EDUCATIONAL PSYCHOLOGY

ANITA WOOLFOLK | ELLEN L. USHER

Educational Psychology

Fifteenth Edition

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Anita Woolfolk Hoy

In memory of my mother,

Marion Wieckert Pratt

1922–2020

A remarkable educator,
An adventurous world traveler,
A courageous advocate for all in need,
And a wonderful guide in life—
Thank you

Ellen Usher

With gratitude to my extraordinary fifth-grade teachers,
Elizabeth Fogartie and Debbie Reeves,
whose influence and inspiration shaped my life path.

From Both of Us:

In memory of

Albert Bandura

1925-2021

He forever changed the fields of social and clinical psychology, learning, motivation, personality, and moral reasoning.

As undergraduate and graduate students, we read his books and studies. As professors, we taught his theories. As researchers, we grounded our work on motivation, self-efficacy, and self-regulation in his research and scholarship.

We have never known an educational psychology that did not include his thinking, nor will we ever.

A lifetime of thanks to you, Professor Bandura, our professional inspiration and guide.

About the Authors

So you will know your authors a bit better, here is some information.

Anita Woolfolk Hoy was born in Fort Worth, Texas, where her mother taught child development at TCU and her father was an early worker in the computer industry. She is a Texas Longhorn—all her degrees are from the University of Texas, Austin, the last one a PhD. After graduating, she was a psychologist working with students in elementary and secondary schools in 15 counties of central Texas. She began her career in higher education as a professor of educational psychology at Rutgers University, and then moved to The Ohio State University in 1994. Today she is Professor Emerita at Ohio State. Anita's research focuses on motivation and cognition, specifically, students' and teachers' sense of efficacy and teachers' beliefs about education. For many years she was the editor of *Theory Into Practice*, a journal that brings the best ideas from research to practicing educators. She is a Fellow of both the American Psychological Association and the American Educational Research Association, and has served as President of Division 15 (Educational Psychology) of APA and Vice-President for Division K (Teaching & Teacher Education) of AERA. Anita also has collaborated with Nancy Perry, University of British Columbia, to write the 2nd edition of *Child Development* (Pearson, 2015) and with her husband, Wayne Hoy, to complete the 5th edition of *Instructional Leadership: A Research-Based Guide to Learning in Schools* (Pearson, 2020).

Ellen L. Usher spent her early childhood in Roswell, Georgia, where she had diverse educational experiences that included attending a private nature-based school and public elementary and middle schools. She went to high school in rural South Carolina and urban Atlanta. A lifelong Francophile, she earned her Bachelor's in foreign language education and began her professional career teaching French to elementary school students in Atlanta Public Schools. Inspired by her own favorite former teachers, Ellen transitioned to teaching fifth and sixth grades while pursuing a master's degree in middle grades education from Oglethorpe University. After earning her PhD in Educational Studies from Emory University, Ellen began her career in higher education at the University of Kentucky in 2007, where she is director of the P20 Motivation and Learning Lab—an intergenerational, interdisciplinary team of researchers engaged in projects that explore human motivation in a variety of teaching and learning contexts. Ellen is a Fellow of the American Psychological Association and past Chair of the Motivation in Education Special Interest Group of the American Educational Research Association.

Preface

Many of you reading this book are enrolled in an educational psychology course as part of your professional preparation for teaching, counseling, speech therapy, nursing, or psychology. The material in this text should be of interest to everyone who is concerned about education and learning, from the nursery school volunteer to the instructor in a community program for adults learning English. No background in psychology or education is necessary to understand this material. It is as free of jargon and technical language as possible, and many people have worked to make this edition clear, relevant, and interesting.

The fifteenth edition of *Educational Psychology* continues to emphasize the educational implications and applications of research on child development, cognitive science, learning, motivation, teaching, and assessment in diverse contexts. Theory and practice are not separated in the text, but are considered together to solve the everyday problems of teaching. To help you explore the connections between research and practice, these pages include a wealth of examples, lesson segments, case studies, guidelines, and even practical tips from experienced teachers. Our goal is to provide knowledge and skills so you can build a solid foundation for a sense of teaching efficacy in every context and for every student. As you read this book, we believe you will see the immense value and usefulness of educational psychology. The field offers unique and crucial knowledge to *any who dare to teach and to all who love to learn*. Since the last edition appeared, there have been exciting developments in the field, and they are reflected in the upcoming chapters. We have also addressed the ways in which the COVID-19 pandemic has changed educational practices and outcomes for many teachers and learners around the world.

New Content in the Fifteenth Edition

Across the book, there is increased coverage of a number of important topics. Some of these include:

- A bold approach to face head-on the issues of **identity, race**, and **privilege** in teaching. After you explore the field of educational psychology in Chapter 1, in the next chapter, we ask you to examine yourself and your students. Who are you? Who are they? We consider **diversity in today's classrooms**. Portraits of students in educational settings make diversity real and human. In a number of other chapters there are new exercises asking readers to "Put Yourself in Their Place" as a way to develop empathy for many students and situations.
- Increased coverage of the **brain, neuroscience, and teaching**, emphasized in Chapter 3 and also integrated into several other chapters.
- Increased coverage of **the impact of technology and interactive learning environments** on the lives of students and teachers today.
- New sections in several chapters on **social and emotional learning (SEL)** and **trauma-informed teaching**.
- New **"What Would You Do?"** cases and new responses from teachers around the United States and Canada, including a case that asks expert teachers what they learned from the shifts to remote instruction during COVID-19 and what they will keep doing as schools get back to "normal."

Key content changes in each chapter include:

- **Chapter 1:** To help build your foundation for a sense of teaching efficacy, we have added a **new casebook about becoming a great teacher** in a world filled with online and in-person "advice." There are responses from expert teachers and even an expert student teacher. In addition, we include new information on **social and**

emotional learning (SEL) and the **effects of trauma** on students—two topics that will be addressed in several other chapters. Also, the section on good teaching now includes the widely used **CLASS model**.

- **Chapter 2:** This chapter begins with a new case that could happen in any school, **"Conversations about race."** We explore the ways that **education is cultural** and then ask you to examine **your own educational and cultural history**—Who are you? What brought you here? To help you think through these important questions, there is new coverage of **intersectionality, stereotypes, prejudice, and poverty** as well as expanded coverage of **racial and gender identity, sexual orientation**, and **creating inclusive classrooms**.
- **Chapter 3:** New information on the **brain, synaptic plasticity**, and **implications for teaching**. Also, there is greater **critical analysis** of Piaget's and Vygotsky's theories.
- **Chapter 4:** Updated information on **early and late maturation in puberty, play, childhood obesity, disordered eating, culture and parenting, aggression, social and emotional learning, child abuse and mandated reporting, identity and technology**, and **dealing with cheating**.
- **Chapter 5:** New sections on **terms and labeling, multiple intelligences, emotional intelligence, problems with learning styles, ADHD, trauma-informed teaching, seizure disorders** and other serious health concerns, and **autism spectrum disorders**.
- **Chapter 6:** New information on **language diversity, Native American languages**, and **an expanded section on affective and emotional/social** considerations for immigrant student and language learners, including **dealing with trauma**.
- **Chapter 7:** Expanded coverage of the **neuroscience** of reinforcement and punishment, **effective instruction delivery, cautions in using time out** for parents and teachers, **reasons** for problem behaviors, and using **positive behavior supports for tier 1, 2, and 3 prevention** of problems.
- **Chapter 8:** Updated coverage of the **brain and cognitive learning, multitasking, working memory and cognitive load, concept teaching, effective practice**, and **teaching implications** of cognitive learning theories. In addition, there is a new section on **children and eye-witness memory**, including **guidelines** for interviewing students.
- **Chapter 9:** New sections on how teachers can **support student metacognition**, using **visual strategies and drawing** to learn, **worked examples and embodied cognition, deliberate practice, thinking critically about online sources**, and **integrating multiple sources** of information. Updated coverage of **problem solving and argumentation**.
- **Chapter 10:** A new casebook asking about **new approaches to teaching and learning that emerged during COVID-19** to facilitate meaningful learning through remote and hybrid instruction. Updated discussion of the **elements of constructivist** learning and teaching, **scaffolding, deep questioning, collaboration, learning in a digital world, immersive learning environments, blending and flipping classrooms**, and **computational thinking**. New sections on **constructive/structured controversy, mobile learning**, and **media citizenship**.
- **Chapter 11:** Updated coverage of **social cognitive theory, self-efficacy and agency, teacher self-efficacy, self-regulated learning, grit**, and **teacher stress**. New sections on **self-regulation of emotions** as relevant for both teachers and learners.
- **Chapter 12:** Chapter is reorganized around **motivational components (e.g., needs, values, goals, beliefs)** and the **antecedents** and **outcomes** associated with them. Updated treatment of **intrinsic and extrinsic motivation, self-determination, goals, school belonging, mindsets**, and **curiosity**. New sections on **social goals** and **achievement emotions**. Completely revised section on **strategies** to encourage **motivation to learn**.
- **Chapter 13:** Cutting across this chapter is the challenge of creating supportive in-person and remote learning environments. **New** sections on rules and routines

for **managing remote learning** including a **"Welcome to Remote Learning" letter** to students from an expert teacher (Anita's daughter). Updated and expanded material on **positive teacher connections, zero tolerance, bullying and cyberbullying, restorative justice**, and **culturally responsive classroom management**.

- **Chapter 14:** Updated research on **teacher expectations, differentiated teaching**, and **homework**, as well as new sections on **ambitious teaching, Webb's Depth of Knowledge, asking essential and authentic questions**, and **giving feedback**. There also are new sections on **Quality Talk** and **Universal Design for Learning**.
- **Chapter 15:** New sections on **feedback** and **teacher evaluation**. Updated material on **selected-response testing, scoring rubrics, grading, retention in grade**, and **value-added modeling**.

A Crystal Clear Picture of the Field and Where It Is Headed

The fifteenth edition maintains our renowned lucid writing style presenting accurate, up-to-date coverage of the foundational areas within educational psychology: learning, development, motivation, teaching, and assessment. We add intelligent examinations of emerging trends in the field and society that affect student learning, such as student diversity, inclusive teaching, social and emotional learning, education and neuroscience, and technology.

Pearson eText, Learning Management System (LMS)-Compatible Assessment Bank, and Other Instructor Resources

PEARSON ETEXT The Pearson eText is a simple-to-use, mobile-optimized, personalized reading experience. It allows you to easily highlight, take notes, and review key vocabulary all in one place—even when offline. Seamlessly integrated videos and other rich media will engage you and give you access to the help you need, when you need it. To gain access or to sign-in to your Pearson eText, visit: https://www.pearson.com/pearson-etext.

- **Video Examples.** One of the features in each chapter is the *Video Examples* that illustrate principles or concepts aligned pedagogically with the chapter. Some videos provide examples of educational psychology principles or concepts in action by showing students and teachers in classrooms. Other videos show students or teachers describing their teaching strategies or experiences.
- **Podcasts.** In all chapters, Anita Talks podcasts provide direct links to relevant selections from Anita Talks About Teaching, a series of podcasts in which Dr. Woolfolk discusses how the chapters in this text relate to the profession of teaching.

Pearson eText
Video Example 3.1
The children in this video are learning something new about growth by observing a tadpole as it changes from day to day. They can assimilate the idea that the tadpole grows legs, but how can they accommodate their concept of growth to understand why the tadpole's tail gets smaller?

Pearson eText
Podcast 3.1
Listen as textbook author Anita Woolfolk talks about brain-based education. What does this mean? Are there some clear implications for teachers, or is it still too early to say?

LMS-COMPATIBLE ASSESSMENT BANK With this new edition, all assessment types—quizzes, application exercises, and licensure exam practice—are included in LMS-compatible banks for the following learning management systems: Blackboard (**9780136945123**), Canvas (**9780136944744**), D2L (**9780136944881**), and Moodle (**9780136945031**). These packaged files allow maximum flexibility to instructors when it comes to importing, assigning, and grading. Assessment types include:

- **Learning Outcome Quizzes:** Each chapter learning outcome is the focus of a Learning Outcome Quiz that is available for instructors to assign through their Learning Management System. Learning outcomes identify chapter content that is most important for learners and serve as the organizational framework for each chapter. The higher order, multiple choice questions in each quiz will measure your understanding of chapter content, guide the expectations for your learning, and inform the accountability and the applications of your new knowledge. Each multiple choice question includes feedback for the correct answer and for each distractor to help guide students' learning.
- **Application Exercises:** Each chapter provides opportunities for students to apply what they have learned through *Application Exercises*. One *Application Exercise* is available for each Learning Outcome within the chapter. The exercises require students to watch short videos, read scenarios, or think about situations and then answer open-ended questions. When used in the LMS environment, a model response written by experts is provided after students submit the exercise. This feedback helps guide students' learning and can assist the instructor in grading.
- **Chapter Tests:** Suggested test items are provided for each chapter and include questions in multiple choice and short answer/essay formats. Some items (lower-level questions) simply ask students to identify or explain concepts and principles they have learned. But many others (higher-level questions) ask students to apply those same concepts and principles to specific classroom situations—that is, to actual student behaviors and teaching strategies. The lower-level questions assess basic knowledge of educational psychology. But ultimately, it is the higher-level questions that can best assess students' ability to use principles of educational psychology in their own teaching practice.

Additional Text Features

With an unswerving emphasis on educational psychology's practical relevance for teachers and students in classrooms, the text is filled with current issues and debates, examples, lesson segments, case studies, and practical ideas from experienced teachers.

Point/Counterpoint sections in each chapter present two perspectives on a controversial question related to the field; topics include debates on the kinds of research that should guide education (p. 23), should girls and boys be taught differently? (pp. 68–69), brain-based education (pp. 98–99), the self-esteem movement (pp. 165–166), pills or skills for students with ADHD (pp. 216–217), the best way to teach English language learners (pp. 265–266), using rewards to encourage student learning (pp. 316–317), what's wrong with multitasking? (pp, 333–334), teaching critical thinking and problem solving (p. 399), problem-based education (p. 430), are "grittier" students more successful? (p. 483), the value of trying to make learning entertaining (p. 530), zero tolerance (pp. 579–580), the value of homework (pp. 623–624), and holding children back (pp, 669–670).

Guidelines appear throughout each chapter, providing concrete applications of theories or principles discussed. See, for example, pages 71, 124, 139, 201, 273, 299, 349, 395, 443, 490, 528, 563, 609.

Guidelines: Family and Community Partnerships sections offer specific guidelines for involving all families in their children's learning—especially relevant now, when demand

for parental involvement is at an all-time high and the need for cooperation between home and school is critical. See, for example, pages 208, 275, 405, 544, 594, 625, 672.

Teachers' Casebook sections present students with realistic classroom scenarios at the beginning of each chapter and ask "What Would You Do?"—giving students the opportunity to apply all the important topics of the chapter to these scenarios via application questions. Students may then compare their responses to those of veteran teachers appearing at the end of each chapter. See, for example, pages 82, 178, 281, 459, 499, 549, 599.

Reaching Every Student sections present ideas for assessing, teaching, and motivating ALL of the students in today's inclusive classrooms. See, for example, page 149.

Lessons for Teachers are succinct and usable principles for teaching based on the research. See, for example, page 101.

Put Yourself in Their Place experiences develop empathy by asking students to imagine how they would feel in different situations. See pages 60, 103, 251, 270, 588.

Stop and Think activities give students firsthand experience with the concept being discussed, as on pages 15, 39, 42, 159, 164, 304, 385, 444, 517, 555.

Supplementary Materials

Many supplements to the textbook are available to enhance readers' learning and development as teachers.

INSTRUCTOR'S MANUAL (9780136944812) The Instructor's Manual is provided as a Word document and includes resources to assist professors in planning their course. These resources consist of suggestions for learning activities, supplementary lectures, group activities, and additional media resources. These have been carefully selected to provide opportunities to support, enrich, and expand on what students read in the textbook.

POWERPOINT® SLIDES (9780136944805) PowerPoint®slides are provided for each chapter and highlight key concepts and summarize the content of the text to make it more meaningful for students. Often these slides also include questions and problems designed to stimulate discussion and to encourage students to elaborate and deepen their understanding of chapter topics.

Note: All instructor resources—LMS-compatible assessment bank, instructor's manual, and PowerPoint slides are available for download at www.pearsonhighered.com.

Acknowledgments

From initial draft of this book to this most recent revision, many people have supported the project. Without their help, this text simply could not have been written.

Many educators contributed to this project. Nancy Perry, our colleague from the University of British Columbia, contributed to the early planning for this edition and the redesign of several *Teachers Casebook* questions; recruited and collaborated with Canadian teachers for the *Casebook*; worked with her student, Silvia Mazabel, to research Chapters 3, 4, and 5; and drafted the first several sections of Chapter 4. Nancy's keen eye and deep knowledge of the field made this edition more current and inclusive. In addition to working with Nancy, Silvia expertly completed research for multiple chapters, kept a sharp eye on the final versions of those chapters, and insured that the references in the chapters and the final Bibliography were accurate.

In previous editions, before she became a coauthor, Ellen L. Usher contributed her remarkable scholarship and delightful writing to revise Chapters 2 and 11. Carol Weinstein wrote the section in Chapter 13 on spaces for learning. Michael Yough (Oklahoma State University) looked over several chapters including Chapter 5, "Language Development, Language Diversity, and Immigrant Education." Chapter 6 was also improved by suggestions from Alan Hirvela, The Ohio State University. Jerrell Cassady, Ball State University,

provided invaluable guidance for Chapter 12, "Motivation in Learning and Teaching." The portraits of students in Chapters 1, 2, and 6 were crafted by Nancy Knapp (University of Georgia).

As we made decisions about how to revise this edition, we benefited from the ideas of colleagues around the country who took the time to complete surveys, answer our questions, and review chapters. Special thanks to Krystal Lira, Kimberly Alberts, and Alexandra Lee (Michigan State University) and Tony Perez and Arianna White-Levatich (Old Dominion University), for their input on content, structure, and flow for the fifteenth edition. We thank Jennifer Burris, Anastacia Cole, Candice Hargons, Sara Kuhl, and Jaylene Patterson (University of Kentucky) and Xiao-Yin Chen (University of Georgia) for their insightful input on specific sections related to privilege and diversity.

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Many classroom teachers across the country and around the world contributed their experience, creativity, and expertise to the *Teachers' Casebook.* We have thoroughly enjoyed our association with these master teachers, and we are grateful for the perspective they brought to the book:

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On this edition, we worked with an outstanding editorial group. Their intelligence, creativity, sound judgment, style, and enduring commitment to quality can be seen on every page of this text. Rebecca Fox-Gieg, Senior Analyst for Content in Teacher Education, guided the project from reviews to completion. Her patience, persistence, and expertise made all the difference. Alicia Reilly was the outstanding developmental editor with the perfect combination of vast knowledge, organizational ability, and creative thinking. The text features, embedded videos, and excellent pedagogical supports would not exist without her tireless efforts. Kathy Smith focused her keen copyeditor's eye on the manuscript. It has been a pleasure to work with her over the years. Janelle Rogers kept all aspects of the project moving forward with amazing skill, grace, artistic vision, and good humor. Yohalakshmi Segar was the senior production project manager. Her attention to detail and instant answers to questions were remarkable. Somehow these wonderful women brought sanity to what could have been chaos and fun to

what might have been drudgery. What a talented and creative group—we are honored to work with them all.

Finally, I (Anita) want to thank my family and friends for their kindness and support during the long days and nights that I worked on this book. To my family, Bob, Eric, Suzie, Lizzie, Wayne K., Marie, Kelly, and the newest member, Amaya—you are amazing.

And of course, to Wayne Hoy, my friend, colleague, inspiration, passion, husband—you are simply the best. Thanks also to you for painting the picture that provided the cover for this edition—so much talent!

I (Ellen), would like to thank Anita for inviting me to collaborate on this book. I have so much appreciation for the energy and time that such an effort requires. You are a kind and patient collaborator. Thanks also to members of the Kentucky P20 Motivation & Learning Lab, including two exceptional undergraduate students—Licia Henneberg and Olivia Huffman—who offered extensive help with literature recommendations, searches, and reference keeping.

—ANITA WOOLFOLK HOY AND ELLEN L. USHER

Brief Contents

Contents

CHAPTER 3

CHAPTER 6

CHAPTER 14

CHAPTER 15

Special Features

TEACHERS' CASEBOOK: WHAT WOULD YOU DO?

GUIDELINES

POINT/COUNTERPOINT

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Chapter 1

Learning, Teaching, and Educational Psychology

Anita Woolfolk Hoy

Teachers' Casebook: Becoming a Great Teacher

What Would You Do?

You are committed to being a great teacher, but teaching is a huge job. Fortunately, you're not alone. Every day, educators and researchers from around the globe post new guides and ideas for effective instruction. You enjoy using social media, online resources, and popular books to improve your teaching. You're drawn to the wisdom of those who are obviously great teachers. You bookmark these resources for activity ideas, innovative approaches, and tips for reaching your ever-changing student population. Also, you just feel that staying current in your professional knowledge is important. On occasion, the advice you hear challenges your long-held beliefs about teaching and learning. But it sometimes feels overwhelming or contradictory.

Critical Thinking

- What makes someone a great teacher? How are "best" practices determined?
- How do you evaluate the quality of others' advice about teaching and learning?
- What would lead you to conclude that someone else's advice is simply a trend versus a sound educational practice?
- What kinds of research findings would convince you to change your practice?

Overview and Objectives

Like many students, you may begin this course with a mixture of anticipation and wariness. Perhaps you are required to take educational psychology as part of a program in teacher education, speech therapy, nursing, or counseling. You might have chosen this class as an elective. Whatever your reason for enrolling, you probably have questions about teaching, schools, students—or even about yourself—that you hope this course could answer. We have written the 15th edition of *Educational Psychology* with questions such as these in mind.

In this first chapter, we begin with the state of education in today's world. Teachers have been both criticized as ineffective and lauded as the best hope for young people. Do teachers make a difference in students' learning? What characterizes good teaching—how do truly effective teachers think and act? What do they believe about students, learning, and themselves? When you are aware of the challenges and possibilities of teaching and learning today, you can appreciate the contributions of educational psychology.

After a brief introduction to the world of the teacher, we turn to a discussion of educational psychology itself. How can principles identified by educational psychologists benefit teachers, therapists, parents, and others who are interested in teaching and learning? What exactly is the content of educational psychology, and where does this information come from? Finally, we consider an overview of a model that organizes research in educational psychology to identify the key student and school factors related to student learning (J. Lee & Shute, 2010). Our goal is for you to become a confident and competent beginning teacher so that by the time you have completed this chapter, you should be able to:

1.1 Describe the challenges facing teachers today, including increasing student diversity, requirements of the Every Student Succeeds Act, the continuing impacts of testing and accountability for teachers and students, and the emphasis on social and emotional learning.

1.2 Discuss the essential features of effective teaching, including different frameworks describing what good teachers do.

1.3 Describe the methods used to conduct research in the field of educational psychology and the kinds of questions each method can address.

1.4 Recognize how theories and research in development and learning are related to educational practice.

OUTLINE

Learning and Teaching Today

Learning Outcome 1.1 Describe the challenges facing teachers today, including increasing student diversity, requirements of the Every Student Succeeds Act, the continuing impacts of testing and accountability for teachers and students, and the emphasis on social and emotional learning.

For the first 14 editions of this book, I (Anita) focused on traditional, in-person teaching. In several chapters of this 15th edition, we will be making a distinction between in-person learning and remote learning. If you were involved with schools in any way in 2020 and 2021 as a student, sibling, teacher, parent, or family member, then you know why we will be making this distinction. Most teachers and students had to quickly learn how to "Zoom," assuming their technologies allowed remote learning. Classes were converted to hybrid, online, or other versions to protect everyone from the spread of COVID-19. But you might be surprised to know that hybrid learning (in-person meetings combined with remote online teaching) and completely online learning were increasing even before schools had to close because of the pandemic (Pulham & Graham, 2018). Before the pandemic, Ted Cross and Laura Polk (2018) claimed that "online education is an integral part of the 21st century" (p. 1). So, we will be looking at research on both in-person and online teaching and learning strategies in many chapters. Expanding your knowledge and skills to include remote learning will prepare you for whatever the future throws at you, which brings us to our favorite topic. We invite you to join us.

Welcome to our favorite topic: educational psychology—the study of development, learning, motivation, teaching, and assessment in and out of schools. We believe this is one of the most important courses you will take to prepare for your future as an educator in the classroom or the consulting office, whether your "students" are children or adults learning how to read or individuals discovering how to improve their diets. In fact, some evidence shows that new teachers who have course work in development and learning are twice as

likely to stay in teaching (National Commission on Teaching and America's Future, 2003). This may be a required course for you, so let us make the case for educational psychology, first by stepping into classrooms today.

Inside Three Classrooms

To begin our examination of good teaching, let's step inside the classrooms of three outstanding teachers. The three situations are real. Our colleague, Carol Weinstein, worked with the first two teachers (Weinstein & Romano, 2015). The third teacher became an expert at helping students with disabilities master specific learning strategies.

A MULTILINGUAL FIRST GRADE. Most of the 25 students in Viviana's class have recently emigrated from the Dominican Republic; the rest come from Nicaragua, Mexico, Puerto Rico, and Honduras. Even though the children speak little or no English when they begin school, by the time they leave in June, Viviana will have helped them master the normal first-grade curriculum for their district. She accomplishes this by teaching in Spanish early in the year to aid understanding and then gradually introducing English as the students are ready. Viviana does not want her students segregated or labeled as disadvantaged. She encourages them to take pride in their Spanish-speaking heritage and uses every available opportunity to support their developing English proficiency.

Both Viviana's expectations for her students and her commitment to them are high. She has an optimism that reveals her dedication: "I always hope that there's somebody out there that I will reach and that I'll make a difference" (Weinstein & Romano, 2015, p. 15). For Viviana, teaching is not just a job; it is a way of life.

A SUBURBAN FIFTH GRADE. Ken teaches fifth grade in a suburban school in central New Jersey. Students in the class represent a range of racial, ethnic, family income, and language backgrounds. Ken emphasizes "process writing." His students complete first drafts, discuss them with others in the class, revise, edit, and "publish" their work. The students also keep daily journals and often use them to share personal concerns with Ken. They tell him of problems at home, fights, and fears; he always takes the time to respond in writing. Ken also uses technology to connect lessons to real life. Students learn about ocean ecosystems by using a special interactive software program. For social studies, the class plays two simulation games that focus on history. One is about coming of age in Native American cultures, and the other focuses on the colonization of America.

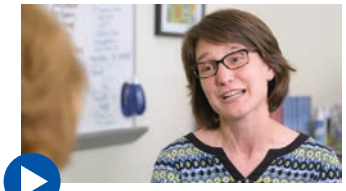
Throughout the year, Ken is very interested in the social and emotional development of his students; he wants them to learn about responsibility and fairness as well as science and social studies. This concern is evident in the way he develops his class rules at the beginning of the year. Rather than specifying do's and don'ts, Ken and his students devise a "Bill of Rights" for the class, describing the rights of the students. These rights cover most of the situations that might need a "rule."

TEACHING MATH TO STUDENTS WITH LEARNING DISABILITIES. The eighth-grade pre-algebra class had 11 students with disabilities—nine with learning disabilities. While her co-teacher taught the math lesson, Joan Hamilton provided explicit instruction in learning strategies. For example, as the math teacher explained a problem, Joan drew a circle on the overhead projector, with the example problem in the middle, and then made notes on the outside of the circle about the steps to solve the problem. Students created their own graphic organizers following Joan's lead. The next day during the homework discussion, students returned to their circle graphic organizers to review and ask questions. The teachers retaught the steps of solving the problem as needed. Most of the students "made it through the material and on to algebra with a basic understanding of the concepts and of how to structure their notes and ask questions" (Hallahan et al., 2019, p. 130).

What do you see in these three classrooms? The teachers are confident and committed to their students. They must deal with a wide range of student characteristics: different languages, different home situations, and different abilities and learning challenges. They must adapt instruction and assessment to students' needs and teach their students "how to learn." They must make the most abstract concepts, such as ecosystems, real and understandable for their particular students. The whole time these experts are navigating through the academic material, they also are taking care of the emotional needs of their students, propping up sagging self-esteem, and encouraging responsibility. If we followed these teachers from the first day of class, we would see that they carefully plan and teach the basic procedures for living and learning in their classes. They can efficiently collect and correct homework, regroup students, give directions, distribute materials, and deal with disruptions—and do all of this while also making a mental note to find out why one of their students is so tired. Finally, they are **reflective**—they constantly think back over situations to analyze what they did and why, and to consider how they might improve learning for their students. And what about those students in classrooms today?

Reflective

Thoughtful and inventive. Reflective teachers think back over situations to analyze what they did and why, and to consider how they might improve learning for their students.



Pearson eText
Video Example 1.1
The middle school principal in this video discusses aspects of diversity among the 853 students in the school including students with special needs, students with diverse academic abilities, socioeconomic levels, languages, and cultures. What challenges are presented in schools with this level of diversity?

Students Today: Dramatic Diversity and Remarkable Technology

Who are the students in American classrooms today? Here are a few statistics about the United States.

- About 25% of U.S. children under 18 have at least one immigrant parent, but in some states such as California, the number is closer to 50% (Urban Institute, 2019). By 2045, half of the U.S. population will be members of some minority group, with about 25% being Hispanic (Frey, 2018).
- Almost 15 million children—about 21% of all children—live in poverty, defined in 2020 by the U.S. Department of Health and Human Services as an income of $26,200 for a family of four ($32,750 in Alaska and $30,130 in Hawaii). And in the public schools, just over half the students qualify for free or reduced-cost lunches—a rough indicator of poverty (Child Trends Databank, 2019). The United States has the *7th-highest* rate of child poverty among the 41 economically advantaged countries of the world; only Spain, Mexico, Bulgaria, Turkey, Israel, and Romania are worse. Iceland and the Scandinavian countries have the lowest rates of child poverty (Blazier, 2017).
- The poverty rate for Black and American Indian children in the United States is about 30%, while the rate for Hispanic children is about 24% (Children's Defense Fund, 2020a).
- About 18% of American children have a mild-to-severe developmental disability such as speech and language impairments, intellectual disabilities, cerebral palsy, or autism. This number has been increasing since the early 2000s. More than half of these children spend most of their time in general education classes (Zablotsky et al., 2019).
- In 2018, for children ages birth to 17, 23% had parents who were divorced or separated, 8% were living with someone who had an alcohol or a drug problem, 7% had a parent who had served time in jail, and 7% lived with someone with a mental illness (Children's Defense Fund, 2020b).

It is clear that American society and schools are more diverse than ever. In contrast, because of the effects of mass media, these diverse students share many similarities today, particularly the fact that most are far more technologically literate than their teachers. For example:

- In 2017, infants to eight-year-olds spent an average of a little more than 2 hours each day with screen media, particularly mobile devices (Rideout, 2017). For 9- to 12-year-olds,

screen time outside school jumped to almost 5 hours, and for teens their average time is an amazing 7-plus hours. Smartphone ownership is up dramatically, as you probably know. In 2019, 19% of eight-year-olds owned smartphones. By age 18, that number was 91%, with ownership more than 80% from age 14 on (Common Sense Media, 2019). Today the numbers probably have increased.

These statistics are dramatic but a bit impersonal. As a teacher, counselor, recreational worker, speech therapist, or family member, you will encounter real children. In this book, you will meet many individuals such as Josué, a bright first-grader whose first language is Spanish and who is struggling to care about learning to read in a language that offers only "run, Spot, run"; Alex, an 11-year-old who has created 10 languages and 30 or 40 alphabets; Jamie Foxx, a very bright third-grade student in a small Texas town whose teacher rewards him for working hard all week by letting him do stand-up comedy for the class on Fridays; Tracy, a failing high school student who does not understand why her study strategies are not working for her; Felipe, a fifth-grade boy from a Spanish-speaking family who is working to learn school subjects and make friends in a language that is new to him; Ternice, an outspoken Black girl in an urban middle school who is hiding her giftedness; Trevor, a second-grade student who has trouble with the meaning of *symbol*; Maya, the head of a popular clique and tormentor of the outcast Jasmine; Eliot, a bright sixth-grade student with severe learning disabilities; and Jessie, a student in a rural high school who just doesn't seem to care about her sinking grade-point average or school in general. If your students are from low-income families, it is likely that their learning suffered more than that of students from higher-income families in the wake of the COVID pandemic. These students from less advantaged backgrounds might have more catching up to do, but it all depends on these individuals and their specific experiences (Kuhfeld et al., 2020).

Even though students in classrooms are increasingly diverse in race, ethnicity, language, and economic level, teachers are much less diverse—the percentage of White teachers is increasing (now about 80%), while the percentage of Black teachers is falling, down to about 7%. Clearly, all teachers should know and be able to work effectively with all their students. Several chapters in this book are devoted to understanding these diverse students. In addition, many times within each chapter, we will explore student diversity and inclusion through research, cases, and practical applications.

Confidence in Every Context

Schools are about teaching and learning; all other activities are secondary. But teaching and learning in the contexts just described can be challenging for both teachers and students. This book is about understanding the complex processes of development, learning, motivation, teaching, and assessment so that you can become a capable and confident teacher.

Throughout this text, we—Anita Woolfolk and Ellen Usher—will share our professional and personal experiences. We see this book as an ongoing conversation with you. To learn more about us, see the "About Your Authors" section on page 11. Here is the first example of many more shared experiences, this time from Anita:

Teachers' sense of efficacy

Teachers' beliefs about how capable they are of reaching even the most difficult students and helping them learn.

Much of my own research has focused on **teachers' sense of efficacy**, defined as a teacher's belief that he or she can reach even difficult students to help them learn. This confident belief appears to be one of the few personal characteristics of teachers that predict student achievement (Çakıroğlu et al., 2012; Klassen & Tze, 2014; Woolfolk Hoy, in press; Zee & Kooman, 2016). Teachers with a high sense of efficacy work harder and persist longer even when students are difficult to teach, in part because these teachers believe in themselves and in their students. Also, they are less likely to experience burnout and more likely to be satisfied with their jobs (Fernet et al., 2012; Fives et al., 2005; Klassen & Chiu, 2010). If you would like to take the teacher self-efficacy survey that I developed, go to my website for the measure and scoring instructions (https://u.osu.edu/hoy.17/research/instruments/#Sense).

I have found that prospective teachers tend to increase in their personal sense of efficacy as a consequence of completing student teaching. But sense of efficacy may decline after the first year as a teacher, perhaps because the support that was provided during student teaching

is gone (Taylor et al., 2019; Woolfolk Hoy & Burke-Spero, 2005). Teachers' sense of efficacy is higher in schools where the other teachers and administrators have high expectations for students and the teachers receive help from their principals in solving instructional and management problems (Capa, 2005). Efficacy grows from real success with students, not just from the cheerleading of professors and colleagues. Any experience or training that helps you succeed in the day-to-day tasks of teaching will give you a foundation for developing a sense of efficacy in your career. This book was written to provide the knowledge and skills that form a solid foundation for an authentic sense of efficacy in teaching.

High Expectations for Teachers and Students

Teachers and students are affected by the expectations and requirements of their school districts, which are themselves influenced by state and national education policies. For example, in 2002, the No Child Left Behind (NCLB) Act became a federal law. NCLB required that *all students* reach proficiency by the end of the 2013–2014 school year, based on standardized test scores. You probably noticed—that did not happen.

For a while, NCLB dominated education. Testing expanded. Schools and teachers were penalized if they did not perform. Federal money could be taken away, teachers and principals could be fired, and schools could be converted to charter schools or closed. As you can imagine, or may have experienced yourself, such high-stakes penalties pushed teachers and schools to "teach to the test" or worse. The curriculum narrowed, and much time was spent on drill and practice—many teachers we worked with said teaching just wasn't fun anymore (Davidson et al., 2015; Meens & Howe, 2015; Strauss, 2015). All in all, NCLB requirements were widely criticized as "blunt instruments, generating inaccurate performance results, perverse incentives, and unintended negative consequences" (Hopkins et al., 2013, p. 101). In general, math achievement did increase with NCLB, but over time student engagement declined—and student engagement is a powerful link to learning. Students can't learn what they ignore (Markowitz, 2018).

In 2015, NCLB was replaced with the Every Student Succeeds Act (ESSA). ESSA dropped the requirement for proficiency for all students by a certain date and returned most control to the states to set standards and develop interventions. For example, schools must test the same subjects in the same grades, as specified in NCLB, and at least 95% of students must participate in the testing. But the local districts now can decide when to test, whether to break one big test into several smaller tests, and even how to find better tests that really capture important student learning. At least one additional measure of school quality such as school climate and safety or student engagement must be included, along with measures of progress toward English language proficiency for English learners (Korte, 2015).

Even after ESSA, many excellent teachers still believe they are spending too much time preparing for tests and not enough time supporting student learning in subjects not tested, such as social studies, art, music, physical education, and technology (Cusick, 2014). Which leads to another high expectation for today's teachers—teaching the whole child.

Teaching the Whole Child: Social and Emotional Learning

Social and emotional learning (SEL)

The process of integrating thinking, emotion, and behavior into teaching and learning so that adults and children develop skills to be aware of themselves and others, learn to manage their own and others' emotions and behavior, make responsible decisions, and build positive relationships.

In the preceding paragraphs, you may have noticed an interest in non-academic outcomes such as school climate or student engagement and worries about subjects left behind such as art, music, or physical education. These concerns are consistent with a larger emphasis on **social and emotional learning (SEL)** and teaching the whole child, concerns shared by Viviana, Ken, and Joan, the expert teachers we described earlier. Social and emotional learning is:

> the process of integrating cognition, emotion, and behavior into teaching and learning such that adults and children build self- and social awareness skills, learn to manage their own and others' emotions and behavior, make responsible decisions, and build positive relationships… (Brackett et al., 2019, p. 144).

Social and emotional learning gained attention in 1994 when a group of educators, researchers, and psychologists formed the Collaborative for Academic, Social, and Emotional Learning (CASEL). Their mission is to be "a trusted source for knowledge about high-quality, evidence-based social and emotional learning" and to encourage schools "to educate the whole child, equipping students for success in school and in life" (CASEL, 2020, casel.org). Since the founding of CASEL, interest in SEL has grown. Programs and interventions for schools and classrooms have expanded—see the CASEL website for many excellent examples (cassel.org). Today, many psychologists believe schools can promote students' mental health and academic learning by incorporating these SEL programs and practices (Schonert-Reichl, 2019). In fact, *Educational Psychologist*, a premier journal in our field, devoted an entire issue to this topic in 2019, with articles on theory, research, school interventions, assessment, teaching practices, social justice, and neurobiology (Wentzel, 2019). Does SEL make a difference?

RESEARCH ON SOCIAL AND EMOTIONAL LEARNING. There is good evidence that SEL can have positive effects on students' academic achievement and social behaviors (Hart et al., 2020). For example, Rebecca Taylor and her colleagues (2017) published a **meta-analysis** (an integration and summary of many individual studies) on the effects of 82 different SEL programs involving 97,000 students from kindergarten through high school. Students were followed from at least six months and up to 18 years after the programs ended. The results of the meta-analysis were impressive. In the eight studies that measured academic achievement, 3.5 years after the programs ended the average achievement of students in SEL programs was 13 percentile points higher than that of students in the control groups (we explain percentiles in Chapter 15, but for now, let's just say this is pretty good). In other studies, students in SEL programs had lasting decreases in behavior problems, less emotional distress, less drug use, and increases in high school and college graduation rates. In a more recent review of research, Stephanie Jones and her colleagues (2019) concluded that individual SEL interventions show the largest gains for students with the greatest number of risks and needs. When what is measured in the studies is closely matched to the goals of the program, effects are more positive as well. By the way, this matching principle is important in many areas of teaching. School achievement tests and classroom tests should measure the learning goals and objectives taught. Don't teach one thing and test another.

Meta-analysis
An integration and summary of many individual studies to synthesize the outcomes into one result that characterizes the findings from the studies.

Upcoming chapters in this book will describe how social and emotional learning is related to the brain, cognitive development and learning, social development, motivation, and teaching. For now, let's consider one example of SEL in action.

PATHS: AN APPROACH TO SOCIAL AND EMOTIONAL LEARNING. SEL interventions can be as small as *kernels,* strategies that teach one skill, such as deep breathing to manage anger, or larger *classroom practices* and *kits* that teach many skills, such as PATHS (Promoting Alternative THinking Strategies), or even more extensive, *whole-school program*s that engage students, parents, teachers, and administrators, such as RULER, which stands for Recognizing, Understanding, Labeling, Expressing, and Regulating emotions (Brackett et al., 2019; Jones et al., 2017, 2019). Let's consider middle-level curriculum interventions, with PATHS as an example, because these are interventions you could encounter as a teacher. The PATHS curriculum is used in more than 3,000 kindergarten through sixth-grade classrooms in the United States and another 500 around the world (Domitrovich et al., 2019).

The goal of PATHS is to develop students' social and emotional skills in self-control and emotional regulation, attention, communication, and problem solving. The curriculum has modules for pre-K through grade 5 and for middle school. Each module includes teaching resources such as a curriculum manual, instructor's manual, posters and other visual aids (charts, stickers, cards, etc.), puppets for young children, novels for older children, and family communication materials (https://pathsprogram.com/overview).

Let's look inside the curriculum for grades 5/6. One component is centered around four novels: *Bridge to Terabithia* by Katherine Paterson, *Maniac Magee* by Jerry Spinelli, *Number the*

Stars by Lois Lowry, and *Hatchet* by Gary Paulsen. In the lesson on the first three chapters of *Maniac Magee*, the students read the chapters aloud and then discuss such questions as "Why was Amanda Beale suspicious of Jeffrey Magee?" (Amanda's family is Black, and Jeffrey is White, so maybe he is not from her part of town. Jeffrey wants to borrow one of Amanda's dearest possessions, a book. Will he return it?) Students might talk about inequality, racism, trust, sharing, or empathy. After the lesson, students may journal and then share their ideas about such topics as "Amanda kept her books in a suitcase to protect them—they were her most important possessions. What would you put into a suitcase—what are your most important possessions? Why?" Other lesson follow-ups might introduce the idea of character analysis, so the PATHS curriculum supports academic goals as well (https://pathsprogram.com/grade-5-6). Explore the PATHS website for more information.

As you will see in future chapters, some applications of SEL have been criticized for viewing the social skills of students of color through a deficient lens, overemphasizing self-regulation and underemphasizing student agency to resist injustice and avoiding the difficult issues that true social awareness and empathy would open up for students. One goal of SEL should be to create caring communities that tackle courageous conversations about injustice, hate, violence, and inequality, not just anger management or decision making (Simmons, 2019). Chapter 4 explores these possibilities.

LIVING WITH SOCIAL-EMOTIONAL TRAUMA. Almost half of all elementary school students in the United States have experienced or witnessed traumatic events (Koslouski & Stark, 2021). An entire issue of the *American Psychologist* was devoted to adverse childhood experiences and trauma (Portwood et al., 2021). What kinds of traumas do students experience? The last few years provide so many examples: hurricanes and tornadoes that rip through communities, floods and fires that destroy homes, lockdowns from pandemic viruses, undrinkable water, police brutality replayed endlessly in videos, protests and counterprotests, attacks on the U. S. Capitol, televised images of collapsing buildings, and mass shootings, including in many schools. But trauma has always been in children's lives in the form of child abuse, divorce, deaths, parental drug and alcohol addictions, bullying, food insecurity, community violence, medical procedures, and even serious accidents. Teachers may not be aware that many students show up in their classrooms straining under the weight of "invisible backpacks" filled with traumatic burdens. Students living in poverty, students facing racism every day, students with disabilities, and immigrant students are especially vulnerable (Santiago et al., 2018). Because trauma can affect so many aspects of teachers' and students' lives, including brain development and learning, we will revisit this topic in several upcoming chapters. The educational challenges, health care inequalities, and economic devastation that came with the coronavirus pandemic certainly set the stage for increased trauma among students and teachers.

No matter what policies your school or the government adopt, what trends affect schools, or what traumas your students experience, capable and confident teachers will be required. But is that true? Do teachers really make a difference? Good question.

Pearson eText
Video Example 1.2
The teacher in this video describes the importance of caring for your students, no matter the color of your skin or theirs. He believes, "If you don't care, they will never learn." In his class, his students are part of his family and know they can count on him to help.

Do Teachers Make a Difference?

We usually consider school achievement to be an outcome—a goal for our students. But doing well in school can also cause other outcomes. In fact, there is some evidence that education and doing well in school are related to well-being and to high IQ scores in adulthood (Ritchie & Tucker-Drob, 2018; Tomsaik et al., 2019). So, education can make a difference, but what about teaching and how would you decide? Perhaps one of your teachers influenced your decision to become an educator. Even if you had such a teacher, and we hope you did, one of the purposes of educational psychology in general and this text in particular is to go beyond individual experiences and testimonies, powerful as they are, to examine larger groups. The results of many large-group studies speak to the power of teachers in the lives of students, as you will see next.

TEACHER–STUDENT RELATIONSHIPS. Bridgett Hamre and Robert Pianta (2001) monitored all the children who entered kindergarten one year in a small school district and continued to do so in that district through the eighth grade. The researchers concluded that the quality of the teacher–student relationship in kindergarten (defined in terms of level of conflict with the child, the child's dependency on the teacher, and the teacher's affection for the child) predicted several academic and behavioral outcomes *through the eighth grade*, particularly for students with many behavior problems. Even when the gender, ethnicity, cognitive ability, and behavior ratings of the student were accounted for, the relationship with the teacher still predicted aspects of school success. So, students with significant behavior problems in the early years are less likely to have problems later in school if their first teachers are sensitive to their needs and provide frequent, consistent feedback. Of course, forming positive relationships with challenging students isn't easy. When students act out, teachers can respond negatively, and the cycle of student behavior problems and teacher conflict continues. Forming positive relationships with students also means breaking the cycle of conflict by teaching the students better ways to deal with anger and frustration—the role of social and emotional learning again (de Jong et al., 2018).

The connection between teacher relationships and student outcomes is widespread. Pianta's research team has documented the importance of teacher–student relationships in many other studies that followed students for years (e.g., Ansari et al., 2020). Daniel Quin (2017) reviewed 46 studies, including studies that followed students over time, and reached similar conclusions—better teacher–student relationships predicted student engagement. In Germany, secondary students who reported higher levels of teacher support also were more satisfied with school, and in the United States, positive teacher relationships predicted social-emotional development and reading achievement for elementary school students (Aldrup et al., 2018; Rucinski et al., 2018). And as you will learn in Chapters 13 and 14, teacher warmth is one element of effective teaching (Sandilos et al., 2019).

Positive relationships with students are important for teachers as well. Remember our expert teacher Ken, who always took the time to respond to students' personal concerns shared in their journals? He would not be surprised that teachers who have close relationships with their students experience high levels of accomplishment and that teachers who report more conflict in student relationships feel more emotional exhaustion and burnout (Corbin et al., 2019). So, evidence is mounting for a strong association between the quality of teacher–student relationships and important outcomes for both students and teachers.

THE COST OF POOR TEACHING. Several years ago, in a widely publicized study, researchers examined how students are affected by having several effective or ineffective teachers in a row (Sanders & Rivers, 1996). They looked at fifth-graders in two large metropolitan school systems in Tennessee. Students who had highly effective teachers for third, fourth, and fifth grades scored at the 83rd percentile on average on a standardized mathematics achievement test in one district and at the 96th percentile in the other district (99th percentile is the highest possible score). In contrast, students who had the least effective teachers 3 years in a row averaged at the 29th percentile in math achievement in one district and 44th percentile in the other—a difference of more than 50 percentile points in both cases! Students who had average teachers or a mixture of teachers with low, average, and high effectiveness for the 3 years had math scores between these extremes. Sanders and Rivers concluded that the best teachers encouraged good-to-excellent gains in achievement for all students, but lower-achieving students were the first to benefit from good teaching. The effects of teaching were cumulative and residual; that is, better teaching in a later grade can partially make up for less effective teaching in earlier grades but cannot erase all the deficits traced to poor teachers (Hanushek et al., 2005; Rivkin et al., 2001).

Effective teachers who establish positive relationships with their students appear to be a powerful force in those students' lives. Students who have problems seem to benefit the most from good teaching. So an important question is, "What makes a teacher effective? What is good teaching?"

Pearson eText
Podcast 1.1
In this podcast, textbook author Anita Woolfolk talks about the importance of teachers in students' lives. Did you know that "teacher involvement and caring are the most significant predictors of a student's engagement in school from first grade through twelfth grade?" Listen to learn more. If you listen carefully, you will catch that two chapter numbers she mentions have changed—14 is now 15, and 10 is now 12.

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Teacher Professionalism (IV, A2)

Begin your own development by reading educational publications. One widely read periodical is *Education Week*. You can access it online at edweek.com.

What Is Good Teaching?

Learning Outcome 1.2 Discuss the essential features of effective teaching, including different frameworks describing what good teachers do.

Educators, psychologists, philosophers, novelists, journalists, filmmakers, mathematicians, scientists, historians, policy makers, and parents, to name only a few groups, have examined this question; there are hundreds of answers. And good teaching is not confined to classrooms. It occurs in homes and hospitals, museums and sales meetings, therapists' offices, and summer camps. In this book we are primarily concerned with teaching in classrooms, but much of what you will learn applies to other settings as well.

So, is good teaching science or art? The application of research-based theories or the creative invention of specific practices? Is a good teacher an expert explainer ("a sage on the stage") or a great coach ("a guide by the side")? These debates have raged for years. In your other education classes, you probably will encounter criticisms of the scientific, teacher-centered sages. You will be encouraged to be inventive, student-centered guides. *But beware of either/or choices*. Teachers must be both knowledgeable and inventive. They must have some basic research-based routines for managing classes, but they must also be willing and able to break from the routine when the situation calls for change. They must know the research on student development, and they also need to know their own particular students, who are unique combinations of cultures, genders, and geographies. Personally, we hope you all become teachers who are both sages and guides, wherever you stand.

Another answer to "What is good teaching?" involves considering what different models and frameworks for teaching have to offer. We look at them next.

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Video Example 1.3

In this video, teachers discusses the question,"What is your model teacher like?"Compare the characteristics described by these teachers with characteristics described in the textbook. What characteristics would you include?

Models of Good Teaching

We will briefly examine three frameworks to help answer the question "What is good teaching?" Another reason to consider these models is that when you become a teacher, you might be evaluated based on one of these approaches or something like them—teacher evaluation is a very hot topic these days! In fact, the Every Student Succeeds Act requires teacher evaluation systems to use multiple measures of effectiveness. We will look at Charlotte Danielson's Framework for Teaching, the high-leverage practices identified by TeachingWorks at the University of Michigan, and the CLASS framework developed by Robert Pianta and his colleagues (2008).

DANIELSON'S FRAMEWORK FOR TEACHING. The *Framework for Teaching* was first published in 1996 and has been revised three times since then, most recently in 2013 (see danielsongroup.org for information about Charlotte Danielson and the Framework for Teaching). According to Charlotte Danielson (2013):

> The Framework for Teaching identifies those aspects of a teacher's responsibilities that have been documented through empirical studies and theoretical research as promoting improved student learning. While the Framework is not the only possible description of practice, these responsibilities seek to define what teachers should know and be able to do in the exercise of their profession. (p. 1)

Danielson's Framework has 4 domains or areas of responsibility: *Planning and Preparation*, *Classroom Environment*, *Instruction*, and *Professional Responsibilities*. Each domain is further divided into 5 or 6 components, making a total of 22 components for the entire framework. For example, Domain 1: Planning and Preparation, is divided into 6 components:

1a Demonstrating knowledge of content and pedagogy

1b Demonstrating knowledge of students

1c Setting instructional objectives

1d Demonstrating knowledge of resources

1e Designing coherent instruction

1f Designing student assessments

When the Framework is used for teacher evaluation, each of these 22 components is further divided into elements (76 in all), and several indicators are specified for each component. For example, component 1b, demonstrating knowledge of students, includes the elements describing knowledge of

- child and adolescent development
- the learning process
- students' skills, knowledge, and language proficiency
- students' interests and cultural heritage
- students' special needs

Indicators of this knowledge of students include the formal and informal information about students that the teacher gathers when planning instruction, the students' interests and needs the teacher identifies, the teacher's participation in community cultural events, opportunities the teacher has designed for families to share their cultural heritages, and any databases the teacher has for students with special needs (Danielson, 2013).

The evaluation system further defines 4 levels of proficiency for each of the 22 components—unsatisfactory, basic, proficient, and distinguished—with a definition, critical attributes, and possible examples of what each level might look like in action. Two examples of distinguished *knowledge of students* are a teacher who plans lessons with three different follow-up activities designed to match different students' abilities and a teacher who attends a local Mexican heritage event to meet members of her students' extended families. Many other examples are possible, but these two give a sense of distinguished *knowledge of students* (component 1b).

You can see that it would take extensive training to use this framework well for teacher evaluation. When you become a teacher, you may learn more about this concept of good teaching because your school district is using it—this framework forms the basis of teacher evaluation in several states. For now, be assured that you will gain knowledge and skills in all 22 components in this text. For example, you will gain knowledge of students (component 1b) in Chapters 2 through 6.

TEACHINGWORKS. TeachingWorks is a national project based at the University of Michigan that is dedicated to improving teaching practice. Project members working with experienced teachers have identified 19 high-leverage teaching practices, defined as the basic fundamentals of teaching—actions that are central to teaching and useful across most grade levels, academic subjects, and teaching situations (see Table 1.1 on the next page). Again, you will develop skills and knowledge about all of these practices in this text. (For a more complete description of the 19 high-leverage practices, see teachingworks.org/work-of-teaching/high-leverage-practices.)

When you compare the high-leverage practices in Table 1.1 with the Danielson components listed earlier, do you see similarities and overlaps?

THE CLASS MODEL. An important conception of good teaching is based on a large-scale program of longitudinal research by Robert Pianta and his colleagues (Allen et al., 2013; Crosnoe et al., 2010; Hafen et al., 2012; Jerome et al., 2009; Luckner & Pianta, 2011; Pianta et al., 2008; Pianta et al., 2008). Pianta's work has identified three domains of teacher–student interactions in the classroom that are related to development and learning for preschool through high school students, regardless of where the students live or their families' incomes, as you can see in Table 1.2 on the next page. Using these three domains, the researchers have also developed a set of classroom observation instruments called CLASS—for the Classroom Assessment Scoring System (https://teachstone.com/class/). Schools in your district might use these instruments for class observation or professional development.

The *affective* domain in Pianta's model is teacher *emotional support*, similar to teacher warmth and enthusiasm identified in early research on teacher effectiveness and described in Chapter 14. The *cognitive* domain is instructional support, which includes different dimensions, depending on the age of the student. For example, language modeling is a

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Video Example 1.4
Teachers must be both knowledgeable and inventive. They must be able to use a range of strategies, and they must also be capable of inventing new strategies. In this video, the teacher knows her students and uses strategies that help each student learn. Notice how she supports students who are English language learners, and observe her method of grouping students to meet diverse needs.

Table 1.1 TeachingWorks 19 High-Leverage Teaching Practices

These practices are based on research evidence, the wisdom of practice, and logic.

1. Leading a group discussion
2. Explaining and modeling content, practices, and strategies
3. Eliciting and interpreting individual students' thinking
4. Diagnosing particular common patterns of student thinking and development in a subject-matter domain
5. Implementing norms and routines for classroom discourse and work
6. Coordinating and adjusting instruction during a lesson
7. Specifying and reinforcing productive student behavior
8. Implementing organizational routines
9. Setting up and managing small-group work
10. Building respectful relationships with students
11. Talking about a student with parents or other caregivers
12. Learning about students' cultural, religious, family, intellectual, and personal experiences and resources for use in instruction
13. Setting long- and short-term learning goals for students
14. Designing single lessons and sequences of lessons
15. Checking student understanding during and at the conclusion of lessons
16. Selecting and designing formal assessments of student learning
17. Interpreting the results of student work, including routine assignments, quizzes, tests, projects, and standardized assessments
18. Providing oral and written feedback to students
19. Analyzing instruction for the purpose of improving it

Source: Reprinted with permission from TeachingWorks (2014), *High-leverage practices*. Retrieved from http://www.teachingworks.org/work-of-teaching/high-leverage-practices.

Table 1.2 A Model of Teacher–Student Interactions in Early Elementary Classrooms

ASPECT OF TEACHING	DOMAIN OF TEACHER–STUDENT INTERACTIONS	DIMENSIONS	DEFINITIONS AND EXAMPLES
Affective	**Emotional Support**	*Positive Climate*	Warmth, mutual respect, positive emotional connections between teacher and students
		Negative Climate (negative predictor of learning)	Disrespect, anger, hostility
		Teacher Sensitivity	Consistency and effectiveness in responding to students' academic and emotional needs
		Regard for Students' Perspectives	Activities that encourage student autonomy and emphasize students' interests, motivations, and points of view
Cognitive	**Instructional Support**	*Concept Development*	Activities and discussion that promote higher-order thinking skills and cognition
		Quality of Feedback	Consistency in providing specific, process-oriented feedback and back-and-forth exchanges to extend students' learning
		Language Modeling	Teachers' modeling more complex language for students in conversations with them and encouraging student talk

ASPECT OF TEACHING	DOMAIN OF TEACHER–STUDENT INTERACTIONS	DIMENSIONS	DEFINITIONS AND EXAMPLES
Behavioral	**Classroom Organization**	*Behavior Management*	Teachers' effectiveness in monitoring, preventing, and redirecting misbehavior
		Productivity	How consistently learning is maximized with clear activities and routines, teacher preparation, efficient transitions, and minimal disruptions
		Instructional Learning Formats	How well materials, modalities, and activities are used to engage students in learning

Source: Based on Brown, et al. (2010). Improving classroom quality: Teacher influences and experimental impacts of the 4Rs program. *Journal of Educational Psychology*, *102*, 153–167 and Gregory, et al. (2017). My teaching partner-secondary: A video-based coaching model. *Theory into Practice*, *56*(1), 38–45.

dimension of instructional support through early elementary school, but content understanding, analysis, and inquiry become important in the later grades. Quality of feedback is included for every grade. The third domain is classroom organization, which includes *behavioral* concerns such as classroom and lesson management, with clear activities and routines that make more time for student learning and are really engaging—we explore these critical organizational dimensions of teaching in depth in Chapter 13.

Is all this talk about expert teachers and effective teaching making you a little nervous? Viviana, Ken, and Joan are experts at the science and art of teaching, but they have years of experience. What about you?

Beginning Teachers

Stop & Think Imagine walking into your first day of teaching. List the concerns, fears, and worries you have. What assets do you bring to the job? What would build your confidence to teach?

Beginning teachers everywhere share many concerns, including maintaining classroom discipline, motivating students, meeting students' different needs, evaluating students' work, dealing with parents, getting along with other teachers, being evaluated by supervisors, and dealing with paperwork and lesson planning (Brichinall et al., 2019; Melnick & Meister, 2008). Many teachers also experience what has been called "reality shock" when they take their first job because they really cannot ease into their responsibilities. On the first day of their first job, beginning teachers face the same tasks as teachers with years of experience. Student teaching, while a critical element, does not really prepare prospective teachers for starting off a school year with a new class. If you listed any of these concerns in your response to the *Stop & Think* question, you shouldn't be troubled. They come with the job of being a beginning teacher (Armstrong, 2018; Borko & Putnam, 1996).

With experience, hard work, and good support, seasoned teachers can focus on their students' needs and judge their own success by looking at their students' accomplishments. One experienced teacher described the shift from concerns about yourself to concerns about your students in this way: "The difference between a beginning teacher and an experienced one is that the beginning teacher asks, 'How am I doing?' and the experienced teacher asks, 'How are the children doing?'" (Codell, 2001, p. 191).

But here is one study that ought to give you confidence, even as a beginner: When Linda Graham and her colleagues (2020) analyzed CLASS observation data from 80 elementary grade teachers, they concluded, " Beginning teachers are doing as well or better than teachers with more years of experience, but… the overall quality of teaching could be

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Your professional growth relies on your becoming a member of a community of practice. The national organizations listed here have hundreds of affiliations and chapters across the country, with regular conferences, conventions, and meetings to advance instruction in their areas. Take a look at their websites to get a feel for their approaches to issues related to professionalism.

- National Council of Teachers of English (ncte.org)
- International Reading Association (reading.org)
- National Science Teachers Association (nsta.org)
- National Council for the Social Studies (ncss.org)
- National Council of Teachers of Mathematics (nctm.org)

Table 1.3 Advice for Student Teachers from Their Students

The students in Ms. Amato's first-grade class gave this advice as a present to their student teacher on her last day.

1. Teach us as much as you can.
2. Give us homework.
3. Help us when we have problems with our work.
4. Help us to do the right thing.
5. Help us make a family in school.
6. Read books to us.
7. Teach us to read.
8. Help us write about faraway places.
9. Give us lots of compliments, like "Oh, that's so beautiful."
10. Smile at us.
11. Take us for walks and on trips.
12. Respect us.
13. Help us get our education.

Source: Nieto, Sonia, *Affirming diversity: The sociopolitical context of multicultural education*, 4th ed., © 2004. Reprinted and Electronically reproduced by permission of Pearson Education, Inc. Upper Saddle River, New Jersey.

higher" (p. 8). So, enter your teaching career with confidence and strive to get even better every year. Our goal in writing this book is to give you the foundation for becoming an expert as you gain experience. One thing experts do is listen to their students. Table 1.3 shows some advice a first-grade class gave to their student teacher: It looks like the students know about good teaching, too.

We began this chapter claiming that educational psychology is the one of the most important courses you will take. OK, maybe we are a bit biased—we have been teaching the subject for a combined total of more than 50 years! So let us tell you more about our favorite topic.

The Role of Educational Psychology

A quick look at history shows that educational psychology and teaching have been closely linked since the beginning. The founders of psychology in the United States believed education was an important arena for investigation (Alexander, 2018). At Harvard in 1890, William James founded the field of psychology and developed a lecture series for teachers entitled *Talks to Teachers about Psychology* (it's worth a read, by the way). These lectures were given in summer schools for teachers around the country and then published in 1899. James's student, G. Stanley Hall, founded the American Psychological Association. Teachers helped him collect data for his dissertation about children's understandings of the world. Hall encouraged teachers to make detailed observations to study their students' development—as his mother had done when she was a teacher. Hall's student John Dewey founded the Laboratory School at the University of Chicago and is considered the father of the progressive education movement. Another of William James's students, E. L. Thorndike, wrote the first educational psychology text in 1903 and founded the *Journal of Educational Psychology* in 1910 (Berliner, 2006; Hilgard, 1996; Pajares, 2003). We go way back!

Educational psychology
The discipline concerned with teaching and learning processes; applies the methods and theories of psychology and has its own as well.

Educational Psychology Today

What is educational psychology today? The view generally accepted is that **educational psychology** is a distinct discipline with its own theories, research methods, problems, and techniques. Educational psychologists do research on learning and teaching and, at the same time, work to improve educational policy and practice (Anderman, 2011). To understand

as much as possible about learning and teaching, educational psychologists examine what happens when someone (a teacher or parent or software designer) teaches something (math or weaving or dancing) to someone else (student or co-worker or team) in some setting (classroom or theater or gym) (Berliner, 2006). So educational psychologists study child and adolescent development; learning and motivation—including how people learn different academic subjects such as reading or mathematics; social and cultural influences on learning; teaching and teachers; and assessment, including testing (Alexander & Winne, 2006).

But even with all this research on so many topics, are the findings of educational psychologists really that helpful for teachers? After all, most teaching is just common sense, isn't it? Let's take a few minutes to examine these questions.

Is It Just Common Sense?

In many cases, the principles set forth by educational psychologists—after spending much thought, time, and money for research—sound pathetically obvious. People are tempted to say, and usually do say, "Everyone knows that!" Consider these examples.

LEARNING STYLES. Students have different learning styles that are dominated by particular senses (visual, auditory, etc.), and they will learn best when they receive information in their preferred learning style.

Commonsense Answer. Of course, we are all different. Some of us are visual learners, and some have to hear information to learn. Most people can describe their own learning style and learn best using that style.

ANSWER BASED ON RESEARCH. This is one of the most persistent myths in education—a "zombie" belief that just won't die. In fact, Kelly Macdonald and her colleagues (2017) found that 93% of the general public and 76% of educators believed this myth even though study after study has shown that students do not learn more when taught in their preferred style (Pashler et al., 2009, Willingham et al., 2015). There are two underlying truths that encourage the persistence of this myth: People do have a preference for how to receive information, and teachers do achieve better results if they present information in multiple sensory modes. So, this myth is made up of a seed of facts, some emotional bias, and just plain wishful thinking that a simple key to good teaching exists. Unfortunately, what you prefer, say ice cream and cake as your dinner every night, is not always good for you. People simply do not learn best when taught in their preferred style (Scudellari, 2015). OK—we sense your skepticism. In Chapter 5 we will dig deeper into the question of learning styles.

SKIPPING GRADES. Should a school encourage exceptionally bright students to skip grades or to enter college early?

Commonsense Answer. No! Very intelligent students who are several years younger than their classmates are likely to be social misfits. They are neither physically nor emotionally ready for dealing with older students and would be miserable in the social situations that are so important in school, especially in the later grades.

ANSWER BASED ON RESEARCH. Maybe. In the report *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students*, the authors note, "Extensive research has indicated that acceleration has positive effects on the academic as well as the affective lives of students" but "decisions about individual students must be based on more than research" (Assouline et al., 2015, p. 2). One example of positive long-term effects is that mathematically talented students who skipped grades in elementary or secondary school were more likely to go on to earn advanced degrees and publish widely cited articles in scientific journals (Park et al., 2013). Whether acceleration is the best solution for a particular student depends on many specific individual characteristics, including the intelligence and maturity of the student as well as the other available options. For some students, moving quickly through the material and working in advanced courses with older students can be a very positive experience (Kretschmann et al., 2014). See Chapter 5 for more on adapting teaching to students' abilities.

STUDENTS IN CONTROL. Does giving students more control over their own learning—more choices—help them learn?

Commonsense Answer. Of course! Students who choose their own learning materials and tasks will be more engaged and thus learn more.

ANSWER BASED ON RESEARCH. Not so fast! Sometimes giving students more control and choice can support learning, but many times it doesn't. For example, giving lower-ability students choice in learning tasks sometimes means the students just keep practicing what they already do well instead of tackling tougher assignments. This happened when hairdressing students were given choices. The lower-ability students kept practicing easy tasks such as washing hair but were reluctant to try more difficult tasks such as giving permanents. When they developed portfolios to monitor their progress and received regular coaching and advice from their teachers, the students made better choices—so, guided choice and some teacher control may be useful in some situations (Kicken et al., 2009).

OBVIOUS ANSWERS? Years ago, Lily Wong (1987) demonstrated that just seeing research results in writing can make them seem obvious. She selected 12 findings from research on teaching. She presented 6 of the findings in their correct form and 6 in exactly the opposite form to both college students and experienced teachers. Both the college students and the teachers rated about half of the wrong findings as "obviously" correct. Jeanne Oakes has an idea about why "obvious answers" are so powerful: "Everybody's firsthand schooling experience often makes research seem irrelevant—that it unnecessarily documents what everybody already knows or unhelpfully contradicts what's obviously true" (2017, p. 94).

Paul Kirschner and Joren van Merriënboer (2013) made a similar point when they challenged several "urban legends" in education, including the assertion that learners (like the hairdressing students just described) know best how to learn. These current, strongly held beliefs about students as self-educating digital natives who can multitask, have unique learning styles, and always make good choices about how to learn *have no strong basis in research*, but still they are embraced.

You might have thought that educational psychologists spend their time discovering the obvious. The preceding examples point out the danger of this kind of thinking. When a principle is stated in simple terms, it can sound simplistic. A similar phenomenon takes place when we see a professional dancer or athlete perform: The well-trained performer makes it look easy. But we see only the results of the training, not all the work that went into mastering the individual movements. And bear in mind that any research finding—or its opposite—may sound like common sense. The issue is not what *sounds* sensible but what is *demonstrated* when the principle is put to the test in research—our next topic.

Using Research to Understand and Improve Learning

Learning Outcome 1.3 Describe the methods used to conduct research in the field of educational psychology and the kinds of questions each method can address.

Stop & Think Quickly list all the different research methods you can think of.

Educational psychologists design and conduct many different kinds of research studies. But before we explore some of the main methods in those studies, let's take a moment to emphasize critical thinking about research in general. In this book and many others, you will encounter studies and research claims. Sometimes the claims will seem contradictory. Being a critical consumer of research, not just in your profession but also in the general media, is important. How strong is the evidence for a claim? Did the researchers study just a few people or many, over a short time or longer? Did what was assessed match what was taught or the goals of the program? Are the students in the study similar to yours? Is the school and community context like your situation? Research results can give you ideas to try, new concepts—tools to think with. But you must bring your own inventiveness and clear thinking to the process.