TODAY'S TEACHERS, STUDENTS, AND

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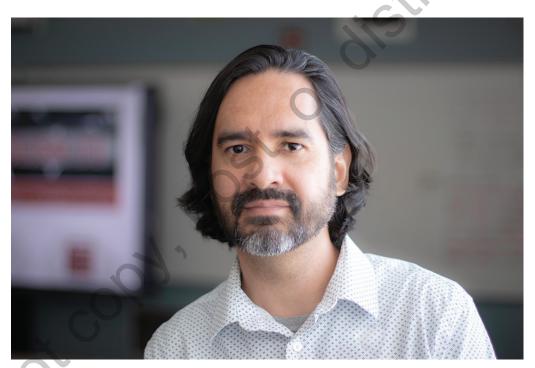
LEARNING OUTCOMES

After reading this chapter, you should be able to do the following:

- 1.1 Identify the reasons individuals choose to become teachers.
- **1.2** Discuss why teachers should be considered professionals.
- 1.3 Document the many things you must learn to become a teacher.
- **1.4** Develop ways for tracking your growth toward teaching.
- 1.5 Articulate what you need to do to be ready to teach.

EDUCATOR INTERVIEW

Mr. Luis Zaldaña



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Mr. Zaldaña has been an English teacher for 15 years. He currently teaches English at a magnet school and dual-credit (high school/college) English course to class sizes of 25 to 35. The magnet school, East Career and Technical Academy, is open for application from students across the fifth largest district in the United States. The 2,000 primarily minority students who attend the academy achieve a 98% graduation rate that is higher than the district average.

Q: What was it like to teach remotely during the Covid-19 pandemic?

A: At the beginning of the global pandemic in March of 2020, teachers were forced to embrace technology. The teachers who had considered technology a distraction from learning were made to rely on it as much as those teachers who had regularly integrated it into instruction. I had to quickly learn that technology in education is vastly different than education within technology. The student shift to distance learning exposed not only my students' limitations with access and lack of technological proficiency, but the limits of my own expertise with remote learning tools, the limits

of administrative support, and the limits of technological infrastructure in the district. Despite the surreal struggles we all encountered, there are many good lessons that were learned. For instance, it is good that transparency was a natural consequence of distance education—parents became intimate participants in their children's school day. It is good that teachers were brought into students' homes and students into teachers' homes—the sociocultural-emotional milieu that undergirds a holistic view of teaching and learning was on full display then and should not be minimized in our practice now. It is good that distance education was a challenge for many teachers—it reminds us what a gift it is to have a room full of students ready to learn. At our school, a cadre of teacher leaders was created who, in turn, developed a variety of distance education support systems for the faculty. It is good that the pandemic underscored this need, because this organizational structure has been invaluable as we have returned to in-person instruction.

Q: What brings you joy in teaching?

A: With a vision for education as a means of human flourishing, I find the greatest joy when students discover that education is a powerful tool they themselves are responsible for wielding, and what they do with it can change their lives and the lives of others. My experience has been that the more students are challenged to cultivate a habit of excellence, with a safe and positive classroom culture, the more likely they are to see the value in what school can offer as it applies to their context. All students, at heart, want to live in the fun of learning new things, and it is our job to give them that without losing the rigor and authenticity of gaining knowledge that causes us—students and teachers—to grow into better people.

Q: How do you know that each student is learning?

A: There are certainly a variety of ways to measure learning as it happens in a day's lesson. Yet I have found one of the most effective ways to know how students are progressing is to lead them to establish their own goals for learning and guide them in metacognitive practices to continually refine and reflect on their efforts toward attaining these goals. This avoids the danger of having students simply repeat information, equipping students, rather, to demonstrate their knowledge in more meaningful ways. Creating this kind of learning community paves the way for students to assert themselves and object, as one of my students recently did, "Mr. Zaldaña, no one wants to take a multiple-choice quiz! Can we have a Socratic Seminar about this?" As I see it, this approach more closely reflects the dynamic and complex nature of teaching and learning, which is a process, not an event. There is a self-evident quality about students who are really "getting it." They want to keep learning. They want to show you what they know. There is a hunger in their eyes.

Q: How do you as a teacher learn? What are you learning now?

A: Teachers learn by deliberate self-reflection. The longer I teach, the more certain I am that the driving force of being a decent educator is to continually refine my understanding of what it means to educate well. We do not arrive; we are always growing into this calling. It is the long journey of examining and reexamining, discovering, and rediscovering what works, what does not, and why. At this stage of my career, I am invested in sifting through the research for the most promising practices in education, and I am fortunate to have gained the momentum to weigh this array of literature against my own experience in the classroom. I am learning to refine my craft, learning to equip myself with pedagogical models and strategies that suit my teaching style, learning to measure it all against the single point of data that matters most: students achieving mastery as a result of what I do. I am learning that good educators must empower other educators to become better, too. Despite all the peripheral trends and distracting policies, I enjoy the classroom. It is where the fun happens.

Q: What keeps you in the profession?

A: When I first began my career in education, I did not realize how political education really was. I have now come to see that we have a system of public education that is inescapably

political! And the call to teach is too consequential to let go. At this season in my life, education is so fruitful an enterprise that I can't imagine doing anything else. It has the power to transform individual students and equal power to transform communities and, by extension, our nation. If we are to continue to cultivate this experiment toward a more perfect democracy, we all have a part to play. I have come to believe education is the backbone of it all. So, I keep teaching.

Q: What advice do you have for those who are studying to become teachers?

A: Determine, as you step into this profession, what kind of teacher you will be! Teach the way you would love to learn and be the kind of teacher you would love to learn from. There are certainly difficulties on the horizon, and it will be easy to get lost in them, but the great responsibility of teachers is to shape human lives for the good. That outweighs it all, and we must recognize that it does not happen accidentally; there will surely be students for whom you wish you could have done more. But, with perseverance, with transparency about your craft, with an intentionality to continue to excel, with a teachable spirit, you can find yourself free to reap the reward of a student who returns and says, "Thank you. You changed my life." And you will know if you have done your job well when you can say to that student with sincerity, "Thank you, you changed mine."

Questions to Consider

- 1. For Mr. Zaldaña, teaching has the power to transform individual students and equal power to transform communities. He has remained in teaching because he believes the great responsibility of teachers is to shape human lives for the good. What other experiences or beliefs that people have or hold might lead them toward choosing teaching as a career?
- 2. What are some of the joyful images that come to mind when you think about being a teacher?
- **3.** Would teaching in a rural area be much different from teaching in a large urban area like the one where East Career and Technical Academy is located? Why? Why not?
- 4. In what ways is teaching like other professions? How might it differ?
- **5.** Why is it important for you at the beginning of your teaching career to keep track of your progress?

INTRODUCTION

You are on a journey to become a teacher. Every journey begins at a specific time in a specific place. However abruptly or significantly, every time is a time of change, and time changes everything. Changes in teaching can happen in a year, a month, a week, or a day. Students are in the classroom one day and not there the next day. It is the changes that occur that make teaching such a challenging and exhilarating profession.

The journey you are about to embark upon is of unknown length and often characterized by uncharted territory, so your earliest decisions regarding this journey should be thoughtfully considered. As Mr. Zaldaña said in his interview at the beginning of this chapter, "We do not arrive; we are always growing into this calling. It is the long journey of examining and reexamining, discovering, and rediscovering what works, what does not, and why."

The major steps you will take on this journey are varied, rigorous, and amazing. Since your journey will be both personal and professional, it will be shaped by your personality, by your life experiences (present and past), and by the professional learning and growth of your knowledge (pedagogical and content), the skills you have acquired, and your attitudes. In most ways, who you become as a teacher is up to you. This text will help you explore the profession of teaching and help you determine if it is truly the right profession for you.

WHY TEACH?

What brought you to consider a career in teaching? Most teachers say they want to teach because they believe they can make a difference in the lives of their students. Many secondary teachers report they chose teaching because they love the subject they are teaching. Some chose teaching because they love to learn. Some chose teaching because of the personal interactions teaching offers. Teachers are happy with their work, and teachers in the United States rate their lives better than all other occupation groups, trailing only physicians (Lopez & Sidhu, 2013). Most of us are happy to be doing something we love, that allows us time to be with and support our families, to be a part of something larger than ourselves, and that gives us a sense of personal worth. We can find all of this through teaching.

Teaching is a noble **profession**. It is a joyful profession. Teaching is also demanding work. It is a profession that requires making hundreds of decisions during a school day, managing 20 to 40 students or more hour after hour, analyzing data about learning, and interacting with parents and colleagues. Teaching has never been easy, even in earlier times when the classroom was a one-room schoolhouse. In addition to ensuring all their students were learning, teachers in former times had to build the fire to keep the school warm and sweep up after the students went home. Teaching requires sustained energy, effort, and motivation.

Is teaching the right choice for you? Some candidates for teaching have started along this career path because they enjoyed going to school. Some follow in the footsteps of parents, aunts, or uncles. Others want to be part of kids' lives, to advocate for children, and to give children exciting, meaningful experiences to help them become educated adults. Many remember a favorite teacher and want to have the same influence on others that that teacher had on them. Teaching seems familiar because we have all spent so much of our lives in classrooms. It is possible to think that teaching can't be too difficult because many of our teachers made it seem easy. We saw teaching through the eyes of the students, not the eyes of the teachers. Teachers have a very different view of classrooms.

The Joy of Teaching

Teachers must be able to laugh, to get their students to laugh, and to laugh with their students. Learning should be fun. Smiles and laughter can brighten any situation, relieve stress, and make whatever challenging task is at hand less daunting. Laughter clarifies the mind and brushes aside confusion as a visceral emotion, and sudden clarity surprises the consciousness. Laughter is beneficial and often contagious. The joy that bubbles up when a group of students is pleasantly surprised or excited

should never be squelched. New teachers may be admonished, "Don't smile until Christmas," but hopefully you will never find yourself in such dire circumstances. A bit of silliness now and then does not exclude the serious aspects of teaching.

A favorite science methods professor of one of your authors (Linda) made every class a delight. He would laugh, joke, and tease us into learning complex concepts. He often reminded us that he was serious but not somber about science education, and then he would smile. It is the playfulness and spirit of teachers that endears them to students. And it is what students remember of their teachers. As you read this book, check out the Teachers' Lounge features for humorous and heartwarming stories teachers tell.

It is through sharing stories that teachers become aware of their strong ties to their professional community. Sharing stories also provides a



Teachers get to work with people of all sizes, and every day brings something to be happy about. iStock/Paola Giannoni

venue for understanding the mysteries of teaching and why it is so rare and marvelous to be a teacher. Ask teachers you know to tell you a story about something funny that happened to them while they were teaching. As their stories unfold, watch their faces, and you will see the joy in teaching.

The joy and rewards of teaching vary from teacher to teacher. The best teachers genuinely enjoy working with children and youth. They find a challenge in ensuring that underserved students learn at important levels and take joy in the academic success of all students. Every teacher has a story about the joy to be found in teaching. Teachers treasure these moments and are always willing to share them.



Teachers enjoy seeing their students be successful.

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Teachers Create Joy for Themselves and Their Students

Teachers are creative individuals. They are constantly thinking of ways to connect with their students and create joy. During the Covid-19 shutdown, one teacher who felt disconnected from her first graders read them a bedtime story each night at 7:00 over Zoom. Teacher and students would all be in pajamas and with blankets. Afterward, they would talk about the story or just laugh about funny things that happened that day. Also, whoever wanted to hang out after the virtual class would meet on Prodigy and challenge each other in math. These are two amazing ways to bring students and a teacher together while apart, thanks to technology.

Intrinsic and Extrinsic Joys

Mr. Zaldaña finds joy in teaching when his students discover that education can be a powerful tool for improving their own lives. The joy in teaching can be found in a variety of ways. Most teachers experience **intrinsic rewards** when students grasp the concept or task they have been teaching. Students are as different as night and day. Some students are successful in everything they pursue. Some are not. Some students are involved. Others are not. Some students resist learning. When teachers can engage students, they are rewarded for their efforts. The more teachers can bring students together in a learning community, the more they are rewarded. It is a positive cycle that excellent teachers strive to perpetuate. It is challenging to try to meet the needs of each individual student, and it is genuinely exciting and joyful when teachers can accomplish this. Teaching is never boring. It is different from minute to minute, and there is no single formula that works for everyone.



The rewards of teaching can come from a variety of sources.

Extrinsic rewards for teachers come from acknowledgments from students, other teachers, parents, and prestigious awards such as Teacher of the Year. Teachers receive visits and letters from former students thanking them for inspiration, comfort, and happiness. Sometimes teachers are surprised at the influence they have had on certain students. When that mischievous student who made them want to tear their hair out, day after day, shows up in later years with a smile and a thank-you, the reward is clear.

Parents write thank-you notes, volunteer to be a teacher's aide, and bake treats for special occasions. Other teachers ask for help with a specific problem or ask to use a lesson that you have developed. Their appreciation of your skill as a teacher is rewarding. Teachers of the Year receive public accolades and can share their expertise with others through speeches and demonstrations. Some awards are even accompanied by money. Payment for going an extra distance is rewarding, but most teachers will tell you it is not the money that brings them joy in teaching.

Making a Difference

Can you think of a teacher who made a difference in your life? It may be one who really cared about you, persuaded you to apply for college, challenged you to learn, or helped you develop self-esteem. Professional athletes, presidents of companies, and national leaders often attribute their success to a teacher. Teachers may not know until years after a student has left their classrooms that they had such an impact.

Parents believe teachers make a difference in their children's lives, especially when learning. Many parents know who the good teachers are in their schools and do everything they can to ensure their children are in those teachers' classrooms. According to the 54th annual PDK Poll (PDK.Poll.Org, 2022), Americans' ratings of their community's public schools reached a new high. When parents know the teachers at their children's schools and see their direct impact on their lives, they are more likely to view their education as positive.

Teaching as Practice and Research

When you become a teacher, you will spend every day of the school year, and some days when you are not teaching, using the knowledge and practicing the skills you gained during your teacher education program. You will also be researching the practice of other teachers and reading research studies to improve your knowledge and skills, just as Mr. Zaldaña is doing. You may not be aware that you will also be conducting research regularly.

Teachers are considered practitioners, while others, usually academics, research what teachers do, think, and practice. Teachers are research practitioners. Every lesson, every encounter with students, every paper corrected becomes a source of data for teacher reflection and decision making. Teachers naturally compile data over time to judge the effectiveness of a lesson or student growth in learning. Learning is a process, and keeping track of how it occurs and evolves is a part of teaching.

Change is intrinsic to schooling. Understanding how any of us learn and how teachers think, learn, and develop skills in practice is becoming of greater interest to policy makers and academic researchers. In 2017, the James S. McDonnell Foundation announced a new program to fund educational research on the science of teaching and expand the understanding of teachers as learners and as agents of change in education. Teachers will play a huge part in research in this area. For you, as a future teacher, it will be important to document your growth and to track changes that may have meaningful results for you and for your students.

Thinking Differently

The Power of Reflection

Most teacher education programs encourage the teacher candidates to spend some time reflecting on teaching practices—to contemplate the success of lessons that have been planned and taught. Reflection is a powerful tool and necessary if teachers wish to grow professionally. Reflecting on the fun times you have had with students is not something you have been asked to do on a regular basis, but it can certainly remind you of why you teach. In a discussion thread in one of Linda's courses, a teacher working on her master's degree commented that the things she loved about teaching she never ended up writing about. She talked about a magical fall day with her students being engulfed in a windstorm of fall leaves, stopping to make piles of the leaves, and then throwing them in the air and running through them. Another teacher in the class responded to this story with the following:

The more classes I take, the more I overreflect and the more complicated everything becomes. I start to see the words, algorithms, data, research, numbers, statistics, and strategies and get so overwhelmed. But it is when I strip away all of these things and enjoy a simple moment sitting on the carpet with three students using play spatulas to pick up letter-shaped cookies or when I hang up the "I miss you" notes from previous students or taking last-day-of-school selfies with my first-year class that I am reminded why I am here and what keeps us all coming back each day and each year. Thanks for sharing your leaf story! It made me smile and think of my own stories like those I have had with my students!

WHY SHOULD TEACHERS BE CONSIDERED PROFESSIONALS?

Merriam-Webster defines a *profession* as "a calling requiring specialized knowledge and often long and intensive academic preparation." All states require at least a bachelor's degree to be eligible for an initial license to teach. Traditionally, states have required some specialized preparation in education that includes student teaching or an internship. A growing number of universities are requiring teacher candidates to have a bachelor's degree in a content area before they begin graduate work in education. Thus, over time, teachers can receive their specialized preparation for teaching at the graduate level. Many teachers today have a master's degree and continue to participate in professional development activities throughout their careers.

Most teachers consider themselves professionals. However, many identify teaching as a semi-profession compared with law, medicine, architecture, engineering, and accountancy. One reason is that teaching does not provide the same monetary advantages or prestige as the traditional professional fields. Another reason is that teachers have little control over the policies defining their work. Other professionals or policy makers select the curricula, set rules, and develop learning standards. Most teachers have limited access to an office, telephone, and secretary. The structure of a teacher's day may leave little time to interact with colleagues to plan or challenge each other intellectually.



Teachers collect data on student growth to make decisions about instruction. iStock/Drazen Zigic

Being a Professional

A profession sets standards for entry into the profession. In addition, its members apply standards and codes of ethics to themselves and others, disciplining one another, when necessary, by removing licenses from offenders. Professionals provide services to clients. Their work is intellectual, requiring specialized knowledge and skills. They are bound by an ethical code that guides their relationships with clients and colleagues. They also have an obligation to practice their profession in ways the public would find acceptable. In professions other than teaching, standards and rules are set by the professionals themselves.

There are many ways that teachers can become involved in activities related to their profession. Teacher unions provide an opportunity for teachers to negotiate contracts that outline salary and working conditions. Teacher organizations in most states conduct annual or semiannual statewide meetings for their members. These meetings provide professional development opportunities, a chance to network with other teachers, and a mechanism for becoming involved at the state level.

You can stay engaged with your subject area and other educational interests by joining national organizations such as the National Council of Teachers of Mathematics (NCTM) or the National Council of Teachers of English (NCTE). Many of the national organizations have state affiliates of which you could become a member or even a leader. Through teacher organizations, teachers can serve on accreditation teams that evaluate schools and universities in their state or across the country. One sign of a true professional is their active and continued involvement in professional organizations at local, state, and national levels.

Two of the InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0 (Council of Chief State School Officers, 2013) include professional learning and leadership and collaboration components. Standard 9 states that "the teacher engages in ongoing professional learning," and Standard 10 states that "the teacher seeks appropriate leadership roles . . . and to advance the profession." You will read more about these InTASC standards later in the chapter.

Setting and Upholding Standards

Teachers work with professors, parents, and the public to set standards for students and teachers in their school districts, states, and national organizations. In some states, teachers have the majority control of

professional standards boards that have the responsibility for developing licensure standards for teachers and other school professionals. In states without professional standards boards, these functions are usually provided by a state board of education, whose members have been elected or appointed by the governor.

Accreditation

Colleges and schools of education and specific teacher education programs are held to professional standards. Most other professions require their members to graduate from an accredited program before they can take the state license examination. Some states require teacher education programs to be nationally accredited by the Council for the Accreditation of Educator Preparation (CAEP). Once you begin teaching, you are likely to be involved every few years in an accreditation visit by the state and/or regional accrediting agency such as the Northwest Accreditation Commission (now part of AdvancED).

When a college of education hosts an accreditation visit by a Board of Examiners (BOE), team members will want to talk to the teacher education candidates and ask questions about specific programs and field experiences. The team may ask you about your portfolio and what you have learned about working with students from diverse populations. They may ask how you know that the students you teach are learning. They are also likely to ask you about the quality of teaching at the university, particularly by education faculty members. Accreditation teams want to ensure that the teacher candidates are prepared to meet the profession's challenges and all students' needs.

Licensure

To teach in a public school, teachers must be licensed by a state agency to teach a specific subject (e.g., mathematics or social studies) at the middle or high school level. Early childhood, elementary, special education, physical education, music, and art teachers are licensed to teach children in specific grades such as preschool, primary, K–6, or K–12. If you graduate from a state-approved program, which is connected to national accreditation, you have usually met the requirements for a state license. You also will be required to pass a state license test in most states. Some states will grant a provisional license that lets you teach for 3 to 5 years before meeting all licensure requirements.

Several years of successful practice and completion of a master's degree is normally required to attain a professional license to continue teaching. Requirements are different when you apply for a license in a state other than the one from which you graduated. The second state may have additional requirements that you must meet and may have higher cutoff, or qualifying, scores on the required licensure tests such as the *Praxis** Core exam or content exams. If you plan to move to a different state to teach, check the requirements for a license so that you can take the appropriate courses during your program.

National Board Certification

Teachers with 3 years of experience are eligible to apply for national certification by the **National Board for Professional Teaching Standards (NBPTS)**. Applicants provide evidence in the collection of documents compiled in a portfolio to show meeting standards for their subject area at a specific age level. Each portfolio must include a videotape of the teacher teaching a lesson, **reflections** on teaching, and an analysis of student work. In addition, the teacher must complete assessment exercises at a testing center. Teaching performance is judged by experienced teachers using **rubrics** aligned with standards. Many states and school districts cover the costs for teachers to participate in this process.

What are the advantages of seeking national board certification? Most applicants report that the process helped improve their teaching and the performance of their students. They learned to reflect on their practice and make changes to improve student learning. A 2004 research study (Goldhaber & Anthony, 2004) of student test scores in North Carolina supports the perceptions of these teachers. The study found that the students of national-board-certified teachers are far more likely to improve their scores on state tests than students of non-national-board-certified teachers. In addition, many national-board-certified teachers receive annual bonuses or pay raises.

Teachers must know the subjects they will be teaching. The knowledge and related skills for teaching the subject are described in the standards of the national organizations that represent teachers in

that field. You will be expected to understand the subject well enough to help young people know it and apply it to the world in which they live. If students are not learning a concept or skills, teachers must relate the content to student experiences to provide meaning and purpose.

The professional and pedagogical knowledge needed by teachers is outlined in the widely accepted standards of the InTASC, established by the Council of Chief State School Officers (CCSSO, https://ccsso.org). The InTASC standards are used by most states as a framework for individual state standards. The effort behind the development and adoption of InTASC standards makes clear that teaching requires a great deal of specialized knowledge and skill. Teachers must be some of the brightest people on the planet. Teaching may not be rocket science, but it is close.

Code of Ethics

Like members of other professions, teachers as a group have developed a code of ethics to guide their work and relationships with students and colleagues. Professional standards boards and other state bodies investigate teachers for infractions against the code of ethics adopted by the state. Ethics statements address issues such as discrimination against students, restraint of students, protecting students from harm, personal relationships with students, and misrepresenting one's credentials.

Being a member of a profession is more than showing up for work by 7:30 and not leaving before 4:00. The parents of students in your classroom expect that you will help their children learn. They expect their children to score at acceptable or better levels on achievement tests. They are counting on you to contribute to their children's literacy and to push them beyond minimal standards. Good teachers manage their classrooms so that students can focus on learning. The public and parents become concerned when classrooms and schools appear out of control. As a teacher, you will be obliged to model acceptable behavior based on the profession's norms.

WHAT DO TEACHERS NEED TO KNOW?

When you watch teachers at work, you may wonder why they do things in a certain way or what motivates them to address one student's behavior differently from the way they might address another student's behavior. Since you cannot get inside teachers' heads and they cannot stop what they are doing to explain the reasons behind their actions, you have to accept the fact that they do know what they are doing and why they are doing it.

You will learn to understand and articulate teaching practices in your teacher education program. Becoming familiar with the teaching standards developed by InTASC will also help you understand the specialized knowledge, skills, and **dispositions** specific to the teaching profession.

Teacher Education Programs

Since teachers must be well educated, the first step in getting into a teacher education program is to demonstrate your brightness by completing university core requirements with a Grade Point Average (GPA) of at least 2.5 or higher. The advising centers at most colleges of education have complete information on what is required before anyone can be admitted to a traditional teacher education program. Visit the website of your local institution of higher education and check out the steps you must take to be admitted to one of its licensure programs for teachers.

The College of Education website (www.csulb.edu/college-of-education) at California State University, Long Beach, presents a range of links to different programs and different levels of professional work, as well as provides numerous links to career services and advising. It is easy to find out what you must do to earn a teaching degree. All the information you need to have a successful beginning is right at your fingertips.

Ways Teacher Education Programs Are Organized and Why

Teacher education programs are traditionally designed to move candidates along a path of acquiring knowledge of human development and behaviors, learning about laws affecting practice in schools, gaining

understanding of counseling practices as well as the impact of cultural diversity on schools and classrooms, and gathering an understanding of working with children with disabilities in regular school classrooms. Candidates who are seeking a secondary license to teach in middle schools or high schools must, in addition to the general university core, complete a specified number of courses in their selected field.

There is a great deal of debate in political and educational groups regarding the type of training necessary for teachers to receive a license. Some believe it is only necessary that a teacher knows the content to be taught. Others believe knowing how to teach is as important as, and perhaps more important than, content during the early grades. It is quite possible that future programs in teacher education will be entirely school based, and candidates will learn as apprentices alongside an expert mentor. The path to becoming a teacher will offer many opportunities and novel approaches. Some will fit you to a T. Find the right path, stay the course, and you will discover an extremely rewarding future.

The Importance of Clinical Practice

Many teacher education programs include early clinical experience to provide the candidates with opportunities to begin to learn what teaching involves. A policy brief on the clinical preparation of teachers by the American Association of Colleges for Teacher Education (2010) stresses the importance of clinical experiences as a key factor in candidates' success. Lortie (1975) made it clear that observing teaching was not the ideal way to learn how to teach—that teacher education candidates had to be actively involved in the daily work of teachers. Now, more than 40 years after Lortie's conclusions, university teacher education programs work to align university course work with practice in the field. Field-based teacher education programs place cohorts of candidates in partnership or Professional Development schools, assign them site-based mentors and supervisors, and require evidence of reflection on practice to help the candidates develop cognitive frameworks for teaching. One such field-based program is the 21st Century Schools partnership between the University of Nevada, Las Vegas (UNLV), College of Education and the Clark County School District in Nevada.

Different Pathways to Becoming a Licensed Teacher

You can study to become a teacher through many routes. Programs are delivered in college class-rooms and schools. Some programs can be completed via distance learning without stepping on campus. A growing number of candidates begin exploring teaching as a career in community colleges, initially developing portfolios and working with children and youth in schools and on community projects.

Most colleges and universities offer several pathways for becoming a teacher. Not all teacher education programs are traditional 4-year undergraduate programs. Many colleges of education offer postbaccalaureate courses to meet state licensure requirements. School districts may negotiate Professional Development course work with state licensing agencies to provide on-the-job credit for individuals who have the expertise to fill high-need positions but do not have a degree in teaching or a state license to teach.

The 5-Year Teaching Degree

Some teacher education programs are 5-year programs that begin at the undergraduate level and end with a master's degree or eligibility for a license after completing a sequence of graduate courses. These programs allow more time for candidates to study the art and science of teaching and learning. They sometimes require a yearlong internship in schools, allowing candidates to practice under the guidance of professionals who provide feedback and support throughout the internship.

Master of Arts in Teaching (MAT) or Certificate Programs

College graduates who decide that they want to become teachers after they have completed a bachelor's degree in another area have several options for pursuing a teaching career. They could choose a Master of Arts in Teaching (MAT) program that offers courses in **pedagogy**, human growth and development, assessment practices, and some form of internship. Schools in Georgia, Oregon, and

Hawaii, to mention just a few, offer MAT programs to qualified candidates. You might also be interested in checking out some of the MAT programs offered in other countries, such as Canada and Australia. Many colleges and universities have certificate programs in which candidates can complete the courses and field experience required for a state license. Some of these programs are offered entirely online. Most MAT or certificate programs require observation time and supervised student teaching, giving credit to the belief that before candidates are eligible to be teachers of record, they should have some practical experience in classrooms under the tutelage of an experienced teacher.

A web search of fifth-year and MAT programs will provide you with a robust list of colleges and universities where you can enroll in a program that will lead to a teaching license and a master's degree. There is some criticism that MAT and certificate programs may not offer the value that should be expected of a master's degree (Robinson, 2011). As a professional and a technology native, you will be able to search the Internet to find the program that best suits your intent.

Alternative Licensure Programs

Many new teachers are entering the profession through alternative routes that allow them to begin teaching without specialized preparation in teaching and learning course work or field experiences in schools. Opening the entry to teaching to anyone with a bachelor's degree challenges the status of a profession because doing so requires no specialized training. This is something that other professions such as medicine and engineering would find unacceptable. However, most states require these alternative-route teachers to take education courses and to be mentored by experienced teachers while they are teaching and completing the course work required for a license.

Many of these alternative routes to licensure (ARL) programs are designed for adults beyond the traditional college age of 18 to 24. They are built on the experience and background of candidates who often have worked for years in a nonteaching field. These programs may be similar to traditional undergraduate and graduate programs, but they offer greater flexibility in scheduling courses through distance education and prompting candidates to schedule their own field observations. Many candidates in these programs are working full-time in schools or other jobs.

School districts, state departments of education, and other organizations are also preparing teachers. The Utah Department of Education welcomes individuals who have a disposition toward teaching who don't want to go back to college, and Michigan and South Carolina allow teachers to start working while gaining certification online (Zalaznick, 2017).

Military personnel may participate in a program to assist men and women who have completed their military service in becoming teachers. Check out the Troops to Teachers website to see what this program offers. When U.S. military organizations are downsized, many well-trained individuals must seek employment in other fields. Military personnel who sign on to this program can receive financial assistance in tuition costs and in some cases are reimbursed for the expenses of moving to a new location. Purdue University Global offers a MAT degree that is completely online and accommodates individuals who are transitioning out of the military.

Teach For America (TFA), founded in 1990, recruits outstanding students from some of the nation's most prestigious universities to teach for 2 or more years in low-income communities throughout the United States. The TFA candidates spend a month in intensive preparation for their initial placement. During their years of teaching, they attend monthly professional development meetings conducted by TFA mentors and may also attend courses at a local college of education that will lead to a master's degree. The TFA organization receives financial support from the federal government, state departments of education, and private donors.

Contentiousness Issue: Learning to Teach vs. Teaching

Throughout the course work you will take to be ready to teach, you will hear many lectures on how children and young adults learn. Some of your courses will teach you how to build relationships with students. Some of your courses will focus on ways to recognize the individual attributes of students and ways to help them be successful, confident, and capable of learning. On your journey to becoming a

teacher, you will learn different methods for presenting content along with the importance of engaging students in discussions to explore new ideas and concepts. You will be asked to reflect on your beliefs regarding teaching and learning, as well as on your ability to deliver effective lessons, write lesson plans, and collaborate with colleagues.

Considerations

As you complete your teacher education program and become a classroom teacher, be prepared to confront the practical realities of a classroom assignment that may not fit or recognize the theoretical and/or idealistic principles presented in your program. Sometimes the contrast can be quite harsh, so be prepared and flexible. When you begin working in a school environment, you may be expected to engage in activities that you were not prepared for in your teacher education program. For example, you may be handed a packaged curriculum and instructed to teach it with fidelity, but after initial attempts at using the curriculum with fidelity, you find that it does not meet the learning needs of your current group of students. Or, you may be given an assignment to work with a resource paraprofessional because of the number of students in your classroom requiring individual education plans (IEPs). Being a teacher requires constant adjustments to what you teach, how you teach, and who you may be required to share your classroom with. Jessica at the beginning of Chapter 12 spent her first year of teaching without having her own classroom. She had all of her teaching materials on a cart and had to move from room to room to teach students. You just never know how your new career may begin.

Trends in the Teaching Force

Hussar and Bailey (2020) project that 58 million students (about twice the population of Texas) will be enrolled in U.S. public PreK–12 schools by the year 2028, and 3.9 million teachers (about twice the population of New Mexico) will be needed to instruct these students. Not all states will see an increase in student enrollment. The highest increase in student populations will be in Southern and Southwestern states. Teaching jobs become available as current teachers retire, move to other schools, or leave the profession. Over the next decade, around 700,000 teachers (about half the population of Hawaii)—almost one of four current teachers—are projected to retire. It seems that soon there will be a need for your talent.

Teachers leave their profession and move from school to school for a variety of reasons. The primary reasons for moving are layoffs, school closings, and other organizational changes in a school or district. Personal reasons include family responsibilities, moving to a new location, and health problems. School closures during the Covid-19 pandemic made it necessary for teachers to develop new skills for remote teaching. Some teachers left the profession because of this additional challenge to teaching.

You may not be able to find a teaching job in the community in which you grew up or near the university you are attending because the schools in that area have few openings. However, jobs do exist if you are willing to move to a part of the country where there are shortages because of high turnover, a growing student population, or a move to reduce the teacher-to-student ratio in classes.

Opportunities to get a teaching job are greater in urban high-poverty areas where high turnover exists. Urban and rural areas have more openings than suburban areas, although acute shortages exist in high-poverty suburban areas too. If you are willing to move to another state, your job opportunities will grow. Special education and math and science were noted as shortage areas in more than 45 states. Striking out on a journey to an unknown territory at the same time you are beginning a new career can certainly be daunting. Both take courage, something all teachers have, and you will be welcomed wherever you decide to go. Use technology to find your new job through a geographic information system and locate the place that most needs you.

Where you decide to teach might be determined by the salary that you can receive. However, buyers beware: Some states offer higher salaries because the cost of living is also higher in that state. And sometimes inflation adjustments take a toll on salaries. In 2022, the average public school teacher

salary was \$66,397 with a range from \$39,000 to \$80,000. There may be a variation in beginning salaries within states due to dense population areas and need. Most states also offer incremental increases for longevity and course work and degrees earned. Visit the National Education Association website to view Teacher Pay in 2023 and educator salaries in each state.

Most teacher contracts are for less than 12 months, but teachers can earn additional income within the school year or during the summer by having second jobs outside the school. Teachers can also supplement their base salaries when they engage in the following activities related to schools or their education:

- Serving as a mentor or staff developer
- Achieving additional teaching licenses or certifications
- Becoming national board certified
- Teaching in a subject area where there is a teacher shortage
- Working in a school more challenging to staff than other schools in the district

Teachers also may receive supplemental income for chairing departments, being team leaders, sponsoring extracurricular activities, and coaching.

Teaching Fields

The first time the idea of teaching crosses our minds, we hold an image of teaching a certain age group of children or a certain subject. One person will imagine a kindergarten room full of brightly colored centers, another will visualize themselves at a board working equations with a group of serious high school seniors, another will imagine helping a group of students construct a model of the planets in the Earth's solar system, and yet others might see themselves using technology to deliver distance education. Teaching is an endless array of possibilities, and for each aspiring teacher, its attraction is to a different reality.

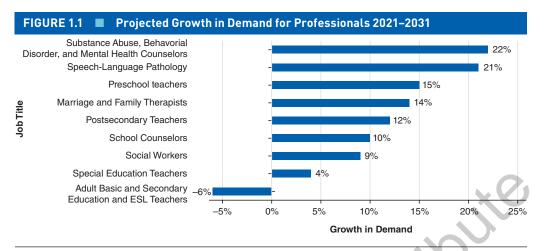
Have you decided what subjects you would like to teach? Math? Art? History? Writing? Technology? Or all the above? Urban and rural schools are likely to have openings for all subjects, from elementary through high school. However, not enough teachers are being prepared or retained in schools to teach mathematics and science classes, **English Language Learners (ELs)**, and students with disabilities. Your chances of finding a job improve if you qualify for one of these highneed areas.

Science, Technology, Engineering, and Mathematics (STEM)

The increase in federal funding for Science, Technology, Engineering, and Mathematics (STEM) programs is the result of data showing that fewer than 50% of U.S. high school students are ready to take college-level math, and fewer than 40% are ready for college-level science. Since it is anticipated that many of the job opportunities in the 21st century will require math skills and scientific knowledge, the federal government has made it a priority to fund educational programs that focus on STEM. There is also a concern that Latinx and Black American students have not had equal opportunities for instruction in STEM-content learning during high school.

Special Education

Another major shortage area is special education teachers for all grades, from preschool through high school (see Figure 1.1 for projected growth in this occupation). These teachers may work with a class-room of special education students but often work as resource teachers with regular teachers in inclusive classrooms. They teach students with mental, behavioral, sensory, physical, and learning disabilities. These jobs are usually very demanding, sometimes physically so, but they can lead to a great deal of joy as students become academically successful or learn to be independent. Many large urban school districts desperately need highly qualified special education teachers.



Source: Occupational Outlook Handbook, U.S. Bureau of Labor Statistics, https://www.bls.gov/ooh/

English Language Learners (ELs)/Bilingual Students

School districts report a shortage of culturally and linguistically diverse educators, especially in areas of the country with large numbers of Latinx and immigrant students. Over the past decade, the schools with these needs have expanded to smaller cities and communities in the Midwest and South where immigrants are employed and migrant workers have settled. Knowledge and skills in English as a Second Language (ESL) and bilingual education will give a new teacher an advantage in many urban and rural areas today. Large urban school districts have an immediate need for EL bilingual teachers. This is certainly true for Clark County School District in Nevada, where the Latinx school population is now over 50% of the total school population.

As mentioned earlier, beginning teachers often want to teach in the same community where they grew up and went to school. However, the types of communities that most beginning teachers have grown up in are not always the places that need the most teachers. If you want to be sure of beginning your teaching career when you graduate, you must go where the jobs are. Highly qualified teachers are always in demand. Make certain you meet the highest requirements for any job, and you will end up where you want to be. In real estate, the three major areas of concern are location, location, location. In teaching, location might have some influence, but good teachers can teach anywhere and discover the joy of helping students learn.

The Role of Technology in Becoming a Teacher

In this digital age, technology makes information, fact or not, myth or marketing, as close as a finger tap or voice command. You all know how to use various forms of technology for personal purposes—to discover that new restaurant, find out what time the movie starts, pay a bill, be a fan, check up on friends, and let your circle of loved ones know where you have been and what you have been up to. It is hard to imagine life without the ease of connecting to the world that technology affords us today. As you develop your teaching persona, you will have to think about how to use technology in a professional manner and how to use it to help students learn.

Throughout this textbook, you will be directed toward websites that will offer information about schools, students, teacher education programs, teaching positions, teacher salaries, and much more. Since this is your journey, when diving into the searches, let your personal questions and ideas guide you to learn more about this wonderful profession. Always keep in mind that not all URLs will take you to accurate information. That is why you must be part researcher when finding out what might be best for you as you become a teacher.

Much of what happens when you begin teaching is a mystery. In many ways, what happens from day to day in any classroom can be surprising. You might be prepared for the worst and find the best. You might discover something wonderful that you were not prepared for that stretches your knowledge

and skills in ways that are new and occasionally frightening. Teaching with the technology available to teachers today adds a dimension of magic to the art and science of teaching. It poses challenges that can leave your head spinning and surprises that make you and your students go, "Wow!" Teachers today must consider technology as a tool for student learning that can foster critical thinking and must learn to use the virtual interactive tools that their students use in their personal lives (McGrail et al., 2011).

Educational Technology Standards for Teachers

The International Society for Technology in Education (ISTE, 2023) has developed a set of standards for teachers. These standards define the fundamental concepts, knowledge, skills, and attitudes that teachers should exhibit. Candidates seeking certification or endorsements in teacher licensure should meet these standards. The instructors at your institution are responsible for making sure that you have knowledge of the standards and that you have had the opportunity to meet some of the performance indicators. Table 1.1 lists ISTE's seven standards areas with the main objective for the performance indicators. The standards are specific enough to define the broad goals of using technology in educational settings, yet general enough to allow for a comfortable fit within local circumstances. Visit www.iste.org/standards to learn more about the standards for educators. These performance indicators will give you a better understanding of what will be expected of you once you begin teaching.

TABLE 1.1 ■ International Society for Technology in Education Standards for Educators						
Standard	Example					
2.1 The Learner	Educators continually learn and explore practices that use technology to improve student learning.					
2.2 The Leader	Educators seek opportunities to support and empower student success and to improve teaching and learning.					
2.3 The Citizen	Educators inspire students to contribute to and responsibly participate in the digital world.					
2.4 The Collaborator	Educators collaborate with colleagues and students to improve practice and solve problems.					
2.5 The Designer	Educators design authentic learner-driven activities and environments that recognize learner variability.					
2.6 The Facilitator	Educators facilitate student achievement of the ISTE Standards for Students.					
2.7 The Analyst	Educators use data to drive instruction and support students in reaching learning goals.					

Source: Adapted from the International Society for Technology in Education (ISTE) website. 2023 International Society for Technology in Education (ISTE).

Record Keeping With Technology

In the next section of this chapter, you will read about the importance of keeping track of your progress toward becoming a teacher. There are so many documents that will demonstrate your expertise when you apply for a job. State departments of education will want to see evidence that you have passed the required test and that you have completed that course requirements for a license. New employers may want to see some evidence of your work as a student teacher, such as lesson plans, or hear you talk about your attitudes toward teaching and learning. They may also ask you to provide letters from people who know about your past accomplishments. Having such documents in files that can be easily retrieved will make your end game less stressful and can make you an organized and efficient individual deserving of a position.

WHY SHOULD YOU TRACK YOUR GROWTH TOWARD BECOMING A TEACHER?

Usually, people spend some time planning and charting a path before they embark on a long journey. There are maps to read and places of interest to check out to see if a side trip is warranted. Some folks even develop strategies for getting the most out of every mile. Not much planning is required for a trip to the supermarket, though a list is always helpful, but when committing to something that might be a benchmark in your life goal of becoming a teacher, planning is certainly essential, as is keeping track of your progress. Knowing what is expected of you is one of the best ways to feel confident and to ensure you get the most out of your classes and the clinical experiences you will have to complete.

As humans, we are strangely programmed to keep track of changes in our environment and in ourselves. We track the weather, our weight, the stock market, and the standing of our favorite teams. We even use almanacs to help us be prepared for events that may happen in the future. Teachers use **benchmarks** such as surviving the first year, successfully completing a round of parent–teacher conferences, and having students make adequate yearly progress on standardized exams to track their progress and to set personal standards for their continuous professional growth. Teacher education candidates should also set benchmarks for becoming teachers.

Keeping Track and Organizing Ideas

Tracking progress and keeping a record of it is something that professionals do. You will be expected to demonstrate what you have learned, when you learned it, and how it will contribute to your future success as a teacher. Some of what you learn will be facts, some concepts, and some complex ideas. Much of what you learn will connect neatly to what you already know, but some ideas will float around in your gray matter, looking for a reasonable home. A teacher's brain holds a marvelous collection of practicality, inspiration, artistry, and affect. You are beginning to build your cognitive network for teaching, and keeping track of this learning will help you understand how it is all connected. This is how we all learn. As David Ausubel, an American psychologist, would say, we create an overarching framework for becoming a teacher and then organize concepts and categories inside this framework.

During college years, it is one class after another until you graduate. What you learn in each class is really up to you, but how you keep track of the learning in each class can truly enhance what you learn in future classes. Every class you take has a syllabus. Each syllabus has a list of learning objectives. Keeping a record of those learning objectives and your personal achievement of them is an excellent step in tracking your progress as a beginning teacher.

Standards

Every content you learn in your teacher education program will relate in some way to the InTASC standards mentioned earlier in this chapter. Organizing your progress related to each InTASC standard will be an excellent way to document your learning. If you can discuss your achievement of these standards during a job interview, you will be the top candidate for any job since schools have adopted a **standards-based curriculum**.

Additionally, being able to articulate the professional standards for your field (e.g., mathematics or early childhood education) will make you appear brilliant to anyone interviewing you.

Student Standards

New teachers should know the student standards for the subject they will be teaching. All states have developed student standards that indicate what students at different grade levels should know and be able to do in a subject area. The tests students must take annually in mathematics, reading, writing, science, and social studies are based on state standards. Many state standards are based on national standards developed by national organizations such as the International Literacy Association (ILA), National Council for the Social Studies (NCSS), and American Association for the Advancement of Science (AAAS). State standards can be accessed on the website of any state department of education.

Teacher Standards

National professional associations have also developed standards that describe what teachers should know and be able to do to teach a specific group of students (e.g., ELs or students with disabilities) or a specific subject such as physical education. If teachers meet these standards, they should be able to help students meet necessary achievement levels. The teacher education program in which you are enrolled will no doubt be standards based and will help you develop the foundation to meet these standards.

There is no time like the present to start down the path toward successful teaching. Take advantage of the assignments and experiences you are required to complete, always thinking about how they relate to your future role as a teacher or students you will be teaching in the future. The activities at the end of each chapter in this book suggest opportunities to apply your knowledge to the realities of classrooms and schools. These activities can be incorporated into a portfolio of your work that will show your growth as you learn how to teach over the next year or two and can be used later during your interview for a job.

WHAT SHOULD A BEGINNING TEACHER DO?

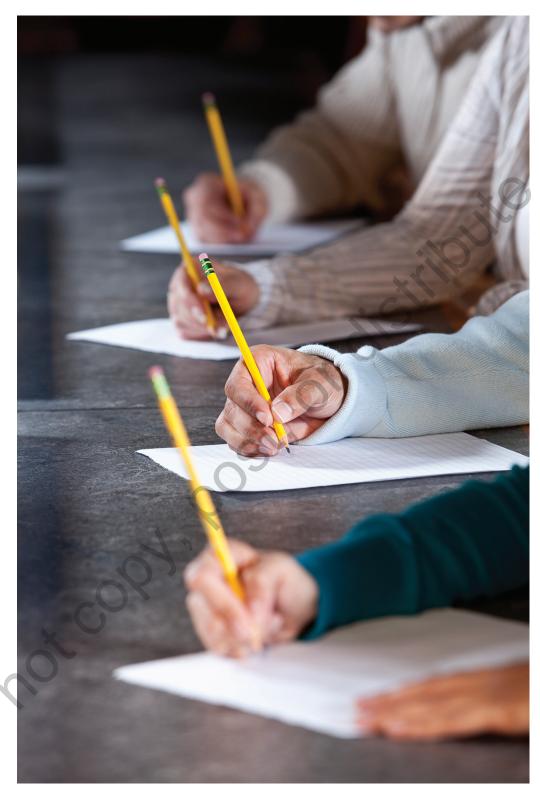
As a teacher education candidate, you are not expected to be a passive learner in your program. You will be required to show evidence that you have met professional and state standards through several **performance assessments** and to demonstrate that you know your subject matter and can teach (see Table 1.1). These assessments are usually administered at three major transition points within a program: (1) before admission to the program, (2) before you can student-teach, and (3) at completion of student teaching and the program. The assessments can include standardized paper-and-pencil tests, portfolios, case studies, evaluations of your student teaching or internship, comprehensive examinations at the end of the program, and projects. You will also be expected to show that you can help all students learn. Each assignment will provide you with evidence of your growth as a teacher.

Assessments Before Admittance to a Program

Teacher candidates are usually required to pass a basic skills test before they are admitted to a teacher education program. Every teacher should be competent in the basic skills of reading, writing, and mathematics. These tests are designed to determine that future teachers have the basic knowledge and skills in these areas. To be admitted to the professional course work in a teacher education program, most states require that you demonstrate aptitude by achieving passing scores on basic skills tests. The Educational Testing Service (ETS) website at www.ets.org/praxis offers detailed information about taking a basic skills test. The ETS website also contains a drop-down menu for individual state testing requirements for licensure. The Pearson National Evaluation Series website provides detailed information about its test services and how you can take exams at its test centers. Some states have developed their own tests of basic skills and other tests required for teacher licensure. The California Basic Educational Skills Test (CBEST) is a standardized test administered throughout the state of California and Oregon for individuals who want to teach at public schools. Individual state test requirements and passing scores can also be found at state departments of education websites.

Assessments of Learning to Teach

Learning to teach in an actual classroom is called a "practicum." It is practice. Practice is just as valuable for a teacher as it is for a pianist learning a new piece of music. In your teacher education program, you will have to practice, test yourself, practice again, test yourself again, and most important of all reflect on your practice and how well it went. Nothing will help you quite as much as learning to reflect on your practice. All expert teachers have learned to be reflective practitioners.



Teachers must demonstrate their knowledge of basic skills and their readiness to teach. Standardized tests provide states with evidence of a teacher's qualifications.

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Your professors and **field-based supervisors** will evaluate your performance in the classroom on assessment rubrics that describe the areas you must reach to show you are proficient in the skills and knowledge to help all students learn. When you receive feedback from the supervisors and professors, you will know where you need to improve your practice to meet the standards.

Assessments for Obtaining a License

Potential teachers in most states must pass one or more tests to be eligible for a license to teach. States either develop their own licensure tests or contract with a major test company such as the ETS or Pearson National Evaluation Series. A state board of education or standards board determines the **cut score** that test takers must achieve to pass the test. The score required to pass the same or similar tests varies from state to state. Your score could be high enough to be licensed in one state but not in another. Ohio, Virginia, and Connecticut have set higher cut scores than other states as part of their effort to raise the quality of teachers in the state. Check with the state in which you plan to work to determine the tests you will be required to pass before you receive a license.

Content Tests

Content tests assess candidates' knowledge of the subject or subjects they will be teaching or the field in which they will be working (e.g., ESL, algebra, or special education). These tests assess the knowledge outlined in the state and professional standards for the field, which is another reason to be familiar with the standards. You should develop the knowledge bases for your field in the courses you have taken in the sciences, humanities, arts, psychology, and social sciences. Secondary and middle-level teacher candidates often major in the academic discipline they plan to teach. Some states require elementary teacher candidates to major or have a concentration in one or more academic fields such as social sciences, mathematics, science, a foreign language, or English.

Most states require new teachers to pass content tests before they receive the first license to teach. Many institutions require candidates to pass this test before they are eligible to be a student-teacher. Knowledge of the subject you teach and how you teach it may seem like different sides of the same coin, but they are truly quite different. It is possible to be an expert in a field and not be able to explain one bit of it to a group of students in a classroom. Because of this, many states require that teachers pass tests in pedagogy.

Assessing Knowledge, Skills, Dispositions, and Student Learning

Knowledge is one of the easier areas to assess. The most popular assessment of knowledge is a standardized, pencil-and-paper test, which now is often completed on a computer. Teacher-developed quizzes and tests provide information on what is known or understood. Grades and your performance on papers, projects, presentations, and case studies contribute to the overall evaluation of the knowledge needed to teach.

Skills or performances are usually demonstrated as you collaborate with your peers, interact with your professors, and work with teachers and students in schools. Your skills can be observed and measured by how successful you are in helping students achieve on tests and other assessments. Field experiences and student teaching provide opportunities for you to apply your knowledge about a subject and pedagogy. You and others will assess your effectiveness in these settings.

A few states require beginning teachers to complete Praxis III, in which trained assessors evaluate their performance as a first-year teacher against standards using a scoring rubric. Teacher education programs in those states emphasize the development of the skills assessed by Praxis III. Other states, including Connecticut, require their new teachers to submit a portfolio after their first year of teaching as evidence they are meeting state standards. At UNLV, at the end of student teaching education, candidates present a digital portfolio to an audience of their peers and professors. Artifacts collected for the portfolio are tied to the InTASC standards.

Many teacher education programs have identified the dispositions that you should demonstrate before you become a teacher. They might include **proficiencies** such as these:

- Believing that all children can learn at high levels, which requires persistence in helping all children be successful
- Appreciating and valuing human diversity, showing respect for students' varied talents and
 perspectives, and commitment to the pursuit of individually configured excellence
- Respecting students as individuals with differing personal and family backgrounds and various skills, talents, and interests

These proficiencies cannot be easily measured on a test. They come across in the papers you write, the presentations you make, the lessons you teach, and the interactions you have with students and parents in schools. Over time and in multiple ways, your dispositions are demonstrated and assessed.

In most teacher education programs, you are expected to learn how to assess student learning and how to respond when a student is not learning. During your field-based practica, you will be required to collect data on student learning, analyze those data, and determine the next steps if one or more students are not learning. By the time you finish your program, you should be familiar with several approaches to assessing student learning. You should also know that students learn in different ways, requiring that you teach using strategies that build on their prior experiences and cultures. You will learn more about assessing student learning in Chapter 11 of this text.

Pedagogical and Professional Knowledge Tests

Some states also require new teachers to pass a test that assesses general pedagogical and professional knowledge that teachers should have to manage instruction and students. This information is taught in courses such as educational foundations, educational psychology, multicultural education, tests and measurement, teaching methods, and the course that requires you to read this textbook. Your specialized knowledge about teaching and learning is assessed in this group of tests. They require you to know theories in education, the critical research that guides how to teach your subject, instructional strategies, the impact of diversity on learning, and the use of technology in teaching.

Learning in School Settings

Most teacher education programs require candidates to observe and work in schools, often beginning with the first education course. You want to make sure you really like working with young children if you are planning to teach at the primary level or older adolescents if you are planning to teach high school. You can also learn whether you have the temperament to work with 30 students at a time or to maintain a schedule that requires you to be in a classroom with students for hours at a time without talking on your cell phone, texting, or having a snack. Field experiences confirm for most candidates that they really do want to teach. Others discover that teaching is not the job for them.

Being Comfortable in School Settings

Most of us found the time we spent as students in school enjoyable, and we liked going to school. That was one reason we were drawn to teaching. Most times, we got along well with our classmates and with our teachers. Teachers must be at school most days of the school year. The teachers we remember fondly are the ones that appeared to enjoy being at school. They greeted everyone with a smile and shared a kind word or two with everyone they met. They appeared happy and happy to be sharing their days with others in school.

The people who work in schools alongside teachers also appreciate friendly greetings and encouraging words. It is important to know the people who will support your role as a teacher because they are often the ones you call for help when something nonacademic goes amiss. When you are comfortable in the schools you are assigned to, when you know the people who work at the school and what their jobs are, when you show a positive regard for each member of the school team and exude a happy character, you will be comfortable in schools and help the people who work with you feel comfortable too.

Professional Development Schools

You may be assigned to a Professional Development School (PDS) for your field experiences and clinical practice. Teachers, teacher candidates, and college professors in a PDS collaborate to support student learning. They may team-teach and take turns teaching, planning together, and supporting each other. After a few weeks of working together, students and parents often are unable to distinguish between the teacher, professor, and teacher candidate. Spending time learning from and with others in a professional development school is a terrific way to learn to be a collaborative future faculty member.



Schools are busy places full of happy people helping one another. New teachers should make a point of knowing and respecting all the support staff at their school.

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Shadow a Student or a Teacher for a Day

Before you receive your first clinical assignment, make a concerted effort to spend a day in a school shadowing a student or a teacher. Shadowing students will help you see the school day through their perspective. Observe what work they are engaged in and how they negotiate the physical, mental, and social demands of being members of a class group. Take note of the kinds of interactions they have with other students and with the teacher. Learn how they keep track of all that is expected of them.

Shadowing a teacher will help you begin to understand what will be expected of you during a typical school day. Try to keep track of the number of decisions teachers make and what those decisions entail. Note the special routines and management strategies they have in place to keep track of the students, student work, and class and school schedules. Listen to the conversations they have with the students and with other teachers. Watch their work with an eye toward the roles you will perform when you begin teaching. It could be an eye-opening experience. If you hear students, parents, other teachers, and administrators refer to effective teachers, ask if you can visit their class to observe their interactions with the subject matter and with students.

Volunteer as a Teacher's Aide or as a Tutor

To learn more about teachers' work, volunteer to help in a classroom or school. Teachers have scores of duties to address, before, during, and after class, and an offer of help from a well-meaning individual is always welcomed. Visit a school near your home, meet with the principal, and explain that you are studying to be a teacher and would like to have some experience working in a school as a volunteer. Your offer of help will certainly be met with enthusiasm.

There are many ways that you can develop skills when working with students. When starting out in your teacher education program, it is good to have experience working closely with one or two children. Tutoring is a terrific way to become familiar with students' learning styles and to understand the difficulties some students have learning specific content. Tutoring programs at reading centers in colleges of education or in public libraries seek tutors for a variety of programs. Working as a tutor can help build your confidence and competence as a teacher.

Become a Member of a Teaching and Learning Team

You will have many opportunities to discuss educational issues in your teacher education courses. You will learn of the theories underlying practice and discuss ways theories are demonstrated through teachers' actions. While involved in your clinical practice, try to join a teacher group, and listen when teachers discuss teaching and learning issues and develop strategies for serving students. Take advantage of the expertise that can be gained from experienced teachers. Ask questions. When you visit schools as part of your field experience requirements, note effective teaching practices that you could incorporate into your own repertoire as you student-teach and later when you have your own classroom.

To become effective teachers, we learn as we observe and practice. We test theories and strategies, expanding our repertoire of ways to help students learn. With time, we become more familiar with the subjects we teach and the students with whom we work. We become more comfortable in the classroom as we understand the bureaucratic requirements of a school and become better managers of the classroom and learning.

TEACHERS' LOUNGE

IS IT MR. OR MRS.?

Having already completed my master's degree in elementary education, and not finding a permanent position in the previous summer, I turned my attention to working as much as possible in the schools of Johnson City as a substitute. In an attempt to meet and be known by as many people as possible, I accepted a several-day position as a kindergarten teacher. My teaching license covered Grades 1–6, but I thought my experience and general training could be easily adapted to kindergarten. In addition, I thought that the small class sizes and presence of a teacher assistant could alleviate any potential problems that might arise.

For context, Johnson City had recently constructed one building to house its K-8 classes, eliminating the middle school and several aging neighborhood elementary schools. Within the school there were no male teachers in the 30+ sections of K-3, nor were there any male administrators or office staff. Additionally, Johnson City sits on the confluence of the Susquehanna and Chenango rivers in central New York. During the winter, temperatures can easily dip below zero,



© Lloyd Goldberg

and windchills can cause dangerous situations if anyone is outside too long. As a self-preservation technique, I used to grow a full, black beard each winter.

On my first day, I was immediately ushered into the world of the little ones. Having a substitute immediately gets them into hyper-mode, and having a male teacher creates some form of irreconcilable conflict in their minds. As the day progressed, we were having a productive experience, but one little boy kept referring to me as Mrs. G, instead of Mr. G. Normally, this isn't a big deal, but he was a smart kid and was the only student to seem to have difficulty with the concept of his teacher being a man. The fact I was wearing a tie and had a full beard was of little consequence to him.

Finally, I pulled him aside and gently said, "Buddy, I don't know about your family, but in mine it is the men who have beards and we call them mister." After a few seconds of intense thought, he motioned for me to come closer to him and responded with "But my grandma has a mustache." Out of sheer respect, I let him call me Mrs. G for the rest of the time I was in the class.

-Mr. Lloyd J. Goldberg, Teacher Third Grade, Schorr Elementary Las Vegas, Nevada

Challenging Assumptions

Do the kinds and amounts of preservice education and preparation that teacher candidates receive before they begin teaching have any impact on whether they leave the profession after their first year on the job?

The Assumption

Some policy makers believe that teachers who enter the teaching force through an Alternative Route to Licensure with little or no supervised field experience in a school setting are just as likely to stay in teaching as those candidates who have course work related to teaching and learning and have had practice teaching experiences.

The Research

Ingersoll et al. (2014) examined measures of teachers' subject-matter education and pedagogical preparation from data provided by two National Center for Education Statistics surveys. Their analyses demonstrated that "the type of college, degree, entry route or certificate mattered little. What did matter was the substance and content of new teachers' pedagogical preparation. Those with more training in teaching methods and pedagogy—especially practice teaching, observation of other classroom teaching and feedback on their own teaching—were far less likely to leave teaching after their first year on the job" (p. 29).

These study results suggest that what keeps teachers in the classroom beyond the first year has much to do with their pedagogical preparation apart from their other qualifications and experiences.

- 1. Do you know what the legislators in your state think about teacher preparation?
- 2. What experiences do you think are most important in learning to teach?
- 3. Can you cite any evidence for either of the perspectives on teacher preparation mentioned above?

UNDERSTANDING AND USING DATA

LICENSURE TEST SCORES

Each state sets the qualifying or cut score that test takers must achieve before they can receive a license to teach in the state. These scores differ across states, as shown in Table 1.2, and they may change as professional and political concerns change.

TABLE 1.2 ■ Qualifying Test Scores for Licensure								
Test	AR	СТ	LA	MS	NV	ОН	PA	VA
Biology: Content Knowledge	-	152	150	135	154	148	147	155
Elementary Education: Curriculum, Instruction, & Assessment	_	163	_	135	158	_	168	_
Elementary Education: Content Knowledge	-	-	150	-	-	-	-	143
English Language, Literature, & Composition: Content Knowledge	159	172	160	157	150	167	160	172
Mathematics: Content Knowledge	116	137	125	123	144	139	136	147
Social Studies: Content Knowledge	155	162	149	143	152	157	157	161

Your Task

Respond to the following questions:

- 1. What does this table tell you about becoming qualified in these eight states?
- 2. Why are scores not indicated for some states?
- 3. Why do some states require higher scores than others?

One way to analyze test scores across states is to look for patterns. In Table 1.3, bold indicates the state(s) with the highest qualifying score, and italics indicates the state with the lowest qualifying score. In some cases, states have qualifying scores that are close, but the range between high and low scores can be as much as 33 for elementary education for the states shown in Table 1.3.

TABLE 1.3 ■ High and Low Qualifying Scores								
Test	AR	СТ	LA	MS	NV	ОН	PA	VA
Biology: Content Knowledge	_	152	150	135	154	148	147	155
Elementary Education: Curriculum, Instruction, & Assessment	_	163	-	135	158	5	168	-
Elementary Education: Content Knowledge	-	-	150	- <	_	-	-	143
English Language, Literature, & Composition: Content Knowledge	159	172	160	157	150	167	160	172
Mathematics: Content Knowledge	116	137	125	123	144	139	136	147
Social Studies: Content Knowledge	155	162	149	143	152	157	157	161

The Power of a Support Group During Clinical Practice

Even though teaching involves being with groups of students every day, it can be a lonely profession if teachers do not interact with another in professional and personal settings. Sharing what works with colleagues and having them react and provide advice should be part of the culture of being a teacher. Other professions such as medicine and architecture require new graduates to practice as interns under the tutelage of experienced doctors or architects during their first years of practice. In many regards, field experiences and student teaching are intended to serve this purpose.

Teachers who welcome teacher education candidates into their classrooms as co-teachers represent an exceptional group who are not only experts in their profession but also eager to give back to their profession by helping others succeed. These teachers will guide you through the myriad dimensions of teaching. They will give you feedback on your teaching assignments and actively listen to your concerns. They become your colleagues in learning to laugh when the unexpected happens and to cheer you onward when your steps may not be so sure. They are also responsible for making sure that you meet standards for clinical experience, so they will expect your best effort and may admonish you when your performance is not acceptable. Be ready to accept constructive criticism as well as the praise that will certainly be yours to enjoy.

Understand the Role of Your Mentor or Cooperating Teacher

Many years ago, the *Harvard Business Review* let the business community know that "Everyone Who Makes It Has a Mentor." The article went on to advise new members of business that if they

did not have a **mentor**, they should find one (Collins & Scott, 1978). Soon after this pronouncement, the teaching profession began to look at what support mentors to new teachers could provide, and a formal construct for mentoring in teaching was developed. Of course, experienced teachers who serve as mentors to beginning teachers have always been around even without being called mentors. Your cooperating teacher is one of the mentors you will encounter on your journey to becoming a teacher. Other mentors may come in the form of professors, relatives, colleagues, and friends. If you do not seem to have a mentor, ask questions, and one will magically appear.

How to Set the Stage for Success in Your First Teaching Job

There is so much you need to know and do before you enter the classroom that first day. It has been said that if you desire a perfect ending, then the beginning must also be perfect. Your teacher education course work and clinical experience will program you for success in your first teaching job, but the guarantee that you will be more than ready rests solely on your shoulders. To paraphrase Eleanor Duckworth, an emeritus professor of education at Harvard, to truly understand a thing, you have to learn it for yourself. All the lectures, all the assignments, and all the visits to schools will not have prepared you at all if you have merely gone through your program with your eyes on the degree at the end of the line. The best way to be prepared for that first teaching job is to develop the habit of asking questions, reflecting on each new step you take, collaborating with others, and always trying to broaden the horizon ahead by looking at it through perspectives different from your own.

Begin a Portfolio

A **portfolio** is a collection of your work, including papers, projects, lesson plans, and assessments. It serves many purposes. During your program, the artifacts (i.e., the documents and presentations) in your portfolio show your growth as a teacher from the first education course you take to completion of the program. Your written papers may have been submitted as part of your course work, or they may be written reflections of your experiences working with students. They show that you understand a particular topic in your field as well as your writing skills and demonstrate your ability to analyze issues and classroom situations.

Lesson plans, which you will develop later in the program as a detailed guide for your instruction of a topic, show that you understand the subject that you are teaching and that you can select appropriate instructional strategies for helping students learn. Evaluations of your field experiences and student teaching by your school and university supervisors provide evidence of your effectiveness in the classroom. Samples of student work related to the lessons you teach, along with your analysis of the student work, and reflections on how effective your teaching was and what you would do differently the next time, provide evidence that you have the knowledge, skills, and dispositions critical to a teacher's work. The artifacts in your portfolio can be evidence that you meet state and professional standards discussed earlier in this chapter.

Like architects and artists, new teachers select examples of their best work for portfolios to be presented at job interviews. These portfolios should also include demographic information that presents your credentials: a résumé, transcripts, child abuse clearance, criminal background clearance, and teaching license. Any awards or honors that you have received should be added to this portfolio. Letters of recommendation from faculty and/or your supervising teachers should be included along with any letters of appreciation or commendations from parents or students.

The task of compiling a portfolio will be much easier if you begin now to collect and organize your papers, projects, evaluations, and student work. You may be surprised to see your own growth over time. Technological advances have made the creation of digital portfolios commonplace. One advantage to the electronic portfolio is that it provides you the opportunity to highlight your technology skills—one of the requirements of many standards. To assist you in beginning your portfolio, each chapter in this book suggests one or two tasks for that purpose.



Maintaining a digital record of professional growth and achievements is one way teachers can document their careers and share information with others.

iStock/bondarillia

Reflect on Your Observations and Practice in Schools

Reflection, a valued skill in teaching, allows you to think about the effects of your choices and actions on students, parents, and other professionals in the learning community. Reflecting on practice and what is learner is an extremely complex and demanding process that requires a lifetime of dedication. John Dewey is quoted as saying, "We do not learn from experience, we learn from reflecting on the experience." Reflection on practice can be enhanced through documentation of actions.

Creating a portfolio is one way you can keep track of what you do and record how well it seems to play out. Once you have the documentation, you can revisit specific events or actions over time and reflect on what might be improved. Reflective teachers can articulate why they chose one instructional method over another, analyze the approach's effectiveness when they use it, and choose another approach for a student who did not learn the first time around.

Early in your program, you will be observing teachers and working with small groups of students rather than teaching. However, you can begin to develop your reflection skills in both these school settings and activities in your college classroom. One popular process is the maintenance of **journals** in which you summarize your thoughts about and reactions to the major things you observed or experienced in a class or school. Journal entries should be brief, candid, and personal. You should record how you were affected by the events and why. You may be surprised, angry, puzzled, delighted, or apathetic. You may not believe what you are reading or seeing. You may want to step in and change something. You may have learned a new strategy for accommodating the needs of a student with disabilities. The journal allows you to regularly record (usually daily or weekly) your reflections on what you are learning. As you read your journal later, you will see how your thoughtful reflections helped you define your own teaching.

Begin Collaborating With Peers and Professors

One way to help you determine whether you want to teach is to talk and work with teachers and other school professionals. You will begin to get a better sense of what it is like to be a teacher rather

than a student. Ask the teachers you observe why they chose a particular lesson, responded to one student in one way and in a separate way to all of the others, and used a particular assessment. Be helpful to the teachers when they ask for assistance and sometimes even when they do not seem to need your help.

You should begin to develop your collaborative skills as you work with other candidates and professors on campus. You are likely to be assigned to work with your peers on group activities. These activities provide you the opportunity to be a leader in planning and delivering papers and presentations. To be successful, you will have to work with people with whom you have many common experiences and others with whom you have little in common. You may have to assist others and sometimes do some of their work for the good of the team. When you are in the classroom, you will find similar dilemmas as when you work with other teachers. You may also have a better understanding of the group dynamics of students when you assign them to group work in the classroom. It is wise to begin now to learn to collaborate with professional colleagues. In a year or two or three, you will be amazed at where your journey to become a teacher has taken you.

CONNECTING TO THE CLASSROOM

- Why teach? The reasons individuals chose to become teachers can be as different as the individuals themselves. Many people chose teaching because they enjoy working with others and helping people learn, and because they enjoyed their time as students in schools. There are many rewards to teaching, and teaching provides individuals with the opportunity to express their creative talents, do something they love, and be a part of something larger than themselves.
- Why should teachers be considered professional? Teachers are professionals because they have
 a code of ethics and standards for practice and are part of an accredited profession. Teaching is a
 challenging profession that requires its members to be knowledgeable, skillful, and in possession
 of the necessary disposition for working with others.
- What do beginning teachers need to know? Teachers need to become familiar with standards
 for PreK-12 students as well as standards for teachers. Teachers need to demonstrate competency
 in knowledge of content and in teaching skill through completion of required assessments.
- How do teachers track their growth toward teaching? Beginning teachers must track their
 progress by collecting documents that demonstrate their achievements in college classrooms and
 as evidence of their successful activities in schools and classrooms.
- What should beginning teachers do? Teachers must engage in many developmental processes in order to become licensed teachers. They need to collaborate with other students and teachers and spend time in schools.

KEY TERMS

Accreditation National Board for Professional Teaching

benchmarks Standards (NBPTS)

Benchmarks Pedagogy

Cut score Performance assessment
Dispositions Portfolio

English Language Learners (ELs)

Extrinsic rewards

Field-based supervisors

Intrinsic rewards

Profession

Proficiencies

Reflections

Rubrics

Lesson plans Mentors

Journals Standards-based curriculum

CLASS DISCUSSION QUESTIONS

- 1. It is believed that some individuals are natural teachers. Is it possible that even individuals who have the natural skills to be teachers would need to learn more to become skilled classroom teachers?
- **2.** What are some of the ways you learned about the teaching profession even before beginning your teacher education program?
- 3. This chapter suggests that teacher education candidates should be able to show evidence that they meet the InTASC standards. Why is it necessary for teachers to possess the knowledge, skills, and dispositions identified in these standards? Which of the InTASC standards do you personally find most important? Why?
- 4. Do you consider teaching a profession similar to law and medicine? Why? Why not?
- **5.** Why is it important to track your professional growth during your teacher education program? How can tracking your growth as a professional help you in the future?

SELF-ASSESSMENT

What Is Your Current Level of Understanding and Thinking About Becoming a Teacher?

One of the indicators of understanding is to examine how complex your thinking is when asked questions that require you to use the concepts and facts introduced in this chapter.

Answer the following questions as fully as you can. Then use the Assessing Your Learning Rubric in Table 1.4 to self-assess the degree to which you understand the complexities of becoming a teacher.

- 1. How would you explain to someone who was not an educator why teaching is a profession?
- 2. Why is it important for teachers to possess specific knowledge and skills?
- **3.** How can a teacher's competency in a content area be assessed?
- 4. When should a teacher candidate begin collecting artifacts about their professional growth? Why?

ASSESSING YOUR LEARNING RUBRIC

TABLE 1.4 Assessing Your Learning Rubric										
	Parts & Pieces	Unidimensional	Organized	Integrated	Extensions					
Indicators	Elements/ concepts are talked about as isolated and independent entities. Some important names are provided in isolation.	One or a few concepts are addressed, while others are underdeveloped, or not mentioned.	Deliberate and structured consideration of all key concepts/ elements.	All key concepts/ elements are included in a view that addresses interconnections.	Integration of all elements and dimensions, with extrapolation to new situations.					
Becoming a teacher	Some reasons and necessary skills are provided with little or no connection between or among them.	Teaching is described in relation to knowledge of content and classroom instruction.	Multiple roles that teachers perform are described.	A holistic view of the many facets of becoming a teacher is provided.	Teaching and becoming a teacher is described as professional growth.					

FIELD GUIDE

For Learning More About . . . Becoming a Teacher

A field guide is a book or pamphlet people can bring along when exploring their surroundings. The term *field guide* is generally used to help people identify wildlife or other objects in nature. In biology, field guides are designed to help the reader identify specific birds, plants, or fish by studying their features and characteristics. Field guides can help people distinguish one object from another that might look similar but is not.

In this text, the term *field guide* is a metaphor. The activities described at the end of each chapter will help guide you through your investigations of the foundations and purposes of schooling in America. In a sense, you will be creating your own field guide of evidence of teaching and student learning. As a field biologist would do, you should take field notes as you complete the activities outlined for you at the end of each chapter. These notes should include facts and descriptions of your observations. Your field notes should also include date, time of day, the grade or group you are observing, and your reflections and "Aha!" moments. Keeping such detailed data is a form of journaling.

Persons engaged in field work also collect artifacts such as pictures and samples of what they are studying. John James Audubon (1785–1851), an American naturalist, completed more than 400 life-size paintings of birds in his expeditions into the field. You will not be expected to collect a specific number of items or even attempt paintings of the classrooms you visit, but you should have evidence of teaching behavior, student responses, and school organization and culture.

Once you have become comfortable in schools and in the classroom, you should begin to compile your field notes into a portfolio—a collection of evidence of your growth toward becoming a teacher. Each chapter in this text will introduce field guide activities such as observation of the school and classroom environments, specific portfolio tasks, and the practice of journaling. When you complete each of the suggested activities in Table 1.5, you will have ample evidence that you have a thorough understanding of schooling in America.

TABLE 1.5 ■ Field Guide Ask one new and one experienced teacher to recall their first year of teaching. If they Ask a Teacher could start over, what would they do differently? What had they been well prepared to or Principal handle when they first entered the classroom? What were their greatest challenges? What recommendations do they have for making your first year successful? What amazing stories do they have to tell? Make Both teachers and students are expected to meet standards in today's schools. The NBPTS Your Own states that teachers should be (1) "committed to students and their learning," (2) "know the **Observations** subjects they teach and how to teach those subjects to students," (3) be "responsible for managing and monitoring student learning," [4] "think systematically about their practice and learn from experience," and (5) be "members of learning communities" (NBPTS.org). For one of your next visits to a school, select one of these five expectations and record evidence that you see of teachers in the school demonstrating it. **Build You** Many people report that a teacher has made a great difference in their lives. Write a short **Portfolio** paper on the influence one or more teachers have made on your life. Describe what the teacher did in the classroom that impressed you. Begin to develop a list of characteristics of teachers who are making a difference. Later you can return to this paper and list to determine if you are developing the same characteristics in yourself as you saw in the teachers you admired. Learn the standards for teaching in your state. Make a list of the proficiencies related to knowledge, skills, and dispositions that you are expected to demonstrate in the classroom. During your field experiences, when you achieve one of these standards, place a checkmark by the standard and indicate how you know that you have achieved the proficiency (e.g., the assessment used and your score). As you progress through your teacher education program, continue to add checkmarks until you have met all the standards. This exercise will help you become very familiar with the standards and will also be tangible proof of how much you have learned.

Read a Book

In *Those Who Can*, by Neil Bright (2013), you will read about master teachers and what they do to encourage, inspire, and promote student learning. You will also read about ways teachers express their professionalism both in and out of the classroom. This book is one that you should talk about with other teachers. Bright's comments should be discussed and implemented whenever possible. The book can serve as a guide and a comfort zone when your first forays into teaching do not turn out as you would like.

In a fresh look at what teachers and administrators can do to make schools places where teacher and students want to be, Nancy Atwell's *Systems to Transform Your Classroom and School* (2013) provides a detailed look at what engaging teachers do to establish environments in which all students can learn. As you read this book, talk and think about ways you will implement some of the practices in your own future classroom.

Search the Web

National Teachers of the Year: Visit www.ccsso.org/national-teacher-of-the-year to see examples of National Teachers of the Year.

State Licensure Requirements: State licensure requirements can be accessed from the state agency in which you are interested or from the National Association of State Directors of Teacher Education and Certification (www.nasdtec.org), where you can access information on licensure requirements and state agencies responsible for teacher licensing.

National Education Association: See the website of the NEA (www.nea.org/home/30442.htm) for an example of a code of ethics. You should become familiar with the code of ethics in your state and school district.

Licensure Tests and Study Guides: For additional information on the licensure tests and study guides, visit the websites of the two major testing companies (www.ets.org and http://home.pe arsonvue.com/Test-Owner/Deliver-your-exam/Pearson-VUE-test-center-network.aspx). You will need to check with your state to determine which tests you will be required to pass.

Additional Web Resources Education Week: The website of Educa education and the latest news on education and the latest news of the latest news

Education Week: The website of Education Week at www.edweek.org includes statistics on education and the latest news on educational practices and issues in schools and universities.