terms of Full Dues Equivalent (FDE) and not an actual membership count. FDE implies that if two members pay half dues, then those two members would just be counted as one member. In 2013, they switched to an actual membership count, regardless of dues payment.

There has long existed considerable debate over the role of teacher certification and licensure tests in shaping the teaching profession. Some researchers point to the rigorous formal education requirements and high-stakes licensure tests common in the legal and medical professions as the model for raising the status of teachers (Darling-Hammond, 2010). Others find that licensure requirements create unnecessary barriers to entry and are only weakly predictive of teacher performance in the classroom (Angrist & Guryan, 2008). Recent research has found that licensure exams (and broader certification requirements) serve to reduce overall supply of new teachers by discouraging teaching candidates from colleges with lower average SAT scores (Larsen et al., 2020) and have no effect on student performance (Chung & Zou, 2022). Here we examine two major patterns related to barriers to entry in the U.S. public teacher workforce over the last half century: licensure tests and alternative certification pathways.

Efforts to use licensure tests as a means of ensuring that only qualified teaching candidates could become teachers date back to the common school movement. We examine overall trends in state requirements for teachers to pass state licensure tests, while recognizing that the minimum passing score states set is also a key determinant of the barrier these tests create. We merge data from two primary sources; data from 1983-1997 were compiled by Larsen (2014) using a range of original sources, while data from 1998-2017 come from NCES's annual Digests of Educational Statistics. In Figure 9 Panel A, we plot the number of states that required teachers to pass: 1) a basic skills test, 2) a subject-specific test, and 3) professional content knowledge test. These data illustrate a steep rise in the existence of state laws requiring public school teachers to pass licensure tests from the early 1980s to the mid-1990s. By 1995, state mandated basic licensure tests had spread to 39 states. In the ensuing two decades, basic skills tests appear to have been slowly replaced by subject-specific licensure tests. This trend was

accelerated by the Highly Qualified Teacher provisions of the NCLB Act of 2001 which required teachers to demonstrate expertise in their subject area (Kraft, 2018). We then see a sharp rise in all licensure testing types in the mid-2010s. Notably, the rise in public charter schools over the past several decades has not lowered the barrier of licensure requirements because most states still require teachers working in public charter schools to hold a state teaching license (Education Commission on the States, 2016).

Alternative certification pathways first emerged in the 1990s as a way to open access to the teaching profession for individuals. For example, Teach for America's first cohort of 489 teachers began working in schools in 1990 after a brief summer training. In Figure 9 Panel B, we plot the total number of traditional and alternative education preparation program completers between 2000 and 2020 collected by the Office of Title II. The overall number of public-school teachers entering the teaching profession through alternative pathways has remained relatively small and steady over the last two decades, ranging between 24,800 and 41,700. The decline in enrollment in traditional teacher preparation programs over the last decade, however, has meant that the percentage of newly licensed teachers who enter the profession via an alternative path has increased steadily, reaching 23% in 2020.

It is difficult to see clear and consistent patterns between tightening or loosening barriers to entry and the overall state of the teaching profession over time. The most consistent evidence is the concurrent improvements in the state of the profession in the 1980s with the steep increase in licensure exam requirements. However, these requirements have only continued to rise in the 2010s during the steep downturn in the state of the teaching profession with the adoption of high-stakes testing and certification requirements such as EdTPA (Chung & Zou, 2022). The rise in

alternative teacher preparation programs pre-dates the recent period of decline in the teaching profession and does not appear to be large enough to drive the overall trends we see.

Teacher Working Conditions

Teachers are often motivated by the intrinsic rewards of the job. They enter the profession because they want to work with young people, are passionate about a subject, and/or want to contribute to society (Drury & Baer, 2011). Teachers' working conditions create the contexts that enable or undercut their success with students and shape their overall satisfaction on the job (Johnson, 2020). Measuring teachers' working conditions presents a challenge given that many important elements relate to interpersonal relationships with colleagues and school administrators. We draw on data collected by the NEA and the SASS/NTPS to track five domains of teachers' working conditions that are commonly featured in the literature: class size, leadership, colleagues, time, and resources (Merrill, 2020).

Trends in average class size over the past half century have differed between general elementary school teachers and subject-specific teachers. As shown in Figure 10 Panel A, average class sizes for non-departmentalized elementary teachers have fallen steadily from 27 to 21 students between 1970 and 2000 where they have largely remained over the last two decades. Class sizes for departmentalized teachers have fluctuated over time with a decline in the 1970s, a rise in the 1980s into the 1990s, and an apparent decline in more recent years (Figure 10 Panel B). Figure 11 Panel A and B illustrate how teachers' perceptions about the support they receive from their school leaders, cooperation among their colleagues, time unburdened by paperwork, and material resources all follow a broadly similar pattern. We observe a moderate rise of positive perceptions around five to ten percentage points across the 2000s and a more modest decline between 2008 and 2012 which appears to have plateaued through 2016.

Although ample research documents the importance of working conditions for teachers' career decisions, we find very limited evidence that macro-trends in working conditions are aligned with the dynamic changes we document in the overall state of the teaching profession. Class sizes for elementary school teachers have declined steadily over the past half-century, while class sizes for subject-specific teachers fluctuate more but remain at levels similar to the 1970s and 1980s. Teachers' perceptions of their working conditions rose during the 2000s when trends in the profession were static, although there is some evidence of a small decline around 2010 concurrent with teacher evaluation reforms. However, the lack of national data after 2016 and the absence of measures for key features of teachers' work environments (e.g., teacher leadership) limit the conclusions we can make regarding working conditions.

Teacher Accountability and Autonomy

Efforts to measure teacher effectiveness and hold teachers accountable for their performance on the job are as old as the teaching profession itself. At the beginning of our panel in the early 1970s public schools were in the midst of the standards movement to introduce state-wide achievement tests and implement "competency based" teacher evaluation (Mehta, 2013; Goldstein, 2014). In 2001, NCLB established high-stakes accountability at the national level. While NCLB focused primarily on schools rather than teachers, these accountability pressures meant that teachers in schools most at risk of being sanctioned for failing to meet Adequate Yearly Progress experienced a meaningful decline in their perceived job security and intentions to teach until retirement (Reback, Rockoff, & Schwartz, 2014). Under the Obama administration, the focus on accountability shifted from schools to teachers, with both Race to the Top grants and state waivers to NCLB requiring high-stakes performance measurement for teachers. These

reform efforts emphasized the use of test-based evaluation measures as key components of teacher performance ratings, decreasing the overall supply of new teachers (Kraft et al., 2020).

The consequences of these accountability reform efforts played out in two particularly salient ways for the teaching profession. First, it created the possibility that tenured teachers could be dismissed due to poor performance, although there is little evidence of any substantial increase in the number of teachers who were actually fired for cause (Kraft & Gilmour, 2017). Second, it ushered in an era of increased efforts to standardize curriculum, instructional materials, and in some cases, instructional techniques in an effort to better align classroom practices with performance measures (Ingersoll, 2009). We examine these mechanisms by tracking changes in teachers' perceptions of their job security and their control over planning and teaching using repeated waves of the nationally representative SASS and NTPS surveys.

As shown in Figure 12 Panel A, the percentage of teachers that are unconcerned about their job security declined from 42% to 27% between 1999 and 2015, a 36% drop. This decline in perceived job security was most pronounced between 2008 and 2012, precisely when states across the country began developing, piloting, and implementing new high-stakes teacher evaluation systems. At the same time, survey data presented in Figure 12 Panel B illustrate a steady decline in teachers' sense of control over a range of instructional decisions.

The patterns of teachers' perceived job security and autonomy in the classroom are somewhat consistent with a hypothesis that the implementation of top-down accountability systems contributed to the declining state of the teaching profession. Initial declines in the available data first emerge in the 2000s with the introduction of test-based accountability under NCLB, prior to the steep decline in the status of teachers in the 2010s. Teachers' concerns about job security and autonomy became more acute during the push to expanded high-stakes

evaluations for teachers in the early 2010s, but this was also during a period of recession-induced declines in education funding and a subsequent rise in teacher layoffs.

School Shootings

School shootings are traumatic events that affect the lives of students, teachers, and communities. Since 1970, 159 teachers have been shot while on the job. Mass school shootings in Columbine, Parkland, and Uvalde have rocked the nation and led schools to conduct active shooter drills and increase security. Research has shown how traumatic events like the Beltway Sniper shootings lower student achievement, but less is known about how these events affect teachers (Gershenson & Tekin, 2018; Gershenson & Hayes, 2018). School shootings may have changed prospective and actual teachers' sense of security and safety on the job.

We explore this hypothesis by plotting trends in school shooting incidents and victims per year from 1970 to the present. Figure 13 depicts these data collected by the Center for Homeland Defense and Security housed at the Naval Postgraduate School. Trends in school shooting incidents and victims across time show a gradual rise across the first four and half decades with meaningful variation from year to year. Starting in 2017, shooting events have spiked, reaching levels of over 100 shooting incidents per year in each of the last five years. These tragic events are now occurring at five times their historic average. The overall patterns in school shooting incidents and victims do not align closely with the trends we observe in teacher status over time. However, it would be quite plausible that the recent rise in school shootings is further contributing to the continued decline in the state of the teaching profession.

Discussion & Conclusion

Historical time-series data on the state of the K-12 teaching profession across more than a dozen different sources place the current moment in stark perspective. Prestige, interest,

preparation, and satisfaction are at or near their very lowest point in over a half century. We view this evidence as a cause for significant concern given the importance of the teaching profession for the life opportunities of current and future generations of American students.

Although the recent period of decline in the wellbeing of the teaching profession predates the COVID-19 pandemic and increased partisan polarization in education, these present-day challenges have likely added to the growing problem. The onset of the global pandemic and the introduction of laws restricting instruction and banning books that address issues of racism and sexuality, for example, have influenced both public perceptions of the profession and teachers' day-to-day experiences on the job (Woo et al., 2022). These challenges are likely to only reinforce the perceived loss of professional autonomy and job security.

Indeed, we find that injuries to the state of the teaching profession have compounded in very recent years. Between 2018 and 2022, the percentage of parents who say they would like their children to be teachers dropped from an already low 46% to 37%. A 2022 survey of U.S. households by NORC (2022) found that only 18% of respondents reported being likely to encourage their child or another younger person to become a K-12 teacher. Data from the nationally representative American Educator Panel show that teacher stress and burnout have risen appreciably during the pandemic years and are meaningfully higher than levels experienced by the broader population of working adults (Steiner et al., 2022). The percentage of teachers who say teaching is still worth it despite its stress and disappointments has declined from 72% to 44% during this same four-year period.

At the same time, historical data illustrate that the current decline in the state of the profession is not without precedent. Teachers experienced a similarly steep and prolonged decline in status during the 1970s, rebounding throughout the 1980s and remained relatively

stable through the 2000s. Better understanding the forces behind this previous fall and rise holds promise for diagnosing and reversing the current decline.

Across all the factors we examined, teacher compensation stands out as a primary candidate for explaining the rapid fall and rise in the state of the teaching profession across the 1970s and 1980s. Of course, many other substantial changes to the U.S. education system were also happening during this time. For example, the number of states that adopted mandatory collective bargaining laws tripled in the 1970s, rising from nine to 30 (Lovenheim & Willén, 2019). Districts across the country were also developing and implementing court-ordered school desegregation plans (Johnson, 2019). In the 1980s, prominent reports such as *A Nation at Risk* sparked national concern about the quality of the U.S. teacher workforce and galvanized a range of reform efforts. Disentangling the role of teacher pay from these other changes is challenging, but the simple time-series evidence we present would certainly suggest that pay represents a possible policy lever for shaping the overall state of the profession.

Researchers and policymakers should also look beyond teacher compensation as they consider how we might improve the attractiveness of the profession. High school students who expressed potential interest in a career in education on the ACT cited better pay as the most common factor that would increase their interest, but identified more autonomy, more opportunities for career advancement, and more professional prestige as the second, third, and fourth most important factors (Croft, Guffy, & Vitale, 2018). We find evidence consistent with the idea that teachers' perceived loss of professional autonomy over the last decade may be a salient factor for the decline in state of the teaching profession. The introduction of high-stakes teacher evaluations may have played a role in accelerating the loss of teachers' perceived

professional autonomy while also undercutting teachers' perceived sense of job security – a valued non-pecuniary benefit of the profession among current teachers (Lang & Palacios, 2018).

Policy efforts to reverse the trend of top-down control over teachers' practice and develop meaningful career ladders might be promising areas for policy innovation. This is not to say that teachers should be left alone in their classroom or expected to develop curricular materials on their own. Such practices can lead to inconsistent instruction, professional isolation, and burnout (Johnson & Birkland, 2003). Instead, efforts to support teachers through coaching, professional learning communities, and peer observation and review programs might create the conditions, and develop the skills, teachers need to feel successful with their students and ensure the profession maintains high standards (Papay & Johnson, 2012). We also must grapple with the rapid rise in deadly school shootings that undermine the basic sense of security necessary for effective teaching and learning. Finally, coalitional approaches to teacher organizing, like “bargaining for the common good,” and bottom-up collective action may provide opportunities for teachers and their unions to influence politics and policymaking alongside other organizations representing working people (Hertel-Fernandez et al., 2020; Lyon, 2022).

Elevating the teaching profession is a generational task, but one that would produce considerable benefits for both individual students and the nation as a whole. There are bright spots to build on amidst the worrisome evidence. In a recent nationally representative survey, two out of three adults viewed teachers as undervalued, suggesting a broadly held interest in reversing the present trends (Ed Choice, 2022). Placing the current state of the teaching profession within context helps us to see the gravity of the current moment and gives us hope that change is possible.

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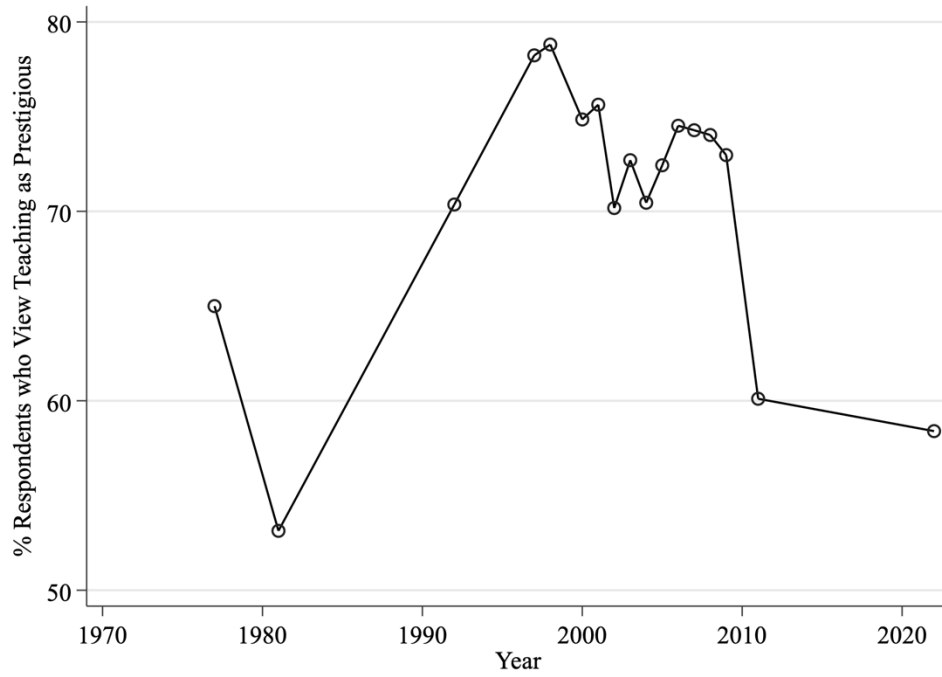
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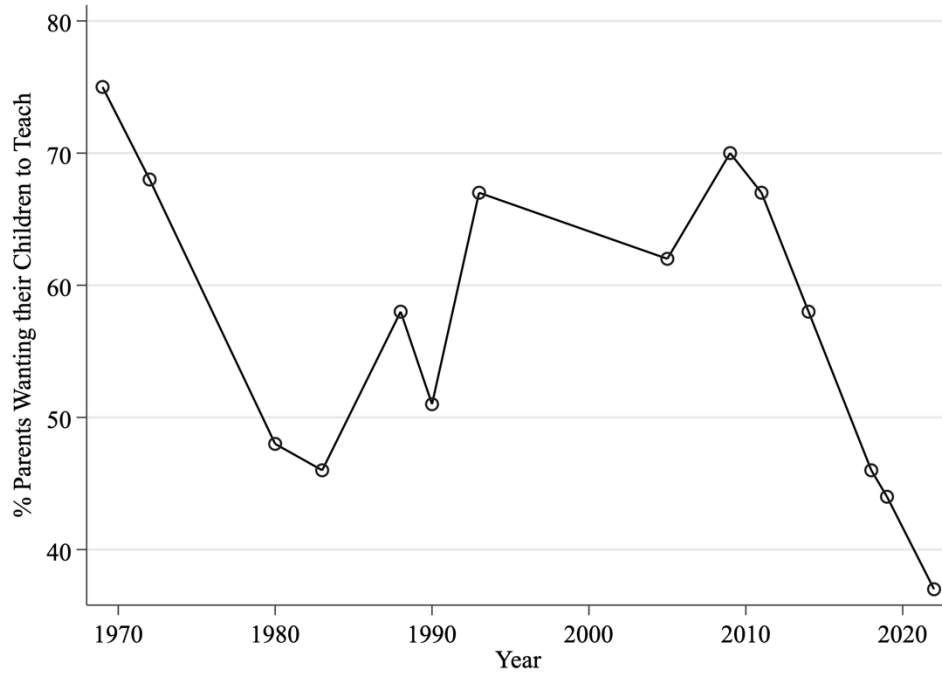
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Figures

Panel A. Harris Poll



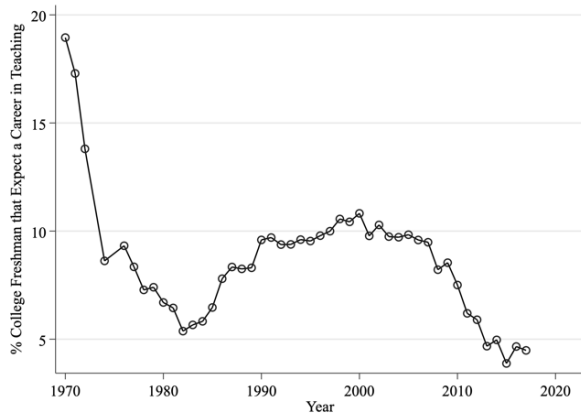
Panel B. PDK/Gallup



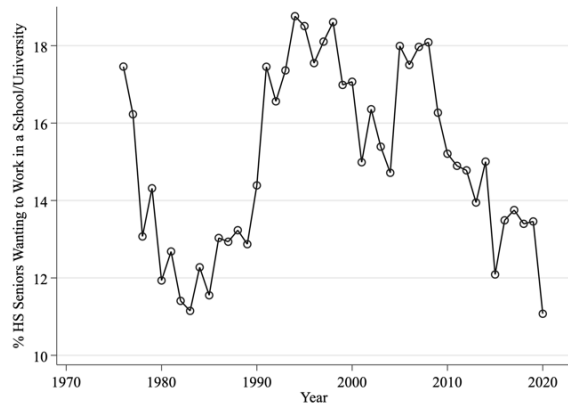
Note. Data are from Harris Poll Prestige Ratings and PDK/Gallup Polling of Parent Perceptions.

Figure 1. Public Perceptions of Teacher Prestige, 1970-2022

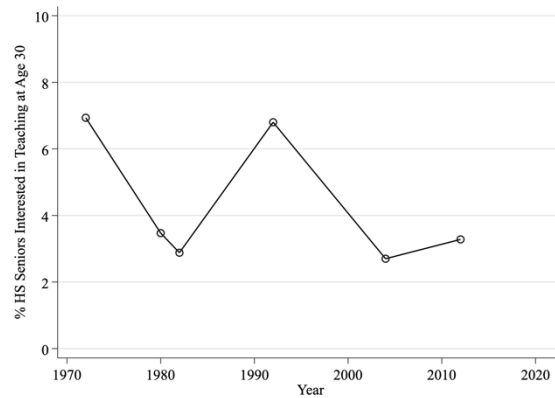
Panel A: CIRP



Panel B: Monitoring The Future



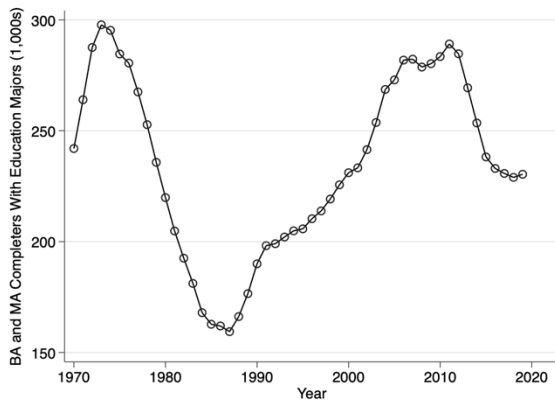
Panel C. NCES



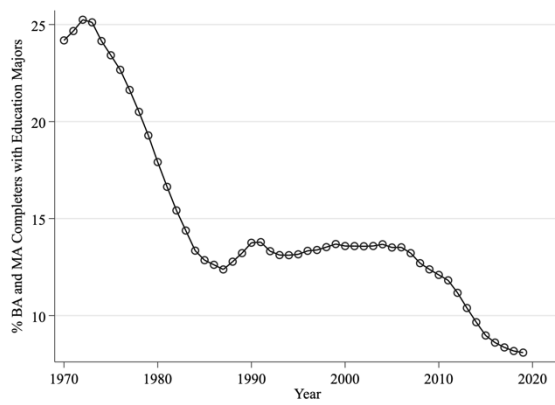
Note. Data are from The CIRP Freshman Survey, Monitoring the Future, and NCES Surveys of High School Seniors. NCES surveys were open response for the 1982 and 2004 survey administrations.

Figure 2. Student Interest in Teaching, 1970-2020

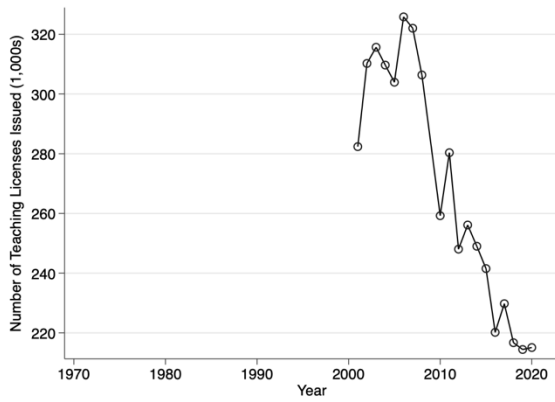
Panel A: HEGIS/IPEDS (Count)



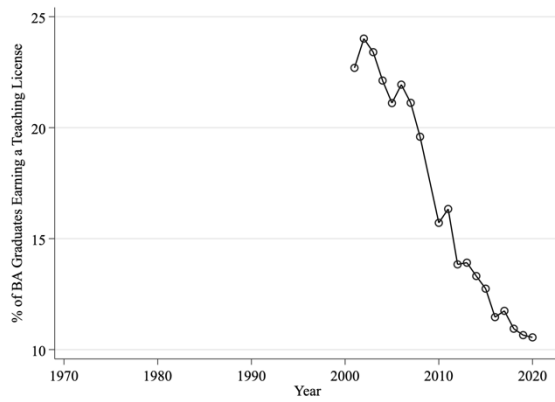
Panel B: HEGIS/IPEDS (Percent)



Panel C: Title II (Count)

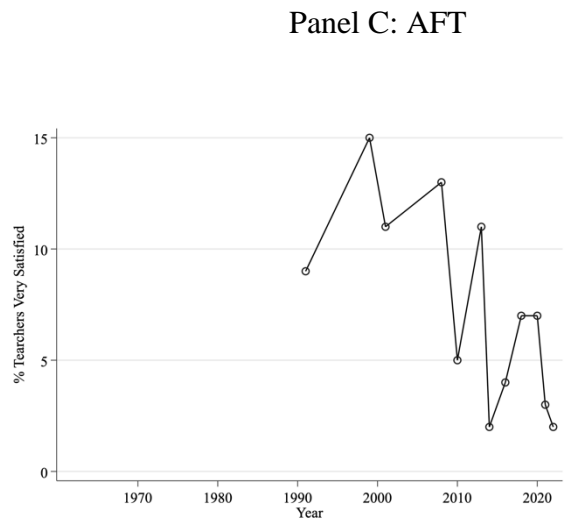
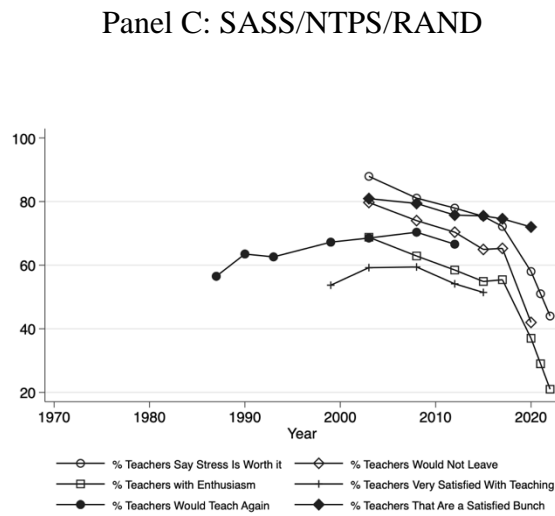
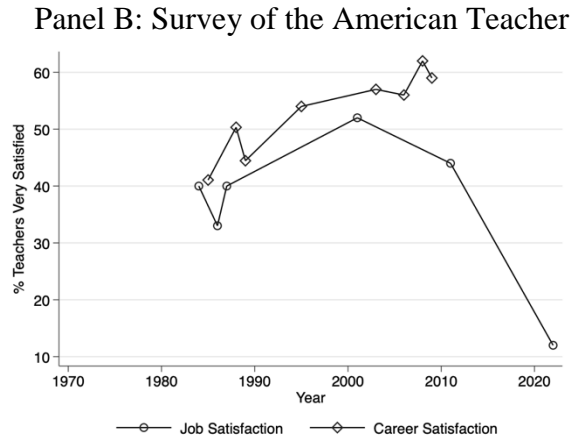
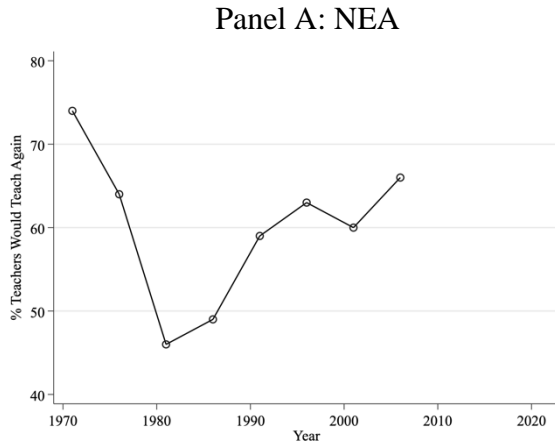


Panel D: Title II (Percent)



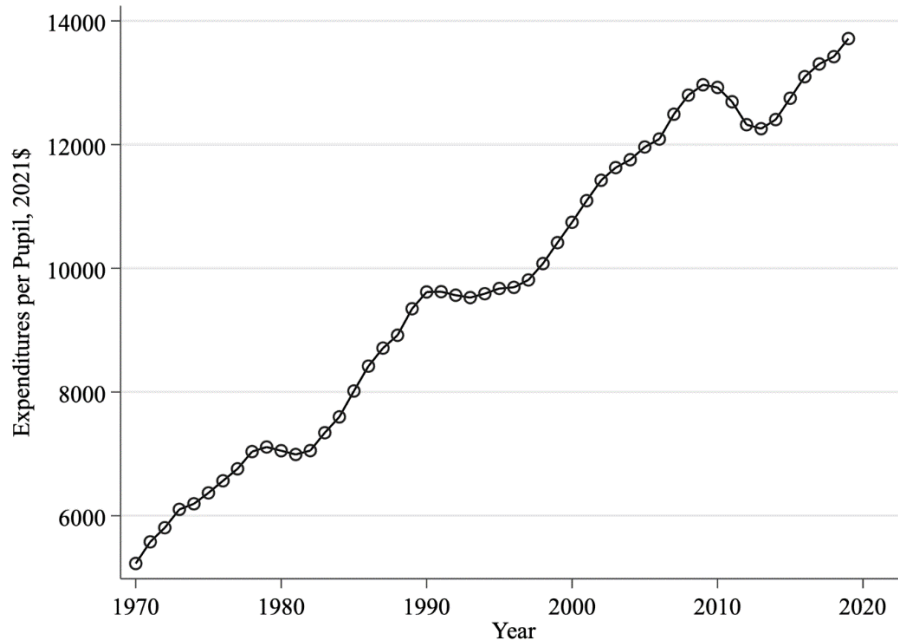
Note. Data are from HEGIS and IPEDS Teacher Degrees Completed and Office of Title II Licensures.

Figure 3. Preparation for Entry into the Teaching Profession, 1970-2020



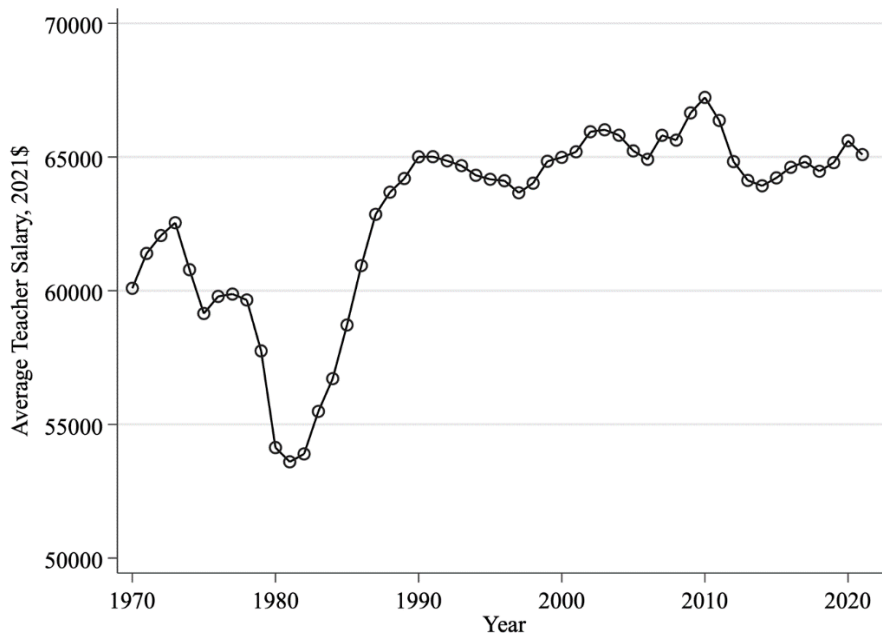
Note. Data are from the Status of the American School Teacher, Survey of the American Teacher, Schools and Staffing Survey/National Teacher and Principal Survey, RAND American Teacher Panel, and American Federation of Teachers Member Survey.

Figure 4. Teacher Job Satisfaction, 1970-2022



Note. Data are from the Common Core of Data.

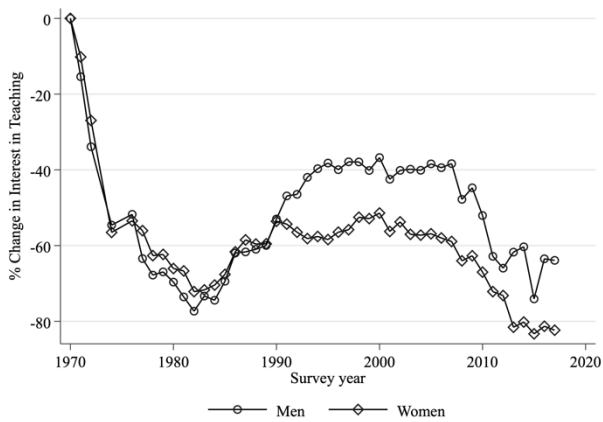
Figure 5. Education Funding, 1970-2020



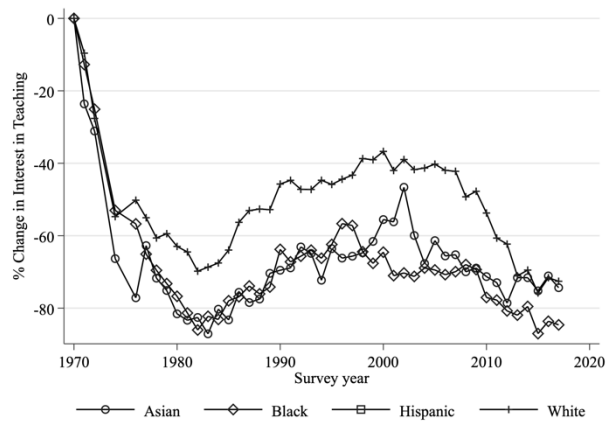
Note. Data are from the National Center for Education Statistics.

Figure 6. Average Teacher Salary in Real Wages, 1970-2022

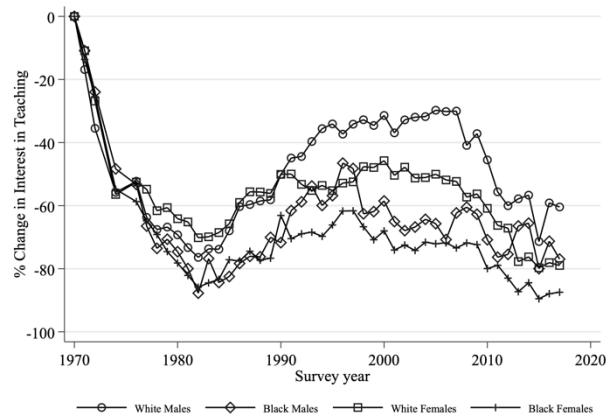
Panel A: CIRP by Gender



Panel B: CIRP by Race



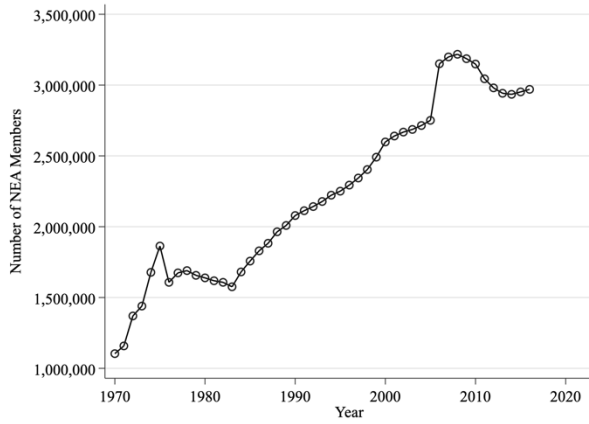
Panel C: CIRP by Race and Gender



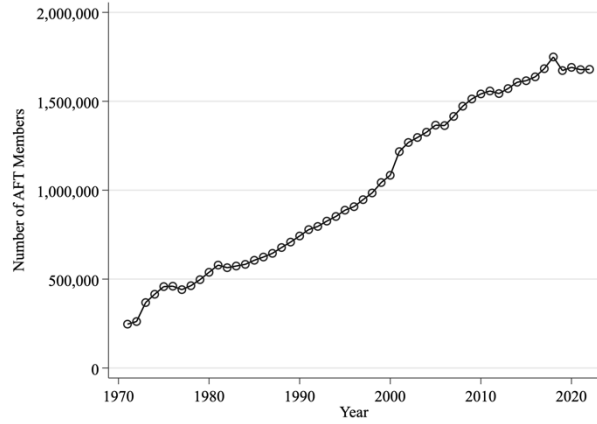
Note. Data are from The CIRP Freshman Survey.

Figure 7. Student Interest in Teaching by Gender and Race, 1970-2017

Panel A: NEA Members



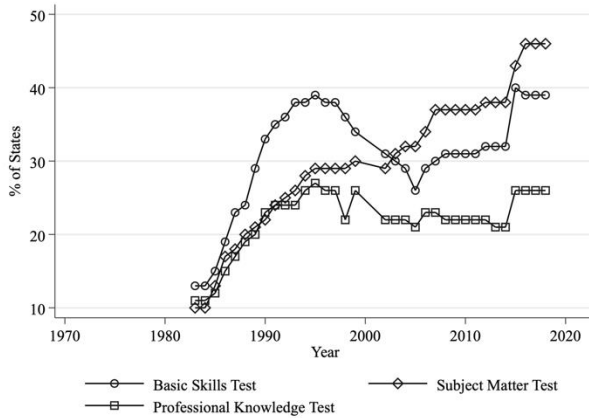
Panel B: AFT Members



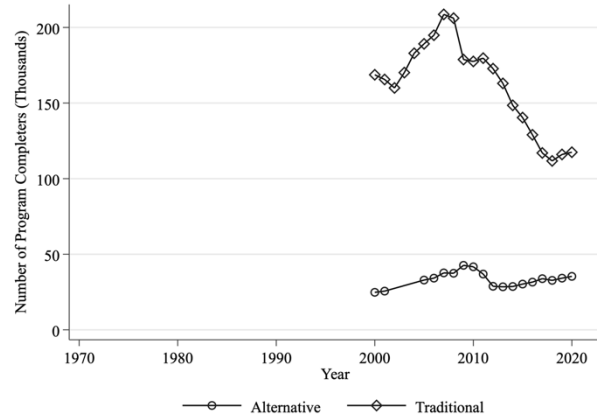
Note. Data are from the National Education Association Handbooks and personal communication with the Office of Secretary Treasurer at the American Federation of Teachers.

Figure 8. Teacher Union Membership, 1970-2022

Panel A: State Teacher Licensure Test Requirements



Panel B: Traditional and Alternative Education Preparation Program Completers

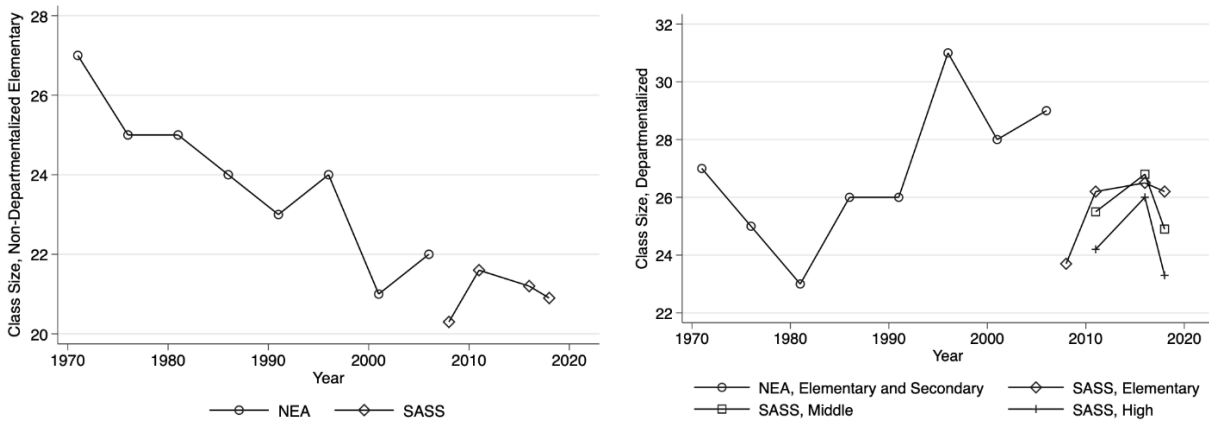


Note. Data are from Larsen (2015), the National Center for Education Statistics, and the Office of Title II Program Completers.

Figure 9. Barriers to Entry into the Teaching Profession, 1970-2020

Panel A: Non-Departmentalized Elementary Classes

Panel B: Departmentalized Classes



Note. Data are from the Schools and Staffing Survey/National Teacher and Principal Survey and the National Education Association.

Figure 10. Average Class Size, 1970-2018

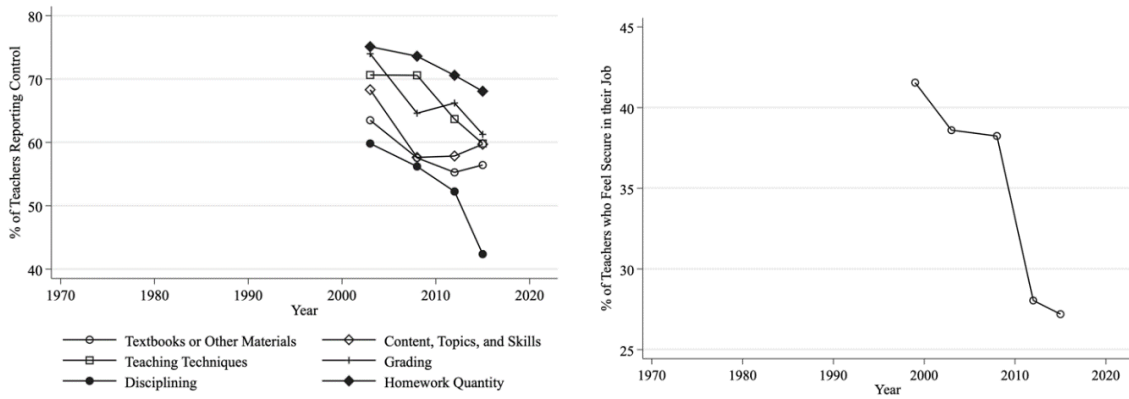
Panel A: Leadership

Panel B: Colleagues, Time, and Resources



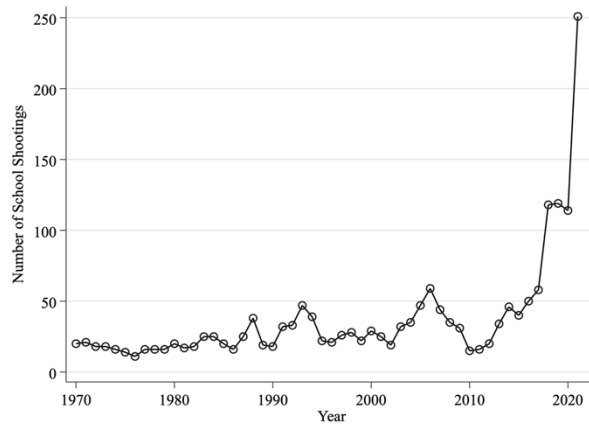
Note. Data are from the Schools and Staffing Survey/National Teacher and Principal Survey. “Routine duties and paperwork interfere with my job of teaching” is the only item with a negative valence.

Figure 11. Teacher Working Conditions, 1988-2016



Note. Data are from the Schools and Staffing Survey/National Teacher and Principal Survey.

Figure 12. Teacher Autonomy and Accountability, 1970-2015



Note. Data are from the Center for Homeland Defense and Security at the Naval Postgraduate School.

Figure 13. School Shootings, 1970-2022

Appendix A

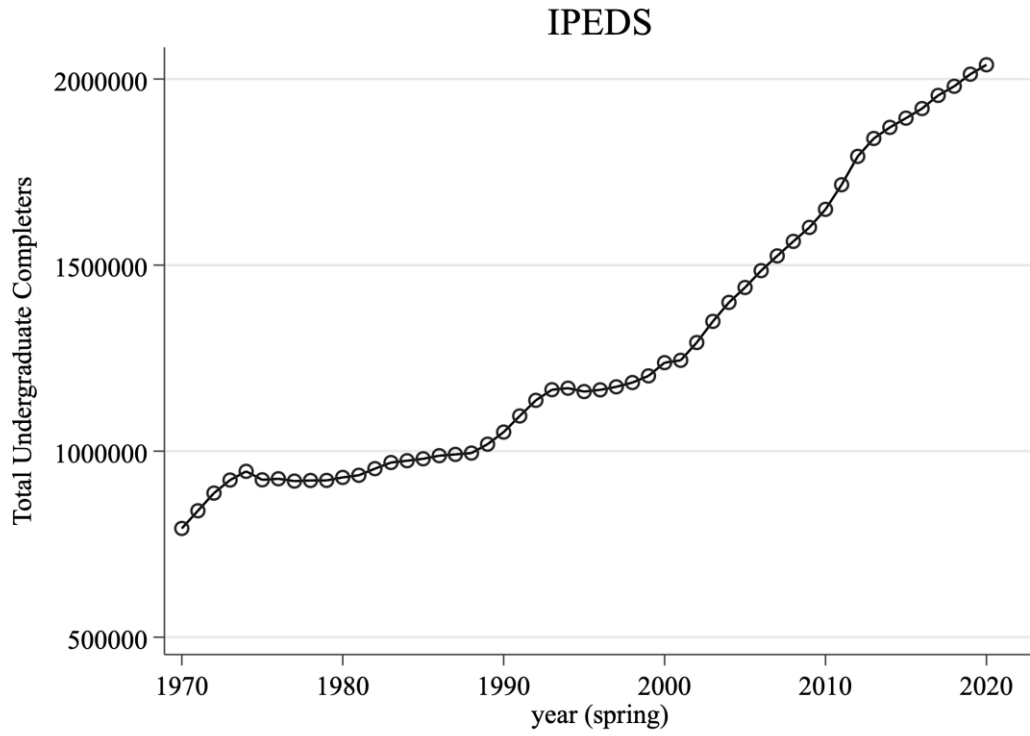


Figure A1. Total Number of Undergraduate Degree Completers, 1970-2020

Primary Data Sources

Harris Poll

Link: <https://theharrispoll.com/>

Description: National public opinion surveys

Target Sample: Nationally representative sample of adults 18 years or older in the United States

Sample Size: The sample size typically ranges from 1,200-2,200 respondents.

Data Range & Frequency: Annually 1977-2011, 2022*

Description of Survey/Item: Occupational prestige ranking: They present a list of occupations and asked how much prestige each job possesses on a 4 point Likert scale. We use whether the respondent answers that the teaching profession "has very great prestige" or "has considerable prestige."

Specific Item(s): "I am going to read off a number of different occupations. For each, would you please tell me if you feel it is an occupation of very great prestige, considerable prestige, some prestige, or hardly any prestige at all?... Teacher"

Response Options:

- Very great prestige
- Considerable prestige
- Some prestige
- Hardly any prestige at all

Measure: We construct a variable that captures the percent of respondents that said that teachers have either "very great prestige" or "considerable prestige" as a measure of public perceptions about the occupational prestige of teachers.

Data Access: We accessed public data from the Odum Institute Archive Dataverse. For missing years, we emailed the staff at Harris International directly. We also commissioned a new survey in 2022.

*NOTE: We omit items in 2014 and 2015 because of changes to the item wording.

PDK Poll

Link: <https://pdkpoll.org/>

Description: Representative polling on American public attitudes among a random sample of adults.

Target Sample: General population of adults in the United States

Sample Size: About 1,000.

Data Range & Frequency: 1970-2018 (1972, 1980, 1981, 1983, 1988, 1993, 2005, 2009, 2011, 2014, 2018)

Description of Survey/Item: They ask parents about their desire for their child to teach.

Specific Item(s): "Would you like to have a child of yours take up teaching in the public schools as a career?"

Response Options:

- Yes
- No

Measure: We use PDK public reports of the percent of parents that affirm that they would like their child to take up teaching in the public schools as a career as a second measure of teachers' occupational prestige.

Data Access: We use data compiled and reported in the 2018 PDK Report, "Teaching: Respect but dwindling appeal " https://pdkpoll.org/wp-content/uploads/2020/05/pdkpoll50_2018.pdf

Cooperative Institutional Research Program (CIRP) The Freshman Survey

Link: <https://heri.ucla.edu/cirp-freshman-survey/>

Description: For over 50 years, the CIRP Freshman Survey (TFS) has provided data on incoming college students' background characteristics, high school experiences, attitudes, behaviors, and expectations for college.

Target Sample: First year college students at participating universities

Sample Size: Between 200,000 and 415,000 respondents per year

Data Range & Frequency: Annually 1970-2017

Description of Survey/Item: They ask first year college students about their probable career. We focus on the percent that choose teaching as their probable career.

Specific Item(s): "Please indicate your intended career."

Response Options:

- "Elementary School Teacher"
- "Secondary School Teacher"
- Other Vocations . . .

Measure: We construct a measure capturing the percent of first year college students that choose either "Elementary School Teacher" or "Secondary School Teacher" as their probable career from a list of over 30 career options.

Data Access: For the years 2009-2017, we requested and received restricted data from HERI. For the years 1966-2008 we accessed public data through the HERI Data Archives (<https://heri.ucla.edu/heri-data-archive/>).

Monitoring the Future (MTF)

Link: <http://monitoringthefuture.org/>

Description: The Monitoring the Future survey explores the changes in important values, behaviors, and lifestyle orientations of American youth. We use the surveys of 12th grade students.

Target Sample: All 12th grade students (public and private schools)

Sample Size: Roughly 16,000 students in approximately 133 public and private high schools nationwide participate

Data Range & Frequency: Annually 1976-2019

Description of Survey/Item: Percent of students that want to be working in a school or university.

Specific Item(s): "Apart from the particular kind of work you want to do, how would you rate each of the following settings as a place to work?... Working in a school or university."

Response Options:

- "Not at all acceptable"
- "Somewhat acceptable"
- "Acceptable"
- "Desirable"

Measure: The percent of students that rated working in a school or university as "desirable."

Data Access: Public data accessed through ICPSR
<https://www.icpsr.umich.edu/web/NAHDAP/series/35>

National Center for Education Statistics (NCES) Surveys of High School Seniors

Link: <https://nces.ed.gov/surveys/nls72/>

Description: This is a series of nationally representative samples of high school students. There are different survey names over time, but NCES maintains several, intentionally consistent questions across cohorts. We use responses of high school seniors in the National Longitudinal Study of 1972, High School and Beyond in 1980 and 1982, the National Education Longitudinal Study in 1992, the Education Longitudinal Study in 2004, and the High School Longitudinal Study in 2012.

Target Sample: 12th grade students (public and private schools)

Sample Size:

- 1972: 22,652 students
- 1980: approximately 28,000 students
- 1982: approximately 30,000 students
- 1992: 17,192 students
- 2004: 15,905 students
- 2012: 23,018 students
-

Data Range & Frequency: 1972-2012 (1972, 1980, 1982, 1992, 2004, 2012)

Description of Survey/Item: Students expecting to teach

Specific Item(s): "What kind of work will you be doing when you are 30 years old?"

Response Options:

- Students can write or select: "school teachers such as elementary or secondary."

* Surveys in 1982 and 2004 allowed for students to write in responses and were later coded by survey administrators. Other survey years provided a list of at least 15 occupations. When write-ins were accepted, they were coded by the survey administrators.

Measure: We use the percent of students reporting that they expect to be a school teacher, such as elementary or secondary, as a measure of student interest in teaching.

Data Access: Public data accessed through NCES

Integrated Postsecondary Education Data System (IPEDS)

Link: <https://nces.ed.gov/ipeds/>

Description: IPEDS captures the universe of people enrolling and graduating from postsecondary education institutions in the United States.

Target Sample: People enrolling and graduating from postsecondary education

Sample Size: Population

Data Range & Frequency: Annual, 1986-2020

Description of Survey/Item: Undergraduate and MA education degree program completers, as a proportion of all undergraduate degree completers

Specific Item(s): Bachelor's and Master's degrees in education conferred by postsecondary institutions and all degrees conferred by postsecondary institutions.

Measure (1): Simple count of the number of individuals who have graduated with Bachelor's or Master's degrees in education.

Measure (2): Proportion of all Bachelor's and Master's degree completers who earned a degree in education.

Data Access: We use data compiled and published in Tables 318.10 and 325.40 in the NCES Digest of Education Statistics (2020).

Higher Education General Information Survey (HEGIS)

Link: <https://www.icpsr.umich.edu/web/ICPSR/series/30>

Description: The Higher Education General Information Survey (HEGIS) Series, the predecessor to the Integrated Postsecondary Education Data System (IPEDS) Series, was designed to provide comprehensive information on various aspects of postsecondary education.

Target Sample: People graduating from postsecondary education institutions

Sample Size: Population

Data Range & Frequency: Annual, 1970-1985

Description of Survey/Item: Undergraduate and MA education degree program completers, as a proportion of all undergraduate degree completers.

Specific Item(s): Bachelor's and Master's degrees in education conferred by postsecondary institutions and all degrees conferred by postsecondary institutions.

Measure (1): Simple count of the number of individuals who have graduated with Bachelor's or Master's degrees in education.

Measure (2): Proportion of all Bachelor's and Master's degree completers who earned a degree in education.

Data Access: We use data compiled and published in the Chartbook of Degrees Conferred, 1969-70 to 1993-94.

Title II

Link: <https://title2.ed.gov/Public/Home.aspx>

Description: Data collected by the U.S. Department of Education on the number of initial public-school teacher licenses and the number of program completers by state.

Target Sample: Number of licenses

Sample Size: Population

Data Range & Frequency: Annual, 2000-2020

Description of Survey/Item: Total number of teaching licenses awarded.

Specific Item(s): States and jurisdictions submit State Report Cards to the U.S. Department of Education annually.

Measure (1): Count of total teaching licenses awarded.

Measure (2): Percent of Bachelor’s degree completers in each year that earn a teaching license as measures of teacher preparation.

Data Access: We retrieved data on the number of initial credentials given by state before the 2019-20 school year by emailing the Westat Support Center at: Title2@westat.com. We accessed 2019-20 data on the public 2021 All States Report Data File on the Title II website.

Schools and Staffing Survey/The National Survey of Teachers and Principals

Link: <https://nces.ed.gov/surveys/sass/dataproducts.asp>

Description: The Schools and Staffing Survey (SASS) was an integrated study of public and private school districts, schools, principals, and teachers designed to provide descriptive data on the context of elementary and secondary education. After 2010–11, NCES redesigned SASS and named it the National Teacher and Principal Survey (NTPS) to reflect the redesigned study's focus on the teacher and principal labor market and on the state of K-12 school staff. NCES first conducted NTPS in 2015–16.

Target Sample: All K-12 teachers in public schools in the United States

Sample Size: About 45,000 to 60,000

Data Range & Frequency: 1987, 1993, 1999, 2003, 2007, 2011, 2015, 2017, 2020 (not released)

Description of Survey/Item (1): "I'm generally satisfied with being a teacher at this school"

Response Options (1):

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

Measure (1): We use the percent that “strongly agree.”

Description of Survey/Item (2): "The teachers at this school like being here; I would describe us as a satisfied group"

Response Options (2):

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

Measure (2): We use the percent that “strongly agree.”

Description of Survey/Item (3): "If you could go back to your college days and start over again would you become a teacher or not"

Response Options (3):

- Certainly would
- Probably would
- Chances about even
- Probably would not
- Certainly would not

Measure (3): We use the percent that “certainly would” or “probably would” teach again

Description of Survey/Item (4): “The stress and disappointments involved in teaching at this school aren’t really worth it.”

Response Options (4):

- Strongly agree
- Somewhat agree (Agree in 2003-04)
- Somewhat disagree (Disagree in 2003-04)
- Strongly disagree

Measure (4): We use the percent that “somewhat disagree” or “strongly disagree.”

Description of Survey/Item (5): “If I could get a higher paying job I’d leave teaching as soon as possible.”

Response Options (5):

- Strongly agree
- Somewhat agree (Agree in 2003-04)
- Somewhat disagree (Disagree in 2003-04)
- Strongly Disagree

Measure (5): We use the percent that “somewhat disagree or “strongly disagree.”

Description of Survey/Item (6): “I don’t seem to have as much enthusiasm now as I did when I began teaching.”

Response Options (6):

- Strongly agree
- Somewhat agree (Agree in 2003-04)
- Somewhat disagree (Disagree in 2003-04)
- Strongly disagree

Measure (6): We use the percent that “somewhat disagree” or “strongly disagree”.

Data Access: We use the DataLab interface on the NCES website (<https://nces.ed.gov/datalab/sass>) to generate means for each of these questions for all public school teachers in each year. We also use the Data Products tab on the NCES website for older surveys (<https://nces.ed.gov/surveys/sass/dataproducts.asp>).

Link: <https://www.metlife.com/about-us/newsroom/2012/march/metlife-survey-of-the-american-teacher-finds-decreased-teacher-s/>

Description: The MetLife Survey of the American Teacher, conducted by Harris Interactive, has been published annually since 1984. Designed to give voice to those closest to the classroom, the survey explores teacher’s opinions on a specific theme and related topics and brings them to the attention of educators, policymakers, and the public.

Target Sample: U.S. public school teachers of grades K-12

Sample Size: About 1,000

Data Range & Frequency: Annual, 1984-2012, 2022 (EdWeek)

Description of Survey/Item: The percent of teachers that report being very satisfied with teaching

Specific Item(s): Question text in 2012, 2011, 2001, 1987, 1986, 1984: “All in all, how satisfied would you say you are with your job as a teacher in the public schools?”

Question text in 2009, 2008, 2006, 2003, 1995, 1989, 1988, 1985: “All in all, how satisfied would you say you are with teaching as a career?”

Response Options:

- Very satisfied
- Somewhat satisfied
- Somewhat dissatisfied
- Very dissatisfied

Measure: Percent of teachers that report being “very satisfied” with teaching.

Data Access: For the years 1984-2012, we use data compiled and published in The MetLife Survey of the American Teacher: Challenges for School Leadership 2012 report: <https://files.eric.ed.gov/fulltext/ED542202.pdf>

For 2022, we use the data reported by Madeline Will of EdWeek on their original data collection: <https://www.edweek.org/teaching-learning/teacher-job-satisfaction-hits-an-all-time-low/2022/04>

Status of the American School Teacher

Link: <https://www.nea.org/>

Description: The National Education Association (NEA) Research Division developed a series of surveys and subsequent reports covering various aspects of teachers’ professional, family, and civic lives. The NEA has conducted this survey, The Status of the American Public School Teacher, every five years since 1956 to gather up-to-date and trend data on matters of importance to the profession.

Target Sample: All teachers in all public schools in the United States

Sample Size: Between 1,000 to 1,500

Data Range & Frequency: Annual, 1984-2012, 2022 (EdWeek)

Description of Survey/Item: “Willingness to teach again”

Response Options:

- Certainly would
- Probably would
- Chances about even for and against
- Probably would not
- Certainly would not

Measure: We use the percent that “certainly would” or “probably would” teach again.

Data Access: We used longitudinal, aggregate data compiled by the NEA Research Team in the 2005-2006 Report on the Status of the American School Teacher, (Table 48 on page 86): <https://eric.ed.gov/?id=ED521866>

American Federation of Teachers Survey

Link: www.aft.org

Description: The American Federation of Teachers is the second largest teachers’ union in the U.S. The AFT research division has conducted member surveys since 1991. As part of these surveys, they have asked a sample of teachers about their job satisfaction at least 12 times between 1991 and 2022.

Target Sample: AFT members

Sample Size: About 1,000

Data Range & Frequency: 1991-2022 (1991, 1999, 2001, 2008, 2010, 2013, 2014, 2016, 2018, 2020, 2021, 2022)

Description of Survey/Item: They ask teachers about their overall job satisfaction.

Specific Item(s): "How satisfied are you with your overall conditions?"

Response Options:

Answer choices are on a 5-point Likert scale that has changed slightly over time.

- Very satisfied
- Somewhat satisfied (Fairly satisfied 1991-2014)
- Somewhat dissatisfied (Just somewhat satisfied 1991-2014)
- Very dissatisfied (Not that satisfied 1991-2014)
- Not sure

Measure: We use the percent that report being "very satisfied."

Data Access: We use aggregate data emailed to us by members of the AFT Research and Communications Teams (Josh Delacruz Goldberg, Andrew Crook, and Guy Molyneux).

American Teacher Panel

Link: <https://www.rand.org/education-and-labor/projects/aep/about.html>

Description: The RAND Corporation launched the American Teacher Panel (ATP) in 2014 as part of a suite of nationally representative surveys. RAND recruited a standing group of panel respondents among K-12 public school teachers who participate in these online surveys. The surveys oversample teachers in some demographic groups and states to allow for subgroup analyses and apply appropriate sampling weights to generate national estimates.

Target Sample: Consistent panel of K-12 public school teachers.

Sample Size: About 1,000

Data Range & Frequency: Annual, 2020-2022

Description of Survey/Item: We use a measure of job satisfaction that is identical to the question from the SASS/NTPS, measuring the percent of teachers that agree that the teachers at their school are a satisfied group.

Specific Item(s): "The teachers at this school like being here; I would describe us as a satisfied group"

Response Options:

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

Measure: We use the percent that “somewhat agree” or “strongly agree”

Data Access: We use summary statistics reported in the State of the American Teacher and State of the American Principal Surveys Technical Documentation and Survey Results from 2020, 2021, and 2022

Appendix B

Data for Exploratory Economic, Sociopolitical, and Policy Explanations

NCES Per Pupil Expenditures

Link: https://nces.ed.gov/programs/digest/d21/tables/dt21_236.15.asp

https://nces.ed.gov/programs/digest/d09/tables/dt09_182.asp

Description: NCES records per pupil expenditure across the United States via the Common Core of Data. We use Table 182 from the 2009 Digest of Education Statistics and Table 236.15 from the 2021 Digest of Education Statistics.

Target Sample: K-12 public schools.

Sample Size: Population

Data Range & Frequency: Annual, 1970-2019

Description of Measure: Average total expenditure per pupil converted to 2021 dollars by year.

Data Access: Publicly available online via links above.

NCES Teacher Salary in Current Dollars

Link: https://nces.ed.gov/programs/digest/d21/tables/dt21_211.50.asp

Description: Data outlining public school teacher salary over time. We use Table 211.50 from the Digest of Education Statistics.

Target Sample: K-12 public schools.

Sample Size: Population

Data Range & Frequency: 1970-2021, Annual

Description of Measure: Public school teacher salaries in constant 2020-21 dollars.

Data Access: Publicly available online via link above.

NEA Membership

Link: <https://www.nea.org/resource-library/nea-handbook>

Description: Data on National Education Association unionization membership

Target Sample: Universal - full membership data

Sample Size: Population

Data Range & Frequency: Annual, 1970-2018

Description of Measure: Objective record of total membership in the NEA. Total membership includes retirees, students, substitutes and all others.

Data Access: Historical NEA Handbooks held in the library at Columbia University

AFT Membership

Link: <https://www.aft.org/>

Description: Count of American Federation of Teachers union members

Target Sample: Universal - full membership data

Sample Size: Population

Data Range & Frequency: Annual, 1970-2022

Description of Measure: Objective record of total membership, inclusive of retirees.

Data Access: Personal communication with the Office of the Secretary-Treasurer at the American Federation of Teachers

Larsen (2014) & NCES State Licensure Test Requirements

Link: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2387096

Description: We merge data from two primary sources; data from 1983-1997 were compiled by Larsen (2014) using a range of original sources, while data from 1998-2017 come from NCES's annual Digests of Educational Statistics, Chapter 2: State Regulations.

Target Sample: 50 U.S. States

Sample Size: Population

Data Range & Frequency (Larsen 2014): 1983-1997, Annual

Data Range & Frequency (NCES): 1998-2017, Annual

Description of Measures: The percent of states with laws requiring public school teachers to pass (1) a basic skills test, (2) a professional knowledge test, and (3) a subject matter test to earn a teaching license.

Data Access: Personal communication with Brad Larson and public data available from NCES

NEA Measures of Class Size

Link: <https://files.eric.ed.gov/fulltext/ED521866.pdf>

Description: Tables 20 and 22 in “Status of the American Public School Teacher: 2005-2006” provide historical data on average class sizes for non-departmentalized elementary teachers and departmentalized teachers (elementary or secondary).

Data Range & Frequency: Every 5 Years, 1971 to 2006

Description of Measure: Average class size

Date Access: Public data through the Institute of Education Sciences (ERIC)

NCES Measures of Class Size

Link:

- https://nces.ed.gov/surveys/sass/tables/sass0708_2009324_t1s_08.asp (2007-2008)
- https://nces.ed.gov/surveys/sass/tables/sass1112_2013314_t1s_007.asp (2011-2012)
- https://nces.ed.gov/surveys/ntps/tables/ntps_7t_051617.asp (2015-2016)
- https://nces.ed.gov/surveys/ntps/tables/ntps1718_ftable06_t1s.asp (2017-2018)

Description: Table created by NCES calculate average class size for four different waves of the SASS/NTPS.

Data Range & Frequency: SASS 2008-2009, 2011-2012; NTPS 2015-2016, 2017-2018

Description of Measure: Average class size

Date Access: Public reports and survey data through NCES

SASS /NTPS Measures of Working Conditions, Autonomy & Job Security

Link: <https://nces.ed.gov/surveys/ntps/>

Description: See Appendix A for full details

Description of Survey/Item (1): “I worry about the security of my job because of the performance of my students on state and/or local tests.”

Response Options (1):

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

Measure (1): We use the percent that “strongly disagree.”

Description of Survey/Item (2): How much actual control do you have IN YOUR CLASSROOM at this school over the following areas of your planning and teaching?

1. Selecting textbooks and other instructional materials
2. Selecting content, topics, and skills to be taught
3. Selecting teaching techniques
4. Evaluating and grading students
5. Disciplining students
6. Determining the amount of homework to be assigned

Response Options (2):

- No control
- Minor control
- Moderate control
- A great deal of control

Measure (2): We use the percent report having “moderate control” or “A great deal of control.”

Description of Survey/Item (3): “The school administration’s behavior toward the staff is supportive and encouraging”

Description of Survey/Item (4): “My principal enforces school rules for student conduct and backs me up when I need it”

Description of Survey/Item (5): “The principal knows what kind of school he or she wants and has communicated it to the staff.”

Description of Survey/Item (6): “In this school, staff members are recognized for a job well done.”

Description of Survey/Item (7): “Rules for student behavior are consistently enforced by teachers in this school, even for students who are not in their classes.”

Description of Survey/Item (8): “There is a great deal of cooperative effort among the staff members.”

Description of Survey/Item (9): “Necessary materials such as textbooks, supplies, and copy machines are available as needed by the staff.”

Response Options (3)-(9):

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

Measures (3)-(9): We use the percent that “somewhat agree” or “strongly agree.”

Description of Survey/Item (10): “Routine duties and paperwork interfere with my job of teaching”

NOTE: This question is the only working conditions item with a negative valence.

Response Options (10):

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

Measure (10): We use the percent that “somewhat agree” or “strongly agree.”

Shooting Incidents Records

Link: <https://www.chds.us/ssdb/>

Description: Shooting Incidents Records within Schools maintained by Center of Homeland Defense and Security

Target Sample: Objective universal record

Sample Size: Population

Data Range & Frequency: Annual, 1970-Present

Description of Measure: Objective record of shootings incidents

Data Access: Used public data via CHDS