

GLOBAL
EDITION



Educational Psychology

FOURTEENTH EDITION

Anita Woolfolk



EDUCATIONAL PSYCHOLOGY

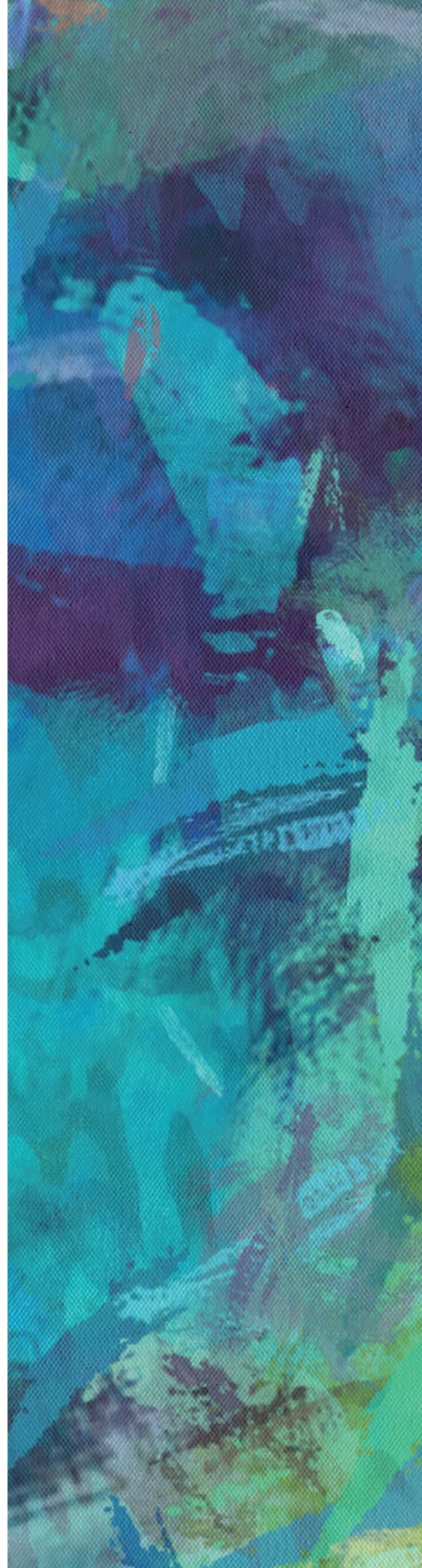
FOURTEENTH EDITION
GLOBAL EDITION

ANITA WOOLFOLK
THE OHIO STATE UNIVERSITY, EMERITA



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Authorized adaptation from the United States edition, entitled *Educational Psychology*, 14th Edition, ISBN 978-0-13-477432-9 by Anita Woolfolk, published by Pearson Education © 2019.

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ISBN 10: 1-292-33152-6

ISBN 13: 978-1-292-33152-2

eBook ISBN 13: 978-1-292-33158-4

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Typeset in ITC Garamond Std 10/12 by SPi Global

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...

ABOUT THE AUTHOR



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.

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.

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.

- **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 text. 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 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.



MyLab Education
Video Example 2.1

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

- **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.



MyLab Education
Podcast 2.1

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

- **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.

MyLab Education [Self-Check 2.5](#)

- **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.

▼ PRACTICE USING WHAT YOU HAVE LEARNED

To access and complete the exercises, click the link under the images below.

Scheme, Assimilation, and Accommodation



MyLab Education
Application Exercise 2.1

Piagetian Concepts in a First Grade Lesson



MyLab Education
Application Exercise 2.2

Using Cultural Tools To Guide Learning



MyLab Education
Application Exercise 2.3

98 CHAPTER TWO

▼ CONNECT AND EXTEND TO LICENSURE

MULTIPLE-CHOICE QUESTIONS

- Classes at Star Community High School began at 7:30 a.m. The new principal, however, wanted to start classes at a later time of 10:00 a.m. The principal submitted a proposal to the local education office and provided several reasons for the recommended change. Imagine you were the officer tasked to handle the proposal and to verify the reasons cited by the principal. In your review, you found that several of the reasons made claims that were not supported by research, EXCEPT:
 - Teenagers undergo neurological developments that reset their biological clock, making many of them unable to sleep before midnight, and hence, they would not get the ideal 9 hours of sleep if school started at 7:30 a.m.
 - Research consistently and conclusively shows that schools that start later in the day (e.g., 10:00 a.m.) have better academic performance than schools that begin early (e.g., 7:30 a.m.).
 - Schools that begin too early may lead many students to experience sleep deprivation, and sleep deprivation is related to failure in memory retrieval; so, performance would suffer.
 - It is better to give students more time for breakfast and less time for lunch, given that the former supplements students with nutrients needed to energize their day, while the latter generally leads to drowsiness in afternoon classes.
- Miss McClintock discovered that five of the children in her class were developmentally advanced. All of the students' language skills were exploding! Although many of the students still had trouble sharing, a few appeared to understand that by sharing, everyone could be happy. Finally, there was even one child who could solve conservation problems. According to Piagetian theory, in what stage are the students in Miss McClintock's class?
 - Formal operations
 - Concrete operations
 - Preoperational
 - Sensorimotor
- You want to maximize your students' learning outcomes and you recently read a book written by Vygotsky. Which of the following strategies would LEAST likely be employed by you?
 - Whenever appropriate, you will utilize technological tools and interactive devices to assist with your teaching.
 - You will put students in the same classroom into groups for discussions to facilitate their learning of challenging topics.

- You will assign additional challenge questions at the end of each class and provide appropriate assistance to your students in solving these.
 - You will encourage students to think about certain problems and talk to themselves about the issues they are working on, before soliciting answers from them.
- Which of the following is TRUE about cognitive development and teaching?
 - Teachers should provide more social stimulations and reduce physical stimulations in the classroom because the former is more important for early cognitive development.
 - Students will benefit if most of their learning comes through direct instructions from a more experienced teacher.
 - Repeatedly teaching students what they already know is important to reinforce their memory and to consolidate their knowledge.
 - Providing students with challenging questions will not intimidate them, but keep them engaged, if appropriate supports are given.

CONSTRUCTED-RESPONSE QUESTIONS

Case

When planning for instruction, Mr. Gething remembered that students should be neither bored nor frustrated. Although this made sense to him, he was unsure how he would compensate for the diverse group of students he had in his second-period language arts class. Some students had difficulty with the English language, and other students planned to participate in the school's annual Shakespearean play. He knew that by grouping students of mixed ability, he could occasionally draw on the talents of his knowledgeable students to assist the less-advanced students. He also understood that without guidelines, students might not accomplish anything.

- Explain the theory of learning Mr. Gething is initially drawing on, and identify the individual credited with it.
- What is the term for the assistance that the more knowledgeable class members may provide to the less-advanced students in order to help them succeed? List some strategies these students might use to assist their peers.

MyLab Education Licensure Exam

- **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. 48), brain-based education (pp. 70–71), the self-esteem movement (p. 135), pills or skills for students with ADHD (p. 179), the best way to teach English language learners (p. 231), should girls and boys be taught differently? (pp. 272–273), using rewards to encourage student learning (pp. 318–319), what's wrong with multitasking? (p. 335), teaching critical thinking and problem solving (p. 395), problem-based education (pp. 424–425), are “grittier” students more successful? (p. 470–471), the value of trying to make learning entertaining (p. 512), zero tolerance (p. 560), the Common Core standards (p. 586), and holding children back (p. 642).

Guidelines appear throughout each chapter, providing concrete applications of theories or principles discussed. See, for example, pages 80, 114, 119, 166, 183, 214, 227, 256, 302, 336, 360, 391, 436, 445, 465, 513, 543, 556, 590, 602, 636, and 644.

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 112, 172, 229, 400, 528, 573, 597, and 651.

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 99, 203, 287, 406–407, and 533.

Reaching Every Student sections present ideas for assessing, teaching, and motivating ALL of the students in today's inclusive classrooms. See, for example, page 93.

Lessons for Teachers are succinct and usable principles for teaching based on the research. See, for example, page 507–508.

Put Yourself in Their Place experiences develop empathy by asking students to imagine how they would feel in different situations. See pages 225, 226, 260, 306, 379, 505, and 643.

Stop and Think activities give students firsthand experience with the concept being discussed, as on pages 246, 332, 337, 493, 498, 506, 539, 583, and 638.

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 <http://www.pearsonglobaleditions.com/> 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 <http://www.pearsonglobaleditions.com/>. 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.

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:

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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

GLOBAL EDITION ACKNOWLEDGMENTS

Pearson would like to thank the following people for their work on the Global Edition:

Contributor

Albert Lee Kai Chung, Nanyang Technological University

Reviewer

Rijul Saxena, Defence Institute of Psychological Research

BRIEF CONTENTS

1 LEARNING, TEACHING, AND EDUCATIONAL PSYCHOLOGY 30

PART I STUDENTS

2 COGNITIVE DEVELOPMENT 58

3 THE SELF, SOCIAL, AND MORAL DEVELOPMENT 100

4 LEARNER DIFFERENCES AND LEARNING NEEDS 148

5 LANGUAGE DEVELOPMENT, LANGUAGE DIVERSITY, AND IMMIGRANT EDUCATION 204

6 CULTURE AND DIVERSITY 244

PART II LEARNING AND MOTIVATION

7 BEHAVIORAL VIEWS OF LEARNING 288

8 COGNITIVE VIEWS OF LEARNING 326

9 COMPLEX COGNITIVE PROCESSES 366

10 CONSTRUCTIVISM AND DESIGNING LEARNING ENVIRONMENTS 408

11 SOCIAL COGNITIVE VIEWS OF LEARNING AND MOTIVATION 452

12 MOTIVATION IN LEARNING AND TEACHING 488

PART III TEACHING AND ASSESSING

13 MANAGING LEARNING ENVIRONMENTS 534

14 TEACHING EVERY STUDENT 578

15 CLASSROOM ASSESSMENT, GRADING, AND STANDARDIZED TESTING 618

CONTENTS

Preface 5



CHAPTER 1

Learning, Teaching, and Educational Psychology 30

Teachers' Casebook—Leaving No Student Behind: What Would You Do? 30

Overview and Objectives 31

Learning and Teaching Today 32

Students Today: Dramatic Diversity and Remarkable Technology 32

Confidence in Every Context 33

High Expectations for Teachers and Students 34

Do Teachers Make a Difference? 35

Teacher–Student Relationships 35 • The Cost of Poor Teaching 36

What is Good Teaching? 37

Inside Three Classrooms 37

A Bilingual First Grade 37 • A Suburban Fifth Grade 37 • An Inclusive Class 37 • So What is Good Teaching? 38 • Models of Good Teaching: Teacher Observation and Evaluation 38

Beginning Teachers 41

The Role of Educational Psychology 42

In the Beginning: Linking Educational Psychology and Teaching 42

Educational Psychology Today 42

Is It Just Common Sense? 42

Helping Students 42 • Answer Based on Research 43 • Skipping Grades 43 • Answer Based on Research 43 • Students in Control 43 • Answer Based on Research 43 • Obvious Answers? 43

Using Research to Understand and Improve Learning 44

Correlation Studies 44 • Experimental Studies 45 • ABAB Experimental Designs 45 • Clinical Interviews and Case Studies 45 • Ethnography 46 • The Role of Time in Research 46 • What's The Evidence? Quantitative versus Qualitative Research 46 • Mixed Methods Research 47 • Scientifically Based Research

and Evidence-Based Practices 47 • Teachers as Researchers 47

POINT/COUNTERPOINT: What Kind of Research Should Guide Education? 48

Theories for Teaching 50

Supporting Student Learning 51

Summary and Key Terms 53

Practice Using What You Have Learned 55

Connect and Extend to Licensure 56

Teachers' Casebook—Leaving No Student Behind: What Would They Do? 57

PART I STUDENTS



CHAPTER 2

Cognitive Development 58

Teachers' Casebook—Symbols and Cymbals: What Would You Do? 58

Overview and Objectives 59

A Definition of Development 60

Three Questions Across the Theories 60

What Is the Source of Development? Nature versus Nurture 61 • What Is the Shape of Development? Continuity versus Discontinuity 61 • Timing: Is It Too Late? Critical versus Sensitive Periods 61 • Beware of Either/Or 61

General Principles of Development 62

The Brain and Cognitive Development 62

The Developing Brain: Neurons 63

The Developing Brain: Cerebral Cortex 66

Brain Development in Childhood and Adolescence 67

Putting It All Together: How the Brain Works 69
Culture and Brain Plasticity 69

POINT/COUNTERPOINT: Brain-Based Education 70
Neuroscience, Learning, and Teaching 70

Does Instruction Affect Brain Development? 70 • The Brain and Learning to Read 70 • Emotions, Learning, and the Brain 71

Lessons for Teachers: General Principles 72

Piaget's Theory of Cognitive Development 73

Influences on Development 74

Basic Tendencies in Thinking	74
Organization	74 • Adaptation 75 • Equilibration 75
Four Stages of Cognitive Development	75
Infancy: the Sensorimotor Stage	76 • Early Childhood to the Early Elementary Years: The Preoperational Stage 77
FAMILY AND COMMUNITY PARTNERSHIPS: Helping Families Care for Preoperational Children	78
Later Elementary to the Middle School Years: The Concrete-Operational Stage	78
GUIDELINES: Teaching the Concrete-Operational Child	80
High School and College: Formal Operations	80
Do We All Reach the Fourth Stage?	82
Some Limitations of Piaget's Theory	82
The Trouble with Stages	82
GUIDELINES: Helping Students to Use Formal Operations	82
Underestimating Children's Abilities	83 • Cognitive Development and Culture 83
Information Processing, Neo-Piagetian, and Neuroscience Views of Cognitive Development	84
Vygotsky's Sociocultural Perspective	85
The Social Sources of Individual Thinking	85
Cultural Tools and Cognitive Development	86
Technical Tools in a Digital Age	87 • Psychological Tools 87
The Role of Language and Private Speech	87
Private Speech: Vygotsky's and Piaget's Views Compared	88
The Zone of Proximal Development	89
Private Speech and the Zone	89 • The Role of Learning and Development 90
Limitations of Vygotsky's Theory	90
Implications of Piaget's and Vygotsky's Theories for Teachers	90
Piaget: What Can We Learn?	91
Understanding and Building on Students' Thinking	91 • Activity and Constructing Knowledge 91
Vygotsky: What Can We Learn?	92
The Role of Adults and Peers	92 • Assisted Learning 93
An Example Curriculum: Tools of the Mind	93
Reaching Every Student: Teaching in the "Magic Middle"	93
Cognitive Development: Lessons for Teachers	94
GUIDELINES: Applying Vygotsky's Ideas in Teaching	95
Summary and Key Terms	95
Practice Using What You Have Learned	97

Connect and Extend to Licensure	98
Teachers' Casebook—Symbols and Cymbals: What Would They Do?	99



CHAPTER 3

The Self, Social, and Moral Development 100

Teachers' Casebook—Mean Girls: What Would You Do?	100
Overview and Objectives	101
Physical Development	102
Physical and Motor Development	102
Young Children	102 • Elementary School Years 102 • The Adolescent Years 103 • Early and Later Maturing 103
GUIDELINES: Dealing with Physical Differences in the Classroom	104
Play, Recess, and Physical Activity	104
Cultural Differences in Play	105 • Exercise and Recess 105
Reaching Every Student: Inclusive Athletics	105
Challenges in Physical Development	106
Obesity	106 • Eating Disorders 107
GUIDELINES: Supporting Positive Body Images in Adolescents	108
Bronfenbrenner: The Social Context for Development	108
The Importance of Context and the Bioecological Model	108
Families	109
Family Structure	109 • Parenting Styles 110 • Culture and Parenting 111
FAMILY AND COMMUNITY PARTNERSHIPS: Connecting with Families	112
Attachment	112 • Divorce 112
GUIDELINES: Helping Children of Divorce	114
Peers	114
Cliques	115 • Crowds 115 • Peer Cultures 115
Friendships	115 • Popularity 116
Causes and Consequences of Rejection	117
Aggression	117 • Relational Aggression 118
Media, Modeling, and Aggression	118
GUIDELINES: Dealing with Aggression and Encouraging Cooperation	119
Video Games and Aggressive Behavior	119
Reaching Every Student: Teacher Support	120
Academic and Personal Caring	120
Teachers and Child Abuse	121
Society and Media	122

Identity and Self-Concept 123

Erikson: Stages of Psychosocial Development 124

The Preschool Years: Trust, Autonomy, and Initiative 124 • The Elementary and Middle School Years: Industry versus Inferiority 125

GUIDELINES: Encouraging Initiative and Industry 126

Adolescence: The Search for Identity 127 • Identity and Technology 128 • Beyond the School Years 128

Racial and Ethnic Identity 128

GUIDELINES: Supporting Identity Formation 129Multidimensional and Flexible Ethnic Identities 129
Black Racial Identity: Outcome and Process 130 • Racial and Ethnic Pride 131

Self-Concept 131

The Structure of Self-Concept 131 • How Self-Concept Develops 132 • Self-Concept and Achievement 133

Sex Differences in Self-Concept of Academic

Competence 133

Self-Esteem 134

POINT/COUNTERPOINT: What Should Schools Do to Encourage Students' Self-Esteem? 135**Understanding Others and Moral Development 135**

Theory of Mind and Intention 136

Moral Development 136

Kohlberg's Theories of Moral Development 136
• Criticisms of Kohlberg's Theory 137

Moral Judgments, Social Conventions, and Personal Choices 138

Moral versus Conventional Domains 138 • Implications for Teachers 139

Beyond Reasoning: Haidt's Social Intuitionist Model of Moral Psychology 140

Moral Behavior and the Example of Cheating 141

Who Cheats? 141 • Dealing with Cheating 143

Personal/Social Development: Lessons for Teachers 143**Summary and Key Terms 143****Practice Using What You Have Learned 145****Connect and Extend to Licensure 146****Teachers' Casebook—Mean Girls: What Would They Do? 147****CHAPTER 4****Learner Differences and Learning Needs 148****Teachers' Casebook—Including Every student: What Would You Do? 148****Overview and Objectives 149****Intelligence 150**

Language and Labels 150

Disabilities and Handicaps 150 • Person-First Language 151 • Possible Biases in the Application of Labels 152

What Does Intelligence Mean? 152

Intelligence: One Ability or Many? 153

Another View: Gardner's Multiple Intelligences 153

What Are These Intelligences? 154 • Critics of Multiple Intelligences Theory 154 • Gardner Responds 154 • Multiple Intelligences Go to School 155

Multiple Intelligences: Lessons for Teachers 156

Another View: Sternberg's Successful Intelligence 156

Neuroscience and Intelligence 157

Measuring Intelligence 157

Binet's Dilemma 158 • What Does an IQ Score Mean? 158 • Group versus Individual IQ Tests 158 • The Flynn Effect: Are We Getting Smarter? 158

GUIDELINES: Interpreting IQ Scores 159

Intelligence and Achievement 159

Gender Differences in Intelligence and Achievement 160

Heredity or Environment? 160

Learning to Be Intelligent: Being Smart About IQ 161

Creativity: What It Is and Why It Matters 161

Assessing Creativity 162

OK, But So What: Why Does Creativity Matter? 163

What Are the Sources of Creativity? 163

Creativity and Cognition 164 • Creativity and Diversity 164

Creativity in the Classroom 164

Brainstorming 165 • Creative Schools 165

GUIDELINES: Applying and Encouraging Creativity 166**Learning Styles 167**

Learning Styles/Preferences 167

Cautions About Learning Styles 167 • The Value of Considering Learning Styles 168

Beyond Either/Or 169

Individual Differences and the Law 169

IDEA 169

Least Restrictive Environment 170 • Individualized Education Program 170 • The Rights of Students and Families 171

Section 504 Protections 172

FAMILY AND COMMUNITY PARTNERSHIPS: Productive Conferences 172**Students with Learning Challenges 173**

Neuroscience and Learning Challenges 173

Students with Learning Disabilities 174

Student Characteristics 175 • Teaching Students with Learning Disabilities 176

Students with Hyperactivity and Attention Disorders	177
Definitions	178 • Treating ADHD with Drugs 178
• Alternatives/Additions to Drug Treatments	178
POINT/COUNTERPOINT: Pills or Skills for Children with ADHD?	179
Lessons for Teachers: Learning Disabilities and ADHD	179
Students with Communication Disorders	180
Speech Disorders	180 • Language Disorders 181
Students with Emotional or Behavioral Difficulties	182
Suicide	183
GUIDELINES: Disciplining Students with Emotional Problems	183
Drug Abuse	185 • Prevention 185
Students with Intellectual Disabilities	186
GUIDELINES: Teaching Students with Intellectual Disabilities	187
Students with Health and Sensory Impairments	187
Cerebral Palsy and Multiple Disabilities	187
Seizure Disorders (Epilepsy)	188 • Other Serious Health Concerns: Asthma, Sickle Cell Disease, and Diabetes 188 • Students with Vision Impairments 189 • Students Who Are Deaf 189
Autism Spectrum Disorders and Asperger Syndrome	190
Interventions	191
Response to Intervention	191
Students Who Are Gifted and Talented	194
Who Are These Students?	194
What Is the Origin of These Gifts?	195 • What Problems Do Students Who Are Gifted Face? 195
Identifying Students Who Are Gifted and Talented	196
Recognizing Gifts and Talents	196
Teaching Students with Gifts and Talents	197
Acceleration	198 • Methods and Strategies 198
Summary and Key Terms	199
Practice Using What You Have Learned	201
Connect and Extend to Licensure	202
Teachers' Casebook—Including Every Student: What Would They Do?	203



CHAPTER 5

Language Development, Language Diversity, and Immigrant Education 204

Teachers' Casebook—Cultures Clash in the Classroom: What Would You Do? 204

Overview and Objectives 205

The Development of Language 206

What Develops? Language and Cultural Differences 206

The Puzzle of Language 206 • Beware of Either/Or Choices 207

When and How Does Language Develop? 207

Sounds and Pronunciation 207 • Vocabulary and Meaning 207 • Grammar and Syntax 208 • Pragmatics: Using Language in Social Situations 209

- Metalinguistic Awareness 209

Emergent Literacy 209

Inside-Out and Outside-In Skills 210 • Building a Foundation 211 • When There Are Persistent Problems 212

Emergent Literacy and Language Diversity 213

Languages and Emergent Literacy 213 • Bilingual Emergent Literacy 213

GUIDELINES: Supporting Language and Promoting Literacy 214

Diversity in Language Development 215

Dual-Language Development 215

Second-Language Learning 215 • Benefits of Bilingualism 216 • Language Loss 216

Signed Languages 217

What Is Involved in Being Bilingual? 217

Contextualized and Academic Language 218

GUIDELINES: Promoting Language Learning 220

Dialect Differences in the Classroom 221

Dialects 221

Dialects and Pronunciation 221 • Dialects and Teaching 221

Genderlects 222

Teaching Immigrant Students 222

Immigrants and Refugees 223

Classrooms Today 224

Four Student Profiles 224

Generation 1.5: Students in Two Worlds 225

Affective and Emotional/Social Considerations 226

Working with Families: Using the Tools of the Culture 226

GUIDELINES: Providing Emotional Support and Increasing Self-Esteem for Students Who Are ELLs 227

Funds of Knowledge and Welcome Centers 227

Student-Led Conferences 228

FAMILY AND COMMUNITY PARTNERSHIPS: Welcoming All Families 229

Teaching Immigrant Students Who Are English Language Learners 230

Two Approaches to English Language Learning 230

- Research on Bilingual Education 230

POINT/COUNTERPOINT: What Is the Best Way to Teach Students Who Are ELLs? 231

- Visual Strategies 232 • Literature Response Groups 232
- Bilingualism for All: Two-Way Immersion 233
- Sheltered Instruction 233

Special Challenges: Students Who Are English Language Learners with Disabilities and Special Gifts 236

- Students Who Are English Language Learners with Disabilities 237
- Reaching Every Student: Recognizing Giftedness in Bilingual Students 239

Summary and Key Terms 239**Practice Using What You Have Learned 241****Connect and Extend to Licensure 242****Teachers' Casebook—Cultures Clash in the Classroom: What Would They Do? 243****CHAPTER 6****Culture and Diversity 244**

Revised by Ellen L. Usher

Teachers' Casebook—White Girls Club: What Would You Do? 244**Overview and Objectives 245****Today's Diverse Classrooms 246**

- American Cultural Diversity 246
- Meet Two More Students 248
- Cautions: Interpreting Cultural Differences 249
- Cultural Conflicts and Compatibilities 249 • Dangers in Stereotyping 250

Economic and Social Class Differences 250

- Social Class and Socioeconomic Status 250
- Extreme Poverty: Homeless and Highly Mobile Students 252
- Poverty and School Achievement 252
- Health, Environment, and Stress 254 • Low Expectations—Low Academic Self-Concept 254 • Peer Influences and Resistance Cultures 254 • Home Environment and Resources 255 • Summer Setbacks 255

GUIDELINES: Teaching Students Who Live in Poverty 256

- Tracking: Poor Teaching 256

Ethnicity and Race in Teaching and Learning 257

- Terms: Ethnicity and Race 257
- Ethnic and Racial Differences in School Achievement 258
- The Legacy of Inequality 260
- What Is Prejudice? 261 • The Development of Prejudice 261 • From Prejudice to Discrimination 263
- Stereotype Threat 264

- Who Is Affected by Stereotype Threat? 264 • Short-Term Effects: Test Performance 264 • Long-Term Effects: Disidentification 265 • Combating Stereotype Threat and Discrimination 266

Gender in Teaching and Learning 267

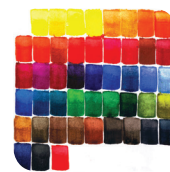
- Sex and Gender 267
- Gender Identity 267
- Gender Roles 268
- Gender Bias in Curriculum Materials and Media 270
- Gender Bias in Teaching 270
- Sexual Orientation 271

POINT/COUNTERPOINT: Should Girls and Boys Be Taught Differently? 272

- Discrimination Based on Gender Expression and Sexual Orientation 273

GUIDELINES: Avoiding Gender Bias in Teaching 274**Creating Culturally Compatible Classrooms 276**

- Culturally Relevant Pedagogy 277
- Self-Agency Strand 279 • Relationship Strand 279
- Diversity in Learning 279
- Social Organization 279 • Cultural Values and Learning Preferences 280 • Cautions (Again) About Learning Styles/Preferences Research 280 • Sociolinguistics 281 • Cultural Discontinuity 281
- Lessons for Teachers: Teaching Every Student 281
- Know Yourself 282 • Know Your Students 282 • Respect Your Students 282 • Teach Your Students 283

GUIDELINES: Culturally Relevant Teaching 283**Summary and Key Terms 284****Practice Using What You Have Learned 285****Connect and Extend to Licensure 286****Teachers' Casebook—White Girls Club: What Would They Do? 287****PART II LEARNING AND MOTIVATION****CHAPTER 7****Behavioral Views of Learning 288****Teachers' Casebook—Sick of Class: What Would You Do? 288****Overview and Objectives 289****Understanding Learning 290**

- Ethical Issues 291
- Goals 291 • Strategies 291
- Learning Is Not Always What It Seems 291

Early Explanations of Learning: Contiguity and Classical Conditioning 292

GUIDELINES: Applying Classical Conditioning	294
Operant Conditioning: Trying New Responses	294
Types of Consequences	295
Reinforcement	295 • Punishment 296
Neuroscience of Reinforcement and Punishment	297
Reinforcement Schedules	298
Extinction	299
Antecedents and Behavior Change	299
Effective Instruction Delivery	299 • Cueing 300
Putting It All Together: Applied Behavior Analysis	300
Methods for Encouraging Behaviors	301
Reinforcing with Teacher Attention	301 • Selecting Reinforcers: The Premack Principle 301
GUIDELINES: Applying Operant Conditioning: Using Praise Appropriately	302
Shaping	303 • Positive Practice 303
GUIDELINES: Applying Operant Conditioning: Encouraging Positive Behaviors	304
Contingency Contracts, Token Reinforcement, and Group Consequences	304
Contingency Contracts	304 • Token Reinforcement Systems 305 • Group Consequences 306
Handling Undesirable Behavior	308
Negative Reinforcement	308 • Reprimands 309
• Response Cost	309 • Social Isolation 309
• Some Cautions About Punishment	309
GUIDELINES: Applying Operant Conditioning: Using Punishment	310
Reaching Every Student: Severe Behavior Problems	311
Current Applications: Functional Behavioral Assessment, Positive Behavior Supports, and Self-Management	311
Discovering the “Why”: Functional Behavioral Assessments	312
Positive Behavior Supports	313
Self-Management	315
Goal Setting	315 • Monitoring and Evaluating Progress 315
FAMILY AND COMMUNITY PARTNERSHIPS: Applying Operant Conditioning: Student Self-Management	316
Self-Reinforcement	316
Challenges and Criticisms	317
Beyond Behaviorism: Bandura’s Challenge and Observational Learning	317
Enactive and Observational Learning	317 • Learning and Performance 317

POINT/COUNTERPOINT: Should Students Be Rewarded for Learning? 318

Criticisms of Behavioral Methods 318
Behavioral Approaches: Lessons for Teachers 319

Summary and Key Terms 320

Practice Using What You Have Learned 322

Connect and Extend to Licensure 323

Teachers’ Casebook—Sick of Class: What Would They Do? 324



CHAPTER 8

Cognitive Views of Learning 326

Teachers’ Casebook—Remembering the Basics: What Would You Do? 326

Overview and Objectives 327

Elements of the Cognitive Perspective 328

The Brain and Cognitive Learning 328
The Importance of Knowledge in Cognition 329
General and Specific Knowledge 329 • Declarative, Procedural, and Self-Regulatory Knowledge 330

Cognitive Views of Memory 330

Sensory Memory 332
Capacity, Duration, and Contents of Sensory Memory 332 • Perception 332 • The Role of Attention 334 • Attention and Multitasking 334

POINT/COUNTERPOINT: What’s Wrong with Multitasking? 335

Attention and Teaching 335

GUIDELINES: Gaining and Maintaining Attention 336

Working Memory 337

Capacity of Working Memory 337 • The Central Executive 338 • The Phonological Loop 338 • The Visuospatial Sketchpad 339 • The Episodic Buffer 339 • The Duration and Contents of Working Memory 339

Cognitive Load and Retaining Information 339

Two Kinds of Cognitive Load 340 • Retaining Information in Working Memory 340 • Levels of Processing Theory 341 • Forgetting 342

Individual Differences in Working Memory 342

Developmental Differences 342 • Individual Differences 343

Is Working Memory Really Separate? 343

Long-Term Memory 344

Capacity and Duration of Long-Term Memory 344
Contents of Long-Term Memory: Explicit (Declarative) Memories 345

- Propositions and Propositional Networks 345
 - Images 345 • Two Are Better Than One: Words and Images 346 • Concepts 346 • Prototypes, Exemplars, and Theory-Based Categories 346
 - Teaching Concepts 347 • Schemas 347
 - Episodic Memory 349

Contents of Long-Term Memory: Implicit Memories 349

- Retrieving Information in Long-Term Memory 350
 - Spreading Activation 351 • Reconstruction 351
 - Forgetting and Long-Term Memory 351
- Individual Differences in Long-Term Memory 352

Teaching for Deep, Long-Lasting Knowledge:

Basic Principles and Applications 352

- Constructing Declarative Knowledge: Making Meaningful Connections 352
- Elaboration 352

FAMILY AND COMMUNITY PARTNERSHIPS: Organizing Learning 353

- Organization 353 • Imagery 353 • Context 355
 - Desirable Difficulty 355 • Effective Practice 355
- Reaching Every Student: Make it Meaningful 356
 - Mnemonics 356
- If You Have to Memorize . . . 357
- Lessons for Teachers: Declarative Knowledge 358
- Development of Procedural Knowledge 359
 - Automated Basic Skills 359

GUIDELINES: Helping Students Understand and Remember 360

- Domain-Specific Strategies 361

Summary and Key Terms 361

Practice Using What You Have Learned 363

Connect and Extend to Licensure 364

Teachers' Casebook—Remembering the Basics: What Would They Do? 364



CHAPTER 9

Complex Cognitive Processes 366

Teachers' Casebook—Uncritical Thinking: What Would You Do? 366

Overview and Objectives 367

Metacognition 368

- Metacognitive Knowledge and Regulation 368
- Individual Differences in Metacognition 369
- Lessons for Teachers: Developing Metacognition 370

- Metacognitive Development for Younger Students 370 • Metacognitive Development for Secondary and College Students (Like You) 371

Learning Strategies 372

- Being Strategic About Learning 372
 - Deciding What Is Important 374 • Summaries 374
 - Underlining and Highlighting 374 • Taking Notes 374
 - Visual Tools for Organizing 375
 - Retrieval Practice: Powerful But Underused 377
 - Reading Strategies 378
 - Applying Learning Strategies 378
 - Appropriate Tasks 378 • Valuing Learning 378 • Effort and Efficacy 379
 - Reaching Every Student: Teaching How to Learn 379

Problem Solving 379

- Identifying: Problem Finding 380
- Defining Goals and Representing the Problem 381
 - Focusing Attention on What Is Relevant 381 • Understanding the Words 381 • Understanding the Whole Problem 382 • Translation and Schema Training: Direct Instruction in Schemas 383 • Translation and Schema Training: Worked Examples 384 • Worked Examples and Embodied Cognition 385 • The Results of Problem Representation 386
- Searching for Possible Solution Strategies 386
 - Algorithms 386 • Heuristics 387
- Anticipating, Acting, and Looking Back 387
- Factors That Hinder Problem Solving 388
 - Some Problems with Heuristics 388

GUIDELINES: Applying Problem Solving 389

Expert Knowledge and Problem Solving 390

- Knowing What Is Important 390 • Memory for Patterns and Organization 390 • Procedural Knowledge 390 • Planning and Monitoring 390

GUIDELINES: Becoming an Expert Student 391

Critical Thinking and Argumentation 392

- What Critical Thinkers Do: Paul and Elder Model 392
- Applying Critical Thinking in Specific Subjects 394
- Argumentation 394
 - Two Styles of Argumentation 394

POINT/COUNTERPOINT: Should Schools Teach Critical Thinking and Problem Solving? 395

- Lessons for Teachers 396

Teaching for Transfer 397

- The Many Views of Transfer 397
- Teaching for Positive Transfer 398
 - What Is Worth Learning? 398 • Lessons for Teachers: Supporting Transfer 399 • Stages of Transfer for Strategies 399

FAMILY AND COMMUNITY PARTNERSHIPS: Promoting Transfer 400

Bringing It All Together: Teaching for Complex Learning and Robust Knowledge 400

- What Is Robust Knowledge? 400
- Recognizing and Assessing Robust Knowledge 401
- Teaching for Robust Knowledge 401
 - Practice 402 • Worked Examples 402
 - Analogies 402 • Self-Explanations 402

Summary and Key Terms 403**Practice Using What You Have Learned 405****Connect and Extend to Licensure 405****Teachers' Casebook—Uncritical Thinking: What Would They Do? 406****CHAPTER 10****Constructivism and Designing Learning Environments 408****Teachers' Casebook—Learning to Cooperate: What Would You Do? 408****Overview and Objectives 409****Cognitive and Social Constructivism 410**

- Constructivist Views of Learning 410
 - Cognitive Constructivism 411 • Social Constructivism 412
- How Is Knowledge Constructed? 412
- Knowledge: Situated or General? 412
- Common Elements of Constructivist Student-Centered Teaching 414
 - Complex Learning Environments and Authentic Tasks 414 • Social Negotiation 415 • Multiple Perspectives and Representations of Content 415
 - Understanding the Knowledge Construction Process 415 • Student Ownership of Learning 415

Designing Constructivist Learning Environments 415

- Assumptions to Guide the Design of Learning Environments 416
- Facilitating in a Constructivist Classroom 416
 - Scaffolding 417 • Advance Organizers as Scaffolding 418 • Facilitating Through Asking and Answering Deep Questions 419

GUIDELINES: Facilitating Deep Questioning 420

- Inquiry and Problem-Based Learning 420
 - Examples of Inquiry 421 • Problem-Based Learning 421 • Research on Inquiry and Problem-Based Learning 423 • Being Smart About Problem-Based Learning 423

POINT/COUNTERPOINT: Are Inquiry and Problem-Based Learning Effective Teaching Approaches? 424

- Cognitive Apprenticeships and Reciprocal Teaching 424

- Cognitive Apprenticeships in Reading: Reciprocal Teaching 425 • Applying Reciprocal Teaching 426

Collaboration and Cooperation 426

- Collaboration, Group Work, and Cooperative Learning 427 • Beyond Groups to Cooperation 427
 - What Can Go Wrong: Misuses of Group Learning 428

Tasks for Cooperative Learning 430

- Highly Structured, Review, and Skill-Building Tasks 430 • Ill-Structured, Conceptual, and Problem-Solving Tasks 430 • Social Skills and Communication Tasks 430

Setting Up Cooperative Groups 431

- Assigning Roles 431 • Giving and Receiving Explanations 432

Designs for Cooperation 432

- Reciprocal Questioning 433 • Jigsaw 434
 - Constructive/Structured Controversies 434

Reaching Every Student: Using Cooperative Learning Wisely 435**GUIDELINES: Using Cooperative Learning 436****Dilemmas of Constructivist Practice 436****Designing Learning Environments in a Digital World 438****Technology and Learning 438**

- Technology-Rich Environments 438 • Virtual Learning Environments 439 • Personal Learning Environments 439 • Immersive Virtual Learning Environments 440 • Games 440

Developmentally Appropriate Computer Activities for Young Children 441

- Computational Thinking and Coding 442

GUIDELINES: Using Computers 443

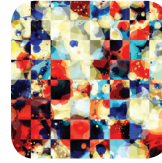
- Media/Digital Literacy 444

GUIDELINES: Supporting the Development of Media Literacy 445**The Flipped Classroom 446****Summary and Key Terms 447****Practice Using What You Have Learned 449****Connect and Extend to Licensure 450****Teachers' Casebook—Learning to Cooperate: What Would They Do? 451****CHAPTER 11****Social Cognitive Views of Learning and Motivation 452**

Revised by Ellen L Usher

Teachers' Casebook—Failure to Self-Regulate: What Would You Do? 452**Overview and Objectives 453**

Social Cognitive Theory	454
A Self-Directed Life: Albert Bandura	454
Beyond Behaviorism	454
Triadic Reciprocal Causality	455
Modeling: Learning by Observing Others	457
Elements of Observational Learning	458
Attention	458
Retention	458
Production	458
Motivation and Reinforcement	459
Observational Learning in Teaching	459
Directing Attention	459
Fine Tuning Already-Learned Behaviors	460
Strengthening or Weakening Inhibitions	460
Teaching New Behaviors	460
Arousing Emotion	460
GUIDELINES: Using Observational Learning	461
Agency and Self-Efficacy	462
Self-Efficacy, Self-Concept, and Self-Esteem	462
Sources of Self-Efficacy	463
Self-Efficacy in Learning and Teaching	464
GUIDELINES: Encouraging Self-Efficacy	465
Teachers' Sense of Efficacy	466
Self-Regulated Learning: Skill and Will	467
What Influences Self-Regulation?	468
Knowledge	468
Motivation	469
Volition	469
POINT/COUNTERPOINT: Are "Grittier" Students More Successful?	470
Development of Self-Regulation	472
A Social Cognitive Model of Self-Regulated Learning	472
Reaching Every Student: Examples of Self-Regulation in Two Classrooms	474
Writing	474
Math Problem Solving	475
Technology and Self-Regulation	475
Another Approach to Self-Regulation: Cognitive Behavior Modification	476
Emotional Self-Regulation	477
GUIDELINES: Encouraging Emotional Self-Regulation	479
Teaching Toward Self-Efficacy and Self-Regulated Learning	479
Teacher Stress, Efficacy, and Self-Regulated Learning	479
Designing Classrooms for Self-Regulation	480
Complex Tasks	480
Control	481
Self-Evaluation	481
Collaboration	482
Bringing It All Together: Theories of Learning	482
Summary and Key Terms	484
Practice Using What You Have Learned	485
Connect and Extend to Licensure	486
Teachers' Casebook—Failure to Self-Regulate: What Would They Do?	487



CHAPTER 12

Motivation in Learning and Teaching 488

Teachers' Casebook—Motivating Students When Resources Are Thin: What Would You Do?	488
Overview and Objectives	489
What Is Motivation?	490
Meeting Some Students	490
Intrinsic and Extrinsic Motivation	491
Intrinsic and Extrinsic Motivation: Lessons for Teachers	492
What You Already Know About Motivation	492
Needs and Self-Determination	493
Maslow's Hierarchy of Needs	493
Self-Determination: Need for Competence, Autonomy, and Relatedness	494
Self-Determination in the Classroom	495
Information and Control	495
The Need for Relatedness	496
Needs: Lessons for Teachers	496
GUIDELINES: Supporting Self-Determination and Autonomy	497
Goals and Goal Orientations	497
Types of Goals and Goal Orientations	498
Four Achievement Goal Orientations in School	498
• Wait—Are Performance Goals Always Bad?	499
• Social and Work-Avoidance Goals	500
• Goals in Social Context	501
Feedback, Goal Framing, and Goal Acceptance	501
Goals: Lessons for Teachers	502
Expectancy-Value-Cost Explanations	502
Costs	502
Tasks Value	503
Lessons for Teachers	503
Attributions and Beliefs About Knowledge, Ability, and Self-Worth	503
Attributions in the Classroom	504
Teacher Attributions Trigger Student Attributions	505
Beliefs About Knowing: Epistemological Beliefs	505
Mindsets and Beliefs About Ability	506
Mindsets: Lessons for Teachers	507
Beliefs About Self-Worth	508
Learned Helplessness	508
Self-Worth	508
Self-Worth: Lessons for Teachers	509
GUIDELINES: Encouraging Self-Worth	510
How Do You Feel About Learning? Interests, Curiosity, Emotions, and Anxiety	510
Tapping Interests	510
Two Kinds of Interests	510
• Catching and Holding Interests	511

POINT/COUNTERPOINT: Does Making Learning Fun Make for Good Learning? 512

Curiosity: Novelty and Complexity 512

GUIDELINES: Building on Students' Interests and Curiosity 513

Flow 514

Emotions and Anxiety 514

Neuroscience and Emotion 514 • Achievement Emotions 515 • Arousal and Anxiety 516 • Anxiety in the Classroom 516 • How Does Anxiety Interfere with Achievement? 517

Reaching Every Student: Coping with Anxiety 517

GUIDELINES: Coping with Anxiety 518

Curiosity, Interests, and Emotions: Lessons for Teachers 518

Motivation to Learn in School: On Target 519

Tasks for Learning 519

Beyond Task Value to Genuine Appreciation 519 • Authentic Tasks 520

Supporting Autonomy and Recognizing

Accomplishment 521

Supporting Choices 521 • Recognizing Accomplishment 521

Grouping, Evaluation, and Time 522

Grouping and Goal Structures 522 • Evaluation 523 • Time 523 • Putting It All Together 523

Diversity in Motivation 525

Lessons for Teachers: Strategies to Encourage

Motivation 526

Can I Do It? Building Confidence and Positive Expectations 526 • Do I Want To Do It? Seeing the Value of Learning 526 • What Do I Need to Do to Succeed? Staying Focused on the Task 527

FAMILY AND COMMUNITY PARTNERSHIPS: Motivation to Learn 528

Do I Belong in This Classroom? 528

Summary and Key Terms 529**Practice Using What You Have Learned 531****Connect and Extend to Licensure 532****Teachers' Casebook—Motivating Students When Resources are Thin: What Would They Do? 533****PART III TEACHING AND ASSESSING****CHAPTER 13****Managing Learning Environments 534**

Teachers' Casebook—Bullies and Victims: What Would You Do? 534

Overview and Objectives 535**The What and Why of Classroom Management 536**

The Basic Task: Gain Their Cooperation 538

The Goals of Classroom Management 539

Access to Learning 539 • More Time for Learning 539 • Management Means Relationships 540 • Management for Self-Management 541

Creating a Positive Learning Environment 541

Some Research Results 541

Routines and Rules Required 542

Routines and Procedures 542 • Rules 542

GUIDELINES: Establishing Class Routines 543

Rules for Elementary School 544 • Rules for Secondary School 544 • Consequences 545 • Who Sets the Rules and Consequences? 545

Planning Spaces for Learning 546

Personal Territories and Seating Arrangements 546 • Interest Areas 547

Getting Started: The First Weeks of Class 547

Effective Managers for Elementary Students 547

GUIDELINES: Designing Learning Spaces 548

Effective Managers for Secondary Students 549

Maintaining a Good Environment for Learning 550

Encouraging Engagement 550

Prevention Is the Best Medicine 550

GUIDELINES: Keeping Students Engaged 551

Withitness 551 • Overlapping and Group Focus 552 • Movement Management 552 • Student Social Skills as Prevention 552

Caring Relationships: Connections with School 552

Teacher Connections 552 • School Connections 554 • Creating Communities of Care for Adolescents 554

Dealing with Discipline Problems 555

Stopping Problems Quickly 555

GUIDELINES: Creating Caring Relationships 556

If You Impose Penalties 557

Teacher-Imposed Penalties versus Student Responsibility 557

GUIDELINES: Imposing Penalties 558**POINT/COUNTERPOINT: Is Zero Tolerance a Good Idea? 560**

What About Zero Tolerance? 560

Bullying and Cyberbullying 560

Victims 561 • Why Do Students Bully? 562 • What Can Teachers Do? Bullying and Teasing 562 • Cyberbullying 563

Special Problems with High School Students 564

GUIDELINES: Handling Potentially Explosive Situations 565

The Need for Communication 566

Message Sent—Message Received 566

Empathetic Listening 566

When Listening Is Not Enough: I-Messages, Assertive

Discipline, and Problem Solving 567

"I" Messages 567 • Assertive Discipline 568

• Confrontations and Negotiations 568

Reaching Every Student: Peer Mediation and Restorative Justice 570

Peer Mediation 570 • Restorative Justice 570

Research on Management Approaches 571

Diversity: Culturally Responsive Management 571**FAMILY AND COMMUNITY PARTNERSHIPS: Classroom Management 573****Summary and Key Terms 573****Practice Using What You Have Learned 575****Connect and Extend to Licensure 576****Teachers' Casebook—Bullies and Victims: What Would They Do? 577****CHAPTER 14****Teaching Every Student 578****Teachers' Casebook—Reaching and Teaching Every Student: What Would You Do? 578****Overview and Objectives 579****Research on Teaching 580**

Characteristics of Effective Teachers 580

Clarity and Organization 580 • Enthusiasm and Warmth 581

Knowledge for Teaching 581

Research on Teaching Strategies 582

The First Step: Planning 583

Research on Planning 583

Learning Targets 584

An Example of State-Level Goals: The Common Core 585

POINT/COUNTERPOINT: Are the Common Core Standards a Valuable Guide for Teaching? 586

Classrooms Targets for Learning 586

Flexible and Creative Plans—Using Taxonomies 587

The Cognitive Domain 587 • The Affective Domain 588

• The Psychomotor Domain 589 • Another Take on

Learning Targets 589

Planning from a Constructivist Perspective 589

GUIDELINES: Using Learning Targets 590**Teaching Approaches 591**

Direct Instruction 591

Rosenshine's Six Teaching Functions 591 • Why Does

Direct Instruction Work? 592 • Evaluating Direct

Instruction 592

Seatwork and Homework 593

Seatwork 593

GUIDELINES: Effective Direct Instruction 594

Homework 595 • The Case Against

Homework 595 • Homework for Older

Students 595 • Beware of Either/Or 596

Questioning, Discussion, Dialogue, and Feedback 596

FAMILY AND COMMUNITY PARTNERSHIPS:**Homework 597**

Kinds of Questions 597 • Asking Deep Ques-

tions 598 • Fitting The Questions to the

Students 599 • Responding to Student

Answers 599 • Group Discussion 600

Fitting Teaching to Your Goals 601

Putting It All Together: Understanding by Design 601

GUIDELINES: Productive Group Discussions 602**Differentiated Instruction and Adaptive Teaching 604**

Within-Class and Flexible Grouping 604

The Problems with Ability Grouping 604 • Flexible

Grouping 604

GUIDELINES: Using Flexible Grouping 605

Adaptive Teaching 605

Reaching Every Student: Differentiated Instruction in

Inclusive Classrooms 606

Technology and Differentiation 607

Teacher Expectations 609

Two Kinds of Expectation Effects 609

Sources of Expectations 609

Do Teachers' Expectations Really Affect Students'

Achievement? 610

Lessons for Teachers: Communicating Appropriate

Expectations 611

GUIDELINES: Avoiding the Negative Effects of Teacher Expectations 612**Summary and Key Terms 613****Practice Using What You Have Learned 615****Connect and Extend to Licensure 616****Teachers' Casebook—Reaching and Teaching Every Student: What Would They Do? 617****CHAPTER 15****Classroom Assessment, Grading, and Standardized Testing 618****Teachers' Casebook—Giving Meaningful Grades: What Would You Do? 618****Overview and Objectives 619**

Basics of Assessment 620

- Measurement and Assessment 620
 - Formative, Interim, and Summative Assessment 621
- Assessing the Assessments: Reliability and Validity 621
 - Reliability of Test Scores 622 • Validity 622 • Absence of Bias 623

Classroom Assessment: Testing 624

- Interpreting Any Test Score 624
 - Norm-Referenced Test Interpretations 625
 - Criterion-Referenced Test Interpretations 625
- Using the Tests from Textbooks 626
- Selected-Response Testing 626
 - Using Multiple-Choice Tests 627 • Writing Multiple-Choice Questions 628
- Constructed Responses: Essay Testing 628
 - Constructing Essay Tests 628 • Evaluating Essays 628
- GUIDELINES: Writing Multiple-Choice Items 629**
- Assessing Traditional Testing 630

Formative and Authentic Classroom Assessments 630

- Informal Assessments 631
 - Exit Tickets 631 • Journals 631 • Involving Students in Assessments 631
- Authentic Assessments: Portfolios and Exhibitions 632
 - Portfolios 634 • Exhibitions 634
- Evaluating Portfolios and Performances 634
 - Scoring Rubrics 634
- GUIDELINES: Creating Portfolios 636**
- GUIDELINES: Developing a Rubric 637**
 - Reliability, Validity, Generalizability 637 • Diversity and Bias in Performance Assessment 637
- Assessing Complex Thinking 638
- Classroom Assessment: Lessons for Teachers 638

Grading 638

- Norm-Referenced versus Criterion-Referenced Grading 639
- Effects of Grading on Students 641
 - The Value of Failing? 641 • Retention in Grade 641
- Grades and Motivation 641
- POINT/COUNTERPOINT: Should Children Be Held Back? 642**
- Beyond Grading: Communicating with Families 643

Standardized Testing 643

- Types of Scores 643
 - Measurements of Central Tendency and Standard Deviation 643
- GUIDELINES: Using Any Grading System 644**
 - The Normal Distribution 646 • Percentile Rank Scores 646 • Grade-Equivalent Scores 647 • Standard Scores 647
- Interpreting Standardized Test Reports 648
 - Discussing Test Results with Families 650
- Accountability and High-Stakes Testing 650
- FAMILY AND COMMUNITY PARTNERSHIPS: Conferences and Explaining Test Results 651**
 - Making Decisions 652 • What Do Teachers Think? 652 • Documented Problems with High-Stakes Testing 652
- New Directions: PARCC and SBAC 653
 - In Sum: Using High-Stakes Testing Well 653
- GUIDELINES: Preparing Yourself and Your Students for Testing 654**
- Reaching Every Student: Helping Students with Disabilities Prepare for High-Stakes Tests 655
- Teacher Accountability and Evaluation 656
 - Value-Added Measures 656
- Quality Standardized Assessment: Lessons for Teachers 656
- Summary and Key Terms 657**
- Practice Using What You Have Learned 659**
- Connect and Extend to Licensure 660**
- Teachers' Casebook—Giving Meaningful Grades: What Would They Do? 661**

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?

Leaving No Student Behind	30
Leaving No Student Behind	57
Symbols and Cymbals	58
Symbols and Cymbals	99
Mean Girls	100
Mean Girls	147
Including Every Student	148
Including Every Student	203
Cultures Clash in the Classroom	204
Cultures Clash in the Classroom	243
White Girls Club	244
White Girls Club	287
Sick of Class	288
Sick of Class	324
Remembering the Basics	326
Remembering the Basics	364
Uncritical Thinking	366
Uncritical Thinking	406
Learning to Cooperate	408
Learning to Cooperate	451
Failure to Self-Regulate	452
Failure to Self-Regulate	487
Motivating Students When Resources Are Thin	488
Motivating Students When Resources Are Thin	533
Bullies and Victims	534
Bullies and Victims	577
Reaching and Teaching Every Student	578
Reaching and Teaching Every Student	617
Giving Meaningful Grades	618
Giving Meaningful Grades	661

GUIDELINES

Family and Community Partnerships—Helping Families Care for Preoperational Children	78
Teaching the Concrete-Operational Child	80

Helping Students to Use Formal Operations	82
Applying Vygotsky's Ideas in Teaching	95
Dealing with Physical Differences in the Classroom	104
Supporting Positive Body Images in Adolescents	108
Family and Community Partnerships—Connecting with Families	112
Helping Children of Divorce	114
Dealing with Aggression and Encouraging Cooperation	119
Encouraging Initiative and Industry	126
Supporting Identity Formation	129
Interpreting IQ Scores	159
Applying and Encouraging Creativity	166
Family and Community Partnerships—Productive Conferences	172
Disciplining Students with Emotional Problems	183
Teaching Students with Intellectual Disabilities	187
Supporting Language and Promoting Literacy	214
Promoting Language Learning	220
Providing Emotional Support and Increasing Self-Esteem for Students Who Are ELLs	227
Family and Community Partnerships—Welcoming all Families	229
Teaching Students Who Live in Poverty	256
Avoiding Gender Bias in Teaching	274
Culturally Relevant Teaching	283
Applying Classical Conditioning	294
Applying Operant Conditioning: Using Praise Appropriately	302
Applying Operant Conditioning: Encouraging Positive Behaviors	304
Applying Operant Conditioning: Using Punishment	310
Family and Community Partnerships—Applying Operant Conditioning: Student Self-Management	316
Gaining and Maintaining Attention	336
Family and Community Partnerships—Organizing Learning	353
Helping Students Understand and Remember	360
Applying Problem Solving	389

Becoming an Expert Student 391

Family and Community Partnerships—Promoting Transfer 400

Facilitating Deep Questioning 420

Using Cooperative Learning 436

Using Computers 443

Supporting the Development of Media Literacy 445

Using Observational Learning 461

Encouraging Self-Efficacy 465

Encouraging Emotional Self-Regulation 479

Supporting Self-Determination and Autonomy 497

Encouraging Self-Worth 510

Building on Students' Interests and Curiosity 513

Coping with Anxiety 518

Family and Community Partnerships—Motivation to Learn 528

Establishing Class Routines 543

Designing Learning Spaces 548

Keeping Students Engaged 551

Creating Caring Relationships 556

Imposing Penalties 558

Handling Potentially Explosive Situations 565

Family and Community Partnerships—Classroom Management 573

Using Learning Targets 590

Effective Direct Instruction 594

Family and Community Partnerships—Homework 597

Productive Group Discussions 602

Using Flexible Grouping 605

Avoiding the Negative Effects of Teacher Expectations 612

Writing Multiple-Choice Items 629

Creating Portfolios 636

Developing a Rubric 637

Using Any Grading System 644

Family and Community Partnerships—Conferences and Explaining Test Results 651

Preparing Yourself and Your Students for Testing 654

POINT/COUNTERPOINT

What Kind of Research Should Guide Education? 48

Brain-Based Education 70

What Should Schools Do to Encourage Students' Self-Esteem? 135

Pills or Skills for Children with ADHD? 179

What Is the Best Way to Teach Students Who Are ELLs? 231

Should Girls and Boys Be Taught Differently? 272

Should Students Be Rewarded for Learning? 318

What's Wrong with Multitasking? 335

Should Schools Teach Critical Thinking and Problem Solving? 395

Are Inquiry and Problem-Based Learning Effective Teaching Approaches? 424

Are "Grittier" Students More Successful? 470

Does Making Learning Fun Make for Good Learning? 512

Is Zero Tolerance a Good Idea? 560

Are the Common Core Standards a Valuable Guide for Teaching? 586

Should Children Be Held Back? 642

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chapter one

LEARNING, TEACHING, AND EDUCATIONAL PSYCHOLOGY

WHAT WOULD YOU DO?

▶ **TEACHERS' CASEBOOK:** Leaving No Student Behind

It is your second year as a teacher in the Lincoln East school district. Over the last 4 years, the number of students from immigrant families has increased dramatically in your school. In your class, you have two students who speak Somali, one Hmong, one Farsi, and four Spanish speakers. Some of them know a little English, but many have very few words other than "OK." If there had been more students from each of the language groups, the district would have given your school additional resources and special programs in each language, providing you extra help, but there are not quite enough students speaking most of the languages to meet the requirements. In addition, you have several students with special needs; learning disabilities, particularly problems in reading, seem to be the most common. Your state and district require you to prepare *all* your students for the achievement tests in the spring, and the national emphasis is on readiness for college and career by the end of high school—for *everyone*. Your only possible extra resource is a student intern from the local college.

CRITICAL THINKING

- What would you do to help all your students to progress and prepare for the achievement tests?
- How would you make use of the intern so that both she and your students learn?
- How could you involve the families of your non-English-speaking students and students with learning disabilities to support their children's learning?