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2 TEACHING AS A PROFESSION

INTASC Standards Addressed: 1, 2, 3, 4, 6, 7, 8, 9, 10

LEARNING OBJECTIVES

After you read this chapter, you should be able to

2.1 Compare and contrast the factors that make—or weaken—the status of teaching as a profession.

2.2 Defend the view that the teaching occupation has become increasingly professionalized over the generations.

2.3 Critique the research findings relating teacher preparation, teaching quality, student achievement, and teacher longevity.

2.4 Describe teacher licensure's rationale, state licensure practices, and the relationship between teacher certification and student achievement.

2.5 Identify the organizations that support teaching professionals and explain how they help professionalize teaching.

2.6 Argue how a school's professional culture and well-designed induction and mentoring programs can help new teachers transition into effective professional educators.

American education's future has become the focus of national attention. In 2018 and 2019, teacher strikes and walkouts made bold headlines across the country as educators from Arizona to Oklahoma and West Virginia and in cities including Denver, Los Angeles, and Oakland, California, protested low salaries and school-funding cuts. In March 2020, the COVID-19 virus forced many governors to shutter their schools and try to educate children through a mix of teacher-made work packets and/or online instruction. Arguably, American parents suddenly trying to "homeschool" their children were never more appreciative of teachers' essential role in their daily lives.

Today's teaching profession faces huge challenges. Teacher preparation programs have seen a 23% decline in the number of people completing their coursework.[1] Expanded career opportunities for undergraduate women (who earn 80% of education degrees) account for part of this decline.[2] The increasing responsibilities, long working hours, high stress without commensurate compensation (salary and benefits), the high accountability demands, the constant evaluations, too much testing and paperwork, and the lack of support are among reasons. Local issues also factor in. It is no surprise that some schools are chronically short of teachers, unable to find educators able and willing to work at current wages and conditions. Given these realities, most American parents do not want their children to become public school teachers.[3]

At the same time, the teaching profession has never been more essential. Like medicine or law, most developed nations regard education as vital for individual citizens and the larger society. Teaching is complex and intellectually demanding work that requires high levels of cognitive and emotional intelligence. Never more so than today, teaching is recognized as an essential public service, a meaningful and rewarding profession that improves children's lives and prepares them for satisfying and responsible adulthood. And most notably, for a large proportion of our children, their social mobility and life options *depend* on working repeatedly with highly effective teachers. Studies confirm that consistently working with highly effective teachers can overcome the academic limitations placed on students by their family backgrounds.[4] Ironically, these challenges can also become incentives to enter the profession where teachers – individually and collegially – can make life-changing differences for children.

Similarly, teachers' expectations for their working lives are shifting. Millennial teachers bring fresh ways of envisioning their teaching careers. New roles and career paths are opening, and school districts are exploring innovative approaches to teacher compensation and leadership. Seeing teaching as a profession; considering how it has evolved over the generations; understanding the research on the relationships between teacher preparation, teaching effectiveness, and student outcomes; acknowledging

the organizations that increase teacher development and the field's professionalization; and recognizing the school factors that help new teachers develop their classroom efficacy and expertise bring a heightened respect for the teaching occupation and its critical importance to local and national life.

2.1 FACTORS THAT MAKE TEACHING A PROFESSION

Teachers are professionals with expert knowledge about instruction and curriculum in their particular disciplines. They understand child development and the ways in which learners learn. As a group, teachers are well organized and increasingly participate in making decisions about educational practices and their work conditions.

2.1a Defining a Profession

Sociology professor Andrew Abbott defines a **profession** as an exclusive occupational group that applies abstract knowledge and specialized skills to particular cases and has expertise and influence to practice in a given domain or field.[5] Likewise, every profession claims competence by successfully showing they have met their profession's high standards of practice.[6] Establishing a profession means that individuals in a certain occupation claim an authority—power, confidence, and right—to practice that livelihood. Because they can demonstrate expertise, these individuals receive the opportunity to do the profession's work.

Broadly defined, **professionalism** means accepting responsibility for developing and growing one's expertise. For teachers, professionalism means incorporating specialized knowledge about student learning, curriculum, instruction, and assessment; particular attention to students' unique needs and well-being; self-regulation; ethical behavior; and infusing autonomous performance and responsibility into their practice. In addition, teacher professionalism implies a sense of stewardship, of caring and doing everything possible to improve teaching and learning—even beyond their own classroom and school. Accomplishing all this requires values such as honesty, fairness, and integrity in the practitioner.

A profession can keep its authority if the public accepts its claims of expertise and if the profession's internal structure of well-defined and agreed-upon knowledge and skills support it. For instance, people believe that physicians are professionals because they know anatomy, physiology, biochemistry, and pathology, and have specialized information and abilities gained through their study in an accredited medical school. The medical profession includes organizing groups that provide written and performance tests that enable doctors to become board certified and earn advanced credentials.

"Few would require cardiologists to deliver babies, real-estate lawyers to defend criminal cases, chemical engineers to design bridges, or sociology professors to teach English. The commonly held assumption is that such traditional professions require a great deal of skill and training; hence, specialization is assumed to be necessary."[7]

Characteristics of a profession include the following elements:[8]

- A clearly defined, highly developed, specialized, and theoretical knowledge base beyond that understood by laypersons
- An orientation toward social or public service and a lifetime commitment to career
- Agreed-upon standards of professional practice shaped by practitioners to ensure or certify minimal competence for group membership
- Autonomy for individuals and the occupational group in making decisions about selected aspects of work
- A code of ethics to help clarify ambiguous issues related to services rendered
- A lengthy period of specialized training
- Control of licensing and certification standards and entry requirements
- Control over training new entrants

- Self-governing and self-policing authority by members of the profession, especially about professional ethics (acceptance of responsibility for judgments made and acts performed related to services rendered)
- Professional associations and elite groups that provide recognition for individual achievements
- High prestige and economic standing

Let's look more closely at education as a profession in four key areas as they compare with law, engineering, and medicine: (1) a defined body of knowledge and skills beyond that which laypersons recognize as unique and special; (2) control over licensing standards and/or entry requirements; (3) autonomy in making decisions about certain work areas; and (4) high prestige and economic standing. We will consider professional associations, unions, and elite groups later in this chapter and discuss teachers and ethics in Chapter 9.

A Defined Body of Knowledge and Skills

All professions have a certain knowledge and skills specialty requiring complex reasoning and problem-solving with large amounts of information that separates their members from the general public. When members make this clearly defined expertise widely known, they protect the public from untrained amateurs by denying them professional membership.

Until relatively recently, however, "teaching" had no agreed-upon specialized body of knowledge.[9] Traditionally, teaching has not been guided by extensive procedural rules as found in law or by established methods such as those found in the physical sciences and health care. As a result, many people talk about education as if they—the laypersons—were also experts. To them, teaching holds no mystery because they have all had personal experiences as students. Because they cannot see teachers' store of professional knowledge and skills or examine the complex mental planning decisions or the moment-by-moment thinking choices made in a dynamic classroom, laypeople assume that teaching does not require any extraordinary talent apart from knowing their subject. In fact, Daniel C. Lortie, professor emeritus of education at the University of Chicago, has coined the phrase **"apprenticeship of observation"** to describe the phenomenon where laypersons who have spent thousands of hours as schoolchildren watching and judging teachers in practice develop many false ideas about teaching and mistakenly consider themselves to be "experts."[10]

Furthermore, until recently, teaching's less well-defined body of knowledge than law or the physical sciences has allowed teacher education course requirements to vary from state to state, and even among teacher training institutions within a given state. While teacher education usually includes three major components—general education, specialized subject education, and professional education—heated discussions often arise over which is more important and by how much. For instance, how many credit hours should a prospective teacher have in professional practice (pedagogy) compared to course hours in a specialized subject field? How much clinical experience in actual school settings should be required? Should students learn the subject discipline in a liberal arts college or within specialized teacher education schools? One might logically ask, if leaders in teacher education cannot clearly agree on the profession's body of knowledge, how can the general public expect to see teachers as true professionals?

Over the past few decades, heightened expectations for student learning have led to heightened expectations for teaching effectiveness. As a result, the body of knowledge for teaching has become clearer, more consensual, and tied to high performance standards. Increasingly, states have adopted a common set of high-quality teacher performance standards using national professional benchmarks.[11] Further, research finds that this increased professional knowledge about teaching effectiveness is making a measurable difference in student learning. Teachers using effective teaching behaviors have been empirically shown to increase student learning linked to increased student achievement.[12]

We now have the means to help teachers master these essential dispositions and practices. For example, educators now have research-validated observation tools to assess teachers' classroom and

professional performance and guide professional growth. For example, Charlotte Danielson's research-based *Framework for Teaching* provides clear descriptions of good teaching in all its complexity at four different performance levels and offers a comprehensive approach to teacher professional learning across their careers, from preservice teacher preparation through teacher leadership.[13] The *Framework* has been repeatedly validated as a means for teachers to improve their teaching practice in ways that increase measured student achievement.[14] Likewise, Robert Marzano and colleagues' Focused Teacher Evaluation Model[15] offers a standards-based evaluation model that also identifies essential behaviors to measure teacher effectiveness. It focuses on student results and gives actionable feedback teachers can use to improve their instructional practices. Research on Marzano's model finds a correlation between the model, student learning gains, and increased student achievement on state math and reading scores.[16] Both instruments measure teacher growth and promote teacher development.

Additionally, since 1954, national teacher education accrediting organizations (discussed later in this chapter) have been setting high, clear standards for teacher preparation programs that specify the courses to be taken and the faculty qualifications for teaching them. Increasingly, teacher preparation programs have adjusted their programs to become accredited, recognizing that having a nationally recognized, respected, and defined body of knowledge strengthens their students' knowledge and skills as well as enhances teaching as a profession.

Controlling Requirements for Entrance and Licensing

Unlike other professions that have a standard path to licensure, teaching has historically lacked uniform requirements for professional entry. Prospective teachers who want to teach in U.S. public schools must receive certification in their desired subject areas and grade levels by the state in which they choose to practice. Certification requirements vary from state to state, differing in time, cost, and difficulty. Nearly every state requires teachers to pass a licensure exam before entering the classroom. Some states require a performance assessment and/or a pedagogical skills exam (to assess teachers' mastery of the professional competencies they gain during teacher preparation to help students learn their subject) plus a content subject assessment and/or a basic skills exam. Certain states offer 1- to 3-year "emergency credentials" that allow candidates to bypass the regular licensure requirements. For the most part, states make these decisions based on political influences and other local considerations.

This array of requirements prompts a variance in teacher preparation programs (i.e., How many hours are required in different course areas? Must teacher candidates pass the licensing exam before or after they complete the teacher preparation program?). Some states issue certificates valid for only 3 to 5 years. To renew them, teachers must meet additional requirements—usually proof of a set number of professional development or graduate education or subject course hours—and pay new fees. All these disparities make it difficult to assess how "classroom ready" entering teachers actually are.

The trend toward testing teachers to assess their basic knowledge and skills remains controversial. Many different teacher licensure exams exist, and states hold teachers to widely different standards of rigor. But because states control the "cut scores" that mark the difference between passing and failing, a teacher who receives a certain score may "pass" in one state but "fail" in another.

Reciprocity of teaching certificates among states is another concern. **Reciprocity** is an agreement between states to accept each other's teaching credentials. Each state often imposes its own state-specific requirements as part of the interstate reciprocity agreements. Because different states have different certification requirements, teachers often find it difficult to move between states and continue to be certified. Teachers must apply for a new license if they wish to teach in a state where they do not currently hold a teaching certificate. States review the request for reciprocity case by case.[17]

The subject of teaching certification requirements generates controversy. Those who want stricter entry requirements insist that these will help upgrade teacher quality and qualifications. Others argue that the entry gates be loosened to allow access to midcareer changers into teaching and allow alternative certification programs that permit college graduates without formal education training to teach immediately. Both sides see their approach as attracting and keeping talented candidates into teaching. But the outcomes of such initiatives could be to diminish teaching's professional status.

Autonomy in Deciding Work Responsibilities

Every profession considers all group members qualified to make expert judgments about their work; outsiders are deemed unqualified to make such decisions. Nonetheless, teachers traditionally have had little input about what they teach or the resources they use. School officials often hire outside "experts" with little teaching experience to help teachers select textbooks, write grant proposals, or resolve local community issues. Likewise, school reform ideas often come from government officials, business leaders, and civic groups—not from teachers. More and more, this situation is changing. Educators at all levels are having increased input, individually and collectively, into education policy decisions.

Research finds that teacher autonomy—such as selecting textbooks and other classroom materials; choosing content, topics, and skills to be taught; deciding on teaching techniques; and evaluating, grading, and disciplining students—is positively associated with teachers' job satisfaction and teacher retention.[18] A 2015 national report found that, from 2003 to 2012, teachers perceived significant declines in their autonomy, with many having less control over factors that affected their classrooms.[19] Many elements, from high-stakes testing to common core state standards and locally developed curriculum, may have contributed.

Limits to teacher autonomy may be necessary as school leaders and policy makers must consider local and national expectations for accountability, consistency, and equity. But as teachers expand their knowledge about effective teaching and learning practices, become increasingly skilled at generating student learning, and actively participate in site-based school leadership, they are expanding their autonomy in influencing their own work responsibilities.

Today's teachers enter the profession from a variety of backgrounds, including prior careers.

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Prestige and Economic Standing

Prestige is the level of social respect or standing, the good reputation, and high esteem accorded to an individual or a group because of their position's status. Occupations have high prestige if the public sees them as holding a relatively lofty position in the hierarchy of occupations and believes the people who are in that occupation make especially valuable contributions to society. In our culture, the most prestigious occupations require an advanced level of formal education or skill, practitioner autonomy, a recognized knowledge base, a self-governing professional body, a code of ethics, and little physical or manual labor. **Status** refers to the position or standing in society that confers certain benefits and

privileges. Factors such as remuneration, knowledge, responsibility, social utility, and prestige contribute to social status. In addition to this "objective" definition, status also has a "personal" dimension. **Subjective status** refers to the self-perception of rank or prestige that emphasizes personal achievement.

Generalizing about teachers' occupational prestige is not clear cut. Some consider teaching as a semiprofession seeking full professional status,[20] whereas others assert that official statistics give teaching formal professional status.[21]

Many features may account for the teaching's midrange prestige and social status. For 50 years, sociologists have studied how the public evaluates occupations' relative prestige. The data show that teaching, like many other female-dominated occupations, rates in the middle, lower than physicians, military officers, engineers, or scientists and higher than business executives, entertainers, or member of Congress.[22] The large teacher workforce, the wide variations in teacher education program expectations and state licensure requirements, and the taxpayer-paid salaries tend to limit their compensation and undermine their socioeconomic status. Similarly, teachers' connections with childhood rather than adulthood, working with groups of children (*required* to attend school) rather than with individuals (usually adults who *voluntarily* go to physicians or lawyers), and the confusion about whether teaching has a specialized body of professional knowledge to justify higher salaries also figure in to determining occupational prestige and status.[23] And since virtually everyone has been a student at one time, teaching has less professional "mystique" than less familiar occupations.

In the 2014 Harris Poll asking respondents to say how much prestige each job had, teaching did not even make the top 10.[24] Thus, status of teaching as a prestigious occupation is debatable. Since prestige and status are relatively independent, a teacher may have the general public's high esteem for being competent, dedicated, and caring in his or her work, but the occupation itself may lack prestige because of teaching's relatively low compensation.[25] As a profession, teaching has most—but not all—of the requisite attributes.

Nonetheless, teaching as a career has experienced changes that have improved its status. First, teachers' average education level has increased significantly over the past century. Now, all teachers have bachelor's degrees; many have master's degrees and even doctorates. Second, teaching has become increasingly complex. Effective teachers use high-level thinking in selecting appropriate subject content, planning and targeting instruction to meet diagnosed student learning needs, facilitating student engagement and mastery, and assessing learning outcomes in ways that increase students' knowledge and skills and improve teaching. Likewise, effective teachers have high levels of language proficiencies in reading, writing, and speaking and expertise using a wide array of media to promote learning. Teachers also work successfully with a variety of people—students, colleagues, parents, and administrators. All these factors positively impact teachers' prestige and esteem in their communities.

Occupational prestige and status are not the last word in measuring teachers' value, however. Sociologists are careful to separate **professionalization** from **professionalism**. The former descriptor refers to the occupations' qualities (typically enhanced by increasing training or raising required qualifications), whereas the latter refers to the attitudes or psychological attributes of those who think they are (or aspire to be) professionals. The latter orientation sees a professional as someone, not an amateur, who is committed to a career and to public service.[26] Teachers can be highly professional in their attitudes, expertise, behaviors, and commitment in their work lives even though their occupation, overall, may not meet some of the stringent criteria more evident in high-prestige professions. This positive orientation raises teachers' esteem and subjective status. Subjective status also improves when teachers feel valued within the profession; feel their school leaders' trust when they receive challenges and the time and support to meet them; get funds to participate in further professional education; work with high-quality resources and facilities; and provide continuing professional development to other teachers. Voters, through their governmental representatives, can elevate the profession's prestige by raising both the salaries and the academic-level requirements for education and to receive professional licenses.

Studies find that several indices of professionalization—namely, teachers' autonomy, authority, and decision-making influence, as well as induction and support for new teachers—are associated with positive student outcomes.[27] Researchers observe that in all the most successful education systems, teachers' high quality and status are common features and assert that the professional status is one factor that attract new teachers to the profession.[28]

Teacher Salaries

As the old cliché goes, teachers are not in it for the money. Fifty-five percent of teachers said they are not satisfied with their teaching salary.[29] Nearly one in five public school teachers have second jobs during the school year.[30] In the view of many, American public school teachers are not being paid anything near what they are worth.

Salary plays a key role in determining an occupation's prestige. As discussed, teachers are not as highly paid as physicians, lawyers, engineers, business executives, and college professors because the public believes that these other professionals deal with more abstract and complex material than preK–12 teachers do, and they work with individuals (usually adults) who come to them voluntarily (as compared to teachers' "captive audience" of children). In addition, these fields require more demanding academic preparation and licensure than does public school teaching. Yet increasingly, the public favors raising teacher pay.[31]

In most preK–12 school districts, teachers' uniform salary schedules determine their compensation (salary, benefits, extra pay, and pensions), with adjustments made for educational credentials ("lanes") and teaching experience ("steps"). Developed in the early to mid-20th century, teacher salary schedules reflect an effort to reduce wage inequality stemming from favoritism, gender, race, and ethnicity in assigning compensation. In the 2011–2012 school year (the most current year available), an estimated 89% of public school districts paid teachers according to uniform salary schedules.[32] But this approach to compensation may not offer the best incentive to attract, develop, and keep effective teachers.

For more than 50 years, teachers' salary and overall compensation have been eroding. An analysis of U.S. census data from 1940 to 2000 shows that the annual salary teachers received fell sharply relative to the annual pay of other workers with college degrees.[33] According to the Economic Policy Institute, a nonpartisan think tank, public school teachers' average weekly wages, adjusted for inflation, have fallen, whereas the weekly wages of other college graduates have risen: Teachers are paid nearly $350 *less* each week in salary, or 23% *less* than their non-teaching college-educated peers. Teachers' 1960 "wage premium" (when women teachers were paid more than comparably educated and experienced women employees in other careers) has become a 21.4% "wage penalty" in 2018. Although teachers do receive better benefits than other college-educated workers, even after considering these in the analysis, the total teacher compensation penalty was 13.1% in 2018. These wage penalties vary across the states, ranging from 0.2% to 32.6%.[34]

Table 2.1 highlights the national 2018 mean average salaries for occupations requiring a college degree. The average secondary school teacher earns $11,280 less than a registered nurse and $14,590 less than an accountant each year (the next closest professions listed) than other college graduates, even though entry into each of these fields requires a 4-year college degree.

TABLE 2.1 ■ Annual Mean Wages for Occupations Requiring a College Degree, 2018

Occupation	Annual Mean Wage
Recent college graduate starting average salary	$ 50,944*
Engineers	$ 99,230
Elementary and secondary school administrators	$ 98,750
Computer programmers	$ 89,580
Social workers	$ 85,900
Accountants, auditors	$ 78,820
Registered nurses	$ 75,510
Secondary school teacher	$ 64,230
Elementary and middle school teachers	$ 51,290

Note: *Miller, S. (2019, August 22). Average starting salary for recent college grads hovers near $51,000. *SHRM*. https://www.shrm.org/resourcesandtools/hr-topics/compensation/pages/average-starting-salary-for-recent-college-grads.aspx

Source: Bureau of Labor Statistics. (2019). *May 2018 National occupational employment and wage estimates United States.* United States Department of Labor. https://www.bls.gov/oes/current/oes_nat.htm#00-0000

Of course, it is a mistake to assume that every college degree-requiring occupation should receive the same salary, and supply and demand for certain skills—not years of schooling—determine wages. Additionally, not all agree that teachers are underpaid.[35]

Then, too, teacher salary analyses typically look at teachers' average salary levels of particular types of schools, localities, and states. This can be misleading because each state determines its own education funding amounts,[36] and teacher salary levels are often standardized according to a uniform schedule based on education levels and years of experience. When considering average salaries, therefore, it is difficult to know whether the salary differences are due to the geographic location (and its cost of living), a more mature teacher workforce (who are paid higher for their extra years on the salary scale), or actual differences in compensation.

Teacher compensation consists of more than salary; it also includes benefits. States and localities often choose to contribute to teacher pension benefits—which promise future advantages—rather than provide present-day increases in teacher salaries.[37] Typically, both teachers and employers make annual contributions to a pension trust fund. Pension rights are typically considered part of a contract between the employer and the employee, often the result of collective bargaining agreements. Once approved, these plans have constitutional protections in certain states. As a rule, public school teachers and other government employees have a total compensation and benefits package that is lower (or at least not higher) than comparable private-sector workers receive.[38]

Most states use **defined benefit (DB) plans**—in which employers guarantee employees a special annual retirement benefit based on a formula, generally considering final average salaries and years of services. Notably, individual benefits are not tied to contributions. Because retirees are guaranteed a certain benefit amount—in addition to features often including cost of living adjustments, young age for normal retirement, and retiree health benefits—the government (taxpayers) must make up any shortfalls resulting from less-than-expected actual pension fund investment returns. Such features are rare in private-sector pensions. Depending on the state, other types of pension plans may also be available. Considering teachers' pension benefits as part of their compensation places salary in a different context.

Traditionally, teachers accepted a "trade-off," receiving relatively low salaries and low-to-no cost health care premiums while working in exchange for regular payments (pensions) and subsidized health care after retirement. But today, this compact is unraveling. Although most state and local governments promise this benefit to employees, few states or municipalities have reserved the monies to honor this commitment.[39] In 2018, teacher pensions made up about $500 billion in unfunded liability,[40] with most state pension funds in debt, falling short of their investment targets and without enough money set aside to fund the pension promise they made to public employees. As a result, many states are either reducing or ending this benefit.

Moreover, health care costs—including premiums, copayments, and deductibles—are spiraling, and teachers' salaries are not keeping up with inflation. On average over the past decade, teacher salaries have increased 1.4% a year as compared with increases of 4% for health insurance and 7.8% for retirement.[41] In fact, most teacher compensation increases go to pay for health insurance and unfunded pension liabilities rather than increased salaries.[42]

Teachers have other ways of supplementing their salaries. Most school districts offer teachers opportunities to earn stipends as club sponsors, department heads, coaches, and summer school instructors, with additional money for earning advanced degrees. Although teachers can make a comfortable living, depending on their subject specialty, their state and school district, and their initiative, recruiting and keeping capable, qualified, and committed teachers is critical. Given our market-driven economy, persons with high-demand skills can find attractive incentives in occupations other than education; the law of supply and demand does not stop at the schoolhouse door.

The issues of teacher salaries, teacher quality, and student achievement are connected. Effective teachers are the most important school-based determinant of student achievement, and the evidence linking teaching quality and student achievement is overwhelming.[43] Salary is a proven method of attracting a larger applicant pool, and selecting the highest-quality teachers from that pool is key (although it may also take meaningful adjustments in school culture and climate to keep them).[44] The growing wage and compensation differences make it more difficult to recruit and retain talented

Research findings show teaching requires knowledge of subject, pedagogy, and learners.

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teachers. States with lower salaries and poorer working conditions have larger teacher shortages, especially for schools serving children of color, children with disabilities, and English learners.[45] Raising teachers' salaries is a critical part in any strategy to recruit and retain a better teacher workforce.

Lastly, teaching as a profession has always been about more than the money. Teachers have the essential task of ensuring children's intellectual growth and preparing each new generation to competently enter the economic, political, and social realms. It would be reasonable to expect that our society would reward such important work with high status and appropriate compensation. Yet as Table 2.1 shows, the average teacher earns less than colleagues in professions requiring similar educational preparation. But since states' legislators and governors are largely responsible for funding schools—and teachers' compensation packages—informed and motivated voters can influence the financial and community support that their state's education and teachers receive.

2.2 HOW THE TEACHER PROFESSION HAS EVOLVED

Today's teachers bear society's expectations of higher achievement for every student, regardless of background or life circumstances. The labor market welcomes highly intelligent, well-educated employees of every race, ethnicity, and gender. As a result, teaching and schooling have changed more dramatically in the past few decades than they did in the two centuries before. Teachers today are working by a whole new set of rules.

2.2a Changes Over the Decades

Although the first American teachers were male "schoolmasters," by 1870 women outnumbered men as teachers across the nation—an imbalance not reversed since it began.[46] As a result, teaching has been a profession largely shaped by a "gendered bureaucracy" in which men, viewed as professionals, supervised and trained women, who actually taught. For the most part, young women teachers did not remain in their classrooms for long. Many married and left to have families. Female teacher turnover was an expected part of the school culture. Because they were seen as a source of cheaper and less aggressive labor than men throughout the 19th century and into the 20th century, women teachers were paid less than their male counterparts.

In the early 20th century, the U.S. educational system organized teaching and learning in simple and mechanistic ways. Administrators—usually men—maintained their schools' continuity. They hired departing teachers' replacements and tried to get newcomers up to speed as efficiently as possible. To achieve this feat, schools typically took an unsophisticated view of teaching. The hiring protocol addressed basic questions:

- Did teachers know their subjects (at least better than their students)?
- Could teachers keep their classrooms orderly, quiet, and purposeful?
- Could teachers move all students out of the halls by the time the next class's bell rang?
- Could teachers' students score highly on tests (so administrators could infer what they learned)?

Thus, although teachers considered themselves to be professionals, the organizations in which they worked—schools—often did not always treat them as such.

In the two decades following World War II, teaching changed from an occupation requiring relatively little specialized training to a profession that demanded increasing levels of preparation and competence. Yet partially in response to the earlier political and life-choice realities, teaching remained an **"unstaged" career**, lacking a progression of steps through which one could advance. Teachers' responsibilities seldom changed over the years, from their first to their last workdays.

Lack of Career Stages

Analysts offer differing explanations for teaching's traditional lack of career stages. Because teaching was widely regarded as "woman's work," some concluded that it did not require the same kinds of promotions that signaled advancement in male-dominant careers. And because child rearing has traditionally shaped women's employment patterns, teaching has been a high-turnover field, not easily plotted out into stages. In 1956, a national survey of first-year teachers found that whereas 80% of the male respondents expected to remain continuously employed as teachers or administrators, only 25% of the female respondents had similar expectations. The vast majority of women who planned to leave education listed "raising a family" as their reason, even though many of those same women returned to teaching after their children were in school.[47] With women living in a society that expected mothers to stay home with their children, personal and family changes often dictated career changes.

Other analysts point to schools' customary **"egg crate" structure**, in which teachers work alone rather than as members of an integrated and tiered organization, for the lack of career stages. In this view, hiring teachers to fill vacant classrooms could supposedly occur with relatively little disruption to the rest of the organization. Some blame the lack of career steps on the influence of teaching's conservative milieu, which discourages efforts to distinguish individuals by competence. Finally, certain analysts conclude that teaching's unstaged nature results from teachers' tendency to define their success based on their work inside the classroom rather than their ability to move up to higher-status positions outside it. This may be circular reasoning because teachers may have looked for success markers from those items available to them. Such has traditionally been teaching's professional culture: rationalizing and minimizing the absence of teaching career stages, promotions, and tangible rewards.

2.2b Changing Career Expectations

Typically, careers are marked by upward movement in responsibly, status, and earnings. Teaching's flat, or narrow, career structure is not compatible with the modern workforce's expectations.[48] But those entering teaching today have different expectations for their careers than did the teachers who entered the profession two generations ago. As a result, the profession's structure is changing to meet modern workplace demands and accommodate the new teaching workforce.

Until the mid-1960s, teaching was the primary career option for large numbers of well-educated women and people of color to whom other professions were formally or informally closed. This is no longer true. Today, persons considering teaching have many more career options than did the retiring

veterans of the current school system. Many of these alternative careers offer higher salaries, greater status and prestige, and better working conditions than does teaching. As a result, many of today's prospective teachers are drawn from a narrower population than the one that filled the teaching ranks decades earlier.

In addition, today's new and prospective teachers differ from retiring teachers in other important ways: They enter teaching at different career stages, they take multiple routes to the classroom, and they plan to spend fewer years there. Approximately 60% of new teachers enter the field through traditional undergraduate teacher preparation programs, while a growing trend sees mature adults enter teaching as a second career.[49] About 40% enter the profession through an alternative route. Many mid-career new teachers come to teaching believing that it offers more meaningful work than their previous employment.

Moreover, the concept of work and career has evolved over the past century. Traditionally, careers were thought to progress in linear career sequence within the context of one or two firms. Success was defined by the organization and measured in promotions and salary increases. In comparison, by 2000, most Americans changed jobs every 4.5 years.[50]

Consequently, whereas veteran teachers expected to remain in their classrooms from novice days until retirement, many new teachers approach teaching tentatively, conditionally, or as one of several careers they expect to have over their working lives. Few see themselves remaining in the classroom for the long term. Although first-career teachers expect to be excellent teachers, they do not plan to make classroom teaching their life's work.[51]

At the same time, the United States is facing a teacher shortage. Unique dynamics of the state and local teacher labor market—as well as school level, school location, and subject area—experience more serious shortages than others. Half of the almost 500,000 teachers who leave their school each year leave the teaching profession; and 90% of the nationwide annual demand for teachers comes from teachers leaving the profession.[52] This topic is more fully discussed elsewhere.[53]

In sum, new teachers have more career choices available to them and do not expect to make classroom teaching their sole occupation. Many have solid employment experiences in other career fields and arrive at teaching with a maturity born of greater chronological age and life-earned wisdom. But in many ways, teaching's current career structure is not attractive to many new or prospective educators. Given these factors, it is the teacher's preparation, potential structural changes in the profession, and the school's professional culture that often make the difference between teachers who enter, teachers who leave, and teachers who stay.

2.2c Teacher Career Advancement Initiatives

Many new teachers observe that while the nature of teaching has becoming increasingly demanding and their career expectations for teaching have changed, the structure of public school teaching careers and the teachers' workday have not. In their view, "we are asking teachers to deliver 21st century instruction in a job structure designed for the demands of the past century."[54] Although mostly true, educators and policy makers are asking questions about whether traditional practices are worthwhile and are exploring interesting new ideas that may redesign teaching's traditional career structure.

Paying for Masters' Degrees and Experience

A sizable body of research investigating the relationship between teachers' coursework and degrees beyond a bachelor's and their students' academic achievement finds attaining a master's degree correlates with higher student achievement *only* for certain subjects (i.e., mathematics and science).[55] It makes sense that a chemistry teacher with a master's in chemistry is more likely to get better student outcomes than an earth science teacher with a master's in educational leadership. But when measured across all teachers and all types of degrees, the average master's degree shows little correlation to student achievement.[56] Nonetheless, of the 56.4% of all U.S. preK–12 teachers who hold a master's degree or higher (up from 47.1% in 1987–1988),[57] about 10% hold credentials in math or science.[58] This extra stipend can amount to an extra $10,000 a year or more by the time the teacher reaches the top of the salary scale, regardless of whether the degree is in the same subject the teacher is teaching.

From the data, it is unclear how much of the "master's-and-above" supplement actually attracts or rewards effective teachers. A 2012 report observed that it cost an estimated $14.8 billion, annually, to pay teachers for earning advanced degrees.[59] Some encourage school districts to stop this practice and, instead, use the money more flexibly to attract and keep effective teachers.[60]

By comparison, teaching experience does appear to positively impact student achievement. Advances in research methods and data systems now allow investigators to conclude that teachers continue to "grow on the job," and these gains continue into their second and third decades of teaching.[61] This is especially true when they teach in a supportive and collegial working environment and when they amass experience in the same grade level, subject, or district.[62] Of course, variations in teacher effectiveness exist at every career stage. Not every experienced teacher is more effective and not every inexperienced teacher is less effective, on average. Additionally, teacher education and experience are an equity issue because the least experienced teachers tend to be disproportionately concentrated in low-income schools with large populations of underrepresented students and English language learners.[63]

Alternative Pay Structures to Advance Teaching as a Career

Education policy makers currently are looking at alternative approaches to teacher compensation to achieve key policy goals: attract and retain quality teachers and improve and enhance their teaching skills once hired. A broader, more flexible salary structure may be an idea whose time has come. Alternative compensation may take the forms of performance pay, knowledge- and skill-based pay, differentiated salary schedules, and career pathways. A closer look at each approach and related research can help inform compensation policy decisions.

Performance (Merit) Pay and Research **Performance pay**—sometimes called *merit pay* or *performance awards*—usually means a system of employee compensation that links salary to measures of work quality or goals such as increasing student achievement. Advocates assert that paying educators more can enhance their effectiveness as well as attract and retain high performers. Most often, districts' performance pay can be either an annual salary increase (where the performance-based compensation becomes a guaranteed part of the teacher's base salary in all future years) or an annual bonus (where a teacher receives the monetary award based on performance in a given year and must be re-earned annually). Forty percent (51) of the 124 largest school districts in the country offer some form of performance pay, usually tied to permanent salary increases.[64]

Research is inconclusive about whether teacher performance pay improves student outcomes.[65] While some studies have found positive (if modest) effects on student achievement,[66] most studies have not.[67] Findings greatly depend on how the program is structured and implemented in the school context.[68] Moreover, research indicates that performance pay is almost always force-fit upon existing compensation plans, and piecemeal, short-term approaches are not likely to strongly affect teacher motivation or student achievement.[69] Performance pay also assumes that teachers can perform better if they have the "right" incentives, a problematic notion. A more complete discussion of these studies' limitations is available elsewhere.[70]

Critics of performance pay note, among other things, that they lack teacher support; they discourage teacher collaboration and harm school culture; teacher performance is difficult to monitor in reliable, valid, and fair ways; and many unintended and harmful consequences result (such as encouraging teacher transfers from low-performing schools or behaving opportunistically by "teaching to the test" or cheating).[71] The National Education Association (NEA) and the American Federation of Teachers (AFT) offer qualified support for performance pay.[72]

Knowledge- and Skills-Based Pay and Research **Knowledge- and skills-based pay** incentive programs give teachers extra compensation for acquiring new knowledge and practices the school and district believe are critical to their goals, such as improved student outcomes. Qualifying for these rewards may include completing teaching portfolios, obtaining dual certification, or earning a graduate degree in their taught subject. Occasionally, these professional proficiencies are linked to external assessments that gauge teacher competency (such as Educational Testing Service's Praxis exams) or evaluate effective practices (such as earning National Board for Professional Teaching Standards [NBPTS] certification).

NBPTS-certified teachers often receive higher salaries and overall higher earnings than noncertified peers. As of July 2019, 25 states awarded stipends ranging from $1,000 to $10,000 annually (and up to 12% above base pay) to teachers holding NBPTS certification. Almost every state allows teachers to use their NBPTS certification as credits toward obtaining or renewing their professional educator credential.[73]

Differentiated Salary Schedules Paying effective teachers more than their colleagues with similar years of experience to teach hard-to-staff subjects or work in hard-to-staff schools—also known as using **differentiated salary schedules**—is becoming more commonplace. In a 50-state sample of the 100 biggest school districts in the country and the largest districts in each state, differentiated pay is currently available in 124 of 145 school districts.[74]

Districts are twice as likely to offer extra compensation for teaching hard-to-staff subjects (i.e., STEM, English as a second language, and special education) as they are for working in high-needs schools.[75] Most award annual salary supplements (stipends), start new hires in these subject areas at a higher level on the salary schedule, or pay an increased base salary on a separate salary schedule. One-time stipends may take the form of recruitment bonuses. Annual stipends can vary district to district, ranging from $100 to $20,000, annually. For example, the Hawaii Department of Education gives a one-time $10,000 recruitment bonus to special education teachers who agree to work in a special education classroom for 3 years (paid over the 3 years).[76] Additional financial incentives include paying the newly hired teacher's moving or housing expenses if they teach in critical subject areas; offering up to 10 extra days of paid professional development; providing loan forgiveness, mortgage assistance, or tuition reimbursement; or leave the differential pay to the superintendent's discretion.

Studies suggest that teacher vacancies in hard-to-staff subjects or schools could benefit from differentiating salaries along these dimensions.[77] Some argue that boosting salaries for a small subset of teachers would be more cost effective than paying supplements to teachers earning master's degrees.[78] Similarly, some conclude that since performance pay is not cost effective over time (because the teacher costs outpace the student achievement), providing differentiated pay for effective teachers to transfer to high-needs schools becomes more cost effective in the long term.[79]

Neither the AFT and the NEA oppose changes to the salary scales but insist it must be done at the local level with teachers' support and input.[80] To gain their support, teachers must believe that the differentiated pay is based on credible and believable grounds. In locales where teachers are union members, union involvement will ensure the plans conform with contracts. Likewise, state- and local-level policy makers' involvement will be needed to guarantee sufficient monies will be available over time to sustain the program.

Career Pathways As professionals, teachers need more than a "one-size-fits-all" career. **Career pathways** (sometimes called *career ladders or career lattice)* offer teachers multiple routes to new roles and responsibilities that best fit their career interests and goals. They earn additional pay as they increase their capacities and take on new roles that contribute to improved student outcomes.[81] Career pathways offer coherence to teachers' career development.

Locally designed and negotiated career pathways may include placing highly effective teachers in **hybrid roles**—providing "release time" or a part-time classroom schedule—that support teacher instructional leadership activities during (and after) the school day. For example, expert teachers with release time can model lessons, observe peers and give feedback on their instruction, mentor novice teachers, participate in peer assistance and review, or lead professional development. They may train to become their school's data experts, analyzing and using data to improve instruction. Interested teachers can also take on more teacher leadership roles, receive job-embedded professional development, have a voice in school leadership decisions, and receive increased compensation (ranging in amounts from minimal to substantial based on role, responsibilities, additional contract days, and annual funding). Career pathways establish clear criteria for eligibility to help interested teachers self-select (and be chosen for) these roles. Both the NEA and the AFT endorse the teacher career pathways concept.[82]

Studies on teachers' attitudes suggest that they want to grow as teachers and leaders and serve in different capacities as educators over their career.[83] The variety of opportunities for professional growth and increased responsibilities—especially when linked to differentiated pay—make a teaching career more attractive. Research indicates that successfully established career advancement initiatives that include these career pathways with features including increased compensation can positively impact teacher recruitment, retention, job satisfaction, and student achievement.[84] But unless local leaders adjust their existing career structures and systems to effectively implement career pathways and find sustainable funding, efforts to create, implement, and sustain career pathways will be disappointing.

Induction programs provide caring, experienced colleagues who help ease the transition into successful teaching and the profession.

iStock/MangoStar_Studio

Millennials and Teaching

The idea of career pathways is of particular interest for millennials or Generation Y (Gen Y), those born between 1980 and 1996, who now comprise a majority of the teacher workforce.[85] Typically, millennials do not equate "jobs" with "careers." Because they arrived in a job environment of massive turnover rates, an unstable economy, and a more competitive business environment, they want to take on responsibility quickly and build their own professional equity and skills to use as future bargaining chips for their next job move. As a result, millennial teachers often want their careers to function as personalized paths that fit their individual interests and career development goals. Studies find that nearly all (98%) of millennial teachers plan to stay in the education profession for their careers, but only half wish to remain classroom teachers.[86]

Millennials seek more control over their work situation; desire career-long professional growth; expect rapid career advancement in experience, expertise, and compensation; and want new challenges and opportunities to prevent burnout.[87] They also value having a work–life balance (despite the fact that 91% aspire to reach leadership positions); believe their work evaluations should be based on outcomes produced (rather than on age or tenure); and seek ongoing feedback about their performance.[88] These beliefs may help propel changes to the teaching profession's structure.

To assess the factors that you deem most important in the early stages of your "ideal career pathway" as a teacher, complete the activity in the **Reflect & Engage** box, Teacher Career Advancement Initiatives.

REFLECT & ENGAGE: TEACHER CAREER ADVANCEMENT INITIATIVES

In many locations, school districts are exploring innovative ideas that may redesign teaching's traditional career structure and compensation. What do you think of these changes?

A. As individuals, create a graphic image using a digital tool such as Piktochart to design your own "ideal career pathway" to take you through your first 5 to 10 years as a teacher.

B. In groups of four, display and explain your graphic images; consider the following issues and discuss the varied factors that make each proposal either attractive or unattractive to you as a future teacher, and explain your thinking.

- Receiving an annual increase to your salary for teaching experience
- Receiving an annual increase for earning a master's degree in your subject area *only* if it is math or science
- Receiving performance (merit) pay based on your students' achievement
- Receiving an annual salary increase for acquiring additional professional knowledge and skills (such as earning NBPTS certification)
- Receiving extra pay through a differentiated salary schedule for teaching a hard-to-staff subject or work in a highly challenging school
- Having frequent opportunities to receive feedback on your teaching performance effectiveness
- Having opportunities to learn new skills and take on extra teacher and/or leadership responsibilities

C. Reassemble the class, and each group reports its preferences and disagreements about the discussed teacher career advancement initiatives.

D. As a class, design three possible "ideal" career pathways available to teachers.

FLIPSIDES

Should Effective Teachers Receive Performance (Merit) Pay?

Effective teachers are the most important school contributor to student learning, and every school would like more of them. Accordingly, policy makers are asking whether schools should use higher salaries, stipends, and bonuses to reward their best performers and to attract and keep teachers who demonstrate superior capacity to generate student learning. As a future teacher, do you think performance (merit) pay for teachers is a good idea whose time has come?

Pay Teachers More Based on Their Performance	Don't Pay Teachers More Based on Their Performance
• The idea of merit pay for teachers is a popular market-based way to improve teachers' compensation. • Some argue that using merit pay for outstanding performance will attract more highly effective individuals into the teaching profession.	• Research on whether teacher pay for performance improves student outcomes is small and has mixed findings. • Links found between teachers' merit pay and increased student learning may be correlational, not cause and effect.
• Many studies confirm that teacher and teaching quality (teacher attributes and effectiveness) are among the strongest school determinants of student achievement. Bonuses for high performance may attract and keep higher-quality teachers.	• Since varied factors that affect student achievement lie outside the teacher's influence (i.e., students' prior knowledge and experiences, students' health, attendance, family mobility), paying teachers' bonuses for their students' high achievement would unfairly advantage certain teachers while unfairly disadvantaging others.

Pay Teachers More Based on Their Performance	Don't Pay Teachers More Based on Their Performance
• Salary schedules (in which all teachers with the same years of teaching experience receive the same salary) do not reflect 21st century labor market realities (and do not effectively recruit or retain highly effective teachers).	• Money does not necessarily motivate teachers' best efforts in helping students learn. • Most teachers do not hold back their best instructional practices while waiting for merit pay to incentivize their use. They use the instructional skills they have.
• Labor market realities insist that more effective professionals should be able to earn more than the least effective professionals. • Performance (merit) pay for teachers would motivate teaching excellence throughout the school.	• Cultural differences between schools (which value collaboration) and businesses (which value competition and profits) make merit pay unworkable in schools. • Merit pay within a department may foster competition rather than collaboration, reducing teachers' willingness to share successful methods, experiences, and sources—to students' detriment.
• Salary should distinguish between high- and low-demand fields (such as math and science as compared with social studies). • Salaries should attract—not discourage—high-achieving college graduates into a profession.	• Serious limitations make performance pay for teachers invalid, unreliable, and unethical. • Studies find measurement errors in the data used to identify effective teachers.[89] Studies find cheating, narrowing the curriculum, and other opportunistic behaviors may result.
• Not recognizing and rewarding the organization's highest performers encourages mediocrity rather than excellence.	• Reducing teacher and teaching quality to a test score is inaccurate and unethical. • Monies to award merit pay to teachers with outstanding performance are not always available (making merit pay programs unsustainable).

Given the reasoning and data about giving teachers' performance pay, do you think schools should pay teachers more for outstanding performance? If no, why? If yes, how?

2.3 RESEARCH ON TEACHER PREPARATION AND TEACHER–STUDENT OUTCOMES

In *Doing What Matters Most: Investing in Quality Teaching*, education scholar Linda Darling-Hammond concludes that reviews of more than 200 studies contradict the myth that "anyone can teach" and that "teachers are born and not made." She writes,

> Teachers who are fully prepared and certified in both their discipline and in education are more highly rated and are more successful with the students than are teachers without preparation, and those with greater training... are more effective than those with less.[90]

2.3a Teacher and Teaching Quality, Teacher Preparation, and Student Achievement

Teacher preparation refers to a "state-approved course of study, the completion of which signifies that an enrollee has met all the state's educational or training requirements for initial certification or licensure to teach in the state's elementary or secondary schools."[91] The search for highly effective teachers had led school districts to look for candidates who have met all the state's initial certification or licensure requirements to teach the states' elementary and secondary students.

Despite the plethora of research about teacher education, relatively few studies connect aspects of teacher preparation and certification to students' learning.[92] Nonetheless, of these studies, many find

that effective teacher preparation and teaching behaviors learned in their preparation programs linked to increased student achievement.

In a national survey, Darling-Hammond found that factors such as student poverty, minority status, and language background appear less important in predicting individual achievement levels than "teacher quality" variables. Fully certified teachers who had a college major in the subject they were teaching had a greater positive impact on student achievement than could be predicted from students' poverty, minority status, or language. Similarly, teacher preparation had a stronger connection with student achievement than class size, overall spending, or teacher salaries, even after taking students' backgrounds into account.[93]

Similarly, preservice teacher preparation that includes coursework, class observation, practice, and feedback on their teaching can help novice teachers be more effective in improving their elementary students' measured achievement in English language arts and mathematics in their first 3 years in the classroom. This tends to be true even in high-poverty schools where students have the greatest need for effective instruction and where novice teachers often start their careers.[94] Investigators determined that informed practice to be the most impactful learning opportunity to affect new teachers' teaching effectiveness.[95]

Of course, not all teacher preparation programs are alike. Each has its own strengths and weaknesses, and many produce teachers who are no more or less effective than teachers graduating from other schools. Nonetheless, certain programs tend to produce more effective teachers.[96]

Darling-Hammond believes that effective teacher education requires students to integrate and relate knowledge of the learners' characteristics with knowledge of the subject taught and then to connect both of these factors to the relevant teaching practices. Only when these three dimensions—the learner, the subject, and the pedagogy—overlap and interact in professional practice can effective teaching and learning occur.[97]

2.3b Research on Alternative Versus Traditional Teacher Preparation Routes

The concern for high-quality teacher preparation has focused on both 4- or 5-year traditional programs and alternative programs. Although they may vary widely across states, **alternate teacher routes** typically allow candidates to begin teaching while working on program coursework and requirements at the same time to speed entry into the teaching occupation. Teach for America (TFA) and The New Teacher Project (TNTP) Teaching Fellows are two examples. According to the National Center for Education Statistics (2018), approximately 18% of public schools teachers in 2015–2016 had entered the profession through an alternative preparation pathway.[98] Given its relatively brief professional preparation, many question whether what schools gain in speed of teacher entry sacrifices teacher knowledge, skills, and student outcomes.

A review of recent research finds that traditional teacher preparation programs consistently produce teachers with better knowledge of instruction,[99] self-efficacy,[100] and teacher retention[101] as compared with alternative programs across all schooling levels except kindergarten.[102] When comparing traditional and alternative preparation programs, studies find mixed results in relation to student achievement, with less selective alternative preparation progress either substantially less effective[103] or slightly less effective[104] than traditional programs for generating student learning. One study found that almost half of teachers from alternative preparation programs did not complete practice teaching as compared to eight percent of traditional program graduates.[105] These differences are especially meaningful for teacher outcomes as teachers who complete more practice teaching and pedagogy coursework feel more prepared for teaching and report a higher likelihood of remaining the profession.[106]

At the same time, some investigations find that it may not be the type of professional certification but the increased classroom experience that leads to student achievement gains. With two or three years of successful teaching experience, studies find that alternatively certified teachers can match traditionally prepared teachers in student achievement gains.[107]

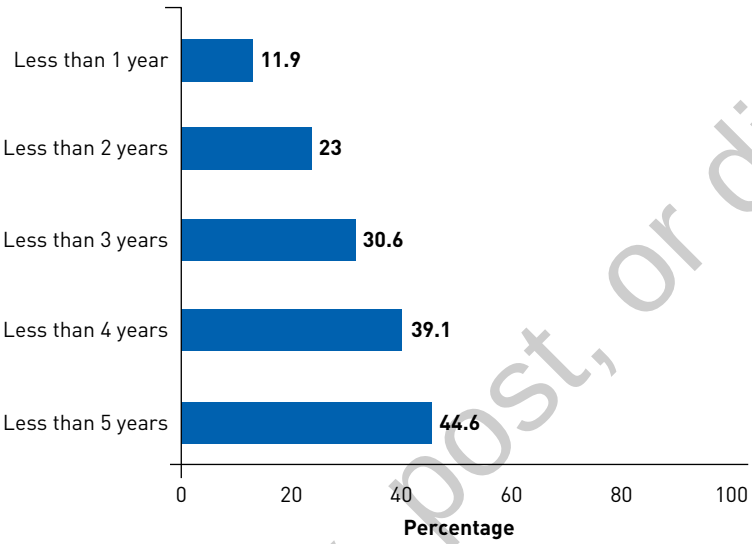
Some argue that choosing between alternative certification programs and traditional teacher preparation programs is a false choice since wide variations in quality and effectiveness exist within each category.[108] Likewise, others observe that traditional and alternative programs have morphed into one

another, making broad comparisons between them useless.[109] So to the question, "Which type of preparation program produces the most effective teachers?" the answer is, "It depends."

2.3c Preparedness and Teacher Longevity

More than 42% of new teachers leave the profession within 5 years of entry,[110] a percentage that has steadily increased over the past 20 years.[111] In his seminal 2003 investigation (updated in 2018), Richard Ingersoll, a University of Pennsylvania professor, observed that 11.9% of beginning teachers left after 1 year, and another 11.1% left after the second year; thus, a cumulative total of 23% of all new teachers had abandoned teaching after only 2 years in the classroom. After 5 years, fully 44.6% of the original teaching pool had exited the profession (Figure 2.1).[112]

FIGURE 2.1 ■ Cumulative Percentage of Beginning Teacher Attrition by Years of Experience

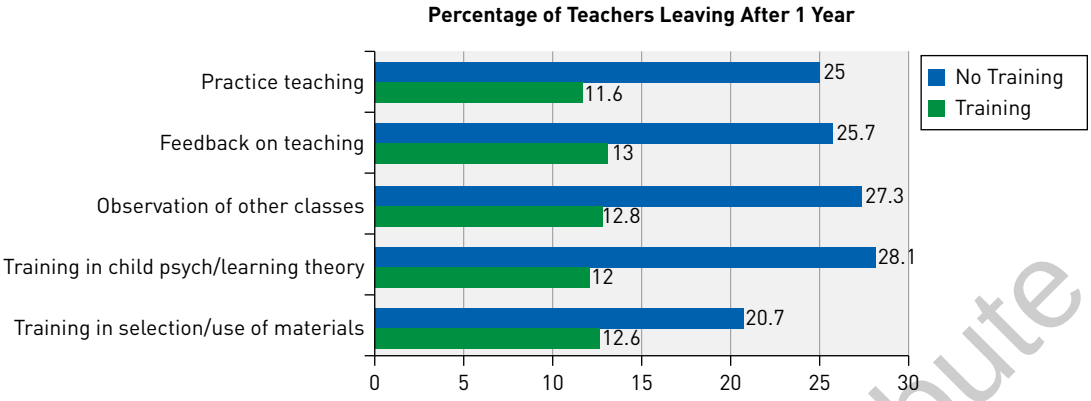


Source: Ingersoll, R., Merrill, E., Stuckey, D., and Collins, G. (2018). *Seven trends: The transformation of the teaching force, updated October 2018*. Research Report (#RR 2018–2). Consortium for Policy Research in Education, University of Pennsylvania. Figure 13, p. 19. https://repository.upenn.edu/cgi/viewcontent.cgi?article=1109&context=cpre_researchreports

Beginning teachers vary widely in the preservice education and preparation they receive, and the nature of their preparation to teach strongly impacts how long they stay in the classroom. Studies find that new teachers with more training in teaching methods and pedagogy—knowing *how* to teach (especially practice teaching, observation of other classroom teaching, and feedback on their own instructional practices)—were much less likely to leave teaching after their first year in their own classrooms. Novice teachers who had taken three or four pedagogy courses in in how to teach were 36% less likely to leave than those who took no such courses.[113] In fact, one study of new-teacher attrition rates 5 years after college graduation found that those with no pedagogical training were 3 times more likely to leave teaching during any given year as compared with peers with the pedagogical training.[114]

Specifically, the presence of four types of new teacher pedagogical preparation—how to select and adapt instructional materials; coursework in learning theory or child psychology; observation of others' classroom teaching; and formal feedback on their own teaching (through practice teaching)—was significantly related to whether new teachers left teaching or not.[115] First-year teachers who had at least 12 weeks of practice teaching before employment were more than 3 times less likely to leave the profession than those who had no practice teaching at all.[116] In short, lower levels of preparation in how to teach accounted for higher new-teacher attrition. Figure 2.2 illustrates how these teacher preparation factors reduce novice-teacher attrition.

FIGURE 2.2 ■ Teacher Preparation Reduces Attrition of First-Year Teachers



Source: Darling-Hammond, L., and Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "highly qualified teacher" challenge. *Education Policy Analysis Archives, 11*(33), p. 24.

Additionally, during their first 3 to 5 years in the profession, teachers who are satisfied with their preparation and who receive supports as they transition into the profession are less likely to leave the teaching field early.[117] It makes sense that studies find the more effective teachers—regardless of preparation pathway—and who receive their colleagues' and administrators' encouragement tended to remain in teaching, whereas those who were less effective were more likely to leave.[118] Other studies confirm these findings.[119] Of course, it is possible that teacher selection effects enter the attrition picture: Those who are committed to teaching as a career may be more likely to enroll in teacher preparation programs that provide many opportunities to learn how to teach.

The research on teacher preparation, teaching effectiveness, and teacher longevity is clear and consistent. High-quality preservice teacher preparation provides beginning teachers with the knowledge and skills needed for effective teaching in today's diverse classrooms. Effective teachers know their subjects very well, and they know how to teach them so that students learn and increase their measured achievement. Teachers understand and apply knowledge of child and adolescent development to motivate and engage students. They are able to diagnose individual learning needs and use multiple methods to engage students in learning and assess their growth. They know how to work with others to make their classroom a safe and stimulating learning environment. In addition, when prospective teachers have sufficient opportunities to practice their learning in real classroom settings with effective supervision from experienced teachers and mentors who give them accurate, detailed, real-time feedback, both they and their students are more likely to be successful.

When it comes to answering, "Which type of preparation generally leads to higher teacher longevity in the profession," the answer is, "Those with traditional preparation." But the bottom line needs emphasizing: Although content knowledge is essential, by itself it cannot ensure that the teacher is able to teach or that his or her students will learn.

To learn more about how teacher preparation programs can make you—and future colleagues—ready for classroom effectiveness, complete the activity in the **Reflect & Engage** box, Teacher Preparation, Student Outcomes, and Teacher Longevity.

REFLECT & ENGAGE: TEACHER PREPARATION, STUDENT OUTCOMES, AND TEACHER LONGEVITY

Conventional wisdom asserts that "teachers are born and not made." One either has the inborn talent to teach or doesn't. Today, we know from ample research that this "wisdom" is untrue.

Working in pairs, discuss the following:

A. Identify what would you like to learn regarding the learner, the subject, and the pedagogy that would make you a more effective teacher.

B. As a teacher, would you rather have a colleague from a traditional or alternative teacher preparation program; explain your answer.

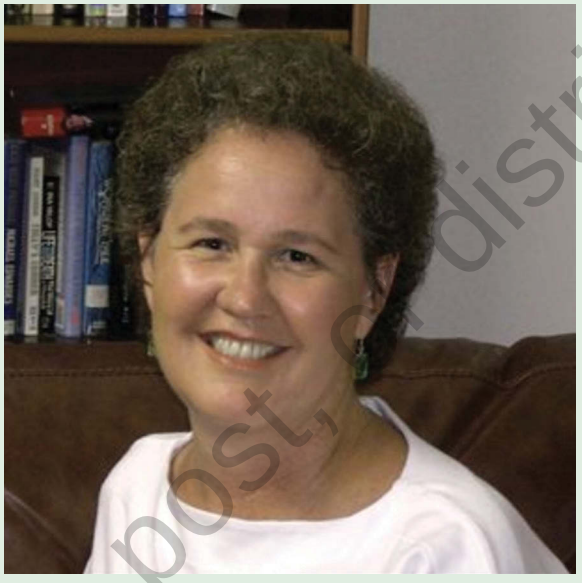
C. Consider the teacher preparation factors that contribute to novice teachers staying—or leaving—the profession after 1 to 5 years in the classroom. Identify the factors that your present teacher preparation program provides to you (you may have to check your college or university course catalog and/or ask your professor) that prepare you to become an effective teacher.

D. If you were a new teacher in a hiring interview with a principal, how might you explain how your teacher preparation readies you to be an effective teacher?

After the paired talks, discuss these issues as an entire class.

AMERICAN EDUCATION SPOTLIGHT: LINDA DARLING-HAMMOND

"I have always felt that the most exciting thing any person could do is to learn, and the most challenging and satisfying thing anyone could do is to teach."*



Courtesy of Linda Darling-Hammond

Sometimes called the "Michael Jordan of educational policy," ** Linda Darling-Hammond is an authority on teacher effectiveness, school reform, and educational equity. Currently the Charles E. Ducommun Professor of Education Emeritus at Stanford University, in 2015 she became the founding president and CEO of the Learning Policy Institute, a "think tank" that brings high-quality research evidence into education policy discussions. In 2016, Darling-Hammond was named the most influential education scholar in the country. In 2019, she became president of California's State Board of Education.

Darling-Hammond propelled the issue of teacher quality into the national education debate. As founding executive director of the National Commission on Teaching and America's Future, a blue-ribbon panel, she spearheaded its 1996 report, *What Matters Most: Teaching for America's Future*, providing research that supports teacher quality and which led to sweeping policy changes that affected teaching in the United States. She also led the development of licensing standards for beginning teachers—Interstate New Teacher Assessment and Support Consortium (InTASC)—that reflect current knowledge about what teachers need to know and be able to do to teach challenging content to diverse learners. And as an early member of the National Board for Professional Teaching Standards (NBPTS), Darling-Hammond helped design performance assessments that allow teachers to demonstrate their classroom teaching skills in authentic ways. As the author or editor of more than 500 publications, including award-winning books on issues of policy and practice, she is a prolific and adroit communicator.

Darling-Hammond started her own education career as a teacher's aide. She began teaching in "grossly underfunded" Camden, New Jersey, where she faced educational inequity firsthand, working in a "crumbling warehouse high school managed by dehumanizing and sometimes cruel procedures and staffed by underprepared and often downright unqualified teachers. It had a nearly empty book room and a curriculum so rigid and narrow that teachers could barely stay awake to teach it."*

Darling-Hammond acknowledges that because teaching has not yet acquired the features that mark a profession—namely, the commitment of everyone who enters the field to their clients' well-being; that everyone entering the field has demonstrated mastery of a common knowledge base they use to serve their clients; and a field in which members take responsibility for defining, transmitting, and enforcing some standards of practice to protect people who they serve—teaching is not yet a profession. Moreover, she observes that state certification does not ensure good teaching because not all states' certification requirements are up to date and are easily waived to allow unprepared persons to teach. By comparison, she argues, NBPTS certification can increase teaching quality and help professionalize teaching.

In her ongoing efforts to strengthen the teaching profession, Darling-Hammond has also done significant work to strengthen the quality of assessments, improve the quality of teacher preparation (even when it is delivered through alternative routes), and advance the quality of schools, including charter schools (including those that she founded or worked with as a board member).

Darling-Hammond received her BA from Yale University in 1973 and her doctorate in Urban Education from Temple University in 1978. She is married to husband Allen and has three children, Kia, Elena, and Sean. Like their mother, Kia and Elena have become well-prepared and deeply committed teachers.

Notes:

*Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work* (pp. xii–xiii). Jossey-Bass.

**Berry, B., as cited in Arizona State University (2019). Reflections on Linda Darling-Hammond. *Inside the Academy.* https://education.asu.edu/inside-the-academy-of-education/reflections-family-friends/reflections-linda-darling-hammond

Sources: AERA. (2019). Meet Linda Darling-Hammond. #THANKASCIENTIST. http://www.aera.net/Newsroom/Thank-A-Scientist-Week/Meet-Linda-Darling-Hammond; Arizona State University. (2019). Reflections on Linda Darling-Hammond. *Inside the Academy.* https://education.asu.edu/inside-the-academy-of-education/reflections-family-friends/reflections-linda-darling-hammond; Barnum, M. (2016, February 23). Opinion: Where Linda Darling-Hammond's bold claims on testing, teachers, and New Orleans go wrong. *The 74.* https://www.the74million.org/article/opinion-where-a-top-scholars-bold-claims-on-testing-teachers-and-new-orleans-go-wrong/; Freedberg, L. (2019, March 15). Linda Darling-Hammond becomes president of California's State Board of Education. *EdSource.* https://edsource.org/2019/linda-darling-hammond-sworn-in-as-new-president-of-californias-state-board-of-education/609870; Hess, R. (2016, January 6). The 2016 RHSU Edu-Scholar public influence rankings. *Education Week*. http://blogs.edweek.org/edweek/rick_hess_straight_up/2016/01/the_2016_rhsu_edu-scholar_public_influence_rankings.html; PBS Online. (n.d.). Interview with Linda Darling-Hammond: Only a teacher. *Teachers Today.* https://www.pbs.org/onlyateacher/today2.html; Stanford Graduate School of Education. (2018, July 21). Teaching is the profession on which all other professions depend: Linda Darling Hammond on transforming education. *School's In.* https://ed.stanford.edu/news/teaching-profession-which-all-other-professions-depend-linda-darling-hammond-transforming

2.4 STATE LICENSURE

If students are to be held to high standards, their teachers must also be held to high standards. *Licensure* and *certification* indicate the state's formal approval of teaching candidates for professional practice. These two terms are often used interchangeably.

2.4a Why States License Teachers

Since education in the United States is mainly a state and local concern, each state can set its own requirements for aspiring teachers. Depending on the region, a teaching certificate may be called a *teaching credential* or a *teacher's license*. When someone earns this credential, it means they have earned at least a bachelor's degree from an accredited college or university, successfully completed a teacher preparation program, and passed the needed exams in the certification field. Candidates must meet a minimum score requirement, pass a background check, and complete the necessary forms to apply for licensure. States also accredit their teacher preparation programs, as we will discuss later in this chapter.

States have a compelling interest in setting meaningful teacher standards. We expect our schools—when successful—to provide benefits to society that go beyond the sum of those conferred upon individual students. Students and communities cannot afford to work with unqualified teachers. Without strong, meaningful, and well-enforced licensure and accreditation requirements, not only will districts lack important data about the teacher candidates, but parents will lack important information about the individuals to whom they entrust their children's learning and safety. Likewise, states will lack the policy tools needed to encourage improvements in teacher training and make quality teachers available to all schools and students.

2.4b State Variations in Licensing Teachers

Because public schools want to ensure that the educators it hires are qualified to teach, most states require prospective teachers to pass a standardized exam that attempts to measure the teacher's knowledge and skills. Individual states may require teachers who wish to hold certain certification levels to

pass more than one formal test. Each state sets its own standards, making testing requirements vary state by state. Presently, most teacher licensing exams focus mainly or exclusively on new teachers' knowledge of the content they are expected to teach.[120] For example, California asks its teacher candidates to pass the California Basic Education Skills Test to earn certification, whereas New York expects teachers to pass a state-administered New York State Teacher Certification Examination. It is essential, therefore, for teaching candidates to learn about the specific licensing and testing requirements in the state where they plan to teach.[121]

Most states (45 of them) require future teachers to pass the Praxis series of exams to become teachers.[122] Praxis basic skills tests include reading/language arts, mathematics, science, and social studies, and each state has a designed a minimum score that candidates must meet in order to pass. Some states require passing this test before candidates can be admitted to the teacher preparation program. States also require subject tests to assess a candidate's knowledge in the subject or level in which they wish to become certified. Moreover, teacher preparation programs in 18 states require candidates to take the edTPA (Education Teacher Performance Assessment), a subject-specific portfolio-based test that demonstrates a candidate's readiness for a full-time classroom teaching assignment.[123] Again, each state sets its own minimum score.

Given the reliance on content knowledge without equal emphasis on know-how to teach (pedagogy), some argue that most teacher licensure tests today provide incomplete evidence of the essential competencies that comprise the core work of teaching.[124]

2.4c How New Teachers Become Licensed

"Are you licensed?" is one of the first questions school district employers will ask candidates applying for teaching positions. Becoming licensed or certified usually means the individual has completed the appropriate academic training and satisfied the requirements specified by state procedures and regulations. Each state has its own specific rules and regulations for teacher certification, but most require a combination of some or all of the following:

- *Formal academic training.* General elementary teachers need a major or minor in education and must have taken college-level courses in math, science, English, and social studies. To become a secondary teacher, one usually is required to major in the subject area to be taught.
- *Completion of an accredited teacher preparation program.* Traditional college and university teacher education programs are designed so that students can work toward the major or minor coursework while also taking teacher preparation courses. These programs include *practica*—a course of study designed especially to prepare teachers that involves the supervised hands-on application of previously studied theory (a required number of hours) and a student-teaching internship, usually a semester long. Many education programs lead to teacher certification upon graduation. One-year teacher preparation programs after a person has obtained a bachelor's degree are also available.
- *Statewide assessments and testing.* Each state requires teachers to pass a series of tests that evaluate their basic liberal arts knowledge as well as their teaching skills. Many states use Educational Testing Service's (ETS) Praxis series or the National Evaluation Services (NES) exams. Some states allow candidates to take the test within a year or two of being granted a provisional license.
- *Additional checks.* All states now require applicants to complete a background check and may require fingerprinting to ensure that only persons without a criminal record are working with children.

Because each state has different licensure or certification requirements, it is best to contact the education department or licensing office in the state where one plans to teach for more information about its teacher-related requirements.

2.4d Research on Teacher Certification and Student Achievement

Although states try to increase teacher and teaching quality by setting licensure and certification requirements, the literature on the relationship between teacher certification and student achievement has produced mixed results. On the one hand, Darling-Hammond and others have found that teacher preparation and certification are the strongest correlates of students' math and reading achievement.[125] On the other hand, some argue that teacher effectiveness may depend on general academic ability or strong subject matter knowledge as much as on any special preparation in how to teach.[126] Others assert that because little research on teacher testing or licensing prior to 2003 meets the standard for scientific evaluation, those studies that did meet this standard have yielded tentative and inconclusive results.[127]

Nevertheless, the emerging studies on teacher certification and student achievement are bringing a fuller understanding closer. Overall, the teacher certification evidence suggests that existing credentialing systems do not distinguish very well between effective and ineffective teachers. Wide variation in teacher effectiveness exists within each certification type with effective (and ineffective) teachers coming from both traditional and nontraditional certification routes.[128] Additionally, research finds that teacher experience, rather than type of certification, tends to make a difference in increasing student achievement, with improved student achievement with increases in teacher experience during the first 3 to 5 years in the classroom.[129] Therefore, teacher certification may be a necessary, but not a sufficient, condition for increasing student achievement.

2.5 ORGANIZATIONS THAT SUPPORT TEACHING PROFESSIONALS

Over the years, the rules governing teachers' behavior and working conditions have evolved. For example, a 1922 Wisconsin teacher's contract forbade a female teacher from dating, marrying, staying out past 8 p.m., smoking, drinking, loitering in ice cream parlors, dyeing her hair, and using lipstick or mascara.[130] More significantly, until the mid-20th century, married women teachers were not allowed to earn tenure.[131] Professional organizations for teachers, such as the National Education Association (NEA) and the American Federation of Teachers (AFT), have long worked to improve teachers' quality of work life and advance teaching as a profession. National teacher education program accrediting associations, the Interstate New Teacher Assessment and Support Consortium (InTASC), and the National Board for Professional Teaching Standards (NBPTS) have also increased teacher professionalization.

2.5a Teacher Unions

Teacher organizations—the National Education Association (NEA) and the American Federation of Teachers (AFT)—have become among the most influential special interest groups in national and state politics. Often referred to as unions, these teacher organizations are considered powerful because of their size, resources, and their statutory authority in certain states to negotiate the contents of collective bargaining agreements with district school boards about teachers' compensation, working conditions, and benefits. The influence of the teacher union depends on the state.[132]

Broadly defined, a **union** is a group of employees who come together voluntarily with the shared goal of improving their working conditions and having a voice at their place of employment. **Collective bargaining** is a formal process that gives union members a voice in decisions that affect its members' compensation and work lives. For teachers, collective bargaining spells out many facets of education policy and practice in the school and district workplace and the day-to-day interactions among teachers, students, and administrators. Union officials represent their teacher members in legal contract discussions to determine salary, benefits, work hours, and working conditions. These may include class schedules, health insurance, layoffs, pay for special duties, seniority, salary schedule, job security, duty-free lunch, hours of work, sick leave, transfers, pupil discipline, parental complaints, and grievance procedures. Collective bargaining negotiations also help protect teachers from receiving unfair treatment. Many agree that traditional labor unions made America's largest, wealthiest middle class possible by

broadly sharing our nation's economic growth.[133] Since the state controls the legal right to collectively bargain, teacher unions may or may not be permitted to operate in any state.

Teacher association or union participation is down over time. About 70% of U.S. public school teachers participate in unions or employee association, down from 74% in 2011–2012 and 79% in 1999–2000.[134] Since the late 1970s, voters and the business community have sought to reduce taxes, limit government expenditures, or both. Yet despite the 2018 U.S. Supreme Court ruling in *Janus v. American Federation of State, County, and Municipal Employees Council 31* that concluded public employee unions could not garnish nonconsenting workers' paychecks to fund their collective bargaining for taxpayer-funded wages and benefits, teacher unions have not seen the predicted mass exodus of teachers. In fact, the AFT has added members since the *Janus* ruling.[135]

The National Education Association and the American Federation of Teachers

Started in 1857, the NEA is the largest professional organization and largest labor union in the United States, formed to promote the professional side of teaching and advocate for teachers. It also represents education support professionals, higher-education faculty, school administrators, retired educators, and education students who plan to become teachers. In 2019, the NEA had 3.2 million members,[136] and in 2017–2018, operated on a $366.7 million budget.[137] Most NEA funding comes from its members' dues.

Founded in 1916, the AFT, an affiliate of the AFL-CIO, formed to represent classroom teachers' interests in bargaining negotiations and other interactions with district and state administrators. Today, it represents more than 1.7 million preK–12 teachers and other educators, paraprofessionals, higher-education faculty, and professional staff; federal, state, and local government employees; and nurses and other health care professionals, as well as early childhood educators and nearly 250,000 retirees in more than 3,000 local affiliates nationwide.[138] In 2017, it operated on a $220.3 million budget.[139]

At various times during the late 20th century, the NEA and AFT considered merging their two teacher organizations, but irreconcilable differences at the national level prevented it. Mergers did occur in certain states. Meanwhile, the two unions established the AFT-NEA Joint Council to develop common positions on issues of mutual interest.

Teacher Unions and Education Reform

In recent years, the NEA and AFT have argued for a new collective bargaining model that recognizes that teachers and administrators hold common goals and share joint responsibility for improving school performance. These educators are not adversaries. In this context, both groups view collaboration as a useful approach in deciding governance, instructional, and personnel issues.

Both NEA and AFT believe that teachers should be held accountable for their students' academic performance, and they want an accountability system that does not limit or distort instruction. For example, an NEA 2011 policy statement proposed using student achievement test scores as part of teacher evaluation and accountability and to also include a mix of observations and a process for supporting teachers with below-par evaluations.[140] Controversy remains, however, about how to determine teacher accountability and what the outcomes from that assessment should be.[141]

Likewise, the AFT acknowledges that teachers and teaching must change, and instructional effectiveness depends on evidence of adequate student learning. Rather than protecting ineffective teachers from accountability, the AFT wants to substantially improve teacher evaluation practices to include rigorous reviews by trained experts, peer evaluators, and principals based on professional teaching standards, best practices, and student achievement. The AFT also asserts that student achievement—including student test scores based on valid and reliable assessment that show students' real growth while in the teacher's classroom—should be an essential component of teacher evaluation.[142] Despite the many complexities involved in making this intention into a reality, willingness to consider teacher accountability for student learning is an important ethical and professional advance in teacher unions' thinking.

Teacher Unions and Student Achievement

The relationship between teacher unionization and student achievement is complex, and findings are mixed. Studies differ on whether collective bargaining results in a higher quality of teacher applicants.[143] Many of the studies that examine the relationship between teacher unions and student achievement find modestly higher achievement on standardized tests (SAT and ACT scores) and on high school graduation rates in unionized schools, especially for middle-range students and students of color. Below-average and above-average students appear to fare worse.[144] Whether the overall student achievement gain is worth the higher costs in teacher compensation and improved working conditions is a matter of debate. Clearly, researchers have much to learn about how unions affect student outcomes. But union leadership and teacher membership that assume more responsibility for student outcomes is a good thing.

Teacher Union Critics

While advocates argue that unions are necessary to protect teachers from arbitrary and potentially unfair administrator decisions and to help teachers gain the compensation, benefits, and voice to impact their working conditions, opponents see it differently. Antiunion sentiment is growing among the public—largely because they perceive that teacher unions protect ineffective teachers and block school reform and accountability, putting teachers' interests ahead of students. Some point to NEA and AFT's opposition to labor market competition by fighting vouchers, tuition tax credits, and homeschooling and by rejecting privatization by "contracting out" school services and rebuffing a lower compulsory minimum age for leaving school. What is more, teachers' collective bargaining impacts district policies, teacher salaries and benefits, and working conditions—typically increasing school district spending by upward of 15%.[145] And unions' political arms advocate for teachers as a special-interest group in local, state, and national elections. As a result, teacher unions have become a flash point in contemporary policy debates.

In a similar vein, some critics wonder if the AFT and NEA's "good faith" plans for reform actually represent the unions' sincere effort to get in front and lead reform rather than have reform "done" to them. Likewise, certain detractors object to what they view as unions advancing certain "quality of life" objectives, such as allegedly promoting a gay rights agenda. The organizations' internal practices have also been subject to critical scrutiny.[146] Partly in response to these criticisms, states have begun to weaken teacher job security and change seniority provisions. As noted, the U.S. Supreme Court in *Janus* (2018) limited public sector unions' ability to collect agency fees from nonmembers.[147]

2.5b Should Teachers Strike?

Teachers face ethical dilemmas when they are expected to behave in ways about which they have conflicted feelings. Participating in a teacher strike is one example. Acting professionally in problematic situations involves thoughtfully addressing issues of personal, moral, and ethical significance.

Causes of Teacher Strikes

Between 1918 and 1960, more than 120 teacher **strikes**—that is, employee work stoppages in support of demands made on their employer, such as higher pay or improved conditions—occurred. In 2018, teacher strikes in six states advocated for increased school spending and teacher salaries.[148] Teachers also strike to express their strong objections to educational policy and practices over which they feel powerless to influence, seeking a voice in their schools' decision-making about educational programs and improved educational services for students.

The legality of strikes varies from state to state. Teachers who decide to strike in states where this practice is illegal can be fired from their jobs. Likewise, the public often reacts negatively to striking teachers, accusing them of acting illegally, victimizing children, violating their contracts, disregarding their districts' poor financial circumstances, and following small groups of "malcontents."

What Strikes Can Accomplish

Teachers walk out because it produces results. Having the legal right to strike affords teachers greater power to increase the dollar value of their work. Even where strikes are illegal, teachers who strike win better salaries and working conditions. A national 43-state analysis conducted in 1996 found evidence that when teachers go on strike, whether legally or illegally, or have a neutral party arbitrate their dispute, they win salary increases of 3.6% to 11.5% and reduce class hours between 37 and 70 minutes per day. In contrast, fact-finding missions and voluntary arbitration have no significant influences on outcomes.[149] More currently, teachers are striking not only to improve their paychecks, save their pensions, and acquire more classroom resources. They are also pushing back against education reform policies such as charter schools, performance (merit) pay, and fighting for social justice initiatives such as protections for undocumented students.

The Dilemma for Teachers

Considering whether to participate in a strike requires teachers to ponder several dilemmas involving their personal and professional code of ethics, their employment, their colleagues, their students, and their administrators. For professionals, the first ethical principle is "Do no harm." Teachers must consider all of the following as they decide:

- *Personal/professional ethics.* As individuals and as professionals, teachers develop a set of ethical guidelines that influence their thoughts and actions about what is "right and appropriate." Teachers' understanding of professional stewardship and their personal values play into how they define the correct behavior in this situation.
- *Employment.* If participating in a strike is not legal, teachers who strike may lose their jobs. An individual teacher must consider whether participating in an illegal walkout is worth the possibility of forfeiting one's employment (and perhaps future positions if the teacher cannot get a letter of recommendation from this employer).
- *Colleagues.* Some teachers interpret "collegiality" as having unquestioned loyalty, group solidarity, and the belief that teachers as professionals should not interfere in other teachers' business or criticize them or their practices, even at the expense of students' well-being. In the face of this "peer pressure," individual teachers may feel coerced into not "breaking ranks" with colleagues, even if they believe that such loyalty compromises students' needs and welfare.
- *Students.* Teachers transmit societal values by providing formal instruction and by acting as role models. They may feel torn between advocating for improved professional benefits and meeting their responsibilities toward their students. Teachers are aware that their respect (or lack of it) toward school rules and commitment to their students' well-being sends powerful messages about integrity and appropriate behavior.
- *Administrators.* Walking out in a strike may place teachers in an adversarial relationship with their administrators and school boards (their actual employers). Teachers must consider whether participating in a strike is worth jeopardizing the collaborative and trusting relationship they have built with each.

Applying abstract ethical standards to actual situations is very difficult. When teachers are unsure how to act, they must rely on their own sense of what is right and appropriate as well as on the expressed and shared professional norms about what constitutes ethical behavior. Prospective educators—in fact, all educators—can develop more mature ethical judgment when they reflect seriously on their own values, expectations, and professional norms as well as consider with colleagues how to act ethically and professionally in given situations.

To consider more fully how teacher organizations can benefit—or harm—the teaching profession, complete the activity in the **Reflect & Engage** box, Organizations That Support Professional Teaching.

REFLECT & ENGAGE: ORGANIZATIONS THAT SUPPORT PROFESSIONAL TEACHING

Teacher unions advocate for teacher professionalism and for improved salary and working conditions that strengthen teaching and learning.

A. In pairs, create a *wordle* (word cloud) using a digital tool such as Vizzlo to answer whether you think that teacher unions like the NEA and AFT are good or bad for the teaching profession and for you as a future teacher. Why? Show and explain your wordle to another pair of classmates.

B. In groups of four, consider whether the teacher unions' shift from their traditional adversarial position in relation to administrators to a collaborative one can benefit or harm teaching and learning.

C. Discuss the pros and cons of teachers going on strike. If you were in a school or district in which the teachers went on strike, what would you do? Explain how you might weigh the various factors in making your decision (including your state laws regarding teacher strikes).

After the groups have finished their discussions, reassemble the entire class to report out and consider their answers.

2.5c National Teacher Preparation Accreditation Organizations

Since teachers are the school's most important factor in increasing student learning, students in teacher education programs want to know that they are receiving the best-possible preparation to become successful, classroom-ready teachers. Completing an accredited teacher education program is one such route.

For almost a century, professional accreditation has played a key role in quality assurance in medicine, and more recently, law, psychology, physical therapy, and other established professions. Its success is due—in large part—to an uncompromising expectation for preparation programs to apply high-quality and rigorous external standards. Receiving a public or private accrediting body's endorsement is one way that teacher education programs show their worth and assure the public that it will receive adequately prepared teachers. Like most other academic fields, **accreditation** in teacher education programs is a means of self-policing and quality control. Although national accreditation of teacher programs is voluntary in most states, about 900 of the approximately 2,100 different providers participate; most of them are traditional schools and departments of education at college and universities.[150] States also have their own teacher preparation program review processes.

Briefly, in the past, two independent accrediting bodies served teacher education: the National Council for Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC). Separately, each organization accredited undergraduate and graduate professional education programs at colleges and universities across the country, judging them on how well they prepared teachers. In October 2010, the two groups merged into the Council for the Accreditation of Educator Preparation (CAEP) in an effort to raise the profession's stature with a single set of high standards. CAEP has 798 programs participating in 43 states and has awarded accreditation to 238 programs.[151]

CAEP accreditation is rigorous, focusing on evidence and outcomes through external peer review that typically occurs every 7 to 10 years on a regular basis. For example, CAEP requires teacher-candidates' grade point averages and information on how the beginning teacher perform in the field. This is a challenging and costly process, especially for states that lack the infrastructure to collect these data. Also, while initially offering teacher education programs a choice of three pathways to accreditation, in 2016, CAEP narrowed these to one. Many teacher-preparation programs were not happy with the changes.

In 2017, the Association for Advancing Quality in Educator Preparation (AAQEP), a new teacher preparation accrediting group, arrived on the scene. AAQEP has certain "must haves," such as teachers' content knowledge and flexibility to programs to be innovative within their local contexts. The group also collaborates with education-preparation programs to self-identify areas of improvement and strengths. As of 2019, AAQEP had 14 states participating, had accredited nine programs, and 83 programs more were applying.[152] Meanwhile, CAEP is not sure the kind of flexibility—that some call "accreditation light"—is the answer to improving schools of education.[153] In return, AAQEP supporters call their approach "collegial" as compared with CAEP's "top-down compliant" or "one-size-fits all."

As it now stands, colleges can "shop around" for the accreditor they prefer, seeking the one they believe will give them the most favorable treatment. All this suggests that accreditors and universities are divided about how to ensure that teachers graduating from teacher education programs are ready to lead their own classrooms. The impact of two competing accreditation organizations (once again) with two different sets of standards on the public's perceptions of teaching's professionalization is unclear.

2.5d Interstate Teacher Assessment and Support Consortium (InTASC)

Created in 1987, the Interstate Teacher Assessment and Support Consortium (InTASC) is a group of state education agencies and national educational organizations dedicated to reforming teacher preparation, licensing, and ongoing professional development. *InTASC Model Core Teaching Standards and Learning Progressions for Teacher 1.0* (2013), based on the best understanding of current research on teaching practice, outlines what teachers should know and be able to do. This includes the performances, essential knowledge, and critical dispositions—to ensure that every K–12 student will be ready to enter today's college or workforce. One basic premise guides its work: An effective teacher must be able to customize learning for learners with a range of individual differences and integrate content knowledge with students' specific strengths and needs to ensure that *all* students learn and perform at high levels.[154]

InTASC aligns itself with the range of current standards for curriculum, professional development, and leadership from other education associations. By offering consistency among these documents, InTASC ensures that teachers have a coherent continuum of expectations from the first days in the classroom through accomplished practice and the conditions needed to support professional development along this continuum. In InTASC's view, only the degree of sophistication in performances, knowledge, and dispositions distinguishes the beginning from the accomplished teacher.[155]

InTASC's philosophy asserts that teachers need to recognize that all learners come to school with varying experiences, abilities, talents, and prior learning, as well as language, culture, and family and community values. These factors are assets that teachers can use to promote learning. To do this effectively, teachers must have a deeper understanding of their own frames of reference (e.g., culture, gender, language, abilities, ways of knowing) and their own potential biases that will likely impact their expectations for and relationships with learners and their families. Also, teachers need to provide each student with multiple approaches to learning.

In addition, InTASC promotes teacher collaboration and teacher leadership. Teachers must open their practice to colleagues' observation and scrutiny and engage in ongoing, embedded professional learning where teachers participate in collective inquiry to improve practice. Professional collaboration and leadership include actively participating as a school improvement team member in decision-making for a shared vision and supportive culture, identifying common goals, and monitoring progress towards these goals. All these roles focus on teachers' responsibility for student learning and their ongoing maturation as effective professionals.

2.5e National Board for Professional Teaching Standards (NBPTS)

The National Board for Professional Teaching Standards (NBPTS), established in 1987, operates a voluntary system to provide a national advanced teaching credentials for most preK–12 teachers by assessing and certifying high-quality teaching. NBPTS sets high standards for what highly effective teachers know and do. Its goal is to improve the teaching profession and positively influence student

learning. It complements but does not replace a state's teacher license. Teachers who achieve National Board Certification (NBC) have met high standards through study, self-assessment, expert evaluation, and peer review. As of 2018, more than 122,000 teachers in 25 certificate areas spanning 16 disciplines across all 50 states—about 3% of all U.S. teachers—had earned NBPTS certification. Forty-seven percent of new certificate holders teach in high-need schools.[156]

The Certification Process

NBPTS candidates must hold at least a bachelor's degree, a valid state teaching license, and have 3 years of successful teaching experience in the same state-supported school district. The assessments are performance based. Teachers must also complete the assessment (of content knowledge) and submit portfolio entry components (typically using videotaped lessons showing the teacher differentiating instruction, demonstrating effective teaching practice and a positive learning environment), as well as provide essays describing themselves as an effective and reflective practitioner for their certificate area. Trained teachers in the candidate's certification area review the assessments. Candidates (sometimes with their school district's help) must also pay a fee.[157] The certification process can take from 1 to 3 years. Certified teachers must renew their certification every 10 years.

Research on NBPTS Teachers and Student Achievement

Nationwide studies tend to find that National Board Certified Teachers (NBCTs) are more effective than other teachers of similar experience in raising student achievement in elementary and secondary schools.[158] Students taught by NBCTs learn more—equal to approximately 1 to 2 months more of additional instruction—than students taught by their noncertified colleagues,[159] with an impact even stronger for minority and low-income students.[160] Additionally, students of NBCTs show evidence of deeper learning nearly 3 times more often than their peers in classrooms of non-NBCTs (74% versus 29%).[161] Moreover, NBCTs have also been found to impact the overall quality of teaching in schools where they work by mentoring their colleagues.[162] The improved student outcomes are matched by NBCTs achieving stronger results on key measures of teacher effectiveness, especially noteworthy when compared to the lack of consistent findings about the effectiveness of teachers with master's degrees.[163] Most (91%) NBCTs choose to remain in the classroom; the others often become school leaders.[164] Whether NBPTS produces better teachers or simply identifies accomplished teachers is unclear.[165]

Other Gains From NBPTS Certification

National board certification also has positive teacher outcomes. NBPTS certification provides a valid, reliable, and highly respected assessment and credentialing system to recognize accomplished teachers. It affords the teaching profession a way to create stages to an otherwise "unstaged" profession, while keeping excellent teachers teaching. Studies find that teachers with NBPTS certification showed a higher level of self-efficacy in instruction, management, engagement and participation in leadership roles,[166] and increased knowledge of teaching[167] than non-NBCTs.

Similarly, schools and school districts frequently use board-certified teachers for instructional leadership. They can model excellent classroom practices that increase students' learning, mentor novice teachers, provide professional development to their colleagues, serve as peer assessors, and work as curriculum coordinators. When used (and appropriately compensated) in these ways, board-certified teachers can help transform schools into high-achieving and professionally rewarding learning communities and create another stage in a teacher's career.

2.6 PROFESSIONAL CULTURE AND TEACHER RETENTION

Teaching is the only profession without a built-in apprenticeship period. Most schools expect new teachers to do the same job as 15-year veterans—a tall order. And new teacher initiation is often a trial by fire. If school districts want to keep and develop the teachers they hire, schools need to build a **professional culture**—the set of beliefs, values, assumptions, and relationships that educators and staff share about teaching and learning that influence every aspect of how a school functions—that includes

and celebrates practices that support new teachers both as they begin working and throughout their tenure.

2.6a Induction and Mentoring

The terms "induction" and "mentoring" are often used interchangeably. In reality, the two terms mean slightly different things. **Induction** is a comprehensive, coherent, and sustained professional development process that the school district organizes to train, support, and retain new teachers. Good induction seamlessly moves new teachers into a lifelong learning program. Beginning before the first day of school and continuing through the first 2 or 3 years of teaching, induction includes new teacher orientation, support, and guidance programs. By comparison, **mentoring** is a specific type of induction program. It consists of a collegial, supportive relationship developed between a veteran and a new teacher to ease the transition into the realities of daily classroom teaching. Typically, mentoring includes giving moral support and practical suggestions.

In both induction and mentoring, teachers "who know the ropes" help novices understand and successfully handle events happening in their classrooms and schools. These programs acculturate the new teachers, who use the guidance and practical advice to learn how to prevent and solve problems on their own. With a variety of caring and knowledgeable colleagues to help the novice make sense of the transition to teaching, develop new skills, and gain essential insights, a new teacher can quickly build competence and a feeling of "I can do this!" No wonder that more than half of the deans, faculty, alumni, and principals believe that inadequate induction and mentoring are among the key reasons why so many new teachers leave the profession.[168]

Induction

Effective induction programs recognize that the art and craft of teaching develops over time. Typically, induction programs focus on learning the district's culture—its philosophy, mission, policies, procedures, and goals—and improving the novice's teaching effectiveness. Although no two induction programs are alike, high-quality induction programs include classroom observations of and by beginning teachers; formative assessment of or feedback on teaching from mentors; and participation in a professional learning community or beginning educator peer network. New teachers are not alone: Their schools ensure that they connect with colleagues and contribute to a group in which new and veteran teachers interact respectfully and value one another's contributions. Teachers tend to remain in teaching when they belong to professional learning communities based in high-quality interpersonal relationships founded on trust and respect.[169]

Mentoring

Although mentoring has become the most popular teacher induction practice during the past 25 years, the program formats vary widely. Mentoring may consist of only one hasty meeting during the first week of school, or it may involve weekly hour-long meetings apart from teachers' regular teaching schedules. Some school districts value mentoring enough to invest many hours of preparation to ready their mentors to be effective in their coaching and relationship roles with new teachers. Others simply make mentoring assignments without much forethought. Without strong administrative support to visibly endorse its value, mentoring rarely works.

Research on Induction and Mentoring

The quality and effectiveness of local schools' induction and mentoring programs vary. Their success with new teachers depends on the funding availability, the quality and number of mentors, and principals' and superintendents' commitment to make the programs work. The most effective induction programs include a package of supports, especially mentors from the same field, the chance to participate in group or collective planning, and collaborative learning activities.

Increasingly, research is showing that well-conceived and implemented high-quality teacher induction and mentoring programs successfully increase new teachers' job satisfaction, efficacy, and retention rates.[170] Effective induction programs increase teacher commitment and retention (except in large,

urban, low-income schools), improve teacher classroom instructional practices, and have students earning higher academic achievement scores or learning gains than teachers without such induction programs.

Likewise, research shows that teachers learn more in collaborative teacher networks and study groups than with mentoring. They learn more in professional development programs that are longer, more sustained, and more intensive than they do in shorter ones. Additionally, they learn more when there is collective participation and when they see teacher learning and development as part of a coherent professional growth program in which all teachers—veterans and newbies alike—participate.[171] Demonstrating that quality teaching is a group responsibility—not just an individual concern—is another hallmark of successful induction programs.

Unfortunately, a 2016 50-state report finds only a few states provide a high-quality system of new teacher supports. Only 16 states provide some dedicated funding for teacher induction, and only 15 states require a research-based, multiyear course of support for all beginning teachers.[172]

According to Linda Darling-Hammond, "An occupation becomes a profession when it assumes responsibility for developing a shared knowledge base for all of its members and for transmitting that knowledge through professional education, licensing, and ongoing peer reviews."[173]

Today, the teaching profession is at an inflection point. We recognize teachers' critical role in making the American economy and democracy work. Teachers now have clearly articulated standards for what they should know and be able to do that are tied empirically to student learning. We know the types of teaching practices and educational access that enable every student to learn and grow into competent citizens. The alignment of teacher preparation accreditation standards, InTASC, and NBPTS are establishing powerful professional models to guide preservice and practicing teachers along a continuum of professional growth from novice to master teacher. We also recognize the types of career advancement initiatives and compensation options that can bring professional satisfaction to educators who wish to grow and advance throughout their careers. High-quality new teacher induction and mentoring have been shown to help beginning teachers succeed in their classrooms, their schools, and throughout their work lives. As a result, teaching, as a profession, has never been better positioned to make a difference to teachers, students, and their communities.

KEY TAKE-AWAYS

Learning Objective 2.1 Compare and contrast the factors that make—or weaken—the status of teaching as a profession.

- The teaching profession is critically important to local and national life, providing an essential public service that prepares children for responsible adulthood. Many of our children's social mobility and life options *depend* on working repeatedly with highly effective teachers.
- Teachers can be highly professional in their attitudes, expertise, behaviors, and commitment in their work lives even though their occupation, overall, may not meet some of the strict criteria more evident in high-prestige professions.
- The issues of teacher compensation and pension are problematic. Traditionally, teachers accepted a "trade-off"—relatively low salaries and low-to-no cost health care premiums—while working in exchange for regular payments (pensions) and subsidized health care after retirement. Today, this compact needs renewed attention and constructive action.

Learning Objective 2.2 Defend the view that the teaching occupation has become increasingly professionalized over the generations.

- The structure of teaching as a career is becoming more compatible with the modern workforce's expectations, providing an array of career advancement options to fulfill teachers' desire for professional growth, new roles and responsibilities, leadership opportunities, increased occupational prestige, and higher compensation during their education careers (inside and outside the classroom).

Learning Objective 2.3 Critique the research findings relating teacher preparation, teaching quality, student achievement, and teacher longevity.

- Research supports the view that teaching behaviors learned in effective preparation programs are linked to increased student achievement.
- Wide variations in quality can be found in both traditional and alternative teacher preparation pathways. Teaching effectiveness depends on the individual, the particular preparation program, and the actual school and classroom milieu. Several years of successful teaching experience may matter more than certification type or preparation pathway in increasing student achievement.
- Sufficient knowledge and skills in pedagogy—*knowing how to teach*—increases teacher effectiveness and longevity in the profession.

Learning Objective 2.4 Describe teacher licensure's rationale, state licensure practices, and the relationship between teacher certification and student achievement.

- States need strong, meaningful, and well-enforced licensure and accreditation requirements as a "quality control" for school districts and parents. Unfortunately, studies find that existing credentialing systems do not distinguish very well between effective and ineffective teachers. Therefore, teacher certification may be a *necessary, but not a sufficient,* condition for increasing student achievement.

Learning Objective 2.5 Identify the organizations that support teaching professionals and explain how they help professionalize teaching.

- The National Education Association (NEA) and the American Federation of Teachers (AFT), often called teacher unions, have long worked to improve teachers' quality of work life and advance teaching as a profession.
- The Council for the Accreditation of Educator Preparation (CAEP) and the Association for Advancing Quality in Educator Preparation (AAQEP) give teacher preparation programs a means of self-policing and quality control. But giving colleges the opportunity to "shop around" for the accreditor they believe will give them the most favorable treatment feeds the belief that accreditors and universities cannot agree on how to ensure that teacher education program graduates are classroom ready. The impact of this on the public's perceptions of teaching's professionalization is unclear.
- The Interstate New Teacher Assessment and Support Consortium (InTASC) and the National Board for Professional Teaching Standards (NBPTS), both aligned to the same high standards, have increased teacher professionalization, guiding teachers' professional growth and effectiveness throughout their careers.

Learning Objective 2.6 Argue how a school's professional culture and well-designed induction and mentoring programs can help new teachers transition into effective professional educators.

- If school districts want to keep and develop the teachers they hire, schools need to build a professional culture that includes varied supports—including strong induction and mentoring programs—for new teachers as they begin working and throughout their tenure.

TEACHER SCENARIO: IT'S YOUR TURN

You have gone home for the semester break and are ready to celebrate the holidays with the family. You and your grandmother have always been close. In fact, her background as a teacher is what inspired you to become a teacher. You are excited to share with her what you have learned in your teacher preparation classes. She retired from teaching 25 years ago, and you love hearing stories about her time in the classroom. After dinner, you asked her why she became a teacher, and she responded that way back then there were only four jobs available for women: being a teacher, a nurse, a secretary, or a housewife.

She knew she was going to college and wanted to earn her "MRS degree." But along the way, she liked the idea that she would take her one class in teaching methods and spend 6 weeks in a school doing her practice teaching.

A. Explain to your grandmother how teaching has changed professionally in terms of preparation, professionalization, and the research supporting pedagogy.

B. Describe to your grandmother how teaching is becoming less of an "unstaged" career.

C. Explain to your grandmother why, despite all the occupations now open to intelligent women, you chose a career in teaching.

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