To my husband,

Wayne K. Hoy

A remarkable scholar,
A demanding and caring mentor,
A dedicated father and grandfather,
And a wonderful companion in life.

The best is yet to be...
So you will know your author 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 children 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. With students and colleagues, she has published over 150 books, book chapters, and research articles. Anita has served as Vice-President for Division K (Teaching & Teacher Education) of the American Educational Research Association and President of Division 15 (Educational Psychology) of the American Psychological Association. Before completing this fourteenth edition of *Educational Psychology*, she collaborated with Nancy Perry, University of British Columbia, to write the second edition of *Child Development* (Pearson, 2015), a book for all those who work with and love children.
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.

Since the first edition of *Educational Psychology* appeared, there have been many exciting developments in the field. The fourteenth edition continues to emphasize the educational implications and applications of research on child development, cognitive science, learning, motivation, teaching, and assessment. Theory and practice are not separated in the text, but are considered together. The book is written to show how information and ideas drawn from research in educational psychology can be applied to solve the everyday problems of teaching. To help you explore the connections between research and practice, you will find in these pages a wealth of examples, lesson segments, case studies, guidelines, and even practical tips from experienced teachers. As you read this book, I 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.

**NEW CONTENT IN THE FOURTEENTH EDITION**

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

- Increased coverage of the **brain, neuroscience, and teaching** emphasized in Chapter 2 and also integrated into several other chapters.
- Increased coverage of **the impact of technology and virtual learning environments** on the lives of students and teachers today.
- Increased emphasis on **diversity in today’s classrooms** (see especially Chapters 1 to 6). Portraits of students in educational settings make diversity real and human for readers. In a number of chapters there are new exercises asking readers to “Put Yourself in Their Place” as a way to develop empathy for many students and situations.
- Increased coverage of effective application of learning principles as identified by the **Institute for Educational Sciences** (https://ies.ed.gov/ncee/wwc/PracticeGuide/1)

Key content changes in each chapter include:

- **Chapter 1**: My goal is that this text will provide the knowledge and skills that will enable students to build a solid foundation for an authentic sense of teaching efficacy in every context and for every student, so there is new information on the **Every Student Succeeds Act** (**ESSA**). Also, the section on research now includes **mixed methods** (complementary methods) (see Table 1.2) and **evidence-based practice**.
- **Chapter 2**: New information on the **brain and brain imaging techniques, synaptic plasticity, brain development in childhood and adolescence**, and **implications for teaching**. Also, there is greater critical analysis of Piaget’s and Vygotsky’s theories.
PREFACE

• Chapter 3: Updated section on physical changes in puberty, cultural differences in play, childhood obesity, eating disorders and the Web sites that promote them, parenting, aggression, racial identity, and self-concept.
• Chapter 4: New sections on biases in labeling, neuroscience and intelligence, problems with learning styles, ADHD, student drug use, seizure disorders and other serious health concerns, and autism spectrum disorders.
• Chapter 5: New information on language development, emergent literacy, language diversity, and bilingual education.
• Chapter 6: New coverage of intersectionality, ethnicity and race, prejudice, expanded coverage of stereotype threat, gender, gender identity, sexual orientation, and creating culturally compatible classrooms.
• Chapter 7: Expanded coverage of ethical issues in behavioral approaches, reasons for classroom disruptions, and teaching implications of behavioral learning.
• Chapter 8: Updated coverage of the brain and cognitive learning, multitasking, working memory and cognitive load, concept teaching, desirable difficulty, effective practice, and teaching implications of cognitive learning theories.
• Chapter 9: All new section on teaching for complex learning and robust knowledge, updated discussion of metacognitive strategies, retrieval practice, worked examples, argumentation, and critical thinking.
• Chapter 10: New sections on designing learning environments, facilitating in constructivist classrooms, scaffolding, asking and answering deep questions, and the flipped classroom. Updated discussion of collaboration, learning in a digital world, and computational thinking.
• Chapter 11: Updated coverage of modeling, self-efficacy and agency, teacher efficacy, self-regulated learning, and emotional self-regulation. New section on grit.
• Chapter 12: Chapter reorganized around five broad themes in motivation. Updated treatment of expectancy-value-cost theory. New section on mindsets. Updated material on flow and on the TARGET framework for motivation.
• Chapter 13: New sections on the role of relationships, social skills, and mentoring in classroom management. Updated material on dealing with discipline problems, bullying and cyberbullying, restorative justice, and culturally responsive classroom management.
• Chapter 14: Updated research on teaching, homework, and teacher expectations as well as new sections on learning targets, the Common Core, asking deep questions, and giving feedback.
• Chapter 15: New sections on formative and interim assessment, guidance for using different types of test formats and rubrics, and assessing complex thinking. Updated material on discussing test results with families, controversies around high-stakes testing, value-added assessment, and PARCC and SBAC tests.

A CRYSTAL CLEAR PICTURE OF THE FIELD AND WHERE IT IS HEADED

The fourteenth edition maintains the lucid writing style for which the book is renowned. The text provides accurate, up-to-date coverage of the foundational areas within educational psychology: learning, development, motivation, teaching, and assessment, combined with intelligent examinations of emerging trends in the field and society that affect student learning, such as student diversity, inclusion of students with special learning needs, education and neuroscience, educational policy, and technology.

MyLab for Education

The most visible change in the fourteenth edition (and certainly one of the most significant changes) is the expansion of the digital learning and assessment resources embedded in the etext. Designed to bring you more directly into the world of K–12 classrooms.
and to help you see the very real impact that educational psychology concepts have on learning and development, these digital learning and assessment resources also:

- Provide you with practice using educational psychology concepts in teaching situations.
- Help you and your instructor see how well you understand the concepts presented in the book and the media resources.
- Help you more deeply think about and process educational psychology and how to use it as a teacher (and as a learning tool).

The online resources in the Enhanced Etext with MyLab for Education include:

- **Video Examples.** In almost all chapters, embedded videos provide illustrations of educational psychology principles or concepts in action. These video examples most often show students and teachers working in classrooms. Sometimes they show students or teachers describing their thinking or experiences.

- **Podcasts.** In all chapters, AnitaTalks podcasts provide direct links to relevant selections from Anita Talks About Teaching, a series of podcasts in which Dr. Woolfolk discusses how the chapters in this text relate to the profession of teaching.

- **Self-Checks.** Throughout the chapters you will find MyLab for Education: Self-Check quizzes. There are four to six quizzes in each chapter, with one at the end of each major text section. They are meant to help you assess how well you have mastered the concepts covered in the section you just read. These self-checks are made up of self-grading multiple-choice items that not only provide feedback on whether you answered the questions correctly or incorrectly, but also offer with rationales for both correct and incorrect answers.
• **Application Exercises.** Also at the end of each major section, you can find one or two application exercises that can challenge you to use chapter content to reflect on teaching and learning in real classrooms. The questions you answer in these exercises are usually constructed-response items. Once you provide your own answers to the questions, you will receive feedback in the form of model answers written by experts.

• **Practice for Your Licensure Exam.** Every chapter ends with an exercise that can give you an opportunity to apply the chapter’s content while reading a case study and then answering multiple-choice and constructed-response questions similar to those that appear on many teacher licensure tests. By clicking on the MyLab for Education hotlink at the end of a Connect and Extend to Licensure exercise, you can complete the activity online and get feedback about your answers.
• **Classroom Management Simulations.** In the left-hand navigation bar of MyLab for Education, you will be able to access interactive simulations that engage you in decision making about classroom management strategies. These interactive cases focus on the classroom management issues teachers most frequently encounter on a daily basis. Each simulation presents a challenge scenario at the beginning and then offers a series of choices to solve each challenge. Along the way you receive mentor feedback on your choices and have the opportunity to make better choices if necessary.

• **Study Modules.** In the left-hand navigation bar of MyLab for Education, you will also find a set of Study Modules. These interactive, application-oriented modules provide opportunities to learn foundational educational psychology concepts in ways other than reading about them. The modules present content through screen-capture videos that include animations, worked examples, and classroom videos. Each module consists of three parts. In the first part, begin with the Learn section that presents several key concepts and strategies. Then work through the problems in the Apply section. These will give you practice applying the concepts and principles to actual teaching and learning scenarios. The third part of each module is a multiple-choice test in the Assess section. This test includes higher-order questions that assess not only what you can remember about the module’s content but also how well you can apply the concepts and strategies you’ve learned to real-life classroom situations.

• **Video Analysis Tool.** Our widely anticipated Video Analysis Tool is also available in the left-hand navigation bar of MyLab for Education. The Video Analysis Tool helps you build your skills in analyzing teaching. Exercises provide classroom videos and rubrics to scaffold your analysis. Timestamp and commenting tools allow you to easily annotate the video and connect your observation to educational psychology concepts you have learned in the text.

**Additional Text Features**

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

*Point/Counterpoint* sections in each chapter present two perspectives on a controversial question related to the field; topics include debates on the kinds of research that should guide education (p. 20), brain-based education (pp. 42–43), the self-esteem movement (p. 107), pills or skills for students with ADHD (p. 151), the best way to teach English language learners (p. 203), should girls and boys be taught differently? (pp. 244–245), using rewards to encourage student learning (pp. 290–291), what’s wrong with multitasking? (p. 306), teaching critical thinking and problem solving (p. 367), problem-based education (pp. 396–397), are “grittier” students more successful? (p. 442), the value of trying to make learning entertaining (p. 484), zero tolerance (p. 532), the Common Core standards (p. 558), and holding children back (p. 614).

*Guidelines* appear throughout each chapter, providing concrete applications of theories or principles discussed. See, for example, pages 52, 86, 91, 138, 155, 186, 199, 228, 274, 308, 331, 363, 408, 417, 437, 485, 515, 528, 562, 574, 608, and 616.

*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 84, 144, 201, 372, 500, 545, 569, and 623.

*Teachers’ Casebook* sections present students with realistic classroom scenarios at the beginning of each chapter and ask “What Would You Do?”—giving students the opportunity to apply all the important topics of the chapter to these scenarios via application questions. Students may then compare their responses to those of veteran
teachers appearing at the end of each chapter. See, for example, pages 71, 174, 259–260, 378–379, 504–505.

Reaching Every Student sections present ideas for assessing, teaching, and motivating ALL of the students in today’s inclusive classrooms. See, for example, page 65.

Lessons for Teachers are succinct and usable principles for teaching based on the research. See, for example, page 479–480.

Put Yourself in Their Place experiences develop empathy by asking students to imagine how they would feel in different situations. See pages 197, 198, 232, 278, 351, 477, and 615.

Stop and Think activities give students firsthand experience with the concept being discussed, as on pages 218, 304, 309, 465, 470, 478, 511, 555, and 610.

SUPPLEMENTARY MATERIALS

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

ONLINE INSTRUCTOR’S MANUAL. Available to instructors for download at www. pearsonhighered.com/educator is an Instructor’s Manual with 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.

ONLINE POWERPOINT® SLIDES. PowerPoint slides are available to instructors for download at www.pearsonhighered.com/educator. These slides include key concept summarizations and other graphic aids to help students understand, organize, and remember core concepts and ideas.

ONLINE TEST BANK. The Test Bank that accompanies this text contains both multiple-choice and essay questions. 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.

TESTGEN®. TestGen is a powerful test generator available exclusively from Pearson Education publishers. Instructors install TestGen on a personal computer (Windows or Macintosh) and create their own tests for classroom testing and for other specialized delivery options, such as over a local area network or on the web. A test bank, which is also called a Test Item File (TIF), typically contains a large set of test items, organized by chapter and ready for your use in creating a test, based on the associated textbook material. Assessments—including equations, graphs, and scientific notation—can be created in either paper-and-pencil or online formats.

The tests can be downloaded in the following formats:

TestGen Testbank file—PC
TestGen Testbank file—MAC
TestGen Testbank—Blackboard 9 TIF
TestGen Testbank—Blackboard CE/Vista (WebCT) TIF
Angel Test Bank (zip)
D2L Test Bank (zip)
Moodle Test Bank
Sakai Test Bank (zip)
ACKNOWLEDGMENTS

During the years I have worked on this book, from initial draft 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 edition and previous editions. Ellen L. Usher (University of Kentucky) contributed her remarkable scholarship and delightful writing to revise Chapters 6 and 11. Carol Weinstein wrote the section in Chapter 13 on spaces for learning. Michael Yough (Purdue University) looked over several chapters including Chapter 5, “Language Development, Language Diversity, and Immigrant Education.” Chapter 5 was also improved by suggestions from Alan Hirvela, The Ohio State University. Jerrell Cassady, Ball State University, provided invaluable guidance for Chapter 12, “Motivation in Learning and Teaching.” The portraits of students in Chapters 1 and 6 were provided by Nancy Knapp (University of Georgia).

As I made decisions about how to revise this edition, I benefited from the ideas of colleagues around the country who took the time to complete surveys, answer my questions, and review chapters.

For their revision reviews, thanks to Karen Banks, George Mason University; Marcus Green, North Carolina State University; Cheryl Greenberg, University of North Carolina at Greensboro; Michelle Koussa, University of North Texas; Nicole Leach, Mississippi State University; and Lu Wang, Ball State University.

Many classroom teachers across the country and around the world contributed their experience, creativity, and expertise to the Teachers’ Casebook. I have thoroughly enjoyed my association with these master teachers, and I am grateful for the perspective they brought to the book:

AIMEE FREDETTE • Second-Grade Teacher
Fisher Elementary School, Walpole, MA

ALLAN OSBORNE • Assistant Principal
Snug Harbor Community School, Quincy, MA

BARBARA PRESLEY • Transition/Work Study Coordinator—High School Level, BESTT Program (Baldwinsville Exceptional Student Training and Transition Program) C. W. Baker High School, Baldwinsville, NY

CARLA S. HIGGINS • K–5 Literacy Coordinator
Legend Elementary School, Newark, OH

DAN DOYLE • History Teacher, Grade 11
St. Joseph’s Academy, Hoffman, IL

DANIELLE HARTMAN • Second Grade
Claymont Elementary School, Ballwin, MO

DR. NANCY SHEEHAN-MELZACK • Art and Music Teacher
Snug Harbor Community School, Quinacy, MA

JACALYN D. WALKER • Eighth-Grade Science Teacher
Treasure Mountain Middle School, Park City, UT

JANE W. CAMPBELL • Second-Grade Teacher
John P. Faber Elementary School, Dunellen, NJ

JENNIFER L. MATZ • Sixth Grade
Williams Valley Elementary, Tower City, PA

JENNIFER PINCOSKI • Learning Resource Teacher, K–12
Lee County School District, Fort Myers, FL

JESSICA N. MAHTABAN • Eighth-Grade Math
Woodrow Wilson Middle School, Clifton, NJ

JOLITA HARPER • Third Grade
Preparing Academic Leaders Academy, Maple Heights, OH

KAREN BOYARSKY • Fifth-Grade Teacher
Walter C. Black Elementary School, Hightstown, NJ

KATIE CHURCHILL • Third-Grade Teacher
On this edition, I was again privileged to work 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. Kevin Davis, Director and Publisher, guided the project from reviews to completion with the eye of an artist, the mind of a scholar, and the logistical capacity of a high-powered computer. He proved to be an excellent collaborator with a wise grasp of the field and a sense of the future. Casey Coriell, Editorial Assistant, kept everything running smoothly and kept my e-mail humming. On this edition I was fortunate to have the help of Kathy Smith. She carefully and expertly read and reread every page—and improved the writing and logic in every chapter. Her expertise and dedication set the standard for everyone in this project. Alicia Reilly was the outstanding developmental editor with the perfect combination of vast knowledge,
organizational ability, and creative thinking. The text features, *Teachers' Casebook*, and excellent pedagogical supports would not exist without her tireless efforts. Content and Media Producers Janelle Rogers, Lauren Carlson and Daniel Dwyer from Pearson and Gail Gottfried kept all aspects of the project moving forward with amazing skill, grace, and good humor. Somehow they brought sanity to what could have been chaos and fun to what might have been drudgery. Now the book is in the able hands of marketing managers Christopher Barry and Krista Clark. I can’t wait to see what they are planning for me now! What a talented and creative group—I am honored to work with them all.

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

And of course, to Wayne Hoy, my friend, colleague, inspiration, passion, husband—you are simply the best.

—ANITA WOOLFOLK HOY
BRIEF CONTENTS

1 Learning, Teaching, and Educational Psychology 2

PART I STUDENTS

2 Cognitive Development 30
3 The Self, Social, and Moral Development 72
4 Learner Differences and Learning Needs 120
5 Language Development, Language Diversity, and Immigrant Education 176
6 Culture and Diversity 216

PART II LEARNING AND MOTIVATION

7 Behavioral Views of Learning 260
8 Cognitive Views of Learning 298
9 Complex Cognitive Processes 338
10 Constructivism and Designing Learning Environments 380
11 Social Cognitive Views of Learning and Motivation 424
12 Motivation in Learning and Teaching 460

PART III TEACHING AND ASSESSING

13 Managing Learning Environments 506
14 Teaching Every Student 550
15 Classroom Assessment, Grading, and Standardized Testing 590
Preface  v

CHAPTER 1  Learning, Teaching, and Educational Psychology  2

Teachers’ Casebook—Leaving No Student Behind: What Would You Do?  2

Overview and Objectives  3

Learning and Teaching Today  4

Students Today: Dramatic Diversity and Remarkable Technology  4

Confidence in Every Context  5

High Expectations for Teachers and Students  6

Do Teachers Make a Difference?  7

Teacher–Student Relationships  7 • The Cost of Poor Teaching  8

What is Good Teaching?  9

Inside Three Classrooms  9

A Bilingual First Grade  9 • A Suburban Fifth Grade  9 • An Inclusive Class  9 • So What is Good Teaching?  10 • Models of Good Teaching: Teacher Observation and Evaluation  10

Beginning Teachers  13

The Role of Educational Psychology  14

In the Beginning: Linking Educational Psychology and Teaching  14

Educational Psychology Today  14

Is It Just Common Sense?  14

Helping Students  14 • Answer Based on Research  15 • Skipping Grades  15 • Answer Based on Research  15 • Students in Control  15 • Answer Based on Research  15 • Obvious Answers?  15

Using Research to Understand and Improve Learning  16

Correlation Studies  16 • Experimental Studies  17 • ABAB Experimental Designs  17 • Clinical Interviews and Case Studies  17 • Ethnography  18 • The Role of Time in Research  18 • What’s the Evidence? Quantitative versus Qualitative Research  18 • Mixed Methods Research  19 • Scientifically Based Research

and Evidence-Based Practices  19 • Teachers as Researchers  19


Theories for Teaching  22

Supporting Student Learning  23

Summary and Key Terms  25

Practice Using What You Have Learned  27

Connect and Extend to Licensure  28

Teachers’ Casebook—Leaving No Student Behind: What Would They Do?  29

PART I STUDENTS

CHAPTER 2  Cognitive Development  30


Overview and Objectives  31

A Definition of Development  32

Three Questions Across the Theories  32


General Principles of Development  34

The Brain and Cognitive Development  34

The Developing Brain: Neurons  35

The Developing Brain: Cerebral Cortex  38

Brain Development in Childhood and Adolescence  39

Putting It All Together: How the Brain Works  41

Culture and Brain Plasticity  41

POINT/COUNTERPOINT: Brain-Based Education  42

Neuroscience, Learning, and Teaching  42

Does Instruction Affect Brain Development?  42 • The Brain and Learning to Read  42 • Emotions, Learning, and the Brain  43

Lessons for Teachers: General Principles  44

Piaget’s Theory of Cognitive Development  45

Influences on Development  46
CONTENTS

Basic Tendencies in Thinking  46
  Organization  46 • Adaptation  47 • Equilibration  47

Four Stages of Cognitive Development  47
  Infancy: the Sensorimotor Stage  48 • Early Childhood to the Early Elementary Years: The Preoperational Stage  49

FAMILY AND COMMUNITY PARTNERSHIPS: Helping Families Care for Preoperational Children  50
  Later Elementary to the Middle School Years: The Concrete-Operational Stage  50

GUIDELINES: Teaching the Concrete-Operational Child  52
  High School and College: Formal Operations  52
  Do We All Reach the Fourth Stage?  54

Some Limitations of Piaget’s Theory  54
  The Trouble with Stages  54

GUIDELINES: Helping Students to Use Formal Operations  54
  Underestimating Children’s Abilities  55 • Cognitive Development and Culture  55

Information Processing, Neo-Piagetian, and Neuroscience Views of Cognitive Development  56

Vygotsky’s Sociocultural Perspective  57
  The Social Sources of Individual Thinking  57

Cultural Tools and Cognitive Development  58
  Technical Tools in a Digital Age  59 • Psychological Tools  59

The Role of Language and Private Speech  59
  Private Speech: Vygotsky’s and Piaget’s Views Compared  60

The Zone of Proximal Development  61
  Private Speech and the Zone  61 • The Role of Learning and Development  62

Limitations of Vygotsky’s Theory  62

Implications of Piaget’s and Vygotsky’s Theories for Teachers  62

Piaget: What Can We Learn?  63
  Understanding and Building on Students’ Thinking  63 • Activity and Constructing Knowledge  63

Vygotsky: What Can We Learn?  64
  The Role of Adults and Peers  64 • Assisted Learning  65

An Example Curriculum: Tools of the Mind  65

Reaching Every Student: Teaching in the “Magic Middle”  65

Cognitive Development: Lessons for Teachers  66

GUIDELINES: Applying Vygotsky’s Ideas in Teaching  67

Summary and Key Terms  67

Practice Using What You Have Learned  69

Connect and Extend to Licensure  70

Teachers’ Casebook—Symbols and Cymbals: What Would They Do?  71

CHAPTER 3

The Self, Social, and Moral Development  72

Teachers’ Casebook—Mean Girls: What Would You Do?  72

Overview and Objectives  73

Physical Development  74
  Physical and Motor Development  74
    Young Children  74 • Elementary School Years  74 • The Adolescent Years  75 • Early and Later Maturing  75

GUIDELINES: Dealing with Physical Differences in the Classroom  76
  Play, Recess, and Physical Activity  76
    Cultural Differences in Play  77 • Exercise and Recess  77

Reaching Every Student: Inclusive Athletics  77

Challenges in Physical Development  78
  Obesity  78 • Eating Disorders  79

GUIDELINES: Supporting Positive Body Images in Adolescents  80

Bronfenbrenner: The Social Context for Development  80

The Importance of Context and the Bioecological Model  80

Families  81
  Family Structure  81 • Parenting Styles  82 • Culture and Parenting  83

FAMILY AND COMMUNITY PARTNERSHIPS: Connecting with Families  84
  Attachment  84 • Divorce  84

GUIDELINES: Helping Children of Divorce  86

Peers  86
  Cliques  87 • Crowds  87 • Peer Cultures  87
    Friendships  87 • Popularity  88
    Causes and Consequences of Rejection  89
    Aggression  89 • Relational Aggression  90
    Media, Modeling, and Aggression  90

GUIDELINES: Dealing with Aggression and Encouraging Cooperation  91
  Video Games and Aggressive Behavior  91

Reaching Every Student: Teacher Support  92
  Academic and Personal Caring  92

Teachers and Child Abuse  93
  Society and Media  94
Identity and Self-Concept  95
Erikson: Stages of Psychosocial Development  96
The Preschool Years: Trust, Autonomy, and Initiative  96 • The Elementary and Middle School Years: Industry versus Inferiority  97
GUIDELINES: Encouraging Initiative and Industry  98
Adolescence: The Search for Identity  99 • Identity and Technology  100 • Beyond the School Years  100
Racial and Ethnic Identity  100
GUIDELINES: Supporting Identity Formation  101
Multidimensional and Flexible Ethnic Identities  101
Black Racial Identity: Outcome and Process  102 • Racial and Ethnic Pride  103
Self-Concept  103
The Structure of Self-Concept  103 • How Self-Concept Develops  104 • Self-Concept and Achievement  105
Sex Differences in Self-Concept of Academic Competence  105
Self-Esteem  106
POINT/COUNTERPOINT: What Should Schools Do to Encourage Students’ Self-Esteem?  107
Understanding Others and Moral Development  107
Theory of Mind and Intention  108
Moral Development  108
Kohlberg’s Theories of Moral Development  108 • Criticisms of Kohlberg’s Theory  109
Moral Judgments, Social Conventions, and Personal Choices  110
Moral versus Conventional Domains  110 • Implications for Teachers  111
Beyond Reasoning: Haidt’s Social Intuitionist Model of Moral Psychology  112
Moral Behavior and the Example of Cheating  113
Who Cheats?  113 • Dealing with Cheating  115
Personal/Social Development: Lessons for Teachers  115
Summary and Key Terms  115
Practice Using What You Have Learned  117
Connect and Extend to Licensure  118
Teachers’ Casebook—Mean Girls: What Would They Do?  119

CHAPTER 4

Learner Differences and Learning Needs  120

Teachers’ Casebook—Including Every student: What Would You Do?  120
Overview and Objectives  121

Intelligence  122
Language and Labels  122
Disabilities and Handicaps  122 • Person-First Language  123 • Possible Biases in the Application of Labels  124
What Does Intelligence Mean?  124
Intelligence: One Ability or Many?  125
Another View: Gardner’s Multiple Intelligences  125
What Are These Intelligences?  126 • Critics of Multiple Intelligences Theory  126 • Gardner Responds  126 • Multiple Intelligences Go to School  127
Multiple Intelligences: Lessons for Teachers  128
Another View: Sternberg’s Successful Intelligence  128
Neuroscience and Intelligence  129
Measuring Intelligence  129
Binet’s Dilemma  130 • What Does an IQ Score Mean?  130 • Group versus Individual IQ Tests  130 • The Flynn Effect: Are We Getting Smarter?  130
GUIDELINES: Interpreting IQ Scores  131
Intelligence and Achievement  131
Gender Differences in Intelligence and Achievement  132
Heredity or Environment?  132
Learning to Be Intelligent: Being Smart About IQ  133
Creativity: What It Is and Why It Matters  133
Assessing Creativity  134
OK, But So What: Why Does Creativity Matter?  135
What Are the Sources of Creativity?  135
Creativity and Cognition  136 • Creativity and Diversity  136
Creativity in the Classroom  136
Brainstorming  137 • Creative Schools  137
GUIDELINES: Applying and Encouraging Creativity  138
Learning Styles  139
Learning Styles/Preferences  139
Cautions About Learning Styles  139 • The Value of Considering Learning Styles  140
Beyond Either/Or  141
Individual Differences and the Law  141
IDEA  141
Least Restrictive Environment  142 • Individualized Education Program  142 • The Rights of Students and Families  143
Section 504 Protections  144
FAMILY AND COMMUNITY PARTNERSHIPS: Productive Conferences  144
Students with Learning Challenges  145
Neuroscience and Learning Challenges  145
Students with Learning Disabilities  146
Student Characteristics  147 • Teaching Students with Learning Disabilities  148
Students with Hyperactivity and Attention Disorders  149
  Definitions  150 • Treating ADHD with Drugs  150
  • Alternatives/Additions to Drug Treatments  150

POINT/COUNTERPOINT: Pills or Skills for Children with ADHD?  151

Lessons for Teachers: Learning Disabilities and ADHD  151

Students with Communication Disorders  152
  Speech Disorders  152 • Language Disorders  153

Students with Emotional or Behavioral Difficulties  154
  Suicide  155

GUIDELINES: Disciplining Students with Emotional Problems  155
  Drug Abuse  157 • Prevention  157

Students with Intellectual Disabilities  158

GUIDELINES: Teaching Students with Intellectual Disabilities  158

Students with Health and Sensory Impairments  159
  Cerebral Palsy and Multiple Disabilities  159
  Seizure Disorders (Epilepsy)  160 • Other Serious Health Concerns: Asthma, Sickle Cell Disease, and Diabetes  160 • Students with Vision Impairments  161 • Students Who Are Deaf  161

Autism Spectrum Disorders and Asperger Syndrome  162

Response to Intervention  163

Students Who Are Gifted and Talented  166
  Who Are These Students?  166
  • What Is the Origin of These Gifts?  167 • What Problems Do Students Who Are Gifted Face?  167
  Identifying Students Who Are Gifted and Talented  168
  Recognizing Gifts and Talents  168
  Teaching Students with Gifts and Talents  169
  Acceleration  170 • Methods and Strategies  170

Summary and Key Terms  171

Practice Using What You Have Learned  173

Connect and Extend to Licensure  174

Teachers’ Casebook—Including Every Student: What Would They Do?  175

CHAPTER 5

Language Development, Language Diversity, and Immigrant Education  176

Overview and Objectives  177

The Development of Language  178
  What Develops? Language and Cultural Differences  178
    The Puzzle of Language  178 • Beware of Either/Or Choices  179
  When and How Does Language Develop?  179
    Sounds and Pronunciation  179 • Vocabulary and Meaning  179 • Grammar and Syntax  180 • Pragmatics: Using Language in Social Situations  181 • Metalinguistic Awareness  181
  Emergent Literacy  181
    Inside-Out and Outside-In Skills  182 • Building a Foundation  183 • When There Are Persistent Problems  184
  Diversity in Language Development  187
    Dual-Language Development  187 • Benefits of Bilingualism  188 • Language Loss  188
    Signed Languages  189
  What Is Involved in Being Bilingual?  189
  Contextualized and Academic Language  190

GUIDELINES: Promoting Language Learning  192

Dialect Differences in the Classroom  193
  Dialects  193
    Dialects and Pronunciation  193 • Dialects and Teaching  193
    Genderlects  194

Teaching Immigrant Students  194
  Immigrants and Refugees  195
  Classrooms Today  196
    Four Student Profiles  196
    Generation 1.5: Students in Two Worlds  197
  Affective and Emotional/Social Considerations  198
  Working with Families: Using the Tools of the Culture  198

GUIDELINES: Providing Emotional Support and Increasing Self-Esteem for Students Who Are ELLs  199
  Funds of Knowledge and Welcome Centers  199
  Student-Led Conferences  200

FAMILY AND COMMUNITY PARTNERSHIPS: Welcoming All Families  201

Teaching Immigrant Students Who Are English Language Learners  202
  Two Approaches to English Language Learning  202 • Research on Bilingual Education  202
CONTENTS

POINT/COUNTERPOINT: What Is the Best Way to Teach Students Who Are ELLs? 203
Visual Strategies 204 • Literature Response Groups 204 • Bilingualism for All: Two-Way Immersion 205
Sheltered Instruction 205
Special Challenges: Students Who Are English Language Learners with Disabilities and Special Gifts 208
Students Who Are English Language Learners with Disabilities 209
Reaching Every Student: Recognizing Giftedness in Bilingual Students 211
Summary and Key Terms 211
Practice Using What You Have Learned 213
Connect and Extend to Licensure 214
Teachers’ Casebook—Cultures Clash in the Classroom: What Would They Do? 215

CHAPTER 6
Culture and Diversity 216
Revised by Ellen L. Usher

Overview and Objectives 217
Today’s Diverse Classrooms 218
American Cultural Diversity 218
Meet Two More Students 220
Cautions: Interpreting Cultural Differences 221
Cultural Conflicts and Compatibilities 221 • Dangers in Stereotyping 222
Economic and Social Class Differences 222
Social Class and Socioeconomic Status 222
Extreme Poverty: Homeless and Highly Mobile Students 224
Poverty and School Achievement 224
Health, Environment, and Stress 226 • Low Expectations—Low Academic Self-Concept 226 • Peer Influences and Resistance Cultures 226 • Home Environment and Resources 227 • Summer Setbacks 227
GUIDELINES: Teaching Students Who Live in Poverty 228
Tracking: Poor Teaching 228
Ethnicity and Race in Teaching and Learning 229
Terms: Ethnicity and Race 229
Ethnic and Racial Differences in School Achievement 230
The Legacy of Inequality 232
What Is Prejudice? 233 • The Development of Prejudice 233 • From Prejudice to Discrimination 235
Stereotype Threat 236
Who Is Affected by Stereotype Threat? 236 • Short-Term Effects: Test Performance 236 • Long-Term Effects: Disidentification 237 • Combating Stereotype Threat and Discrimination 238
Gender in Teaching and Learning 239
Sex and Gender 239
Gender Identity 239
Gender Roles 240
Gender Bias in Curriculum Materials and Media 242
Gender Bias in Teaching 242
Sexual Orientation 243
POINT/COUNTERPOINT: Should Girls and Boys Be Taught Differently? 244
Discrimination Based on Gender Expression and Sexual Orientation 245
GUIDELINES: Avoiding Gender Bias in Teaching 246
Creating Culturally Compatible Classrooms 248
Culturally Relevant Pedagogy 249
Self-Agency Strand 251 • Relationship Strand 251
Diversity in Learning 251
Social Organization 251 • Cultural Values and Learning Preferences 252 • Cautions (Again) About Learning Styles Research 252 • Sociolinguistics 253 • Cultural Discontinuity 253
Lessons for Teachers: Teaching Every Student 253
Know Yourself 254 • Know Your Students 254 • Respect Your Students 254 • Teach Your Students 255
GUIDELINES: Culturally Relevant Teaching 255
Summary and Key Terms 256
Practice Using What You Have Learned 257
Connect and Extend to Licensure 258
Teachers’ Casebook—White Girls Club: What Would They Do? 259

PART II LEARNING AND MOTIVATION

CHAPTER 7
Behavioral Views of Learning 260
Teachers’ Casebook—Sick of Class: What Would You Do? 260
Overview and Objectives 261
Understanding Learning 262
Ethical Issues 263
Goals 263 • Strategies 263
Learning Is Not Always What It Seems 263
Early Explanations of Learning: Contiguity and Classical Conditioning 264
CONTENTS

GUIDELINES: Applying Classical Conditioning  266
Operant Conditioning: Trying New Responses  266
Types of Consequences  267
Reinforcement  267 • Punishment  268
Neuroscience of Reinforcement and Punishment  269
Reinforcement Schedules  270
Extinction  271
Antecedents and Behavior Change  271
Effective Instruction Delivery  271 • Cueing  272
Putting It All Together: Applied Behavior Analysis  272
Methods for Encouraging Behaviors  273
Reinforcing with Teacher Attention  273 • Selecting Reinforcers: The Premack Principle  273
GUIDELINES: Applying Operant Conditioning: Using Praise Appropriately  274
Shaping  275 • Positive Practice  275
GUIDELINES: Applying Operant Conditioning: Encouraging Positive Behaviors  276
Contingency Contracts, Token Reinforcement, and Group Consequences  276
Contingency Contracts  276 • Token Reinforcement Systems  277 • Group Consequences  278
Handling Undesirable Behavior  280
Negative Reinforcement  280 • Reprimands  281
• Response Cost  281 • Social Isolation  281
• Some Cautions About Punishment  281
GUIDELINES: Applying Operant Conditioning: Using Punishment  282
Reaching Every Student: Severe Behavior Problems  283
Current Applications: Functional Behavioral Assessment, Positive Behavior Supports, and Self-Management  283
Discovering the “Why”: Functional Behavioral Assessments  284
Positive Behavior Supports  285
Self-Management  287
Goal Setting  287 • Monitoring and Evaluating Progress  287
FAMILY AND COMMUNITY PARTNERSHIPS: Applying Operant Conditioning: Student Self-Management  288
Self-Reinforcement  288
Challenges and Criticisms  289
Beyond Behaviorism: Bandura’s Challenge and Observational Learning  289
Enactive and Observational Learning  289 • Learning and Performance  289

POINT/COUNTERPOINT: Should Students Be Rewarded for Learning?  290
Criticisms of Behavioral Methods  290
Behavioral Approaches: Lessons for Teachers  291
Summary and Key Terms  292
Practice Using What You Have Learned  294
Connect and Extend to Licensure  295
Teachers’ Casebook—Sick of Class: What Would They Do?  296

CHAPTER 8
Cognitive Views of Learning  298

Teachers’ Casebook—Remembering the Basics: What Would You Do?  298
Overview and Objectives  299
Elements of the Cognitive Perspective  300
The Brain and Cognitive Learning  300
The Importance of Knowledge in Cognition  301
General and Specific Knowledge  301 • Declarative, Procedural, and Self-Regulatory Knowledge  302
Cognitive Views of Memory  302
Sensory Memory  304
Capacity, Duration, and Contents of Sensory Memory  304 • Perception  304 • The Role of Attention  306 • Attention and Multitasking  306
POINT/COUNTERPOINT: What’s Wrong with Multitasking?  307
Attention and Teaching  307
GUIDELINES: Gaining and Maintaining Attention  308
Working Memory  309
Capacity of Working Memory  309 • The Central Executive  310 • The Phonological Loop  310
• The Visuospatial Sketchpad  311 • The Episodic Buffer  311 • The Duration and Contents of Working Memory  311
Cognitive Load and Retaining Information  311
Two Kinds of Cognitive Load  312 • Retaining Information in Working Memory  312 • Levels of Processing Theory  313 • Forgetting  314
Individual Differences in Working Memory  314
Developmental Differences  314 • Individual Differences  315
Is Working Memory Really Separate?  315
Long-Term Memory  316
Capacity and Duration of Long-Term Memory  316
Contents of Long-Term Memory: Explicit (Declarative) Memories  317
CONTENTS

Propositions and Propositional Networks 317
- Images 317 • Two Are Better Than One: Words and Images 318 • Concepts 318 • Prototypes, Exemplars, and Theory-Based Categories 318 • Teaching Concepts 319 • Schemas 319 • Episodic Memory 321

Contents of Long-Term Memory: Implicit Memories 321
- Retrieving Information in Long-Term Memory 322
- Spreading Activation 323 • Reconstruction 323 • Forgetting and Long-Term Memory 323

Individual Differences in Long-Term Memory 324

Teaching for Deep, Long-Lasting Knowledge:
Basic Principles and Applications 324
- Constructing Declarative Knowledge: Making Meaningful Connections 324
- Elaboration 324

FAMILY AND COMMUNITY PARTNERSHIPS: Organizing Learning 325
- Organization 325 • Imagery 325 • Context 327 • Desirable Difficulty 327 • Effective Practice 327
- Reaching Every Student: Make it Meaningful 328
- Mnemonics 328
- If You Have to Memorize . . . 329
- Lessons for Teachers: Declarative Knowledge 330
- Development of Procedural Knowledge 331
- Automated Basic Skills 331

GUIDELINES: Helping Students Understand and Remember 332
- Domain-Specific Strategies 333

Summary and Key Terms 333

Practice Using What You Have Learned 335

Connect and Extend to Licensure 336

Teachers’ Casebook—Remembering the Basics: What Would They Do? 336

CHAPTER 9
Complex Cognitive Processes 338

Teachers’ Casebook—Uncritical Thinking: What Would You Do? 338

Overview and Objectives 339

Metacognition 340
- Metacognitive Knowledge and Regulation 340
- Individual Differences in Metacognition 341
- Lessons for Teachers: Developing Metacognition 342

Metacognitive Development for Younger Students 342 • Metacognitive Development for Secondary and College Students (Like You) 343

Learning Strategies 344
- Being Strategic About Learning 344
- Deciding What Is Important 346 • Summaries 346 • Underlining and Highlighting 346 • Taking Notes 346
- Visual Tools for Organizing 347
- Retrieval Practice: Powerful But Underused 349
- Reading Strategies 350
- Applying Learning Strategies 350
- Appropriate Tasks 350 • Valuing Learning 350 • Effort and Efficacy 351

Reaching Every Student: Teaching How to Learn 351

Problem Solving 351
- Identifying: Problem Finding 352
- Defining Goals and Representing the Problem 353
- Focusing Attention on What Is Relevant 353 • Understanding the Words 353 • Understanding the Whole Problem 354 • Translation and Schema Training: Direct Instruction in Schemas 355 • Translation and Schema Training: Worked Examples 356 • Worked Examples and Embodied Cognition 357 • The Results of Problem Representation 358
- Searching for Possible Solution Strategies 358
- Algorithms 358 • Heuristics 359

Factors That Hinder Problem Solving 360
- Some Problems with Heuristics 360

GUIDELINES: Applying Problem Solving 361
- Expert Knowledge and Problem Solving 362
- Knowing What Is Important 362 • Memory for Patterns and Organization 362 • Procedural Knowledge 362 • Planning and Monitoring 362

GUIDELINES: Becoming an Expert Student 363

Critical Thinking and Argumentation 364
- What Critical Thinkers Do: Paul and Elder Model 364
- Applying Critical Thinking in Specific Subjects 366
- Argumentation 366
- Two Styles of Argumentation 366

POINT/COUNTERPOINT: Should Schools Teach Critical Thinking and Problem Solving? 367
- Lessons for Teachers 368

Teaching for Transfer 369
- The Many Views of Transfer 369
- Teaching for Positive Transfer 370
- What Is Worth Learning? 370 • Lessons for Teachers: Supporting Transfer 371 • Stages of Transfer for Strategies 371

FAMILY AND COMMUNITY PARTNERSHIPS: Promoting Transfer 372
Bringing It All Together: Teaching for Complex Learning and Robust Knowledge  372
What Is Robust Knowledge?  372
Recognizing and Assessing Robust Knowledge  373
Teaching for Robust Knowledge  373
Practice  374 • Worked Examples  374 • Analogies  374 • Self-Explanations  374
Summary and Key Terms  375
Practice Using What You Have Learned  377
Connect and Extend to Licensure  377
Teachers’ Casebook—Uncritical Thinking: What Would They Do?  378

CHAPTER 10
Constructivism and Designing Learning Environments  380

Overview and Objectives  381

Cognitive and Social Constructivism  382
Constructivist Views of Learning  382
Cognitive Constructivism  383 • Social Constructivism  384
How Is Knowledge Constructed?  384
Knowledge: Situated or General?  384
Common Elements of Constructivist Student-Centered Teaching  386
Complex Learning Environments and Authentic Tasks  386 • Social Negotiation  387 • Multiple Perspectives and Representations of Content  387 • Understanding the Knowledge Construction Process  387 • Student Ownership of Learning  387
Designing Constructivist Learning Environments  387
Assumptions to Guide the Design of Learning Environments  388
Facilitating in a Constructivist Classroom  388
Scaffolding  389 • Advance Organizers as Scaffolding  390 • Facilitating Through Asking and Answering Deep Questions  391
GUIDELINES: Facilitating Deep Questioning  392
Inquiry and Problem-Based Learning  392
Examples of Inquiry  393 • Problem-Based Learning  393 • Research on Inquiry and Problem-Based Learning  395 • Being Smart About Problem-Based Learning  395
POINT/COUNTERPOINT: Are Inquiry and Problem-Based Learning Effective Teaching Approaches?  396
Cognitive Apprenticeships and Reciprocal Teaching  396
Cognitive Apprenticeships in Reading: Reciprocal Teaching  397 • Applying Reciprocal Teaching  398
Collaboration and Cooperation  399
Collaboration, Group Work, and Cooperative Learning  399 • Beyond Groups to Cooperation  399 • What Can Go Wrong: Misuses of Group Learning  400
Tasks for Cooperative Learning  402
Highly Structured, Review, and Skill-Building Tasks  402 • Ill-Structured, Conceptual, and Problem-Solving Tasks  402 • Social Skills and Communication Tasks  402
Setting Up Cooperative Groups  403
Assigning Roles  403 • Giving and Receiving Explanations  404
Designs for Cooperation  404
Reciprocal Questioning  405 • Jigsaw  406 • Constructive/Structured Controversies  406
Reaching Every Student: Using Cooperative Learning Wisely  407
GUIDELINES: Using Cooperative Learning  408
Dilemmas of Constructivist Practice  408
Designing Learning Environments in a Digital World  410
Technology and Learning  410
Technology-Rich Environments  410 • Virtual Learning Environments  411 • Personal Learning Environments  411 • Immersive Virtual Learning Environments  412 • Games  412
Developmentally Appropriate Computer Activities for Young Children  413
Computational Thinking and Coding  414
GUIDELINES: Using Computers  415
Media/Digital Literacy  416
GUIDELINES: Supporting the Development of Media Literacy  417
The Flipped Classroom  418
Summary and Key Terms  419
Practice Using What You Have Learned  421
Connect and Extend to Licensure  422
Teachers’ Casebook—Learning to Cooperate: What Would They Do?  423

CHAPTER 11
Social Cognitive Views of Learning and Motivation  424
Revised by Ellen L. Usher

Teachers’ Casebook—Failure to Self-Regulate: What Would You Do?  424
Overview and Objectives  425
Social Cognitive Theory  426
A Self-Directed Life: Albert Bandura  426
Beyond Behaviorism  426
Triadic Reciprocal Causality  427
Modeling: Learning by Observing Others  429
Elements of Observational Learning  430
Attention  430 • Retention  430 • Production  430 • Motivation and Reinforcement  431
Observational Learning in Teaching  431
Directing Attention  431 • Fine Tuning Already-Learned Behaviors  432 • Strengthening or Weakening Inhibitions  432 • Teaching New Behaviors  432 • Arousing Emotion  432
GUIDELINES: Using Observational Learning  433
Agency and Self-Efficacy  434
Self-Efficacy, Self-Concept, and Self-Esteem  434
Sources of Self-Efficacy  435
Self-Efficacy in Learning and Teaching  436
GUIDELINES: Encouraging Self-Efficacy  437
Teachers’ Sense of Efficacy  438
Self-Regulated Learning: Skill and Will  439
What Influences Self-Regulation?  440
Knowledge  440 • Motivation  441 • Volition  441
POINT/COUNTERPOINT: Are “Grittier” Students More Successful?  442
Development of Self-Regulation  444
A Social Cognitive Model of Self-Regulated Learning  444
Reaching Every Student: Examples of Self-Regulation in Two Classrooms  446
Writing  446 • Math Problem Solving  447
Technology and Self-Regulation  447
Another Approach to Self-Regulation: Cognitive Behavior Modification  448
Emotional Self-Regulation  449
GUIDELINES: Encouraging Emotional Self-Regulation  451
Teaching Toward Self-Efficacy and Self-Regulated Learning  451
Teacher Stress, Efficacy, and Self-Regulated Learning  451
Designing Classrooms for Self-Regulation  452
Complex Tasks  452
Control  453
Self-Evaluation  453
Collaboration  454
Bringing It All Together: Theories of Learning  454
Summary and Key Terms  456
Practice Using What You Have Learned  457
Connect and Extend to Licensure  458
Teachers’ Casebook—Failure to Self-Regulate: What Would They Do?  459
CHAPTER 12 Motivation in Learning and Teaching  460
Teachers’ Casebook—Motivating Students When Resources Are Thin: What Would You Do?  460
Overview and Objectives  461
What Is Motivation?  462
Meeting Some Students  462
Intrinsic and Extrinsic Motivation  463
Intrinsic and Extrinsic Motivation: Lessons for Teachers  464
What You Already Know About Motivation  464
Needs and Self-Determination  465
Maslow’s Hierarchy of Needs  465
Self-Determination: Need for Competence, Autonomy, and Relatedness  466
Self-Determination in the Classroom  467 • Information and Control  467 • The Need for Relatedness  468
Needs: Lessons for Teachers  468
GUIDELINES: Supporting Self-Determination and Autonomy  469
Goals and Goal Orientations  469
Types of Goals and Goal Orientations  470
Four Achievement Goal Orientations in School  470
Wait—Are Performance Goals Always Bad?  471
Social and Work-Avoidance Goals  472 • Goals in Social Context  473
Feedback, Goal Framing, and Goal Acceptance  473
Goals: Lessons for Teachers  474
Expectancy-Value-Cost Explanations  474
Costs  474
Tasks Value  475
Lessons for Teachers  475
Attributions and Beliefs About Knowledge, Ability, and Self-Worth  475
Attributions in the Classroom  476
Teacher Attributions Trigger Student Attributions  477
Beliefs About Knowing: Epistemological Beliefs  477
Mindsets and Beliefs About Ability  478
Mindsets: Lessons for Teachers  479
Beliefs About Self-Worth  480
Learned Helplessness  480 • Self-Worthy  480
Self-Worth: Lessons for Teachers  481
GUIDELINES: Encouraging Self-Worth  482
How Do You Feel About Learning? Interests, Curiosity, Emotions, and Anxiety  482
Tapping Interests  482
Two Kinds of Interests  482 • Catching and Holding Interests  483
CONTENTS

POINT/COUNTERPOINT: Does Making Learning Fun Make for Good Learning? 484
Curiosity: Novelty and Complexity 484
GUIDELINES: Building on Students’ Interests and Curiosity 485
Flow 486
Emotions and Anxiety 486
Neuroscience and Emotion 486 • Achievement 487 • Arousal and Anxiety 488 • Anxiety in the Classroom 488 • How Does Anxiety Interfere with Achievement? 489
Reaching Every Student: Coping with Anxiety 489
GUIDELINES: Coping with Anxiety 490
Curiosity, Interests, and Emotions: Lessons for Teachers 490
Motivation to Learn in School: On Target 491
Tasks for Learning 491
Beyond Task Value to Genuine Appreciation 491 • Authentic Tasks 492
Supporting Autonomy and Recognizing Accomplishment 493
Supporting Choices 493 • Recognizing Accomplishment 493
Grouping, Evaluation, and Time 494
Grouping and Goal Structures 494 • Evaluation 495 • Time 495 • Putting It All Together 495
Diversity in Motivation 497
Lessons for Teachers: Strategies to Encourage Motivation 498
Can I Do It? Building Confidence and Positive Expectations 498 • Do I Want To Do It? Seeing the Value of Learning 498 • What Do I Need to Do to Succeed? Staying Focused on the Task 499
FAMILY AND COMMUNITY PARTNERSHIPS: Motivation to Learn 500
Do I Belong in This Classroom? 500
Summary and Key Terms 501
Practice Using What You Have Learned 503
Connect and Extend to Licensure 504
Teachers’ Casebook—Motivating Students When Resources are Thin: What Would They Do? 505

PART III TEACHING AND ASSESSING

CHAPTER 13 Managing Learning Environments 506

Teachers’ Casebook—Bullies and Victims: What Would You Do? 506

Overview and Objectives 507
The What and Why of Classroom Management 508
The Basic Task: Gain Their Cooperation 510
The Goals of Classroom Management 511
Access to Learning 511 • More Time for Learning 511 • Management Means Relationships 512 • Management for Self-Management 513
Creating a Positive Learning Environment 513
Some Research Results 513
Routines and Rules Required 514
Routines and Procedures 514 • Rules 514
GUIDELINES: Establishing Class Routines 515
Rules for Elementary School 516 • Rules for Secondary School 516 • Consequences 517 • Who Sets the Rules and Consequences? 517
Planning Spaces for Learning 518
Personal Territories and Seating Arrangements 518 • Interest Areas 519
Getting Started: The First Weeks of Class 519
Effective Managers for Elementary Students 519
GUIDELINES: Designing Learning Spaces 520
Effective Managers for Secondary Students 521
Maintaining a Good Environment for Learning 522
Encouraging Engagement 522
Prevention Is the Best Medicine 522
GUIDELINES: Keeping Students Engaged 523
Withitness 523 • Overlapping and Group Focus 524 • Movement Management 524 • Student Social Skills as Prevention 524
Caring Relationships: Connections with School 524
Teacher Connections 524 • School Connections 526 • Creating Communities of Care for Adolescents 526
Dealing with Discipline Problems 527
Stopping Problems Quickly 527
GUIDELINES: Creating Caring Relationships 528
If You Impose Penalties 529
Teacher-Imposed Penalties versus Student Responsibility 529
GUIDELINES: Imposing Penalties 530
POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? 530
What About Zero Tolerance? 532
Bullying and Cyberbullying 532
Victims 533 • Why Do Students Bully? 534 • What Can Teachers Do? Bullying and Teasing 534 • Cyberbullying 535
Special Problems with High School Students 536
GUIDELINES: Handling Potentially Explosive Situations 537
Basics of Assessment  592
  Measurement and Assessment  592
    Formative, Interim, and Summative Assessment  593
Assessing the Assessments: Reliability and Validity  593
  Reliability of Test Scores  594 • Validity  594 • Absence of Bias  595
Classroom Assessment: Testing  596
  Interpreting Any Test Score  596
    Norm-Referenced Test Interpretations  597 • Criterion-Referenced Test Interpretations  597
Using the Tests from Textbooks  598
Selected-Response Testing  598
  Using Multiple-Choice Tests  599 • Writing Multiple-Choice Questions  600
Constructed Responses: Essay Testing  600
  Constructing Essay Tests  600 • Evaluating Essays  600
GUIDELINES: Writing Multiple-Choice Items  601
Assessing Traditional Testing  602
Formative and Authentic Classroom Assessments  602
  Informal Assessments  603
    Exit Tickets  603 • Journals  603 • Involving Students in Assessments  603
  Authentic Assessments: Portfolios and Exhibitions  604
    Portfolios  606 • Exhibitions  606
  Evaluating Portfolios and Performances  606
    Scoring Rubrics  606
  GUIDELINES: Creating Portfolios  608
  GUIDELINES: Developing a Rubric  609
    Reliability, Validity, Generalizability  609 • Diversity and Bias in Performance Assessment  609
Assessing Complex Thinking  610
Classroom Assessment: Lessons for Teachers  610
Grading  610
  Norm-Referenced versus Criterion-Referenced Grading  611
Effects of Grading on Students  613
  The Value of Failing?  613 • Retention in Grade  613
Grades and Motivation  613
  POINT/COUNTERPOINT: Should Children Be Held Back?  614
Beyond Grading: Communicating with Families  615

Standardized Testing  615
  Types of Scores  615
    Measurements of Central Tendency and Standard Deviation  615
GUIDELINES: Using Any Grading System  616
  The Normal Distribution  618 • Percentile Rank Scores  618 • Grade-Equivalent Scores  619
Interpreting Standardized Test Reports  620
  Discussing Test Results with Families  622
Accountability and High-Stakes Testing  622
FAMILY AND COMMUNITY PARTNERSHIPS: Conferences and Explaining Test Results  623
  Making Decisions  624 • What Do Teachers Think?  624 • Documented Problems with High-Stakes Testing  624
New Directions: PARCC and SBAC  625
  In Sum: Using High-Stakes Testing Well  625
GUIDELINES: Preparing Yourself and Your Students for Testing  626
  Reaching Every Student: Helping Students with Disabilities Prepare for High-Stakes Tests  627
  Teacher Accountability and Evaluation  628 • Value-Added Measures  628
  Quality Standardized Assessment: Lessons for Teachers  628
Summary and Key Terms  629
Practice Using What You Have Learned  631
Connect and Extend to Licensure  632
Teachers’ Casebook—Giving Meaningful Grades: What Would They Do?  633
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?**

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaving No Student Behind</td>
<td>2</td>
</tr>
<tr>
<td>Leaving No Student Behind</td>
<td>29</td>
</tr>
<tr>
<td>Symbols and Cymbals</td>
<td>30</td>
</tr>
<tr>
<td>Symbols and Cymbals</td>
<td>71</td>
</tr>
<tr>
<td>Mean Girls</td>
<td>72</td>
</tr>
<tr>
<td>Mean Girls</td>
<td>119</td>
</tr>
<tr>
<td>Including Every Student</td>
<td>120</td>
</tr>
<tr>
<td>Including Every Student</td>
<td>175</td>
</tr>
<tr>
<td>Cultures Clash in the Classroom</td>
<td>176</td>
</tr>
<tr>
<td>Cultures Clash in the Classroom</td>
<td>215</td>
</tr>
<tr>
<td>White Girls Club</td>
<td>216</td>
</tr>
<tr>
<td>White Girls Club</td>
<td>259</td>
</tr>
<tr>
<td>Sick of Class</td>
<td>260</td>
</tr>
<tr>
<td>Sick of Class</td>
<td>296</td>
</tr>
<tr>
<td>Remembering the Basics</td>
<td>298</td>
</tr>
<tr>
<td>Remembering the Basics</td>
<td>336</td>
</tr>
<tr>
<td>Uncritical Thinking</td>
<td>338</td>
</tr>
<tr>
<td>Uncritical Thinking</td>
<td>378</td>
</tr>
<tr>
<td>Learning to Cooperate</td>
<td>380</td>
</tr>
<tr>
<td>Learning to Cooperate</td>
<td>423</td>
</tr>
<tr>
<td>Failure to Self-Regulate</td>
<td>424</td>
</tr>
<tr>
<td>Failure to Self-Regulate</td>
<td>459</td>
</tr>
<tr>
<td>Motivating Students When Resources Are Thin</td>
<td>460</td>
</tr>
<tr>
<td>Motivating Students When Resources Are Thin</td>
<td>505</td>
</tr>
<tr>
<td>Bullies and Victims</td>
<td>506</td>
</tr>
<tr>
<td>Bullies and Victims</td>
<td>549</td>
</tr>
<tr>
<td>Reaching and Teaching Every Student</td>
<td>550</td>
</tr>
<tr>
<td>Reaching and Teaching Every Student</td>
<td>589</td>
</tr>
<tr>
<td>Giving Meaningful Grades</td>
<td>590</td>
</tr>
<tr>
<td>Giving Meaningful Grades</td>
<td>633</td>
</tr>
</tbody>
</table>

**GUIDELINES**

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family and Community Partnerships—Helping Families Care</td>
<td>50</td>
</tr>
<tr>
<td>for Preoperational Children</td>
<td></td>
</tr>
<tr>
<td>Teaching the Concrete-Operational Child</td>
<td>52</td>
</tr>
<tr>
<td>Helping Students to Use Formal Operations</td>
<td>54</td>
</tr>
<tr>
<td>Applying Vygotsky’s Ideas in Teaching</td>
<td>67</td>
</tr>
<tr>
<td>Dealing with Physical Differences in the Classroom</td>
<td>76</td>
</tr>
<tr>
<td>Supporting Positive Body Images in Adolescents</td>
<td>80</td>
</tr>
<tr>
<td>Family and Community Partnerships—Connecting with Families</td>
<td>84</td>
</tr>
<tr>
<td>Helping Children of Divorce</td>
<td>86</td>
</tr>
<tr>
<td>Dealing with Aggression and Encouraging Cooperation</td>
<td>91</td>
</tr>
<tr>
<td>Encouraging Initiative and Industry</td>
<td>98</td>
</tr>
<tr>
<td>Supporting Identity Formation</td>
<td>101</td>
</tr>
<tr>
<td>Interpreting IQ Scores</td>
<td>131</td>
</tr>
<tr>
<td>Applying and Encouraging Creativity</td>
<td>138</td>
</tr>
<tr>
<td>Family and Community Partnerships—Productive Conferences</td>
<td>144</td>
</tr>
<tr>
<td>Disciplining Students with Emotional Problems</td>
<td>155</td>
</tr>
<tr>
<td>Teaching Students with Intellectual Disabilities</td>
<td>159</td>
</tr>
<tr>
<td>Supporting Language and Promoting Literacy</td>
<td>186</td>
</tr>
<tr>
<td>Promoting Language Learning</td>
<td>192</td>
</tr>
<tr>
<td>Providing Emotional Support and Increasing Self-Esteem for</td>
<td>199</td>
</tr>
<tr>
<td>Students Who Are ELLs</td>
<td></td>
</tr>
<tr>
<td>Family and Community Partnerships—Welcoming all</td>
<td>201</td>
</tr>
<tr>
<td>Families</td>
<td></td>
</tr>
<tr>
<td>Teaching Students Who Live in Poverty</td>
<td>228</td>
</tr>
<tr>
<td>Avoiding Gender Bias in Teaching</td>
<td>246</td>
</tr>
<tr>
<td>Culturally Relevant Teaching</td>
<td>255</td>
</tr>
<tr>
<td>Applying Classical Conditioning</td>
<td>266</td>
</tr>
<tr>
<td>Applying Operant Conditioning: Using Praise Appropriately</td>
<td>274</td>
</tr>
<tr>
<td>Applying Operant Conditioning: Encouraging Positive</td>
<td>276</td>
</tr>
<tr>
<td>Behaviors</td>
<td></td>
</tr>
<tr>
<td>Applying Operant Conditioning: Using Punishment</td>
<td>282</td>
</tr>
<tr>
<td>Family and Community Partnerships—Applying Operant</td>
<td>288</td>
</tr>
<tr>
<td>Conditioning: Student Self-Management</td>
<td></td>
</tr>
<tr>
<td>Gaining and Maintaining Attention</td>
<td>308</td>
</tr>
<tr>
<td>Family and Community Partnerships—Organizing Learning</td>
<td>325</td>
</tr>
<tr>
<td>Helping Students Understand and Remember</td>
<td>332</td>
</tr>
<tr>
<td>Applying Problem Solving</td>
<td>361</td>
</tr>
</tbody>
</table>

xxvii
SPECIAL FEATURES

Becoming an Expert Student  363
Family and Community Partnerships—Promoting Transfer  372
Facilitating Deep Questioning  392
Using Cooperative Learning  408
Using Computers  415
Supporting the Development of Media Literacy  417
Using Observational Learning  433
Encouraging Self-Efficacy  437
Encouraging Emotional Self-Regulation  451
Supporting Self-Determination and Autonomy  469
Encouraging Self-Worth  482
Building on Students’ Interests and Curiosity  485
Coping with Anxiety  490
Family and Community Partnerships—Motivation to Learn  500
Establishing Class Routines  515
Designing Learning Spaces  520
Keeping Students Engaged  523
Creating Caring Relationships  528
Imposing Penalties  530
Handling Potentially Explosive Situations  537
Family and Community Partnerships—Classroom Management  545
Using Learning Targets  562
Effective Direct Instruction  566
Family and Community Partnerships—Homework  569
Productive Group Discussions  574
Using Flexible Grouping  577
Avoiding the Negative Effects of Teacher Expectations  584
Writing Multiple-Choice Items  601
Creating Portfolios  608
Developing a Rubric  609
Using Any Grading System  616
Family and Community Partnerships—Conferences and Explaining Test Results  623
Preparing Yourself and Your Students for Testing  626

POINT/COUNTERPOINT

What Kind of Research Should Guide Education?  20
Brain-Based Education  42
What Should Schools Do to Encourage Students’ Self-Esteem?  107
Pills or Skills for Children with ADHD?  151
What Is the Best Way to Teach Students Who Are ELLs?  203
Should Girls and Boys Be Taught Differently?  244
Should Students Be Rewarded for Learning?  290
What’s Wrong with Multitasking?  307
Should Schools Teach Critical Thinking and Problem Solving?  367
Are Inquiry and Problem-Based Learning Effective Teaching Approaches?  396
Are “Grittier” Students More Successful?  442
Does Making Learning Fun Make for Good Learning?  484
Is Zero Tolerance a Good Idea?  532
Are the Common Core Standards a Valuable Guide for Teaching?  558
Should Children Be Held Back?  614