EDUCATIONAL PSYCHOLOGY ACTIVE LEARNING EDITION

FIFTEENTH EDITION



ANITA WOOLFOLK ELLEN L. USHER

Educational Psychology

Active Learning Edition

Fifteenth Edition

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Anita Woolfolk Hoy

To my brothers, Eric and Robert Pratt—two of the smartest, kindest, most talented people I have ever known. I am grateful for their presence in my life. They are my parent's best gift to me.

Eric is a dedicated engineer, responsible for designing important parts on several airplanes. He perfected each design with a sense of personal responsibility for the well-being of everyone who would fly in those planes.

Robert is the artist who created the amazing sculpture on the cover of this book. As a friend said when she saw it, "I am struck by the beauty of the hands uplifting the child. I envision the hands of parents, grandparents, family, and teachers. My son was in kindergarten this year and had the most wonderful teacher. When I look at this sculpture, I see her hands with ours, lifting his up."

Ellen L. Usher

With gratitude to members of the P20 Motivation & Learning Lab. Our decade of thinking, laughing, and learning together enriched my understanding of what it means to teach and learn. You made my intellectual life and scholarship infinitely better.

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 second edition of Child Development (Pearson, 2015) and with her husband, Wayne Hoy, to complete the fifth 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 was 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. In 2022, she joined the Mayo Clinic College of Medicine and Science where she is an education scientist and professor. 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 text maintains the new, unique format that was created for the previous Active Learning Edition. If you didn't see that text, this one is probably unlike any textbook you have ever encountered. It is divided into 47 easy-to-read modules. Research in educational psychology points to several reasons why this format will help you learn. First, we have known for years that learning is faster and more permanent if you study smaller chunks over a longer period instead of trying to jam more learning into your brain in a short period of time. Also, we know that learning is deeper and more meaningful if you act on what you read—connect and apply your understanding before you get too far away from the new information. Third, we know that motivation is higher when goals are specific, the task is moderately challenging, and it can be accomplished with reasonable time and effort. Fourth, more frequent testing and checking your understanding early let you correct misconceptions and relearn, so you do not remember the wrong information. Finally, we know that your lives are full, and your assignments are many, so shorter, more manageable readings fit better into your schedule. Mastering these active learning modules will help you become more self-regulating and in charge of your own academic life. So welcome to a better, more research-based way to learn educational psychology—our favorite subject!

The 15th 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 clusters. 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 15th 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 Cluster 1, in the next cluster, 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 clusters, 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 Cluster 3 and also integrated into several other clusters.
- Increased coverage of the impact of technology and interactive learning environments on the lives of students and teachers today.
- New sections in several clusters 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 cluster include:

- Cluster 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 clusters. Also, the section on good teaching now includes the widely used **CLASS model**.
- Cluster 2: This cluster 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.
- Cluster 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.
- Cluster 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.
- Cluster 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.
- Cluster 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.
- Cluster 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 tiers 1, 2, and 3 prevention of problems.
- Cluster 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.
- Cluster 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.

- Cluster 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.
- Cluster 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.
- Cluster 12: Cluster 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.
- Cluster 13: Cutting across this cluster 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 cyberbully-ing, restorative justice, and culturally responsive classroom management.
- Cluster 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.
- Cluster 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 15th 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.

Learning Management System (LMS)-Compatible Assessment Bank, and Other Instructor Resources **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, Canvas, D2L, and Moodle. These packaged files allow maximum flexibility to instructors when it comes to importing, assigning, and grading. Assessment types include:

- Learning Outcome Quizzes: Each cluster 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 cluster content that is most important for learners and serve as the organizational framework for each cluster. The higher-order, multiple-choice questions in each quiz will measure your understanding of cluster 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 cluster provides opportunities for students to apply what they have learned through *Application Exercises*. One *Application Exercise* is available for each Learning Outcome within the cluster. 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.
- Cluster Tests: Suggested test items are provided for each cluster 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 cluster present two perspectives on a controversial question related to the field; topics include debates on the kinds of research that should guide education (p. 25), should girls and boys be taught differently? (pp. 70–71), brain-based education (pp. 98–99), the self-esteem movement (pp. 168–169), pills or skills for students with ADHD (pp. 220–221), the best way to teach English learners (pp. 270–271), using rewards to encourage student learning (pp. 322–323), what's wrong with multitasking? (pp. 337–338), teaching critical thinking and problem solving (p. 405), problem-based education (pp. 434–435), are "grittier" students more successful? (pp. 488–489), the value of trying to make learning entertaining (p. 537), zero tolerance (pp. 585–586), the value of homework (pp. 629–630), and holding children back (pp. 676–677).

Guidelines appear throughout each cluster, providing concrete applications of theories or principles discussed. See, for example, pages 55, 69, 80, 110, 113, 126, 135, 141, 147, 152, 164, 196, 205, 225, 230, 255, 262, 278, 295, 304, 307, 313, 339, 355, 366, 398, 400, 430, 449, 459, 476, 481, 495, 517, 533, 538, 544, 564, 567, 571, 575, 580, 584, 593, 614, 621, 626, 636, 640, 661, 671, 678, and 691.

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 108, 146, 211, 280, 319, 360, 411, 551, 600, 630, and 687.

Teachers' Casebook sections present students with realistic classroom scenarios at the beginning of each cluster and ask "What Would You Do?"—giving students the opportunity to apply all the important topics of the Cluster to these scenarios via application questions. Students may then compare their responses to those of veteran teachers appearing at the end of each cluster. See, for example, pages 83, 181, 285, 463, 504, 553, and 603.

Reaching Every Student sections present ideas for assessing, teaching, and motivating ALL of the students in today's inclusive classrooms. See, for example, page 152.

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 62, 103, 255, 274, and 594.

Stop and Think activities give students firsthand experience with the concept being discussed, as on pages 15, 39, 42, 162, 168, 308, 390, 451, 522, and 559.

Supplementary Materials

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

INSTRUCTOR'S MANUAL 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 PowerPoint[®]slides are provided for each cluster 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 cluster topics.

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

Acknowledgments

From the 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 *Casebooks*; worked with her student Silvia Mazabel to research Clusters 3, 4, and 5; and drafted the first several sections of Cluster 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 clusters, kept a sharp eye on the final versions of those clusters, and ensured that the references in the clusters 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 Clusters 2 and 11. Carol Weinstein wrote the section in Cluster 13 on spaces for learning. Michael Yough (Oklahoma State University) reviewed several clusters, including Cluster 6, "Language Development, Language Diversity, and Immigrant Education." Cluster 6 was also improved by suggestions from Alan Hirvela, The Ohio State University. Jerrell Cassady, Ball State University, provided invaluable guidance for Cluster 12, "Motivation in Learning and Teaching." The portraits of students in Clusters 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 clusters. 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 15th 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. And once again, we are grateful for the astute comments and wise guidance on those topics from H. Richard Milner, a groundbreaking scholar and friend.

For their revision reviews, thanks to Alyssa Gonzalez-DeHass, Florida Atlantic University; Carla M. Firetto, Arizona State University; Judy K. Hughey, Kansas State University; Kurt Kowalski, California State University San Bernardino; and Marie K. Iding, University of Hawaii.

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:

- AIMEE FREDETTE 2nd-Grade Teacher, Fisher Elementary School, Walpole, MA
- ALLAN OSBORNE Assistant Principal, Snug Harbor Community School, Quincy, MA
- AMANDA ROMANO 6th-Grade Teacher, Galileo School for Gifted Learning, Sanford, FL
- AMY POCHODYLO High School Science Teacher, Buckeye Valley High School, Delaware, OH
- ANNE LINERS 9th–12th-Grade Student Teacher, South High School, Fort Minneapolis, MN
- ASHLEY RICHARDSON 6th–8th-Grade Dean of Instruction and Discipline, Lansing Charter Academy, Lansing, MI
- BARBARA PRESLEY Transition/Work Study Coordinator—High School Level, BESTT Program (Baldwinsville Exceptional Student Training and Transition Program) C. W. Baker High School, Baldwinsville, NY

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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 and Brooke Nethers, Content Analysts in Teacher Education, guided the project from reviews to completion. Their 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. Karin Kipp focused her keen copyeditor's eye on the manuscript. Janelle Rogers kept all aspects of the project moving forward with amazing skill, grace, artistic vision, and good humor. Ajay Prasanna V was the senior production project manager. His attention to detail, keen eye, and instant answers to questions were remarkable. Somehow these wonderful colleagues 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.

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—ANITA WOOLFOLK HOY AND ELLEN L. USHER

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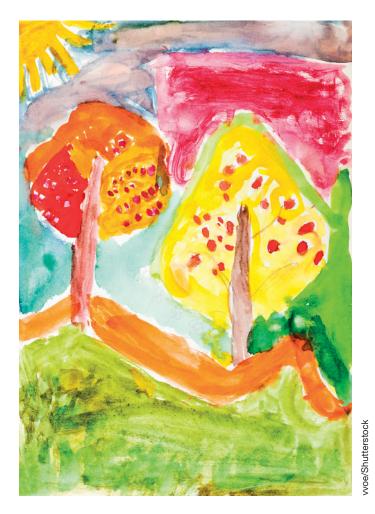
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Cluster 1 Learning, Teaching, and Educational Psychology



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 cluster, 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 cluster, 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

Teachers' Casebook—Becoming a Great Teacher: What Would You Do? Overview and Objectives

MODULE 1: Educational Psychology for Today's Teachers

Learning and Teaching Today

Inside Three Classrooms Students Today: Dramatic Diversity and Remarkable Technology Confidence in Every Context High Expectations for Teachers and Students Teaching the Whole Child: Social and Emotional Learning Do Teachers Make a Difference?

What Is Good Teaching?

Models of Good Teaching Beginning Teachers

MODULE 2: Research and Theory in Educational Psychology

The Role of Educational Psychology

Educational Psychology Today Is It Just Common Sense? Using Research to Understand and Improve Learning Theories for Teaching Supporting Student Learning

Cluster 1 Review

Key Terms • Connect and Extend to Licensure • Teachers' Casebook— Becoming a Great Teacher: What Would They Do?

MODULE 1 Educational Psychology for Today's Teachers

Learning Objective 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.

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

Learning and Teaching Today

For the first 14 editions of this book, I (Anita) focused on traditional, in-person teaching. In several clusters 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 on-line 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 clusters. 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 coursework 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 prealgebra 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?

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 *seventh-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,

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. 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 clusters in this book are devoted to understanding these diverse students. In addition, many times within each cluster, 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 v. Here is the first example of many more shared experiences, this time from Anita:

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., 2007; 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

Teachers' sense of efficacy

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

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 (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. 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; http://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 (http://casel.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 Cluster 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.

Upcoming clusters 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; larger *classroom practices* and *kits* that teach many skills, such as PATHS (Promoting Alternative THinking Strategies); or even more extensive, *whole-school programs* 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. 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 grade 5. One component is centered around four novels: *Bridge to Terabithia* by Katherine Paterson, *Maniac Magee* by Jerry Spinelli, *Number the*

Meta-analysis

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