## EDUCATIONAL PSYCHOLOGY ACTIVE LEARNING EDITION

FIFTEENTH EDITION



ANITA WOOLFOLK ELLEN L. USHER

# Educational Psychology

**Active Learning Edition** 

# **Fifteenth Edition**

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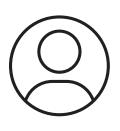
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### Anita Woolfolk Hoy

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<sup>®</sup> SLIDES** PowerPoint<sup>®</sup>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.

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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:

- 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
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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.

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—ANITA WOOLFOLK HOY AND ELLEN L. USHER

# **Brief Contents**

# **PART I** SETTING THE STAGE, MEETING THE PLAYERS

- **1** Learning, Teaching, and Educational Psychology 2
- **2** Who Are You? Who Are Your Students? Culture and Diversity 34

# PART II DEVELOPMENT: SIMILARITIES AND DIFFERENCES

- **3** Cognitive Development 86
- **4** The Self, Social, and Moral Development 132
- **5** Learner Differences and Learning Needs 184
- **6** Language Development, Language Diversity, and Immigrant Education 246

### PART III LEARNING AND MOTIVATION

- **7** Behavioral Views of Learning 288
- **8** Cognitive Views of Learning 328
- **9** Complex Cognitive Processes 372
- **10** Constructivism and Interactive Learning 418
- **11** Social Cognitive Views of Learning and Motivation 466
- **12** Motivation in Learning and Teaching 506

### PART IV TEACHING AND ASSESSING

- **13** Creating Supportive Learning Environments 556
- **14** Teaching Every Student 606
- **15** Classroom Assessment, Grading, and Standardized Testing 650

# Contents

Preface vi

# PART I SETTING THE STAGE, MEETING THE PLAYERSCluster 1

Learning, Teaching, and Educational Psychology   2
Teachers' Casebook—Becoming a Great Teacher: What Would You Do? 2
Overview and Objectives 3
Learning and Teaching Today 4
Inside Three Classrooms 5
A MULTILINGUAL FIRST GRADE 5 • A SUBURBAN FIFTH GRADE 5 • TEACHING MATH TO STUDENTS WITH LEARNING DISABILITIES 5
Students Today: Dramatic Diversity and Remarkable Technology 6
Confidence in Every Context 7
High Expectations for Teachers and Students 8
Teaching the Whole Child: Social and Emotional Learning 8
RESEARCH ON SOCIAL AND EMOTIONAL LEARNING 9 • PATHS: AN APPROACH TO SOCIAL AND EMOTIONAL LEARNING 9 • LIVING WITH SOCIAL-EMOTIONAL TRAUMA 10
Do Teachers Make a Difference? 10
TEACHER-STUDENT RELATIONSHIPS 11 • THE COST OF POOR TEACHING 11
What Is Good Teaching?12
Models of Good Teaching 12
DANIELSON'S FRAMEWORK FOR TEACHING 12 • TEACHINGWORKS 13 • THE CLASS MODEL 13
Beginning Teachers 15
Module 1 Summary 16
The Role of Educational Psychology 18
Educational Psychology Today 18
Is It Just Common Sense? 18
LEARNING STYLES 19 • ANSWER BASED ON RESEARCH 19 • SKIPPING GRADES 19 • ANSWER BASED ON RESEARCH 19 • STUDENTS IN CONTROL 19 • ANSWER BASED ON RESEARCH 19 • OBVIOUS ANSWERS? 20
Using Research to Understand and Improve Learning 20
CORRELATION STUDIES 20 • EXPERIMENTAL STUDIES 21 • ABAB EXPERIMENTAL DESIGNS 22 • SCIENTIFICALLY BASED RESEARCH AND EVIDENCE-BASED PRACTICES 22 • CLINICAL INTERVIEWS AND CASE STUDIES 22 • ETHNOGRAPHY 23 • THE ROLE OF TIME IN RESEARCH 23 • WHAT'S THE EVIDENCE? QUALITATIVE VERSUS QUANTITATIVE RESEARCH 23 • MIXED METHODS RESEARCH 23 • TEACHERS AS RESEARCHERS 24
POINT/COUNTERPOINT: What Kind of Research Should Guide Education? 25
Theories for Teaching 26
Supporting Student Learning 27
Module 2 Summary 29
Key Terms 30
Connect and Extend to Licensure 30
Teachers' Casebook—Becoming a Great Teacher: What Would They Do? 31

## **Cluster 2**

Who Are You? Who Are Your Students? Culture and Diversity	34
Teachers' Casebook—Conversations About Race: What Would You Do?	34
Overview and Objectives	35
Education Is Cultural What Is Culture?	<b>37</b> 37
Your Cultural and Educational History Meet Two Students	<b>39</b> 41
Cultural Intersections and Terminology INTERSECTIONALITY 42 • CULTURAL GROUPS AND TERMINOLOGY 42	42
Stereotypes, Prejudice, and Discrimination STEREOTYPES: THE GOOD AND THE BAD 43 • FROM STEREOTYPES TO PREJUDICE 44 • STEREOTYPE THREAT 45 • FROM PREJUDICE TO DISCRIMINATION 46	43
Module 3 Summary	47
Economic and Social Class Differences	47
Social Class and Socioeconomic Status	48
Poverty and Social Inequality	49
Poverty and Academic Outcomes HEALTH, ENVIRONMENT, AND STRESS 51 • LOW EXPECTATIONS—LOW ACADEMIC SELF- CONCEPT 52 • PEER INFLUENCES AND RESISTANCE CULTURES 52 • HOME ENVIRONMENT AND RESOURCES 53 • SUMMER SETBACKS AND SCHOOL DISRUPTIONS 53 • TRACKING AND POOR TEACHING 54	50
Extreme Poverty: Homeless and Highly Mobile Students	54
GUIDELINES: Teaching Students Who Live in Poverty	55
Module 4 Summary	56
Ethnicity and Race in Teaching and Learning Defining Ethnicity and Race Ethnic and Racial Identity	56 56 57
MULTIDIMENSIONAL AND FLEXIBLE ETHNIC IDENTITIES 57 • RACIAL IDENTITY DEVELOPMENT 58	
Ethnic and Racial Differences in School Achievement The Legacy of Racial Inequality RACISM AND DISCRIMINATION 63	59 62
Module 5 Summary	64
-	64
Gender and Sexual Orientation in Teaching and Learning Sex and Gender	65
Gender Identity	65
Gender Roles	66
Gender Bias and Sexism in Curriculum and Media	67
Gender Bias in Teaching	68
GUIDELINES: Avoiding Gender Bias in Teaching	69
POINT/COUNTERPOINT: Should Girls and Boys Be Taught Differently?	70
Sexual Orientation	72
Discrimination Based on Gender Identity and Sexual Orientation	73
Module 6 Summary	74
Creating Culturally Welcoming Classrooms	75
Culturally Relevant Pedagogy	76
Diversity in Learning SOCIAL ORGANIZATION 77 • CULTURAL VALUES AND LEARNING PREFERENCES 77 • SOCIOLINGUISTICS 78 • CULTURAL DISCONTINUITY 79	77

Lessons for Teachers: Teaching Every Student KNOW YOURSELF 79	79
GUIDELINES: Culturally Relevant Teaching	80
KNOW YOUR STUDENTS 81 • RESPECT YOUR STUDENTS 81 • TEACH YOUR STUDENTS 81	
Module 7 Summary	82
Key Terms	82
Connect and Extend to Licensure	83
Teachers' Casebook—Conversations About Race: What Would They Do?	83

# **PART II** DEVELOPMENT: SIMILARITIES AND DIFFERENCES

### Cluster 3

Cognitive Development	86
Teachers' Casebook—Symbols and Cymbals: What Would You Do?	86
Overview and Objectives	87
A Definition of Development	88
Three Questions Across the Theories	89
WHAT IS THE SOURCE OF DEVELOPMENT? NATURE VERSUS NURTURE 89 • WHAT IS THE SHAPE OF DEVELOPMENT? CONTINUITY VERSUS DISCONTINUITY 90 • TIMING: IS IT TOO LATE? CRITICAL VERSUS SENSITIVE PERIODS 90 • BEWARE OF EITHER/OR 90	
General Principles of Development	90
The Brain and Cognitive Development	91
The Developing Brain: Neurons	91
The Developing Brain: Cerebral Cortex	94
Brain Development in Childhood and Adolescence	95
Putting It All Together: How the Brain Works	96
CULTURE AND BRAIN PLASTICITY 97	
POINT/COUNTERPOINT: Brain-Based Education	98
Neuroscience, Learning, and Teaching DOES INSTRUCTION AFFECT BRAIN DEVELOPMENT? 100 • THE BRAIN AND LEARNING TO READ 100 • EMOTIONS, LEARNING, AND THE BRAIN 100	99
Lessons for Teachers: General Principles	101
Module 8 Summary	102
Piaget's Theory of Cognitive Development	103
Influences on Development	104
Basic Tendencies in Thinking	104
ORGANIZATION 104 • ADAPTATION 104 • EQUILIBRATION 105	
Four Stages of Cognitive Development	105
INFANCY: THE SENSORIMOTOR STAGE106EARLY CHILDHOOD TO THE EARLY ELEMENTARYYEARS: THE PREOPERATIONAL STAGE107LATER ELEMENTARY TO THE MIDDLE SCHOOL YEARS:THE CONCRETE-OPERATIONAL STAGE108	
GUIDELINES: Family and Community Partnerships: Helping Families Care for Preoperational Children	108
GUIDELINES: Teaching the Concrete-Operational Child	110
HIGH SCHOOL AND COLLEGE: FORMAL OPERATIONS 111 • DO WE ALL REACH THE FOURTH STAGE? 112	
GUIDELINES: Helping Students Use Formal Operations	113
Some Limitations of Piaget's Theory	113
THE TROUBLE WITH STAGES 113 • UNDERESTIMATING CHILDREN'S ABILITIES 114 • COGNITIVE DEVELOPMENT AND CULTURE 114	

Development115Module 9 Summary115Vygotsky' Sociocultural Perspective116The Social Sources of Individual Thinking117Cultural Tools and Cognitive Development118TECHNICAL TOOLS IN A DIATAL AGE 119 + PSYCHOLOGICAL TOOLS 119117The Roles of Language and Private Speech119PRIVATE SPEECH AND THE ZONE 121 + THE ROLE OF LEARNING AND DEVELOPMENT 122121Imitations of Piaget's and Vygotsky's Theories for Teachers122Implications of Piaget's and Vygotsky's Theories for Teachers122Vigotsky: What Can We Learn?124Vigotsky: What Can We Learn?125Reaching Every Student: Teaching in the "Magic Middle"125GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Taechers' Casebook – Symbols and Cymbals: What Would They Do?122Deveriew and Objectives133Physical Development132Vyous LIDIER IN 13 + ELEMENTARY SCHOULY FARS SCHOULT HAR SCHOULT HAR SCHOULT HAR SCHOULT HAR SCHOULT HAR SCHOULT HAR SCHOULY HAR SCHOULY HAR SCHOULY HAR SCHOULT HAR	Information Processing, Neo-Piagetian, and Neuroscience Views of Cognitive	
Vygotsky's Sociocultural Perspective       116         The Social Sources of Individual Thinking       117         Cultural Tools and Cognitive Development       118         TECHNICAL TOOLS IN A DIGITAL AGE 119 • PSYCHOLOGICAL TOOLS 119       119         The Roles of Language and Private Speech       119         PRIVATE SPEECH AND THE ZONE 119 • TPSYCHOLOGICAL TOOLS 119       121         The Zone of Proximal Development       122         PRIVATE SPEECH AND THE ZONE 121 • THE ROLE OF LEARNING AND DEVELOPMENT 122       121         Imitations of Vigotsky's Theory       122         Private SPEECH AND THE ZONE 121 • THE ROLE OF LEARNING AND DEVELOPMENT 122       121         Implications of Private and Vygotsky's Theories for Teachers       122         Private SPEECH AND THE ZONE 121 • ASSISTED LEARNING 123 • ACTIVITY AND CONSTRUCTING KOWNLEDGE 123       124         Vygotsky: What Can We Learn?       125         GUIDELINES: Applying Vygotsky's Ideas in Teaching       126         Cognitive Development: Lessons for Teachers       127         Module 10 Summary       127         Key Terms       128         Connect and Extend to Licensure       129         Teachers' Casebook – Mean Girls: What Would You DO?       122         Overview and Objectives       133         Physical Development       135	Development	115
The Social Sources of Individual Thinking       117         Cultural Tools and Cognitive Development       118         TECHNICAL TOOLS IN AN DIAGET'S VIEWS COMPARED       120         PRIVATE SPEECH VIGOTSKY'S AND PAGET'S VIEWS COMPARED       120         PRIVATE SPEECH AND THE ZONE       121 * THE ROLE OF LEARNING AND DEVELOPMENT       122         Implications of Vigotsky's Theory       122         Implications of Vigotsky's Theories for Teachers       122         PRIVATE SPEECH AND THE ZONE       121 * THE ROLE OF LEARNING       123 * ACTIVITY AND CONSTRUCTING         VNOERSTANDING AND BULDING ON STUDENTS' THINKING       123 * ACTIVITY AND CONSTRUCTING       124         ATH E ROLE OF ADULTS AND PEERS       124       125         GUIDELINES: Applying Vygotsky's Ideas in Teaching       126       127         Module 10 Summary       127       127         Key Terms       128       200       200         Cluster 4       129       129         Teachers' Casebook – Symbols and Cymbals: What Would They Do?       129         Correite w and Objectives       133       133         Physical Development       132       134         Physical AD Moral Development       132       135         Counted and Extend to Licensure       133       133	Module 9 Summary	115
Cultural Tools and Cognitive Development       118         TECHNICAL TOOLS IN A DIGITAL AGE 119 + PSYCHOLOGIGAL TOOLS 119       119         The Coles of Language and Private Speech       119         PRIVATE SPEECH: VIGOTSKY'S AND PLAGET'S VIEWS COMPARED 120       121         The Zone of Private Speech AND THE ZONE 121 + THE ROLE OF LEARNING AND DEVELOPMENT 122       121         Limitations of Vigotsky's Theory       122         Plaget: What Can W Learn?       122         UNDERSTANDING AND BULDING ON STUDENTS' THINKING 123 + ACTIVITY AND CONSTRUCTING (NOW EDCE) 123       124         An Example Curriculum: Tools of the Mind       125         GUIDELINES: Applying Vygotsky's Ideas in Teaching       126         Cognitive Development: Lessons for Teachers       127         Module 10 Summary       127         Key Terms       128         Connect and Extend to Licensure       129         Teachers' Casebook – Symbols and Cymbals: What Would They Do?       129         Curricutum: Tools of Ifferences in the Classroom       132         Mysical and Motoral Development       132         The Self, Social, and Moral Development       134         Physical Collences       135         YOUNG CHLIDERN       136         Connect and Extend to Licensure       137         GUIDELINES: D		
TECHNICAL TOOLS IN A DIGITAL AGE       119       PIP         The Roles of Language and Private Speech       120         The Zone of Proximal Development       121         PRIVATE SPEECH: VEORABETS VIEWS COMPARED       120         Initiations of Vigotsky's Theory       122         Implications of Piaget's and Vygotsky's Theories for Teachers       122         Piaget: What Can We Learn?       122         Vygotsky: What Can We Learn?       123         Vygotsky: What Can We Learn?       124         An Example Curriculum: Tools of the Mind       125         Reaching Every Student: Teaching in the "Magic Middle"       126         Cognitive Development: Lessons for Teachers       127         Module 10 Summary       128         Connect and Extend to Licensure       129         Teachers' Casebook – Mean Girls: What Would You Do?       132		
The Roles of Language and Private Speech119PRIVATE SPEECH AND FRACENS VAND PAGETES VERUS COMPARED120The Zone of Proximal Development121PRIVATE SPEECH AND THE ZONE122Initiations of Vigotsky's Theory122Implications of Plaget's and Vigotsky's Theories for Teachers122Piaget: What Can We Learn?122UNDERSTANDING AND BUILDING ON STUDENTS'THINKING123 + ACTIVITY AND CONSTRUCTING KNOWLEDGE 123124An Example Curriculum: Tools of the Mind125GUIDELINES: Applying Vigotsky's (deas in Teaching126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129Cluster 4132Coverview and Objectives133Physical Development134Physical Development135Young CHLDERN 125 · ELEMENTARY SCHOOL YEARS 135137CULDELINES: Dealing with Physical Differences in the Classroom135The ADOLESCENT YEARS 136 · EARLY AND ALER MATURING 136137OLIDELINES: Supporting Positive Body Images in Adolescents131Module 11 Summary142Eachers' Supporting Positive Body Images in Adolescents131Migue Addition Development136Young CHLDERN 136 · EARLY AND LATER MATURING 136137CULDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Franching Every St		118
PRIVATE SPEECH. VIGOTSKY'S AND PIAGET'S VIEWS COMPARED 120       121         The Zone of Proximal Development       122         Implications of Vigotsky's Theory       122         Implications of Piaget's and Vygotsky's Theories for Teachers       122         Piaget: What Can We Learn?       122         Vygotsky: What Can We Learn?       124         ANDOUTDE TAXED WAD DUEDNO ON STUDENTS' THINKING 123 + ACTIVITY AND CONSTRUCTION NNOWLEDGE 123       124         Vygotsky: What Can We Learn?       125         GUIDELINES: Applying Vygotsky's Ideas in Teaching       125         Reaching Every Student: Teaching in the "Magic Middle"       125         Connect and Extend to Licensure       127         Module 10 Summary       127         Key Terms       128         Connect and Extend to Licensure       129         The Self, Social, and Moral Development       132         Physical Development       133         Physical Development       134         Physical Development       135         VOUNG CHLOREN TEAP       136         Connect md Motor Development       136         Yegotsky:       134         Physical Development       135         Young CHLOREN Tas + ELEMENTARY SCHOOL YEARS 135       137         GU		119
PRIVATE SPEECH AND THE ZONE 121 • THE ROLE OF LEARNING AND DEVELOPMENT 122122Limitations of Vygotsky's Theory122Inplications of Piaget's and Vygotsky's Theories for Teachers122Piaget: What Can We Learn?122UNDERSTANDING AND BUILDING ON STUDENTS' THINKING 123 • ACTIVITY AND CONSTRUCTING NNOWLEOGE 123124An Example Curriculum: Tools of the Mind125Reaching Every Student: Teaching in the "Magic Middle"126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129Cluster 4132The Self, Social, and Moral Development132Overview and Objectives133Physical Development134Physical Development135VOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135137CULTURAL DIFFERENCES IN PLAY IND LICENS INB137OUNC CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135137CULUTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity136Play, Recess, and Physical Activity and Students with Disabilities139OCALIDLINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Forn ferberences IN PLAY 138 • EXERCISE AND RECESS 138139Challenges in Physical Activity and Students with Disabilities139OLUTURAL DIFFERENCES IND LIVE AND DISORDERED EATING 140132		11/
Limitations of Vygotsky's Theory122Implications of Piaget's and Vygotsky's Theories for Teachers122Piaget: What Can We Learn?123Vygotsky: What Can We Learn?124THE ROLE OF ADULTS AND PEERS 124 • ASSISTED LEARNING 124125Reaching Every Student: Teaching in the "Magic Middle"125GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development: Lessons for Teachers127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129Cluster 4132The Self, Social, and Moral Development132Overview and Objectives133Physical and Motor Development134Physical and Motor Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135137CULTURAL DIFFERENCES IN PLAY 134 • EXERCISE AND RECESS 138139Challenge sin Physical Activity137CULTURAL DIFFERENCES IN PLAY 134 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity and Students with Disabilities139Challenge sin Physical Activity137CULTURAL DIFFERENCES IN PLAY 134 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity and Students with Disabilities139Challenge sin Physical Activity132Challenge sin Physical Activity136CULTURAL DIFFERENCES IN PLAY 134 • EXERCISE AND RECESS 138Reaching Every Student: Physical Activity and Students with Disabilities139C	The Zone of Proximal Development	121
Implications of Plaget's and Vygotsky's Theories for Teachers122Plaget: What Can We Learn?122UNDERSTANDING AND BUILDING ON STUDENTS' THINKING123 • ACTIVITY AND CONSTRUCTINGKNOWLEDGE123Vygotsky: What Can We Learn?124THE ROLE OF ADULTS AND PEERS124 • ASSISTED LEARNING124An Example Curriculum: Tools of the Mind125GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129Cluster 4132The Self, Social, and Moral Development132Overview and Objectives133Physical Development134Physical and Motor Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135137GUIDELINES: Dealing with Physical Activity137OLUTUAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Reaching Every Student Physical Activity and Students with Disabilities139Obesity 139 • BODY IMAGE AND DISORDERED EATING 140142Bronfenbrenner: The Social Context for Development142Module 11 Summary142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145GUIDELINES: Supporting	PRIVATE SPEECH AND THE ZONE 121 • THE ROLE OF LEARNING AND DEVELOPMENT 122	
Piaget: What Can We Learn?122UNDERSTANDING AND BUILDING ON STUDENTS' THINKING123 • ACTIVITY AND CONSTRUCTING KNOWLEGE 123Vygotsky: What Can We Learn?124THE ROLE OF ADULTS AND PEERS124 • ASSISTED LEARNINGReaching Every Student: Teaching in the "Magic Middle"125GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129Cluster 4132The Self, Social, and Moral Development132Povriew and Objectives133Physical Development134Physical Development135Young CHILDES: Dealing with Physical Differences in the Classroom135THE ADULESCENT YEARS138Play, Recess, and Physical Activity OLUTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Challenges in Physical Development OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140139Challenges in Physical Context for Development OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141Module 11 Summary142PareINTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145144GUIDELINES: Family and Community Partnerships: Connecting with Families146		122
UNDERSTANDING AND BUILDING ON STUDENTS'THINKING 123 • ACTIVITY AND CONSTRUCTING KNOWLEDGE 123 Vygotsky: What Can We Learn? THE ROLE OF ADULTS AND PEERS 124 • ASSISTED LEARNING 124 An Example Curriculum: Tools of the Mind 125 Reaching Every Student: Teaching in the "Magic Middle" 125 GUIDELINES: Applying Vygotsky's Ideas in Teaching 126 Cognitive Development: Lessons for Teachers 127 Key Terms 128 Connect and Extend to Licensure 129 Teachers' Casebook—Symbols and Cymbals: What Would They Do? 129 Cluster 4 The Self, Social, and Moral Development 132 Physical Development 134 Physical Development 135 CGUIDELINES: Dealing with Physical Differences in the Classroom 135 THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity 0UUNG CHILDREN 139 • ELEMENTARY SCHOOL YEARS 138 CGUIDELINES: Supporting Positive Body Images in Adolescents 139 Challenges in Physical Development 139 Challenges in Physical Context for Development 139 Challenges in Physical Context for Development 144 PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145 CUIDELINES: Family and Community Partnerships: Connecting with Families 144 PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145		
Vygotsky: What Can We Learn? THE ROLE OF ADULTS AND PEERS 124 • ASSISTED LEARNING 124124An Example Curriculum: Tools of the Mind Reaching Every Student: Teaching in the "Magic Middle"125GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129Cluster 4132The Self, Social, and Moral Development132Overview and Objectives133Physical Development134Physical and Motor Development135YOUNG CHILDREN135VOUNG CHILDREN135Cluster 10136Play, Recess, and Physical Activity OULTURAL DIFFERNCES IN PLAY138Play, Recess, and Physical Activity 	UNDERSTANDING AND BUILDING ON STUDENTS' THINKING 123 • ACTIVITY AND CONSTRUCTING	122
An Example Curriculum: Tools of the Mind125Reaching Every Student: Teaching in the "Magic Middle"125GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129 <b>Cluster 4</b> 132The Self, Social, and Moral Development132Overview and Objectives133Physical Development134Physical and Motor Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136139Play, Recess, and Physical Activity OULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity and Students with Disabilities OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140142GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Fornfenbrenner: The Social Context for Development DESITY 139 • BODY IMAGE AND DISORDERED EATING 145 • ATTACHMENT 145144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145144	Vygotsky: What Can We Learn?	124
Reaching Every Student: Teaching in the "Magic Middle"125GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129 <b>Cluster 4</b> 132The Self, Social, and Moral Development132Overview and Objectives133Physical Development134Physical Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADDLESCENT YEARS 136 • EARLY AND LATER MATURING 136139Play, Recess, and Physical Activity137OULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Challenges in Physical Development140OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140139CBUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrenner: The Social Context for Development142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145144CUIDELINES: Family and Community Partnerships: Connecting with Families146		125
GUIDELINES: Applying Vygotsky's Ideas in Teaching126Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129 <b>Cluster 4</b> 132The Self, Social, and Moral Development132Overview and Objectives133Physical Development134Physical Development134Physical and Motor Development135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS136 · EARLY AND LATER MATURING 136Play, Recess, and Physical Activity137Outrade. In Physical Development139OBESITY 139 · BODY IMAGE AND DISORDERED EATING 140139GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrener: The Social Context for Development142Families144PARENTING STYLES 144 · CULTURE AND PARENTING 145 · ATTACHMENT 145144	*	
Cognitive Development: Lessons for Teachers127Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129 <b>Cluster 4</b> 132The Self, Social, and Moral Development132Coverview and Objectives133Physical Development134Physical Development134Physical Development135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136139Play, Recess, and Physical Activity OLITURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity and Students with Disabilities139OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141Module 11 Summary142Bronfenbrener: The Social Context for Development DESITY 139 • BODY IMAGE AND DISORDERED EATING 145 • ATTACHMENT 145144GUIDELINES: Family and Community Partnerships: Connecting with Families144		
Module 10 Summary127Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129 <b>Cluster 4</b> 132The Self, Social, and Moral Development132Teachers' Casebook – Mean Girls: What Would You Do?132Overview and Objectives133Physical Development134Physical Development135YOUNG CHILDREN 135 · ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 · EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 · EXERCISE AND RECESS 138139Challenges in Physical Development OBESITY 139 · BODY IMAGE AND DISORDERED EATING 140139GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Ite Importance of Context for Development DERENTY 139 · BODY IMAGE AND DISORDERED EATING 140142Families PARENTING STYLES 144 · CULTURE AND PARENTING 145 · ATTACHMENT 145144GUIDELINES: Family and Community Partnerships: Connecting with Families146		
Key Terms128Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129 <b>Cluster 4</b> 132The Self, Social, and Moral Development132Teachers' Casebook – Mean Girls: What Would You Do?132Overview and Objectives133Physical Development134Physical Development134Physical Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Challenges in Physical Development139OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141Module 11 Summary142Infornehrenner: The Social Context for Development142Importance of Context and the Bioecological Model142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145144CUIDELINES: Family and Community Partnerships: Connecting with Families146		
Connect and Extend to Licensure129Teachers' Casebook – Symbols and Cymbals: What Would They Do?129 <b>Cluster 4</b> 132The Self, Social, and Moral Development132Teachers' Casebook – Mean Girls: What Would You Do?132Overview and Objectives133Physical Development134Physical Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Challenges in Physical Development139OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145146CUIDELINES: Family and Community Partnerships: Connecting with Families146		
Teachers' Casebook – Symbols and Cymbals: What Would They Do?129Cluster 4The Self, Social, and Moral Development132Teachers' Casebook – Mean Girls: What Would You Do?132Overview and Objectives133Physical Development134Physical Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Challenges in Physical Development139OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145146		
Cluster 4132The Self, Social, and Moral Development132Teachers' Casebook–Mean Girls: What Would You Do?132Overview and Objectives133Physical Development134Physical and Motor Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity and Students with Disabilities139OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141Module 11 Summary142Fonfenbrenner: The Social Context for Development142In Importance of Context and the Bioecological Model142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145146CUIDELINES: Family and Community Partnerships: Connecting with Families146		129
The Self, Social, and Moral Development132Teachers' Casebook–Mean Girls: What Would You Do?132Overview and Objectives133Physical Development134Physical and Motor Development135YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Challenges in Physical Development139OESITY 139 • BODY IMAGE AND DISORDERED EATING 140142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145146GUIDELINES: Family and Community Partnerships: Connecting with Families146	Teachard Oceahadly Cymphale and Cymphales What Wayld They De0	100
Teachers' Casebook – Mean Girls: What Would You Do?132Overview and Objectives133Physical Development134Physical and Motor Development135YOUNG CHILDREN135 • ELEMENTARY SCHOOL YEARS135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS136 • EARLY AND LATER MATURING136Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY138 • EXERCISE AND RECESS138Reaching Every Student: Physical Activity and Students with Disabilities139OBESITY139 • BODY IMAGE AND DISORDERED EATING141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146	Teachers' Casebook-Symbols and Cymbals: what would They Do?	129
Overview and Objectives133Physical Development134Physical and Motor Development135YOUNG CHILDREN135 • ELEMENTARY SCHOOL YEARS135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS136 • EARLY AND LATER MATURING136Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY138 • EXERCISE AND RECESS138Reaching Every Student: Physical Activity and Students with Disabilities139OBESITY139 • BODY IMAGE AND DISORDERED EATING140GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Free Importance of Context and the Bioecological Model142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146		129
Physical Development134Physical and Motor Development135YOUNG CHILDREN135 • ELEMENTARY SCHOOL YEARS135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS136 • EARLY AND LATER MATURING136Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY138 • EXERCISE AND RECESS138Reaching Every Student: Physical Activity and Students with Disabilities139OBESITY139 • BODY IMAGE AND DISORDERED EATING140GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142The Importance of Context for Development142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146	Cluster 4	
Physical and Motor Development135YOUNG CHILDREN135 • ELEMENTARY SCHOOL YEARS135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS136 • EARLY AND LATER MATURING136Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY138 • EXERCISE AND RECESS138Reaching Every Student: Physical Activity and Students with Disabilities139OBESITY139 • BODY IMAGE AND DISORDERED EATING140GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146	<b>Cluster 4</b> The Self, Social, and Moral Development	132
YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135135GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity and Students with Disabilities139OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrenner: The Social Context for Development The Importance of Context and the Bioecological Model Families142OUIDELINES: Family and Community Partnerships: Connecting with Families146	<b>Cluster 4</b> The Self, Social, and Moral Development Teachers' Casebook–Mean Girls: What Would You Do?	132 132
GUIDELINES: Dealing with Physical Differences in the Classroom135THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136137Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138139Reaching Every Student: Physical Activity and Students with Disabilities139Challenges in Physical Development139OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145146	<b>Cluster 4</b> The Self, Social, and Moral Development Teachers' Casebook—Mean Girls: What Would You Do? Overview and Objectives	132 132 133
THE ADOLESCENT YEARS136 • EARLY AND LATER MATURING136Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY138 • EXERCISE AND RECESS138Reaching Every Student: Physical Activity and Students with Disabilities139Challenges in Physical Development139OBESITY139 • BODY IMAGE AND DISORDERED EATING140GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook—Mean Girls: What Would You Do? Overview and Objectives Physical Development	132 132 133 134
Play, Recess, and Physical Activity137CULTURAL DIFFERENCES IN PLAY138 • EXERCISE AND RECESS138Reaching Every Student: Physical Activity and Students with Disabilities139Challenges in Physical Development139OBESITY139 • BODY IMAGE AND DISORDERED EATING140GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook—Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development	132 132 133 134
CULTURAL DIFFERENCES IN PLAY       138 • EXERCISE AND RECESS       138         Reaching Every Student: Physical Activity and Students with Disabilities       139         Challenges in Physical Development       139         OBESITY       139 • BODY IMAGE AND DISORDERED EATING       140         GUIDELINES: Supporting Positive Body Images in Adolescents       141         Module 11 Summary       142         Bronfenbrenner: The Social Context for Development       142         The Importance of Context and the Bioecological Model       142         Families       144         PARENTING STYLES       144 • CULTURE AND PARENTING       145 • ATTACHMENT         GUIDELINES: Family and Community Partnerships: Connecting with Families       146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135	132 132 133 134 135
Reaching Every Student: Physical Activity and Students with Disabilities139Challenges in Physical Development139OBESITY139 • BODY IMAGE AND DISORDERED EATING140GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136	132 132 133 134 135
Challenges in Physical Development139OBESITY139 • BODY IMAGE AND DISORDERED EATING140GUIDELINES: Supporting Positive Body Images in Adolescents141Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES144 • CULTURE AND PARENTING145 • ATTACHMENTGUIDELINES: Family and Community Partnerships: Connecting with Families146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity	132 132 133 134 135
OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140         GUIDELINES: Supporting Positive Body Images in Adolescents       141         Module 11 Summary       142         Bronfenbrenner: The Social Context for Development       142         The Importance of Context and the Bioecological Model       142         Families       144         PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145       146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138	<ul> <li>132</li> <li>132</li> <li>133</li> <li>134</li> <li>135</li> <li>135</li> <li>137</li> </ul>
Module 11 Summary142Bronfenbrenner: The Social Context for Development142The Importance of Context and the Bioecological Model142Families144PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145146GUIDELINES: Family and Community Partnerships: Connecting with Families146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138 Reaching Every Student: Physical Activity and Students with Disabilities	132 132 133 134 135 135 135 137
Bronfenbrenner: The Social Context for Development       142         The Importance of Context and the Bioecological Model       142         Families       144         PARENTING STYLES       144 • CULTURE AND PARENTING       145 • ATTACHMENT         GUIDELINES: Family and Community Partnerships: Connecting with Families       146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138 Reaching Every Student: Physical Activity and Students with Disabilities Challenges in Physical Development	132 132 133 134 135 135 135 137
The Importance of Context and the Bioecological Model       142         Families       144         PARENTING STYLES       144 • CULTURE AND PARENTING       145 • ATTACHMENT       145         GUIDELINES: Family and Community Partnerships: Connecting with Families       146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138 Reaching Every Student: Physical Activity and Students with Disabilities Challenges in Physical Development OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140	132 132 133 134 135 135 135 137 139 139
The Importance of Context and the Bioecological Model       142         Families       144         PARENTING STYLES       144 • CULTURE AND PARENTING       145 • ATTACHMENT       145         GUIDELINES: Family and Community Partnerships: Connecting with Families       146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138 Reaching Every Student: Physical Activity and Students with Disabilities Challenges in Physical Development OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140 GUIDELINES: Supporting Positive Body Images in Adolescents	132 132 133 134 135 135 135 137 139 139 139
PARENTING STYLES       144 • CULTURE AND PARENTING       145 • ATTACHMENT       145         GUIDELINES: Family and Community Partnerships: Connecting with Families       146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138 Reaching Every Student: Physical Activity and Students with Disabilities Challenges in Physical Development OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140 GUIDELINES: Supporting Positive Body Images in Adolescents Module 11 Summary	132         132         133         134         135         135         137         139         139         141         142
GUIDELINES: Family and Community Partnerships: Connecting with Families 146	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138 Reaching Every Student: Physical Activity and Students with Disabilities Challenges in Physical Development OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140 GUIDELINES: Supporting Positive Body Images in Adolescents Module 11 Summary Eronfenbrenner: The Social Context for Development	132 132 133 134 135 135 135 137 139 139 139 139 141 142 142
	<ul> <li>Cluster 4</li> <li>The Self, Social, and Moral Development</li> <li>Teachers' Casebook – Mean Girls: What Would You Do?</li> <li>Overview and Objectives</li> <li>Physical Development <ul> <li>YOUNG CHILDREN</li> &lt;</ul></li></ul>	132 132 133 134 135 135 135 137 139 139 139 141 142 142 142
	Cluster 4 The Self, Social, and Moral Development Teachers' Casebook – Mean Girls: What Would You Do? Overview and Objectives Physical Development Physical and Motor Development YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135 GUIDELINES: Dealing with Physical Differences in the Classroom THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136 Play, Recess, and Physical Activity CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138 Reaching Every Student: Physical Activity and Students with Disabilities Challenges in Physical Development OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140 GUIDELINES: Supporting Positive Body Images in Adolescents Module 11 Summary Eronfenbrenner: The Social Context for Development The Importance of Context and the Bioecological Model Families	132 132 133 134 135 135 135 137 139 139 139 141 142 142 142
GUIDELINES: Helping Children of Divorce 147	<ul> <li>Cluster 4</li> <li>The Self, Social, and Moral Development</li> <li>Teachers' Casebook – Mean Girls: What Would You Do?</li> <li>Overview and Objectives</li> <li>Physical Development <ul> <li>YOUNG CHILDREN 135 • ELEMENTARY SCHOOL YEARS 135</li> </ul> </li> <li>GUIDELINES: Dealing with Physical Differences in the Classroom <ul> <li>THE ADOLESCENT YEARS 136 • EARLY AND LATER MATURING 136</li> <li>Play, Recess, and Physical Activity</li> <li>CULTURAL DIFFERENCES IN PLAY 138 • EXERCISE AND RECESS 138</li> <li>Reaching Every Student: Physical Activity and Students with Disabilities</li> <li>Challenges in Physical Development <ul> <li>OBESITY 139 • BODY IMAGE AND DISORDERED EATING 140</li> </ul> </li> <li>GUIDELINES: Supporting Positive Body Images in Adolescents</li> <li>Module 11 Summay </li> <li>PARENTING STYLES 144 • CULTURE AND PARENTING 145 • ATTACHMENT 145</li> <li>GUIDELINES: Family and Community Partnerships: Connecting with Families</li> </ul></li></ul>	132         132         133         134         135         135         137         139         139         141         142         142         142         144

Peers	148
CLIQUES 148 • CROWDS 148 • PEER CULTURES 148 • FRIENDSHIPS 148 • POPULARITY 149 • WHO IS LIKELY TO HAVE PROBLEMS WITH PEERS? 150 • AGGRESSION 150 • RELATIONAL AGGRESSION 151 • MEDIA, MODELING, AND AGGRESSION 151 • VIDEO GAMES AND AGGRESSIVE BEHAVIOR 151	
Reaching Every Student: Teacher Support	152
GUIDELINES: Dealing with Aggression and Encouraging Cooperation	152
ACADEMIC AND PERSONAL CARING 153 • SUPPORTING SOCIAL AND EMOTIONAL LEARNING 153	
Teachers and Child Abuse	155
MANDATED REPORTING 155 • WHAT CAN TEACHERS DO? 155	
Module 12 Summary	157
Identity and Self-Concept	158
Erikson: Stages of Psychosocial Development THE PRESCHOOL YEARS: TRUST, AUTONOMY, AND INITIATIVE 159 • THE ELEMENTARY AND	158
MIDDLE SCHOOL YEARS: INUSI, AUTONOMY, AND INTIATIVE 159 THE ELEMENTARY AND MIDDLE SCHOOL YEARS: INDUSTRY VERSUS INFERIORITY 159	
GUIDELINES: Encouraging Initiative and Industry	161
ADOLESCENCE: THE SEARCH FOR IDENTITY 162 • IDENTITY AND TECHNOLOGY 163 • BEYOND THE SCHOOL YEARS 163	
GUIDELINES: Supporting Identity Formation	164
RACIAL AND ETHNIC PRIDE 165	
Self-Concept	165
THE STRUCTURE OF SELF-CONCEPT 165 • HOW SELF-CONCEPT DEVELOPS 166 • SELF-CONCEPT AND ACHIEVEMENT 167	
Sex Differences in the Self-Concept of Academic Competence	167
Self-Esteem	168
POINT/COUNTERPOINT: What Should Schools Do to Encourage Students' Self-Esteem?	168
THE DANGERS OF PERFECTIONISM 169	470
Module 13 Summary	170
Understanding Others and Moral Development	170
Theory of Mind and Intention Moral Development	171 171
KOHLBERG'S THEORIES OF MORAL DEVELOPMENT 171 • CRITICISMS OF KOHLBERG'S THEORY 172	171
Moral Judgments, Social Conventions, and Personal Choices	173
MORAL VERSUS CONVENTIONAL DOMAINS 173 • IMPLICATIONS FOR TEACHERS 174	
Beyond Reasoning: Haidt's Social Intuitionist Model of Moral Psychology	175
Moral Behavior and the Example of Cheating WHO CHEATS? 176 • DEALING WITH CHEATING 177	176
Personal/Social Development: Lessons for Teachers	178
Module 14 Summary	178
Key Terms	179
Connect and Extend to Licensure	180
Teachers' Casebook—Mean Girls: What Would They Do?	181
Cluster 5	
Learner Differences and Learning Needs	184
Teachers' Casebook—Including Every Student: What Would You Do?	184
Overview and Objectives	185
Language and Labeling	187

Impairments, Disabilities, and Handicaps	187
Person-First/Identity-First Language	188
Possible Biases in the Application of Labels	189
Intelligence	189
What Does Intelligence Mean?	189
INTELLIGENCE: ONE ABILITY OR MANY? 190	
Another View: Gardner's Multiple Intelligences	190
WHAT ARE THESE INTELLIGENCES? 191 • CRITICS OF MULTIPLE INTELLIGENCES THEORY 191 • GARDNER RESPONDS 192	
Multiple Intelligences: Lessons for Teachers	193
Another View: Sternberg's Successful Intelligence	193
Neuroscience and Intelligence	194 194
Measuring Intelligence BINET'S DILEMMA 194 • WHAT DOES AN IQ SCORE MEAN? 195 • GROUP VERSUS INDIVIDUAL IQ TESTS 195 • THE FLYNN EFFECT: ARE WE GETTING SMARTER? 195	194
GUIDELINES: Interpreting IQ Scores	196
INTELLIGENCE AND ACHIEVEMENT 196	
Sex Differences in Intelligence and Achievement	197
HEREDITY OR ENVIRONMENT? 198	
Learning to Be Intelligent: Being Smart About IQ	198
Emotional Intelligence	198
WHAT IS EMOTIONAL INTELLIGENCE? 199	
Module 15 Summary	200
Creativity: What It Is and Why It Matters	201
Assessing Creativity	202
OK, But So What: Why Does Creativity Matter?	203
What Are the Sources of Creativity?	203
CREATIVITY AND COGNITION 204 • CREATIVITY AND DIVERSITY 204	204
Creativity in the Classroom	
GUIDELINES: Applying and Encouraging Creativity	205
Learning Styles: Proceed with Caution	207
Learning Styles/Preferences	207
CAUTIONS ABOUT LEARNING STYLES 207 • WHY ARE LEARING STYLES/PREFERENCES SO POPULAR? 208	
Beyond Either/Or	208
Module 16 Summary	208
Individual Differences and the Law	209
IDEA	209
LEAST RESTRICTIVE ENVIRONMENT 210 • INDIVIDUALIZED EDUCATION PROGRAM 210 • THE RIGHTS OF STUDENTS AND FAMILIES 211	
GUIDELINES: Family and Community Partnerships: Productive Conferences	211
Section 504 Protections	212
Response to Intervention	213
Module 17 Summary	214
Students with Learning Challenges	215
Neuroscience and Learning Challenges	215
Students with Specific Learning Disabilities	216
STUDENT CHARACTERISTICS 217 • TEACHING STUDENTS WITH LEARNING DISABILITIES 218	
Students with Hyperactivity and Attention Disorders	219
DEFINITIONS 219 • TREATING ADHD WITH DRUGS 220	
POINT/COUNTERPOINT: Pills or Skills for Children with ADHD?	220

ALTERNATIVES/ADDITIONS TO DRUG TREATMENTS 221

Lessons for Teachers: Learning Disabilities and ADHD	221
Students with Communication Impairments	222
SPEECH IMPAIRMENTS 222 • LANGUAGE DISORDERS 223 Students with Emotional or Behavioral Disorders	223
TRAUMA 224	223
GUIDELINES: Disciplining Students with Emotional Problems	225
DEATH BY SUICIDE 227 • SUBSTANCE USE DISORDER 227 • PREVENTION 228 • THE STIGMA OF MENTAL HEALTH ISSUES 228	
Students with Intellectual Disabilities	229
GUIDELINES: Teaching Students with Intellectual Disabilities	230
Students with Health and Sensory Impairments CEREBRAL PALSY AND MULTIPLE DISABILITIES 230 • SEIZURE DISORDERS (EPILEPSY) 231 • OTHER SERIOUS HEALTH CONCERNS: ASTHMA, SICKLE CELL DISEASE, AND DIABETES 232 • STUDENTS WITH VISUAL IMPAIRMENTS 232 • STUDENTS WHO ARE DEAF 233	230
Autism Spectrum Disorders INTERVENTIONS 234	233
Module 18 Summary	234
Students Who Are Gifted and Talented	236
Who Are These Students? WHAT IS THE ORIGIN OF THESE GIFTS 237 • WHAT PROBLEMS DO STUDENTS WHO ARE GIFTED	236
FACE? 237	
Identifying Students Who Are Gifted and Talented	238
RECOGNIZING GIFTS AND TALENTS 238 Teaching Students with Gifts and Talents	240
ACCELERATION 240 • METHODS AND STRATEGIES 240	-10
Module 19 Summary	240
Key Terms	241
Connect and Extend to Licensure	241
Teachers' Casebook—Including Every Student: What Would They Do?	242
Cluster 6	
Language Development, Language Diversity, and Immigrant	
Education	246
Teachers' Casebook—Communicating and Creating Community in the	
Classroom: What Would You Do?	246
Overview and Objectives	247
The Development of Language What Develops? Language and Cultural Differences	249 249
THE PUZZLE OF LANGUAGE 249	249
When and How Does Language Develop? SOUNDS AND PRONUNCIATION 250 • VOCABULARY AND MEANING 250 • GRAMMAR AND SYNTAX 252 • PRAGMATICS: USING LANGUAGE IN SOCIAL SITUATIONS 252 • METALINGUISTIC AWARENESS 252	250
Emergent Literacy	253
BUILDING A FOUNDATION 253 • WHEN PROBLEMS PERSIST 254	254
Emergent Literacy and Language Diversity LANGUAGES AND EMERGENT LITERACY 254 • BILINGUAL EMERGENT LITERACY 255	254
GUIDELINES: Supporting Language and Promoting Literacy	255
Diversity in Language Development	256
Dual-Language Development	256

SECOND-LANGUAGE LEARNING 257 • BENEFITS OF BILINGUALISM 257 •

LANGUAGE LOSS 258

Signed Languages	259
What Is Involved in Being Bilingual?	259
Basic Communication and Academic Language	260
GUIDELINES: Promoting Language Learning	262
Dialect Differences in the Classroom	263
Dialects	263
DIALECTS AND PRONUNCIATIONS 263 • DIALECTS AND TEACHING 264	
Genderlects	264
Module 20 Summary	265
Teaching Immigrant Students and English Learners	266
Immigrants and Refugees	267
Classrooms Today	268
Four Student Profiles	268
Generation 1.5: Students in Two Worlds	269
Bilingual Education and English Learners	270
TWO APPROACHES TO LEARNING ENGLISH	270
POINT/COUNTERPOINT: What Is the Best Way to Teach English Learners?	270
RESEARCH ON BILINGUAL EDUCATION 272 • VISUAL STRATEGIES 272 • LITERATURE RESPONSE GROUPS 272 • BILINGUALISM FOR ALL: TWO-WAY IMMERSION 272	
Sheltered Instruction	274
Affective and Emotional/Social Considerations	274
DEALING WITH TRAUMA 276	
Working with Families: Using the Tools of the Culture	278
GUIDELINES: Providing Emotional Support and Increasing Self-Esteem for Students Who Are ELs	278
FUNDS OF KNOWLEDGE AND WELCOME CENTERS 279 • STUDENT-LED CONFERENCES 280	
GUIDELINES: Family and Community Partnerships: Welcoming All Families	280
Special Challenges: Students Who Are English Learners with Unique Learning Needs and Gifts	281
Students Who Are English Learners with Disabilities	281
Reaching Every Student: Recognizing Giftedness in Bilingual Students	282
Module 21 Summary	283
Key Terms	284
Connect and Extend to Licensure	285
Teachers' Casebook—Communicating and Creating Community in the Classroom: What Would They Do?	285

## PART III LEARNING AND MOTIVATION

## Cluster 7

Behavioral Views of Learning	288
Teachers' Casebook—Sick of Class: What Would You Do?	288
Overview and Objectives	289
Understanding Learning	291
Ethical Issues	
GOALS 292 • STRATEGIES 292	
Learning Is Not Always What It Seems	292
Early Explanations of Learning: Contiguity and Classical Conditioning	293
GUIDELINES: Applying Classical Conditioning	295

Operant Conditioning: Trying New Responses	296
Types of Consequences	296
REINFORCEMENT 296 • PUNISHMENT 297	200
Neuroscience of Reinforcement and Punishment Reinforcement Schedules	298 299
EXTINGTION 300	299
Antecedents and Behavior Change	300
EFFECTIVE INSTRUCTION DELIVERY 301 • CUEING 301	
Module 22 Summary	301
Putting It All Together: Applied Behavior Analysis	302
Methods for Encouraging Behaviors	303
REINFORCING WITH TEACHER ATTENTION 303 • SELECTING REINFORCERS: THE PREMACK PRINCIPLE 304	
GUIDELINES: Applying Operant Conditioning-Using Praise Appropriately	304
SHAPING 305	001
Contingency Contracts, Token Reinforcement, and Group Consequences	306
CONTINGENCY CONTRACTS 306	
GUIDELINES: Applying Operant Conditioning—Encouraging Positive Behaviors	307
TOKEN REINFORCEMENT SYSTEMS 308 • GROUP CONSEQUENCES 309	
Handling Undesirable Behavior	310
NEGATIVE REINFORCEMENT 311 • POSITIVE PRACTICE	
OVERCORRECTION 311 • REPRIMANDS 311 • RESPONSE COST 312 • SOCIAL ISOLATION 312 • SOME CAUTIONS ABOUT PUNISHMENT 312	
GUIDELINES: Applying Operant Conditioning-Using Punishment	313
Module 23 Summary	314
Current Applications: Functional Behavioral Assessment, Positive Behavior Supports,	
and Self-Management	315
Discovering the "Why": Functional Behavioral Assessments	316
Reaching Every Student: Positive Behavior Supports	317
Self-Management GOAL SETTING 318 • MONITORING AND EVALUATING PROGRESS 318 •	318
SELF-REINFORCEMENT 319	
GUIDELINES: Family and Community Partnerships: Applying Operant Conditioning:	
Student Self-Management	319
Challenges and Criticisms	320
Beyond Behaviorism: Bandura's Challenge and Observational Learning	320
ENACTIVE AND OBSERVATIONAL LEARNING 320 • LEARNING AND PERFORMANCE 320	001
Criticisms of Behavioral Methods Behavioral Approaches: Lessons for Teachers	321 321
	322
POINT/COUNTERPOINT: Should Students Be Rewarded for Learning?	
Module 24 Summary	323
Key Terms	324
Connect and Extend to Licensure	325
Teachers' Casebook—Sick of Class: What Would They Do?	325
Cluster 8	
Cognitive Views of Learning	328
Teachers' Casebook—Remembering the Basics: What Would You Do?	328
Overview and Objectives	329
Elements of the Cognitive Perspective	330

The Brain and Cognitive Learning	330
The Importance of Knowledge in Cognition	331
GENERAL AND SPECIFIC KNOWLEDGE 332 • DECLARATIVE, PROCEDURAL, AND	
SELF-REGULATORY KNOWLEDGE 332	
Cognitive Views of Memory	332
Sensory Memory	333
CAPACITY, DURATION, AND CONTENTS OF SENSORY MEMORY 334 • PERCEPTION 335 • THE ROLE OF ATTENTION 335 • ATTENTION AND MULTITASKING 337	
POINT/COUNTERPOINT: What's Wrong with Multitasking?	337
ATTENTION AND TEACHING 338	
GUIDELINES: Gaining and Maintaining Attention	339
Working Memory	340
A MODEL OF WORKING MEMORY 340 • THE CENTRAL EXECUTIVE 341 • THE PHONOLOGICAL LOOP 341 • THE VISUO-SPATIAL SKETCHPAD 342 • THE EPISODIC BUFFER 342 • CAPACITY OF WORKING MEMORY 342 • THE DURATION AND CONTENTS OF WORKING MEMORY 342	
Cognitive Load and Retaining Information in Working Memory	343
TWO (OR THREE) KINDS OF COGNITIVE LOAD 343 • COGNITIVE LOAD: LESSONS FOR TEACHERS 343 • RETAINING INFORMATION IN WORKING MEMORY 344 • LEVELS OF PROCESSING THEORY 345 • FORGETTING 345	
Individual Differences in Working Memory	346
DEVELOPMENTAL DIFFERENCES 346 • INDIVIDUAL DIFFERENCES 346	
Is Working Memory Really Separate?	347
Module 25 Summary	347
Long-Term Memory	349
Capacity and Duration of Long-Term Memory	349
Contents of Long-Term Memory: Explicit (Declarative) Memories	349
PROPOSITIONS AND PROPOSITIONAL NETWORKS 349 • IMAGES 350 • TWO ARE BETTER THAN ONE: WORDS AND IMAGES 350 • CONCEPTS 351 • PROTOTYPES, EXEMPLARS, AND THEORY-BASED CATEGORIES 351 • TEACHING CONCEPTS 352 • SCHEMAS 352 • EPISODIC MEMORY 354	
GUIDELINES: Interviewing Young Students and Eyewitness Testimony	355
Contents of Long-Term Memory: Implicit Memories	355
Retrieving Information in Long-Term Memory	356
SPREADING ACTIVATION 356 • RECONSTRUCTION 357 • FORGETTING AND LONG-TERM MEMORY 357	000
Individual Differences in Long-Term Memory	357
Module 26 Summary	358
Teaching for Long-Lasting Knowledge: Basic Principles and Applications	359
Constructing Declarative Knowledge: Making Meaningful Connections	359
ELABORATION 359 • ORGANIZATION 360 • IMAGERY 360	007
GUIDELINES: Family and Community Partnerships: Organizing Learning	360
	300
CONTEXT 361 • DESIRABLE DIFFICULTY 361 • EFFECTIVE PRACTICE 361	2(2
Reaching Every Student: Make It Meaningful MNEMONICS 363	362
If You Have to Memorize	364
Lessons for Teachers: Declarative Knowledge	365
Development of Procedural Knowledge	365
AUTOMATED BASIC SKILLS 365 • DOMAIN-SPECIFIC STRATEGIES 366	505
GUIDELINES: Helping Students Understand and Remember	366
Module 27 Summary	368
Key Terms	368
Connect and Extend to Licensure	369
Teachers' Casebook—Remembering the Basics: What Would They Do?	370

Complex Cognitive Processes	372
Teachers' Casebook—Uncritical Thinking: What Would You Do?	372
Overview and Objectives	373
Metacognition	375
Metacognitive Knowledge and Regulation	375
Individual Differences in Metacognition	375
Lessons for Teachers: Developing Metacognition METACOGNITIVE DEVELOPMENT FOR YOUNGER STUDENTS 376 • METACOGNITIVE DEVELOPMENT FOR SECONDARY AND COLLEGE STUDENTS (LIKE YOU) 377	376
Learning Strategies	379
Being Strategic About Learning	380
DECIDING WHAT IS IMPORTANT 380 • SUMMARIES 381 • UNDERLINING AND HIGHLIGHTING 381 • TAKING NOTES 382	
Visual Tools for Organizing	383
Retrieval Practice: Powerful but Underused	385
Reading Strategies	385
Applying Learning Strategies APPROPRIATE TASKS 386 • VALUING LEARNING 386 • EFFORT AND EFFICACY 387	386
Reaching Every Student: Teaching How to Learn	387
Module 28 Summary	387
Problem Solving	388
Identifying: Problem Finding	389
Defining Goals and Representing the Problem FOCUSING ATTENTION ON WHAT IS RELEVANT 390 • UNDERSTANDING THE WORDS 390 • UNDERSTANDING THE WHOLE PROBLEM 390 • TRANSLATION AND SCHEMA TRAINING: DIRECT INSTRUCTION IN REPRESENTING PROBLEMS 392 • TRANSLATION AND SCHEMA TRAINING: WORKED EXAMPLES 392 • WORKED EXAMPLES AND EMBODIED COGNITION 393 • THE RESULTS OF PROBLEM REPRESENTATION 395	390
Searching for Possible Solution Strategies ALGORITHMS 395 • HEURISTICS 395	395
Anticipating, Acting, and Looking Back	396
Factors That Hinder Problem Solving SOME PROBLEMS WITH HEURISTICS 397	397
GUIDELINES: Applying Problem Solving	398
Expert Knowledge and Problem Solving knowing what is important 399 • memory for patterns and organization 399 • procedural knowledge 399 • planning and monitoring 400	399
GUIDELINES: Becoming an Expert Student	400
Module 29 Summary	402
Critical Thinking and Argumentation	403
What Critical Thinkers Do: Paul and Elder's Model	403
Teaching Critical Thinking APPLYING CRITICAL THINKING IN SPECIFIC SUBJECTS 404	403
POINT/COUNTERPOINT: Should Schools Teach Critical Thinking and Problem Solving?	405
Thinking Critically About Online Sources	405
Argumentation TWO STYLES OF ARGUMENTATION 407 • LESSONS FOR TEACHERS 408	406
Teaching for Transfer	408
The Many Views of Transfer	408

|--|--|

Teaching for Positive Transfer WHAT IS WORTH LEARNING? 410 • LESSONS FOR TEACHERS: SUPPORTING TRANSFER 410 • STAGES OF TRANSFER FOR STRATEGIES 410	409
GUIDELINES: Family and Community Partnerships: Promoting Transfer	411
Bringing It All Together: Teaching for Complex Learning and Robust Knowledge What Is Robust Knowledge? Teaching for Robust Knowledge PRACTICE 412 • WORKED EXAMPLES 412 • ANALOGIES 413 • INTEGRATING MULTIPLE	<b>412</b> 412 412
TEXTS 413 • SELF-EXPLANATIONS 413	
Module 30 Summary	413
Key Terms	415
Connect and Extend to Licensure	415
Teachers' Casebook—Uncritical Thinking: What Would They Do?	416
Cluster 10	
Constructivism and Interactive Learning	418
Teachers' Casebook—Necessity Is the Mother of Inventive Teaching:	
What Would You Do?	418
Overview and Objectives	419
Cognitive and Social Constructivism	420
Constructivist Views of Learning COGNITIVE CONSTRUCTIVISM 421 • SOCIAL CONSTRUCTIVISM 422	421
How Is Knowledge Constructed?	423
Knowledge: Situated or General?	423
Common Elements of Learner-Centered Teaching COMPLEX LEARNING ENVIRONMENTS AND AUTHENTIC TASKS 425 • SOCIAL NEGOTIATION 425 • MUL PERSPECTIVES AND REPRESENTATIONS OF CONTENT 425 • SELF-AWARENESS AND REFLECTION ABOUT THE KNOWLEDGE CONSTRUCTION PROCESS 426 • STUDENT OWNERSHIP OF LEARNING 427	424 LTIPLE
Designing Constructivist Learning Environments	427
Facilitating Deep Learning in a Constructivist Classroom SCAFFOLDING 427 • ADVANCE ORGANIZERS 429 • FACILITATING THROUGH ASKING AND ANSWERING DEEP QUESTIONS 429	427
GUIDELINES: Facilitating Deep Questioning	430
Inquiry-Based Learning	431
EXAMPLES OF INQUIRY 431 • PROBLEM-BASED LEARNING 432 • DOES INQUIRY-BASED INSTRUCTION IMPROVE LEARNING? 433	
POINT/COUNTERPOINT: Are Teaching Approaches to Support Inquiry- and Problem-Based Learning Effective?	434
BEING SMART ABOUT INQUIRY LEARNING 435	
Cognitive Apprenticeships	436
Module 31 Summary	437
Collaboration and Cooperation Learning in Groups	438 439
GOALS OF GROUP WORK 439 • WHAT CAN GO WRONG: MISUSES OF GROUP LEARNING 439	-107
Learning Through Cooperation	440
EFFECTS OF COOPERATIVE LEARNING 442 • TEACHER'S ROLE IN COOPERATIVE LEARNING 442 Designing Cooperative Learning Tasks	442
HIGHLY STRUCTURED, REVIEW, AND SKILL-BUILDING TASKS 442 • ILL-STRUCTURED, CONCEPTUAL, AND PROBLEM-SOLVING TASKS 443 • SOCIAL SKILLS AND COMMUNICATION TASKS 443 • GIVING AND RECEIVING EXPLANATIONS 444	
Setting Up Cooperative Groups	444
GROUP COMPOSITION 444 • ASSIGNING ROLES 445	

Examples of Cooperative Learning Techniques RECIPROCAL QUESTIONING 446 • JIGSAW 446 • CONSTRUCTIVE/STRUCTURED CONTROVERSIES 447	446
Reaching Every Student: Using Cooperative Learning Wisely	448
GUIDELINES: Using Cooperative Learning	449
Module 32 Summary	450
Designing Interactive Digital Learning Environments	451
Technology and Learning	451
Technology-Rich Environments	452
MOBILE LEARNING 452 • VIRTUAL LEARNING ENVIRONMENTS 453 • IMMERSIVE VIRTUAL LEARNING ENVIRONMENTS 454 • GAMES 455	
Computational Thinking and Coding	456
Media Use, Digital Citizenship, and Media Literacy	457
DEVELOPMENTALLY APPROPRIATE ACTIVITIES 457 • DIGITAL CITIZENSHIP 458 • CRITICAL MEDIA LITERACY 459	
GUIDELINES: Supporting the Development of Media Literacy	459
Blending and Flipping: Technology-Powered Pedagogy	460
Dilemmas of Constructivist Practice	461
Module 33 Summary	462
Key Terms	462
Connect and Extend to Licensure	463
Teachers' Casebook—Necessity Is the Mother of Inventive Teaching: What Would They Do?	463
Teachers' Casebook—Failure to Self-Regulate: What Would You Do?	466
Overview and Objectives	467
Social Cognitive Theory	469
A Self-Directed Life: Albert Bandura	469
Beyond Behaviorism	470
Triadic Reciprocal Causality	470
Modeling: Learning by Observing Others	472
Elements of Observational Learning ATTENTION 473 • RETENTION 473 • PRODUCTION 473 • MOTIVATION AND	473
REINFORCEMENT 474 Observational Learning in Teaching	474
DIRECTING ATTENTION 474 • FINE-TUNING ALREADY-LEARNED BEHAVIORS 475 • STRENGTHENING OR WEAKENING INHIBITIONS 475 • TEACHING NEW BEHAVIORS 475 • AROUSING EMOTION 475	1/ 1
GUIDELINES: Using Observational Learning	476
Agency and Self-Efficacy	477
Self-Efficacy, Self-Concept, and Self-Esteem	477
Sources of Self-Efficacy	478
Self-Efficacy in Learning and Teaching	480
GUIDELINES: Supporting Self-Efficacy	481
Teachers' Sense of Efficacy	482
Module 34 Summary	483
Self-Regulated Learning: Skill and Will	484
How Does Self-Regulation Develop? KNOWLEDGE 485 • MOTIVATION 486 • VOLITION 486	485

POINT/COUNTERPOINT: Are "Grittier" Students More Successful?	488
DEVELOPMENTAL CHANGES IN SELF-REGULATION 490	
A Social Cognitive Model of Self-Regulated Learning	490
Reaching Every Student: Technology and Self-Regulation	492
Self-Regulation of Emotions	493
SOCIAL AND EMOTIONAL LEARNING 493 • TEACHER STRESS AND SELF-REGULATION 494	
GUIDELINES: Encouraging Emotional Self-Regulation	495
Teaching Toward Self-Efficacy and Self-Regulated Learning	496
Complex Tasks	496
Agency and Control	497
Self-Management	498
Self-Evaluation	499
Collaboration	500
Bringing It All Together: Theories of Learning	500
Module 35 Summary	502
Key Terms	503
Connect and Extend to Licensure	503
Teachers' Casebook—Failure to Self-Regulate: What Would They Do?	504
Cluster 12	
Cluster 12	
Motivation in Learning and Teaching	506
Teachers' Casebook—Motivating Students When Resources Are Thin: What Would	
You Do?	506
Overview and Objectives	507
What Is Motivation?	509
Meeting Some Students	510
Intrinsic and Extrinsic Motivation	511
What You Already Know About Motivation	512
Needs and Self-Determination	513
Maslow's Hierarchy of Needs	513
Self-Determination: Need for Competence, Autonomy, and Relatedness	515
SELF-DETERMINATION IN THE CLASSROOM 515 • NEED-SUPPORTIVE VERSUS NEED-THWARTING CLASSROOMS 516	
GUIDELINES: Supporting Self-Determination and Autonomy	517
SUPPORTIVE RELATIONSHIPS AS MOTIVATORS 518	
Needs: Lessons for Teachers	518
Module 36 Summary	518
Goals and Goal Orientations	519
Goal Setting: What Am I Trying to Do?	520
Making Goals Work: Feedback, Framing, and Commitment	521
Goal Orientations: Why Am I Trying to Do This?	522
WAIT—ARE PERFORMANCE GOALS ALWAYS BAD? 523 • WORK-AVOIDANCE GOALS 524 • CONTEXTUAL INFLUENCES ON GOAL ORIENTATION 524	
Social Goals	524
Goals: Lessons for Teachers	525
Expectancies, Values, and Costs	525
Expectancy for Success	526
Task Value	526
Perceived Cost	527
Expectancy, Value, and Cost: Lessons for Teachers	527

Attributions and Beliefs About Ability	527
Attributions in the Classroom	528
Teacher Attributions Trigger Student Attributions	529
Mindsets About Ability	530
Ability Mindsets in the Classroom Mindsets About Failure	530 531
Attributions and Mindsets: Lessons for Teachers	532
GUIDELINES: Encouraging a Healthy Mindset	533
Module 37 Summary	533
How Do You Feel About Learning? Interest, Curiosity, and Emotions Tapping Interests TWO KINDS OF INTERESTS 535 • CATCHING AND HOLDING INTERESTS 536	<b>535</b> 535
Curiosity: Novelty and Complexity	536
POINT/COUNTERPOINT: Does Making Learning Fun Make for Good Learning?	537
GUIDELINES: Building on Students' Interests and Curiosity	538
Flow	539
Emotions	540
EMOTION AND THE BODY 540 • ACHIEVEMENT EMOTIONS 541 • EMOTIONS IN THE CLASSROOM 542	
Anxiety in the Classroom	542
Reaching Every Student: Coping with Negative Emotions	543
GUIDELINES: Coping With Test Anxiety	544
Interest, Curiosity, and Emotions: Lessons for Teachers	545
Module 38 Summary	545
Strategies to Encourage Motivation to Learn	546
Why Am I Learning This? Is It Valuable, Useful, Relevant?	547
CREATING AUTHENTIC TASKS 547 • INCREASING PERCEIVED RELEVANCE AND UTILITY 547	E 40
Will I Enjoy This? ENHANCING CURIOSITY, INTEREST, AND INTRINSIC VALUE 548 • SUPPORTING AUTONOMY 548	548
Can I Do It? Building Confidence and Positive Expectations	549
What Do I Need to Do to Succeed? Providing Structures That Support Progress	549
Do I Belong in This Classroom? Creating Inclusive Opportunities	550
GUIDELINES: Family and Community Partnerships: Supporting the Sociocultural	
Foundations of Motivation	551
Module 39 Summary	552
Key Terms	552
Connect and Extend to Licensure	553
Teachers' Casebook—Motivating Students When Resources Are Thin: What Would They Do?	553

## PART IV TEACHING AND ASSESSING

Cluster 13	
Creating Supportive Learning Environments	556
Teachers' Casebook—Bullies and Victims: What Would You Do?	556
Overview and Objectives	556
The What and Why of Supportive Classroom Organization	558
The Basic Task: Gain Their Cooperation	559
The Basic Goals: Access, Time, Relationships, and Self-Management	560
ACCESS TO LEARNING 560 • MORE TIME FOR LEARNING 560 • MANAGEMENT MEANS RELATIONSHIPS 561 • MANAGEMENT FOR SELF-MANAGEMENT 562	

	562
Relevant Research Results	563
Routines and Rules Required: In-Person Learning	563
ROUTINES AND PROCEDURES 563	
GUIDELINES: Establishing Class Routines for In-Person Learning	564
RULES 565 • RULES FOR IN-PERSON TEACHING IN ELEMENTARY SCHOOL 565 • RULES FOR IN-PERSON TEACHING IN SECONDARY SCHOOL 565 • CONSEQUENCES 566 • WHO SETS THE RULES AND CONSEQUENCES? 566	
Routines and Rules Required: Remote Learning	567
GUIDELINES: Establishing Routines and Rules for Remote Learning	567
Planning Spaces for Learning PERSONAL TERRITORIES AND SEATING ARRANGEMENTS 570 • INTEREST AREAS 570	570
GUIDELINES: Designing Learning Spaces	571
Getting Started: The First Weeks of Class EFFECTIVE MANAGERS FOR ELEMENTARY STUDENTS 572 • EFFECTIVE MANAGERS FOR SECONDARY STUDENTS 573	572
Module 40 Summary	573
Maintaining a Good Environment for Learning	574
Encouraging Engagement	574
GUIDELINES: Keeping Students Engaged	575
Prevention Is the Best Medicine	575
WITHITNESS 576 • OVERLAPPING AND GROUP FOCUS 576 • MOVEMENT MANAGEMENT 576 • STUDENT SOCIAL SKILLS AS PREVENTION 576	
Caring Relationships: Connections with School	578
TEACHER CONNECTIONS 578 • SCHOOL CONNECTIONS AND BELONGING 579 • CREATING COMMUNITIES OF CARE FOR ADOLESCENTS 579	
GUIDELINES: Creating Caring Relationships	580
GUIDELINES: Creating Caring Relationships Module 41 Summary	580 <b>581</b>
Module 41 Summary Dealing with Discipline Problems	
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly	<b>581</b> 582 582
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties	<b>581</b> 582 582 583
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties	<b>581</b> 582 582 583 583
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance?	<b>581</b> <b>582</b> 583 <b>584</b> 585
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea?	<b>581</b> 582 582 583 584 585 585
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice	<b>581</b> <b>582</b> 583 584 585 <b>585</b> 585
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility	<ul> <li>581</li> <li>582</li> <li>582</li> <li>583</li> <li>584</li> <li>585</li> <li>586</li> <li>587</li> </ul>
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice	<b>581</b> <b>582</b> 583 <b>584</b> 585 <b>585</b> 585
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND	<ul> <li>581</li> <li>582</li> <li>582</li> <li>583</li> <li>584</li> <li>585</li> <li>586</li> <li>587</li> </ul>
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592	<ul> <li>581</li> <li>582</li> <li>582</li> <li>583</li> <li>584</li> <li>585</li> <li>585</li> <li>586</li> <li>587</li> <li>588</li> </ul>
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592 Special Challenges with High School Students	<ul> <li>581</li> <li>582</li> <li>583</li> <li>584</li> <li>585</li> <li>586</li> <li>587</li> <li>588</li> <li>593</li> </ul>
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592 Special Challenges with High School Students GUIDELINES: Handling Potentially Explosive Situations The Need for Communication Message Sent—Message Received	<b>581</b> 582 583 584 585 585 586 587 588 593 593 593 594 594
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592 Special Challenges with High School Students GUIDELINES: Handling Potentially Explosive Situations The Need for Communication Message Sent—Message Received Empathetic Listening	<b>581</b> 582 583 584 585 586 587 588 593 593 594
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592 Special Challenges with High School Students GUIDELINES: Handling Potentially Explosive Situations The Need for Communication Message Sent—Message Received Empathetic Listening When Listening Is Not Enough: I-Messages, Assertive Discipline, and Problem Solving	<b>581</b> 582 583 584 585 585 586 587 588 593 593 593 594 594
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592 Special Challenges with High School Students GUIDELINES: Handling Potentially Explosive Situations The Need for Communication Message Sent—Message Received Empathetic Listening When Listening Is Not Enough: I-Messages, Assertive Discipline, and	<ul> <li>581</li> <li>582</li> <li>583</li> <li>584</li> <li>585</li> <li>586</li> <li>587</li> <li>588</li> <li>593</li> <li>593</li> <li>594</li> <li>594</li> <li>595</li> </ul>
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592 Special Challenges with High School Students GUIDELINES: Handling Potentially Explosive Situations The Need for Communication Message Sent—Message Received Empathetic Listening When Listening Is Not Enough: I-Messages, Assertive Discipline, and Problem Solving I-MESSAGES 596 • ASSERTIVE DISCIPLINE 596 • CONFRONTATIONS AND	<ul> <li>581</li> <li>582</li> <li>583</li> <li>584</li> <li>585</li> <li>586</li> <li>587</li> <li>588</li> <li>593</li> <li>593</li> <li>594</li> <li>594</li> <li>595</li> </ul>
Module 41 Summary Dealing with Discipline Problems Stopping Problems Quickly If You Impose Penalties GUIDELINES: Imposing Penalties What About School Suspensions and Zero Tolerance? POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? Reaching Every Student: Restorative Justice Teacher-Imposed Penalties Versus Student Responsibility Bullying and Cyberbullying VICTIMS 588 • WHY DO STUDENTS BULLY? 590 • WHAT CAN TEACHERS DO? BULLYING AND TEASING 590 • CYBERBULLYING 592 Special Challenges with High School Students GUIDELINES: Handling Potentially Explosive Situations The Need for Communication Message Sent—Message Received Empathetic Listening When Listening Is Not Enough: I-Messages, Assertive Discipline, and Problem Solving I-MESSAGES 596 • ASSERTIVE DISCIPLINE 596 • CONFRONTATIONS AND NEGOTIATIONS 597	<ul> <li>581</li> <li>582</li> <li>582</li> <li>583</li> <li>584</li> <li>585</li> <li>586</li> <li>587</li> <li>588</li> <li>593</li> <li>593</li> <li>594</li> <li>595</li> <li>596</li> </ul>

Module 42 Summary	60
Key Terms	60
Connect and Extend to Licensure	60
Teachers' Casebook—Bullies and Victims: What Would They Do?	60
Cluster 14	
Teaching Every Student	606
Teachers' Casebook—Reaching and Teaching Every Student: What Would You Do?	60
Overview and Objectives	60
Research on Teaching	60
Characteristics of Effective Teachers CLARITY AND ORGANIZATION 609 • ENTHUSIASM AND WARMTH 609	60
Knowledge for Teaching	61
Teacher Expectations TWO KINDS OF EXPECTATION EFFECTS 611 • SOURCES OF EXPECTATIONS 611 • DO TEACHERS' EXPECTATIONS REALLY AFFECT STUDENTS' ACHIEVEMENT? 612 • LESSONS FOR TEACHERS: COMMUNICATING APPROPRIATE EXPECTATIONS 613	61
GUIDELINES: Avoiding the Negative Effects of Teacher Expectations	614
The Goal: Ambitious Teaching	61
The First Step: Planning	61
Research on Planning	61
Learning Goals	61
AN EXAMPLE OF STATE-LEVEL GOALS: THE COMMON CORE 617 • CLASSROOMS GOALS FOR LEARNING 618	
Flexible and Creative Plans—Using Taxonomies THE COGNITIVE DOMAIN 619 • THE AFFECTIVE DOMAIN 620 • THE PSYCHOMOTOR DOMAIN 620	61
The Cognitive Demands of Learning Objectives: Webb's Depth of Knowledge Planning from a Constructivist Perspective	62 62
GUIDELINES: Using Learning Objectives	62
Module 43 Summary	622
Teaching Approaches	62
Research on Teaching Strategies	62
Explicit Teaching and Direct Instruction ROSENSHINE'S SIX TEACHING FUNCTIONS 625 • WHY DOES DIRECT INSTRUCTION WORK? 625 • EVALUATING DIRECT INSTRUCTION 625	624
GUIDELINES: Effective Direct Instruction	62
Independent Work and Homework INDEPENDENT WORK 627 • HOMEWORK 628	62
POINT/COUNTERPOINT: Is Homework Valuable?	62
GUIDELINES: Family and Community Partnerships: Homework	63
Questioning, Discussion, Dialogue, and Feedback KINDS OF QUESTIONS 632 • ASKING AUTHENTIC QUESTIONS 633 • FITTING THE QUESTIONS TO THE STUDENTS—AND WAITING 633 • RESPONDING TO STUDENT ANSWERS 634 • GROUP DISCUSSION AND QUALITY TALK 634	63
Lessons for Teachers: Fitting Teaching to Your Goals	63
GUIDELINES: Productive Group Discussions	63
Putting It All Together: Understanding by Design	63
Differentiated Instruction	63
Within-Class and Flexible Grouping THE PROBLEMS WITH ABILITY GROUPING 640 • FLEXIBLE GROUPING 640	639

GUIDELINES: Using Flexible Grouping	640
Differentiated Instruction in Inclusive Classrooms	641
ASSISTIVE TECHNOLOGY 641	
Reaching Every Student: Differentiation with Universal Design for Learning	642
Module 44 Summary	643
Key Terms	645
Connect and Extend to Licensure	645
Teachers' Casebook—Reaching and Teaching Every Student: What Would They Do?	646

## Cluster 15

Classroom Assessment, Grading, and Standardized Testing	650
Teachers' Casebook—Giving Meaningful Grades: What Would You Do?	650
Overview and Objectives	651
Basics of Assessment	653
Measurement and Assessment	653
FORMATIVE, INTERIM, AND SUMMATIVE ASSESSMENT 654	
Assessing the Assessments: Reliability and Validity	654
RELIABILITY OF TEST SCORES 655 • VALIDITY 655 • ABSENCE OF BIAS 656	
Classroom Assessment: Testing	657
Interpreting Any Test Score NORM-REFERENCED TEST INTERPRETATIONS 658 • CRITERION-REFERENCED TEST INTERPRETATIONS 658	657
Using the Tests from Textbooks	659
Selected-Response Testing	659
USING MULTIPLE-CHOICE TESTS 660 • WRITING MULTIPLE-CHOICE QUESTIONS 660	
Constructed Responses: Essay Testing	660
GUIDELINES: Writing Multiple-Choice Test Items	661
CONSTRUCTING ESSAY TESTS 662 • EVALUATING ESSAYS 663	
Assessing Traditional Testing	663
Module 45 Summary	664
Formative and Authentic Classroom Assessments	665
Informal Assessments	665
EXIT TICKETS 665 • JOURNALS 665 • INVOLVING STUDENTS IN ASSESSMENTS 666	
Authentic Assessments: Performances and Portfolios PERFORMANCES 666 • PORTFOLIOS 668	666
Evaluating Portfolios and Performances	668
SCORING RUBRICS 668	
GUIDELINES: Creating Portfolios	669
RELIABILITY AND VALIDITY 670	
GUIDELINES: Developing a Rubric	671
DIVERSITY AND BIAS IN PERFORMANCE ASSESSMENT 671	
Assessing Complex Thinking	671
Classroom Assessment: Lessons for Teachers	672
Grading	673
Norm-Referenced Versus Criterion-Referenced Grading	673
Effects of Grading on Students	674
THE VALUE OF FAILING? 674 • RETENTION IN GRADE 675	
POINT/COUNTERPOINT: Should Children Be Held Back?	676
Grades and Motivation	677
Beyond Grading: Communicating with Families	677
GUIDELINES: Using Any Grading System	678

Module 46 Summary	680
Standardized Testing	681
Types of Scores	681
MEASUREMENTS OF CENTRAL TENDENCY AND STANDARD DEVIATION 681 • THE NORMAL DISTRIBUTION 682 • PERCENTILE RANK SCORES 683 • GRADE-EQUIVALENT SCORES 683 • STANDARD SCORES 683	
Interpreting Standardized Test Reports DISCUSSING TEST RESULTS WITH FAMILIES 687	685
GUIDELINES: Family and Community Partnerships: Conferences and Explaining Test Results	687
Accountability and High-Stakes Testing	688
MAKING DECISIONS 689 • WHAT DO TEACHERS THINK? 689 • DOCUMENTED PROBLEMS WITH HIGH-STAKES TESTING 689	
New Directions: PARCC and SBAC	689
Using High-Stakes Testing Well: Lessons for Teachers	690
Reaching Every Student: Helping Students with Disabilities Prepare for High-Stakes Tests	691
GUIDELINES: Preparing Yourself and Your Students for Testing	691
Teacher Accountability and Evaluation	693
VALUE-ADDED MODELS 693 • SO HOW SHOULD WE EVALUATE TEACHERS? 694 • A BROADER APPROACH: MEASURES OF TEACHER EFFECTIVENESS 694	
Module 47 Summary	695
Key Terms	696
Connect and Extend to Licensure	696
Teachers' Casebook—Giving Meaningful Grades: What Would They Do?	697

Licensure Appendix A-1 Glossary G-1 References R-1 Name Index N-1

Subject Index S-1

# **Special Features**

# TEACHERS' CASEBOOK: WHAT WOULD YOU DO?

Becoming a Great Teacher: What Would You Do?	2
Becoming a Great Teacher: What Would They Do?	31
Conversations About Race: What Would You Do?	34
Conversations About Race: What Would They Do?	83
Symbols and Cymbals: What Would You Do?	86
Symbols and Cymbals: What Would They Do?	129
Mean Girls: What Would You Do?	132
Mean Girls: What Would They Do?	181
Including Every Student: What Would You Do?	184
Including Every Student: What Would They Do?	242
Communicating and Creating Community in the Classroom: What Would You Do?	246
Communicating and Creating Community in the Classroom: What Would They Do?	285
Sick of Class: What Would You Do?	288
Sick of Class: What Would They Do?	325
Remembering the Basics: What Would You Do?	328
Remembering the Basics: What Would They Do?	370
Uncritical Thinking: What Would You Do?	372
Uncritical Thinking: What Would They Do?	416
Necessity Is the Mother of Inventive Teaching: What Would You Do?	418
Necessity Is the Mother of Inventive Teaching: What Would They Do?	463
Failure to Self-Regulate: What Would You Do?	466
Failure to Self-Regulate: What Would They Do?	504
Motivating Students When Resources Are Thin: What Would You Do?	506
Motivating Students When Resources Are Thin: What Would They Do?	553
Bullies and Victims: What Would You Do?	556
Bullies and Victims: What Would They Do?	603
Reaching and Teaching Every Student: What Would You Do?	606
Reaching and Teaching Every Student: What Would They Do?	646
Giving Meaningful Grades: What Would You Do?	650
Giving Meaningful Grades: What Would They Do?	697
GUIDELINES	
Teaching Students Who Live in Poverty	55
Avoiding Gender Bias in Teaching	69
Culturally Relevant Teaching	80
Family and Community Partnerships: Helping Families Care for	
Preoperational Children	108
Teaching the Concrete-Operational Child	110

Helping Students Use Formal Operations Applying Vygotsky's Ideas in Teaching Dealing with Physical Differences in the Classroom Supporting Positive Body Images in Adolescents Family and Community Partnerships: Connecting with Families Helping Children of Divorce Dealing with Aggression and Encouraging Cooperation Encouraging Initiative and Industry Supporting Identity Formation

113

126

135

141

146 147

152

161

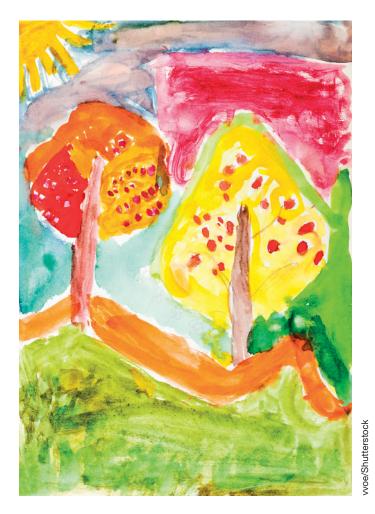
164

Interpreting IQ Scores	196
Applying and Encouraging Creativity	205
Family and Community Partnerships: Productive Conferences	211
Disciplining Students with Emotional Problems	225
Teaching Students with Intellectual Disabilities	230
Supporting Language and Promoting Literacy	255
Promoting Language Learning	262
Providing Emotional Support and Increasing Self-Esteem for Students Who Are ELs	278
Family and Community Partnerships: Welcoming All Families	280
Applying Classical Conditioning	295
Applying Operant Conditioning—Using Praise Appropriately	304
Applying Operant Conditioning—Encouraging Positive Behaviors	307
Applying Operant Conditioning—Using Punishment	313
Family and Community Partnerships: Applying Operant Conditioning:	
Student Self-Management	319
Gaining and Maintaining Attention	339
Interviewing Young Students and Eyewitness Testimony	355
Family and Community Partnerships: Organizing Learning	360
Helping Students Understand and Remember	366
Applying Problem Solving	398
Becoming an Expert Student	400
Family and Community Partnerships: Promoting Transfer	411
Facilitating Deep Questioning	430
Using Cooperative Learning	449
Supporting the Development of Media Literacy	459
Using Observational Learning	476
Supporting Self-Efficacy	481
Encouraging Emotional Self-Regulation	495
Supporting Self-Determination and Autonomy	517
Encouraging a Healthy Mindset	533
Building on Students' Interests and Curiosity	538
Coping With Test Anxiety	544
Family and Community Partnerships: Supporting the Sociocultural	
Foundations of Motivation	551
Establishing Class Routines for In-Person Learning	564
Establishing Routines and Rules for Remote Learning	567
Designing Learning Spaces	571
Keeping Students Engaged	575
Creating Caring Relationships	580
Imposing Penalties	584
Handling Potentially Explosive Situations	593
Family and Community Partnerships: Classroom Organization and Management	600
Avoiding the Negative Effects of Teacher Expectations	614
Using Learning Objectives	621
Effective Direct Instruction	626
Family and Community Partnerships: Homework	630
Productive Group Discussions	636
Using Flexible Grouping	640
Writing Multiple-Choice Test Items	661
Creating Portfolios	669
Developing a Rubric	671
Using Any Grading System	678
Family and Community Partnerships: Conferences and Explaining Test Results	687
Preparing Yourself and Your Students for Testing	691

### POINT/COUNTERPOINT

What Kind of Research Should Guide Education?	25
Should Girls and Boys Be Taught Differently?	70
Brain-Based Education	98
What Should Schools Do to Encourage Students' Self-Esteem?	168
Pills or Skills for Children with ADHD?	220
What Is the Best Way to Teach English Learners?	270
Should Students Be Rewarded for Learning?	322
What's Wrong with Multitasking?	337
Should Schools Teach Critical Thinking and Problem Solving?	405
Are Teaching Approaches to Support Inquiry- and Problem-Based Learning Effective?	434
Are "Grittier" Students More Successful?	488
Does Making Learning Fun Make for Good Learning?	537
Is Zero Tolerance a Good Idea?	585
Is Homework Valuable?	629
Should Children Be Held Back?	676

# 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.