Ed Psych Modules

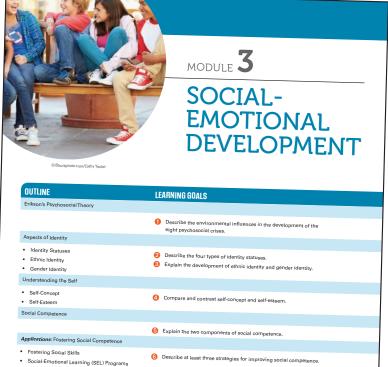
Cheryl Cisero Durwin | Marla Reese-Weber



CONTEMPORARY. CURRENT. COMPLETE.

Stand-alone modules offer **flexibility** for instructors and **accessibility** for students.

Concrete **examples and pedagogy** throughout each module provide frequent opportunities for self-reflection and application.



APPLICATIONS: ADVANCING MORAL DEVELOPMENT

Explain how families, peers, and schools contribute to the moral development of children and adolescents.

We've made a fast and furious survey of the theories of moral development. You may have noticed that some of these theories overlap, despite using different terminology (see Table 4.2 for a developmental comparison of theories). Many aspects of these theories have been studied in the contexts of family, peers, and schools to provide suggestions on how to advance moral development among children and adolescents (Eisenberg et al., 2009).

Family Context

Although parents begin as external authority figures who provide consequences, the norms for behavior become the child's own moral code as they outgrow the need for external consequences (Dunn, 2014; Hoffman, 2000). More specifically, maternal support and responsiveness are related to empathy and prosocial behavior in children (Malti, Eisenberg, Kim, & Buchman, 2013). The children of parents who use consistent discipline that includes providing reasons for misbehavior and suggesting appropriate alternatives



Gender Differences in Motivation, Gender differences in competence beliefs are more pronounced in genderstereotyped domains for boys and girls (e.g., sports for boys and reading for girls).

\ DIVERSITY

math as less useful for future goals (Frenzel, Pekrun, & Goetz, 2007; Gaspard et al., 2015; Steinmayr & Spinath, 2010). Despite their lower utility value for math, adolescent girls seem to have higher attainment value in the subject compared to boys (Gaspard et al., 2015). Girls consider it important to perform well in math classes even if they don't consider math to be important for their future. However, girls 'value for math appears to be a double-edged sword because they also perceive math to have a higher cost compared to boys. They report more anxiety and hopelessness in math and feel that math requires more effort compared to that made by boys (Frenzel et al., 2007; Gaspard et al., 2015). In elementary school, girls also begin to develop an entity belief about their ability in general (Dweck, 2000, 2002). Compared to boys: "The students like the text because the modules are concise and give concrete examples to guide them in learning about applying theory into practice. The language is clear and the material is explained in a reader-friendly manner."

-Deborah A. Scigliano, Duquesne University

"I really liked the way the module was set up with small vignettes and then practical application. ... Performance-based assessment is where teacher certification seems to be headed and we need to create textbooks that allow students to use real-world application linking it to theory. "

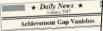
-Cynthia Erickson, University of Mobile

2

MIDDLE SCHOOL: ACHIEVEMENT GAP

DREPARE:

- As you read the case, make notes:
- 1. WHO are the central characters in the case? Describe them
- 2. WHAT is taking place? 3. WHERE is the case taking place? Is the environment a factor?
- 4. WHEN is the case taking place? Is the timing a factor?



Jarrod and Tamara Patterson met dur ing college and are both teachers in the Chicago area. They live in the subtract Tamara completed her student teach-ing at an inner-city school. She wanted to continue in a similar school district, so she takes the train into the city each day history in a public middle school.

Over the years, Jarrod and Tamara have had a number of arguments about educat Over the years, Jarrod and Tamara have had a number of arguments about educatio their disagreements stem from the developmental differences in their students-works with younger students—but their livelised stagreements involve the difference suburban and urban classrooms. Ninety percent of Tamara's students are African An live in households where the median annual income is around \$33,000. In confit Jarrod's students are White, 9% are Latino, 9% are Hispanic, and only 3% are Africa The median annual income for households in Jarrod's school district is \$33,000.

As they begin their drive into the city to run errands on Saturday morning. Tar As they begin their drive into the city to run errands on Saturday morning. Tar Jarrod that she needs to stop by her classroom to pick up some papers. She yesterday and needs to finish grading them before Monday morning. Ja respond—he has taken the opportunity to read the newspaper while Tamard or "Listen to this," he begins. "A new study examined the 'achievement gap'user to tits, ne users. A new study examined the "achevement gp-idea that African Americans perform more poorly compared to Whites. Says I researchers found that the differences in achievement levels between African Whites no longer exist."

Tamara responds skeptically, "How did they determine that?"

"Well, it says that the researchers found no differences in the GPAs of stude ethnic backgrounds, including African American and White s Tamara pushes the issue. "Who were the students? How did they get in GPA? Did they use the official records?"

Jarrod replies, "It doesn't give that many details."

Jarroo repres, it obesit give that many userses. As they pull into the school parking lot, Tamara announces, "The newspu-those statements without supplying more details." She grabs the Jarrod's hands and says, "Come on. While we are inside getting my pap bly find more information about the study on the web."

"Do we have to do this today?" moans Jarrod, wishing he had kept his mouth shut "Yes," replies Tamara.

As they enter Tamara's classroom, Jarrod says, "I still can't get over how old everything seems in the building. When are they going to update the decor, not to mention your textbooks?"

Tamara ignores his comment. She turns on the only computer in the room and retrieves her papers while she waits for the computer to get up and running. Then she launches her internet browser and begins to alphabetize her papers, because she knows it will take several minutes before the computer is ready. Jarrod waits impatiently. "How long is this going to take?"

"Well, if we had new computers with wireless Internet connections like at your school, we'd be out of here by now. But I don't have those perks, so just give me a couple of minutes."

Tamara uses the researchers' names from the newspaper article to find the original study online. "Good, it was published early this year." she says, and sends the print job to the printer in the main office. "Come on. I'll grab the printout. I can read while you drive us."

As they walk to the office, Tamara can't help herself. "I suppose you have your own printer in your class-room and don't have to walk to the main office all the time." "As a matter of fact, I do," replies Jarrod. "You know you could get a job in my school district anytime. Remember, you chose to work here. Don't give me a hard time because I chose not to."

As they drive to their next stop, Tamara begins to read and launches into a tirade: "Well, they used col-lege students, not K-12 students. Oh, can you believe this? They didn't even use official records to find GPAs. They simply asked students to provide their GPA on a survey." "Why do you care so much? It's just one newspaper article in the back of the paper, " replies Jarrod.

Tamara continues her tirade. "Because parents and most other teachers won't take the time to read the Transa continues her trade. "Because parents and most other teachers won't take the time to re actual study and see that the newspaper article is misleading. People won't realize that the achiev gap is still present in K-12 classrooms and will expect all teachers to have students with similar achievement levels. That's unrealistic. If journalists were actually trying to inform the

levels. That's unrealistic. If journalists were actually trying to inform the public—instead of spewing out stories on movie stars in rehab—they would explain why the achievement gap exists. It's not even about ethnic-ity, it's about socioeconomic status." "Maybe you should write a letter to the editor," suggests Jarr "Maybe I will," Tamara says



ASSESS-

- How might the different schools in which Tamara and Jarrod work influence the importance each places on understanding achievement differences?
- Should teachers be concerned with what type of students participate in research studies like the one reported in the newspaper article? Why or why not?
- How would you respond to a parent whose child is not achieving as well as others but who believes that all students should perform equally well?

CASE STUDIES

Case Studies for each unit include all four grade levelsearly childhood, elementary, middle school, and secondary-and related pedagogy facilitates application for practice.

CASE STUDIES: REFLECT AND EVALUATE

EARLY CHILDHOOD: THE WORKSHEETS

These questions refer to the case study on page 268.

- According to self-efficacy theory, what is Melissa's efficacy expectation for completing her schoolwork? How would you characterize Claire's self-efficacy? How would you characterize Martin's self-efficacy?
- Explain why asking a peer to show Melissa how to complete the math sheet might improve her self-efficacy.
- 3. How can Mrs. Garvey improve the self-efficacy of students in her class?
- Based on self-worth theory, which student—Melissa, Martin, or Claire-would be most difficult to moti-vate? Why? Which student would be easiest to motivate? Why?
- 5. Based on the case study, speculate on the degree of Mrs. Garvey's teaching efficacy.

"I especially like that these case studies are realistic enough to create thoughtful discussions that connect to the lives of teachers and students."

-Robert J. Colesante, Siena College

"I like the fact that students can be in one class but enrolled in different education programs because the book includes questions from all three levels, elementary, middle school, and high school." -Donna Farland-Smith, The Ohio State University

ELEMENTARY SCHOOL

MIDDLE SCHOOL

HIGH SCHOO

"This text gives MUCH more attention to culturally responsive pedagogy and diversity than my current text."

> -Dawn N. Hicks Tafari, Winston-Salem State University

Including footage with teachers and students, filmed in real classrooms, video clips are accessible in the interactive eBook and provide a firsthand look at the concepts and strategies presented in the modules.

> Created specifically to support this text, the videos include footage from classrooms representing a range of grade levels.

text to enhance important content with real-life demonstrations and interviews.







All videos are supported by pedagogical aids including follow-up questions to assess understanding and prompt reflection.

VIDEO CASES

Ed Psych Modules

Ed Psych Modules

Cheryl Cisero Durwin

Southern Connecticut State University

Marla Reese-Weber

Illinois State University



Los Angeles | London | New Delhi Singapore | Washington DC | Melbourne



FOR INFORMATION:

SAGE Publications, Inc. 2455 Teller Road Thousand Oaks, California 91320 E-mail: order@sagepub.com

SAGE Publications Ltd. 1 Oliver's Yard 55 City Road London, EC1Y 1SP United Kingdom

SAGE Publications India Pvt. Ltd. B 1/I 1 Mohan Cooperative Industrial Area Mathura Road, New Delhi 110 044 India

SAGE Publications Asia-Pacific Pte. Ltd. 3 Church Street #10-04 Samsung Hub Singapore 049483

Acquisitions Editor: Terri Accomazzo Development Editors: Jessica Miller and Lucy Berbeo eLearning Editor: Allison Hughes Editorial Assistant: Erik Helton Production Editor: Olivia Weber-Stenis Copy Editor: Tina Hardy Typesetter: C&M Digitals (P) Ltd. Proofreader: Ellen Brink Indexer: Sheila Bodell Cover Designer: Scott Van Atta Marketing Manager: Kara Kindstrom Copyright © 2018 by SAGE Publications, Inc.

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

All trademarks depicted within this book, including trademarks appearing as part of a screenshot, figure, or other image, are included solely for the purpose of illustration and are the property of their respective holders. The use of the trademarks in no way indicates any relationship with, or endorsement by, the holders of said trademarks.

Printed in Canada.

ISBN 978-1-5063-1075-6

This book is printed on acid-free paper.

16 17 18 19 20 10 9 8 7 6 5 4 3 2 1

BRIEF CONTENTS

4

INTRODUCTION

MODULE 1: USING SCIENCE TO INFORM CLASSROOM PRACTICES

UNIT 1: PERSONAL DEVELOPMENT

UNIT 1: CASE STUDIES	22
MODULE 2: CONTEXTS OF DEVELOPMENT	30
MODULE 3: SOCIAL-EMOTIONAL DEVELOPMENT	46
MODULE 4: MORAL DEVELOPMENT	66

UNIT 2: THE DEVELOPING LEARNER

UNIT 2: CASE STUDIES	84
MODULE 5: BRAIN DEVELOPMENT	92
MODULE 6: COGNITIVE DEVELOPMENT	112
MODULE 7: LANGUAGE DEVELOPMENT	130

UNIT 3: LEARNING THEORIES

UNIT 3: CASE STUDIES	150
MODULE 8: BEHAVIORAL LEARNING THEORIES	158
MODULE 9: SOCIAL COGNITIVE THEORY	174
MODULE 10: INFORMATION PROCESSING	188

UNIT 4: COGNITIVE PROCESSES

UNIT 4: CASE STUDIES	206
MODULE 11: METACOGNITION	214
MODULE 12: TRANSFER OF SKILLS AND KNOWLEDGE	232
MODULE 13: HIGHER ORDER THINKING	250

UNIT 5: MOTIVATION

UNIT 5: CASE STUDIES	268
MODULE 14: BEHAVIORAL THEORY	276
MODULE 15: COGNITIVE THEORIES	292
MODULE 16: SELF THEORIES	314

UNIT 6: CLASSROOM MANAGEMENT AND INSTRUCTION

UNIT 6: CASE STUDIES	336
MODULE 17: CLASSROOM MANAGEMENT	344
MODULE 18: INSTRUCTION: APPLYING	
BEHAVIORAL, COGNITIVE, AND	
CONSTRUCTIVIST APPROACHES	366
MODULE 19: GROUPING PRACTICES	384

UNIT 7: LEARNER DIFFERENCES

UNIT 7: CASE STUDIES	404
MODULE 20: INTELLIGENCE AND GIFTEDNESS	412
MODULE 21: COGNITIVE DISABILITIES	438
MODULE 22: EMOTIONAL, SOCIAL, AND	
BEHAVIORAL DISORDERS	462

UNIT 8: ASSESSMENT

UNIT 8: CASE STUDIES	482
MODULE 23: ASSESSING STUDENT LEARNING	490
MODULE 24: TEST CONSTRUCTION AND USE	512
MODULE 25: STANDARDIZED TESTS	
AND SCORES	534

DETAILED CONTENTS

Preface	xvii
Acknowledgments	xix
Digital Resources	XX
About the Authors	xxi

INTRODUCTION

CASE STUDY	2
MODULE 1: USING SCIENCE TO INFORM CLASSROOM PRACTICES	4
Outline and Learning Goals	4
Educational Psychology: A Resource for Teachers	5
Educational Psychology: The Science	6
Research Designs	7
Samples	9
Measures	10
Educational Psychology: Classroom Practices	11
Best Practices	11
Addressing Diversity	12
Using a Case Study Approach	16
Summary	18
Key Concepts	18
Case Study: Reflect and Evaluate	18

UNIT 1: PERSONAL DEVELOPMENT

22

 MODULE 2: CONTEXTS OF DEVELOPMENT
 Outline and Learning Goals
 Bronfenbrenner's Bioecological Theory
 30

UNIT 1: CASE STUDIES

Family Context	32
Parenting Practices	32
Divorce and Remarriage	34
Peer Context	36
Friendships and Peer Groups	36
Peer Statuses	38
Broader Contexts	40
Parental Employment	41
Cultural Factors	42
Summary	44
Key Concepts	44
Case Studies: Reflect and Evaluate	44
MODULE 3: SOCIAL-EMOTIONAL	
DEVELOPMENT	46
Outline and Learning Goals	46
Erikson's Psychosocial Theory	46
Aspects of Identity	51
Identity Statuses	51
Ethnic Identity	51
Gender Identity	53
Understanding the Self	55
Self-Concept	56
Self-Esteem	57
Social Competence	58
Applications: Fostering	
Social Competence	61
Fostering Social Skills	61
Social-Emotional Learning (SEL) Programs	62
Summary	63
Key Concepts	63
Case Studies: Reflect and Evaluate	64
MODULE 4: MORAL DEVELOPMENT	66
Outline and Learning Goals	66
Cognitive-Developmental Moral Reasoning	66

Piaget's Theory	67
Kohlberg's Theory	67
Gilligan's Criticism	69
Prosocial Behavior	70
Eisenberg's Theory	70
Perspective Taking	71
Empathy	72
Aggressive Behavior	73
Social-Cognitive Domains	74
Social-Information Processing	74
Applications: Advancing	
Moral Development	76
Family Context	76
Peer Context	77
School Context	78
Summary	80
Key Concepts	80
Case Studies: Reflect and Evaluate	80

UNIT 2: THE DEVELOPING LEARNER

UNIT: CASE STUDIES	84
MODULE 5: BRAIN	
DEVELOPMENT	92
Outline and Learning Goals	92
Influence of Neuroscience on Education	92
Neuroscience 101	93
Brain Structures and Functions	93
Factors Affecting Brain Development	97
Brain Mechanisms During Learning	98
Executive Functioning	99
Reading	102
Math	105
Applications: How Neuroscience	
Informs Best Practices	106
Summary	108
Key Concepts	109
Case Studies: Reflect and Evaluate	110

MODULE 6: COGNITIVE
DEVELOPMENT

Outline and Learning Goals	112
Constructivist Theories of	
Cognitive Development	112
Individual and Social Constructivis	sm 113
Piaget's Theory	113
Vygotsky's Theory	120
Issues in Cognitive Development: Piaget and Vygotsky	121
What Comes First: Development o Learning?	r 121
Role of Language in Cognitive Development	122
Role of Play in Cognitive Developm	ent 123
Applications: Constructivist Principles for Effective Teaching	124
Summary	126
Key Concepts	127
Case Studies: Reflect and Evaluate	127
MODULE 7: LANGUAGE	
DEVELOPMENT	130
Outline and Learning Goals	130
Understanding Language Acquisition	130
Biological Basis of Language	131
Imitation and Reinforcement	131
Social Interactions	132
Development of Language Skills	133
Language Acquisition Through Early Childhood	133
Language Acquisition Through Adolescence	136
Bilingual Language Acquisition	138
Individual Differences in Language	
Acquisition	e 140
Acquisition <i>Applications:</i> Encouraging Language Development in the Classroom	
Applications: Encouraging Language	140
<i>Applications:</i> Encouraging Language Development in the Classroom	140 142

UNIT 3: LEARNING THEORIES

UNIT 3: CASE STUDIES150MODULE 8: BEHAVIORAL
LEARNING THEORIES158

Outline and Learning Goals	158
Assumptions of Behavioral	
Learning Theories	158
Classical Conditioning	159
Operant Conditioning	162
Basic Tenets of the Theory	162
Using Consequences Effectively	164
Applications: Applied Behavior Analysis	168
Strategies for Increasing Appropriate Behaviors	168
Strategies for Decreasing Inappropriate Behaviors	170
	170
Summary	172
Key Concepts	
Case Studies: Reflect and Evaluate	172
MODULE 9: SOCIAL	
COGNITIVE THEORY	174
Outline and Learning Goals	174
Assumptions of Social Cognitive Theory	174
Observational Learning	176
Model Characteristics	176
Imitator Characteristics	177
Environmental Characteristics	178
Personal Factors in Learning	179
Self-Efficacy	180
Self-Regulation	182
<i>Applications:</i> Improving Students' Self-Efficacy and Self-Regulation	184
Summary	185
Key Concepts	185
Case Studies: Reflect and Evaluate	186
MODULE 10: INFORMATION	
PROCESSING	188
Outline and Learning Goals	188
Assumptions of the Information	
Processing Approach	188
Perception and Attention	189
Memory	192
Encoding, Storage, and Retrieval	192
Sensory Memory	193
Working (Short-Term) Memory	193
Long-Term Memory	195

Applications: Teaching Effective

198
198
199
201
201
202

UNIT 4: COGNITIVE PROCESSES

UNIT 4 CASE STUDIES		206
	MODULE 11: METACOGNITION	214
	Outline and Learning Goals	214
	What Is Metacognition and Why Is It Important?	214
	Special Cases of Metacognition	216
	Theory of Mind in Childhood	217
	Egocentrism in Adolescence	218
	Factors Affecting the Development and Use of Metacognition	220
	Applications: Learning Strategies	221
	Reading Comprehension	221
	Writing Skills	224
	Note Taking	225
	Studying	227
	Summary	229
	Key Concepts	230
	Case Studies: Reflect and Evaluate	230
	MODULE 12: TRANSFER OF	
	SKILLS AND KNOWLEDGE	232
	Outline and Learning Goals	232
	What Is Transfer and Why Is It Important?	232
	Specific Versus General Transfer	233
	Low-Road Versus High-Road Transfer	233
	Do We Readily Transfer What We Learn?	234
	The Success of Low-Road Transfer	235
	The Problem of High-Road Transfer	236

<i>Applications:</i> How to Facilitate Transfer
Develop Automaticity of Skills
Promote Meaningful Learning
Teach Metacognitive Strategies
Motivate Students to Value Learning
Summary
Key Concepts
Case Studies: Reflect and Evaluate

MODULE 13: HIGHER ORDER	
THINKING	250
Outline and Learning Goals	250
What Is Higher Order Thinking and Why Is It Important?	250
Critical Thinking	252
What Is Critical Thinking?	252
Applications: Fostering Critical Thinking	254
Problem Solving	255
What Is Problem Solving?	255
Applications: Fostering Problem-Solving Strategies	258
Creativity	260
What Is Creativity?	260
Applications: Fostering Creativity	262
Summary	263
Key Concepts	264
Case Studies: Reflect and Evaluate	264

UNIT 5: MOTIVATION

UNIT 5: CASE STUDIES	268
MODULE 14: BEHAVIORAL THEORY	276
Outline and Learning Goals	276
A Developmental View of Motivation Defining Intrinsic and Extrinsic	277
Motivation	277
Factors Influencing Intrinsic and Extrinsic Motivation	277
Rewarding Students for Learning	279

Task-Contingent and Performance-	
Contingent Rewards	280
Applications: Using Rewards	
Effectively	281
Praising Students for Learning	282
Process, Performance, and	
Person Praise	283
Applications: Using Praise Effectively	284
When the Reward Is the Activity Itself	286
Flow Theory	286
Applications: Creating an	
Intrinsically Motivating	
Learning Environment	287
Summary	289
Key Concepts	290
Case Studies: Reflect and Evaluate	290
_	
MODULE 15: COGNITIVE	
THEORIES	292
Outline and Learning Goals	292
Cognitive Theories of Motivation	292
Expectancy-Value Theory	293
Goal Theory	294
Attribution Theory	296
Developmental and Cultural	
Differences in Motivation	299
Developmental Changes in	
Motivation	300
Serious Motivational Problems	305
Learned Helplessness	305
Anxiety	306
Applications: Enhancing	
Students' Motivation	308
Student-Level Techniques	308
Classroom-Level Techniques	309
Summary	311
Key Concepts	311
Case Studies: Reflect and Evaluate	312
MODULE 16: SELF THEORIES	314
Outline and Learning Goals	314
Self-Efficacy Theory	315
Self-Efficacy and Motivation	315
Teacher Efficacy	318

Self-Worth Theory	320
Self-Worth and Motivation	320
Types of Students	320
Self-Determination Theory	323
Self-Determination and Motivation	325
Becoming Self-Determined	325
Integrating the Self Theories	328
Self Theories Compared	328
Applications: Fostering Self-Efficacy, Self-Worth, and	
Self-Determination	329
Summary	331
Key Concepts	332
Case Studies: Reflect and Evaluate	332

UNIT 6: CLASSROOM MANAGEMENT AND INSTRUCTION

UNIT 6: CASE STUDIES	336
MODULE 17: CLASSROOM MANAGEMENT	344
Outline and Learning Goals	344
Importance of Classroom Management	344
Preparing for the First Day	345
Establishing Rules and Procedures	347
Time Management	349
Increasing Academic Learning Time	349
Increasing Student Engagement	351
Relationship Building	352
Teacher-Student Relationships	353
Parental Involvement	354
Applications: Addressing	
Discipline Problems	357
Providing Consequences	357
Bullying	360
Summary	363
Key Concepts	363
Case Studies: Reflect and Evaluate	363

MODULE 18: INSTRUCTION:	
APPLYING BEHAVIORAL, COGNITI	VE,
AND CONSTRUCTIVIST	
APPROACHES	366
Outline and Learning Goals	366
Meeting the Needs of Diverse Learners	368
Teaching Methods Based on Behaviorism	369
Direct Instruction	369
Mastery Learning	371
Teaching Methods Based on Cognitive Learning Theory	372
Discovery Learning and Guided Discovery	373
Expository Teaching	373
Teaching Methods Based on Constructivism	374
Inquiry Learning	375
Cooperative Learning	376
Methods of Fostering	
Comprehension	377
Summary	381
Key Concepts	381
Case Studies: Reflect and Evaluate	381
MODULE 19: GROUPING	
PRACTICES	384
Outline and Learning Goals	384
Grouping by Ability	385
Within-Class Ability Grouping	386

Grouping by Ability	385
Within-Class Ability Grouping	386
Between-Class Ability Grouping	387
Flexible Grouping Methods	389
Cooperative Learning	390
Characteristics of Cooperative Learning	390
Effectiveness of Cooperative Learning	392
Applications: Best Practices	394
Elementary School: Using Within-Class Ability Grouping Effectively	394
Middle School and High School: To Track or Not to Track	395
Using Cooperative Learning Effectively	397

Summary	399
Key Concepts	400
Case Studies: Reflect and Evaluate	400

UNIT 7: LEARNER DIFFERENCES

UNIT 7: CASE STUDIES	404
MODULE 20: INTELLIGENCE	
AND GIFTEDNESS	412
Outline and Learning Goals	412
Intelligence and Giftedness: More	44.0
Than "Being Smart"	412
Theories of Intelligence	413
Theories of Giftedness	417
Assessing Intelligence and Giftedness	419
Intelligence Measured as IQ	419
Interpreting IQ Scores	420
Assessing Giftedness	422
Biological, Social, and Cultural Issues	424
Heredity or Environment?	424
Socioeconomic and Cultural Factors	425
Applications: Intelligence and Giftedness in the Classroom	429
Teaching for Multiple	
Intelligences	429
Teaching for Successful Intelligence	430
Teaching Students Who Are Gifted	432
Summary	434
Key Concepts	434
<i>Case Studies: Reflect and Evaluate</i>	435

MODULE 21: COGNITIVE DISABILITIES

Outline and Learning Goals
Cognitive Disabilities in Today's Classrooms
Special Education Referral and Eligibility

Planning and Placement	440
Intellectual Disabilities	441
Identification of Intellectual Disabilities	442
Applications: Guidelines for Teachers in the General Education Classroom	443
Specific Learning Disabilities	445
Identification of Specific Learning Disabilities	445
Reading Disability	450
Mathematics Disability	453
Summary	458
Key Concepts	458
Case Studies: Reflect and Evaluate	459
MODULE 22: EMOTIONAL,	
SOCIAL, AND BEHAVIORAL	
DISORDERS	462
Outline and Learning Goals	462
Emotional, Social, and Behavioral Disorders in Today's Classrooms	462
Special Education Referral and Eligibility	464
Planning and Placement	465
Characteristics of Disorders	466
Anxiety and Depression	467
ADHD and Conduct Disorder	469
Autism Spectrum Disorders	473
Applications: Interventions	475
Types of Interventions	475
Effectiveness of Interventions	476
Summary	477
Key Concepts	478
<i>Case Studies: Reflect and Evaluate</i>	478

UNIT 8: ASSESSMENT

438	UNIT 8: CASE STUDIES	482
438	MODULE 23: ASSESSING	
438	STUDENT LEARNING	490
	Outline and Learning Goals	490
440	What is Assessment?	490

Purposes of Assessment in Education	491
Types of Assessments	492
Planning Assessments	493
Choice of Assessments	493
Objective and Performance	
Assessments	494
Evaluating Student Performance	496
Procedures for Performance Assessments	497
Grading Procedures	500
Communicating Assessment	
Information	504
Report Cards	504
Parent-Teacher Communication	505
Applications: Implementing Valid and	
Meaningful Assessments	507
Summary	509
Key Concepts	510
Case Studies: Reflect and Evaluate	510
MODULE 24: TEST	
CONSTRUCTION AND USE	
Outline and Learning Goals	512
Characteristics of High-Quality	
Classroom Tests	512
Validity	513
Reliability	514
Fairness and Practicality	514
Test Preparation	515
Developing a Test Blueprint	515
Creating Selected-Response Items	517
Creating Constructed-Response Items	522
Applications: Improving Your Test	526

erea interprise interp	• • •	
Creating Constructed-Response Items	522	
<i>lications:</i> Improving Your Test	526	
Test Administration Considerations	526	
Item and Distractor Analyses	527	

Summary	530
Key Concepts	531
Case Studies: Reflect and Evaluate	531
MODULE 25: STANDARDIZED	
TESTS AND SCORES	
Outline and Learning Goals	534
Types of Standardized Tests	534
Categories of Standardized Tests	536
Criterion-Referenced and Norm-Referenced Tests	537
Understanding Test Scores	538
Central Tendency and Variability	540
Normal Distribution	541
Types of Test Scores	542
Characteristics of Good Tests	545
Validity	546
Reliability	548
Applications: Accommodating Students at Risk	550
Summary	553
Key Concepts	554
Case Studies: Reflect and Evaluate	554
How Does <i>EdPsych</i> Help You	
Prepare for the Praxis Exam?	556
Glossary	562
References	578
Index	646

PREFACE

eaching is about making instructional decisions. To be highly effective, teachers need to understand the science underlying all aspects of education and know how to apply concepts, principles, and conclusions from educational and psychological theories and research to particular situations they encounter. Students in education certification programs are often taught the "what" and the "how" of teaching. For example, they may be taught what to do when students are fighting or how to develop and deliver a lesson. Educational psychology is about the why. For example, why are teacher education students told to use a particular conflict resolution strategy or a particular teaching method in a certain situation? The effectiveness of these approaches can be determined only by evaluating what we know from psychological research. Teachers need to understand why particular approaches, strategies, and methods work under various circumstances to make effective decisions. We wrote this book to help students of educational psychology learn how to make better instructional decisions. This third edition of EdPsych Modules helps students to

- Understand the importance of learning evidence-based, best practices that guide how they will make informed decisions,
- Apply educational psychology theory and research findings to diverse instructional situations, and
- Understand student differences and learn ways to adapt instruction to individual student needs.

OUR APPROACH FLEXIBLE: A book that adapts to your course.

• *EdPsych Modules* is the first and only text written with a modular approach rather than modified from a conventional chapter text. This intentionally designed format allows you flexibility in preparing and teaching your course. Our modules are succinct (about half the length of a typical chapter), stand-alone topics that represent every subject found in a traditional chapter textbook. The modules are organized into themed units that correspond to chapters found in conventional textbooks. With this modular approach, instructors can arrange the topics in any order, and even skip entire modules or units if they choose.

• Our inclusion of case studies that span K-12 grade levels also allows you flexibility in designing your course. Each unit begins with four full-length case studies, one from each certification level: early childhood, elementary, middle school, and high school. Instructors can choose one particular educational level (only early childhood), several (elementary and high school), all levels, or may choose to skip the cases altogether.

Our stand-alone modules and cases allow you to tailor content to your particular course and student audience.

APPLIED: Opportunities for practical application of theories and concepts

In each module, our coverage of educational psychology theories and concepts includes examples that illustrate application and critical thinking about individual differences and instructional contexts.

- In every module, **Applications** sections help students tie theory and research to educational practice. Coverage is focused on evidence-based teaching methods and principles that are linked to research.
- Case studies 33 in all provide opportunities for students to apply theories and concepts. Our case studies are rich, detailed glimpses into classroom and school settings. Each unit begins with four case studies: early childhood, elementary school, middle school, and high school that are relevant to all modules in that unit.
 - At the end of each case study ASSESS questions prompt students to assess their existing knowledge and to identify assumptions, preconceptions, and personal beliefs prior to reading a particular module.

- Each module ends with REFLECT AND EVALUATE questions based on the case studies at the beginning of each unit. These questions encourage students to check their comprehension of important concepts, to apply what they have learned about the research presented in the modules, and to evaluate the situations and instructional decisions presented in the case.
- Our developmental approach of presenting cases at various certification levels enables students to meaningfully apply the concepts they are learning to the grade levels they intend to teach. Whether you use the cases studies out of class as homework or writing assignments or for in-class discussions, students will have the opportunity to practice applying what they've learned.

EXTENSIVE COVERAGE Balance of classical and contemporary topics

We present research on traditional topics, such as cognitive development, learning, information-processing, and motivation, as well as more contemporary educational topics such as the role of the brain in learning, social-emotional learning, differentiated instruction, response-to-intervention, and underserved populations.

Depth of coverage

The scope of each module provides a deeper examination of core topics than the survey approach in traditional chapter textbooks. For example, while typical chapter textbooks combine behavioral and social cognitive learning theories into a single chapter, we treat each of these topics as separate modules to allow more meaningful discussion of the theory, research, and practice. We also offer more in-depth coverage of topics that may be only minimally covered in chapter textbooks such as constructivist teaching approaches, intelligence, grouping practices, and metacognition.

Integrated issues of diversity

Our book treats diversity—characteristics such as ethnicity, race, socioeconomic status, gender, and disabilities—not as a separate topic but as a facet of most instructional situations.



A marginal icon (see at left) indicates where pertinent coverage of diversity appears in the modules. We have chosen to emphasize information as a diversity issue only if it is supported by sufficient research or theoretically relevant. Within the modules, we integrate diversity by covering research findings that

- indicate important similarities or differences among individuals of various diversity groups on psychological constructs such as intelligence, motivation, or language;
- reveal differences among individuals of various groups in values, practices, or social interactions;
- suggest differential responses to treatments, interventions, or teaching methods for individuals of varying diversity groups; and
- highlight differential treatment of individuals from various diversity groups within the classroom.

These findings are relevant because they provide essential information to help teachers make informed decisions that affect the success and well-being of their students.

You will also find diversity in the case studies. We include students and teachers of diverse backgrounds in the case studies, and where appropriate, we present Reflect and Evaluate questions at the end of the modules that probe students to re-evaluate their personal beliefs or assumptions about diversity.

NEW IN THIS EDITION

The third edition provides instructors and students with the same content as our previous edition in a more streamlined presentation. Our original motivation for writing a truly modular textbook was to ensure that our students actually read the pages that instructors assigned. Therefore, our intent has always been to provide students with an up-to-date treatment of theory and research on topics in a brief and easy-to-digest format. In our streamlined third edition, we have condensed 30 modules into 25 modules and have reduced the number of themed units from nine to eight. These changes include

- efficiently combining modules on "Social Development" and "Emotional Development" into one module called *Social-Emotional Development*;
- writing an entirely new module on *Brain Development* with updated research to replace the previous module called "The Brain and Development";
- writing an entirely new module on *Information Processing* with updated research;



- moving the topic of creativity with topics on critical thinking and problem solving to create a new module called *Higher-Order Thinking*, which replaces the old module called "Critical Thinking and Problem Solving;"
- creating a new module called *Classroom Management*, which covers many of the topics in the previous modules on "Creating a Productive Learning Environment" and "Understanding and Managing Student Behavior";
- combining topics on *Intelligence and Giftedness* into one module
- incorporating topics from the module on "Performance Assessment" into the module on *Assessing Student Learning*; which is also a newly written module, and
- incorporating topics from the module on "Issues in Standardized Testing" into the module on *Standardized Tests and Scores*, and moving this module to Unit 8 on Assessment, eliminating the need for a separate Unit 9 covering standardized testing.

Our third edition also features newly written case studies for Units 4, 6, and 8. These case studies provide a fresh new glimpse into classrooms that reflect the changes to modules within these units that we describe above. As in the previous editions of our textbook, the case studies are written based on real-life classroom situations.

In addition to these primary changes, we have ensured that all of our modules contain the most up-to-date research. We have included new research citations and have expanded our coverage of diversity throughout the book.

ACKNOWLEDGMENTS

The publisher and authors gratefully acknowledge the contributions of the following reviewers:

James A. Bernauer, Robert Morris University Agnes Cave, The Catholic University of America Robert Colesante, Siena College Patricia Corbett, Great Bay Community College Michael G. Curran Jr., Rider University Jeff W. Dennis, Southwestern Michigan College Maryann Dudzinski, Valparaiso University Stella Erbes, Pepperdine University Cynthia Erickson, University of Mobile Donna Farland-Smith, The Ohio State University Joseph D. Green, Pepperdine University Alishia Huntoon, Oregon Institute of Technology Miriam Lipsky, University of Miami Christine Purkiss, Angelo State University Martha Ravola, Alcorn State University Deborah A. Scigliano, Duquesne University Michael F. Shaughnessy, Eastern New Mexico University Pam Tabor, Miami Dade College Dawn N. Hicks Tafari, Winston-Salem State University Katie Tuohey, Ursuline College Kathy Vespia, Salve Regina University

Lois J. Willoughby, Miami Dade College–Kendall

xix

DIGITAL RESOURCES

SAGE coursepacks

SAGE coursepacks for Instructors makes it easy to import our quality content into your school's LMS (Blackboard, Canvas, Brightspace by Desire2Learn (D2L), and Moodle). **Don't use an LMS platform?** No problem, you can still access many of the online resources for your text via SAGE edge.

SAGE coursepacks offers:

- Intuitive, simple format that makes it easy to integrate the material into your course with minimal effort-
- Pedagogically robust assessment tools including test banks and quizzing/activity options that foster review, practice, and critical thinking, and offer a more complete way to measure student engagement.
- Chapter-specific discussion questions to help launch engaging classroom interaction while reinforcing important content
- Assignable SAGE Premium Video (available via the interactive eBook version, linked through SAGE coursepacks) that is tied to learning objectives, and curated and produced exclusively for this text to bring concepts to life and appeal to different learning styles
- EXCLUSIVE, influential SAGE journal and reference content, built into course materials and assessment tools, that ties important research and scholarship to chapter concepts to strengthen learning
- Editable, chapter-specific **PowerPoint*** **slides** that offer flexibility when creating multimedia lectures so you don't have to start from scratch but you can customize to your exact needs
- **Sample course syllabi** with suggested models for structuring your course that give you options to customize your course in a way that is perfect for you

- Lecture notes that summarize key concepts on a chapter-by-chapter basis to help you with preparation for lectures and class discussions
- Integrated links to the interactive eBook that make it easy for your students to maximize their study time with this "anywhere, anytime" mobilefriendly version of the text. It also offers access to more digital tools and resources, including SAGE Premium Video
- All tables and figures from the textbook

SAGE edge™

SAGE edge for Students enhances learning in an easy-to-use environment that offers:

- Mobile-friendly **flashcards** that strengthen understanding of key terms and concepts, and make it easy to maximize your study time, anywhere, anytime
- Mobile-friendly practice **quizzes** that allow you to assess how much you've learned and where you need to focus your attention
- A customized online **action plan** that includes tips and feedback on progress through the course and materials
- Learning objectives that reinforce the most important material
- Chapter-specific study questions that allow you to engage with the material other content for use in independent or classroom-based explorations of key topics.
- Video and multimedia resources that bring concepts to life, are tied to learning objectives, and make learning easier.

ABOUT THE AUTHORS



Cheryl Durwin received her PhD in Educational Psychology at the University of Massachusetts, Amherst in 1996. She is Professor of Psychology at Southern Connecticut State University. She has taught educational psychology for over 20 years in various formats such as graduate level and undergrad-

uate courses ranging from mid-size sections of 40 students to small, writing-intensive sections. Cheryl regularly teaches courses in research design, testing, motivation, cognition and memory, and learning disabilities. Her research interests include the development, assessment, and remediation of reading skills, efficacy of reading interventions in disadvantaged populations, and college-level teaching and learning.



Marla Reese-Weber received her PhD at The Ohio State University in 1998. She is Professor of Psychology and serves as the associate dean in the College of Arts and Sciences at Illinois State University. She has taught educational psychology for over 17 years in sections as small as 25 students and sections as large as 150 students.

In addition, her course on educational psychology has included a focus on underserviced populations, particularly in urban areas. Marla also teaches adolescent development at the undergraduate and graduate levels as well as a course on developmental research methods. Her research interests include sibling and dating violence as well as romantic relationship development during emerging adulthood. Though both of us have had varied experiences in teaching educational psychology, we came together because of a singular need. We wanted a textbook that was flexible enough to meet our very different circumstances. Cheryl has taught small, writing-intensive classes with a focus on case studies to help students apply what they are learning, while Marla has taught larger classes of 50 or more students with an emphasis on research design and the science behind educational psychology. In each of our courses, we select varied topics to emphasize and order the topics very differently, and we have unique teaching styles. We wanted a textbook that would fit each of our needs.

EdPsych Modules is the first textbook purposefully and intentionally written from a module approach. Our modules are succinct, stand-alone topics that are organized into themed units representing every subject matter found in a traditional chapter textbook. Because these are stand-alone, our modules can be combined or organized in any order, regardless of the order we decided to use in the table of contents. Instructors can even skip modules or entire units if they choose. For those who teach with case studies, we provide four detailed classroom situations at the beginning of every unit, one for each educational level: early childhood, elementary, middle school, and high school. Again, instructors can choose one particular educational level, several, all levels, or may choose to skip the cases altogether. We believe that if our textbook is flexible enough to meet our very diverse needs, it can meet the needs of any instructor, regardless of the type of teacher education program, class size, or course emphasis.

INTRODUCTION

USING SCIENCE TO INFORM CLASSROOM PRACTICES





CASE STUDY MIDDLE SCHOOL: ACHIEVEMENT GAP, 2

MODULE 1: USING SCIENCE TO INFORM CLASSROOM PRACTICES

Outline and Learning Goals, 4 Educational Psychology: A Resource for Teachers, 5 Educational Psychology: The Science, 6 Educational Psychology: Classroom Practices, 11 Summary, 18 Key Concepts, 18 Case Study: Reflect and Evaluate, 18

MIDDLE SCHOOL: ACHIEVEMENT GAP

PREPARE:

As you read the case, make notes:

- 1. WHO are the central characters in the case? Describe them.
- 2. WHAT is taking place?
- 3. WHERE is the case taking place? Is the environment a factor?
- 4. WHEN is the case taking place? Is the timing a factor?

Jarrod and Tamara Patterson met during college and are both teachers in the Chicago area. They live in the suburbs, where Jarrod teaches third grade. Tamara completed her student teaching at an inner-city school. She wanted



© iStockphoto.com/Haluk Köhserli

to continue in a similar school district, so she takes the train into the city each day to teach history in a public middle school.

Over the years, Jarrod and Tamara have had a number of arguments about education. Some of their disagreements stem from the developmental differences in their students—as Jarrod works with younger students—but their liveliest disagreements involve the differences between suburban and urban classrooms. Ninety percent of Tamara's students are African American and live in households where the median annual income is around \$33,000. In contrast, 79% of Jarrod's students are White, 9% are Latino, 8% are Hispanic, and only 3% are African American. The median annual income for households in Jarrod's school district is \$83,000.

As they begin their drive into the city to run errands on Saturday morning, Tamara reminds Jarrod that she needs to stop by her classroom to pick up some papers. She forgot them yesterday and needs to finish grading them before Monday morning. Jarrod doesn't respond—he has taken the opportunity to read the newspaper while Tamara drives.

"Listen to this," he begins. "A new study examined the 'achievement gap'—you know, the idea that African Americans perform more poorly compared to Whites. Says here that some researchers found that the differences in achievement levels between African Americans and Whites no longer exist."

Tamara responds skeptically, "How did they determine that?"

"Well, it says that the researchers found no differences in the GPAs of students from several ethnic backgrounds, including African American and White students," replies Jarrod.

Tamara pushes the issue. "Who were the students? How did they get information about GPA? Did they use the official records?"

Jarrod replies, "It doesn't give that many details."

As they pull into the school parking lot, Tamara announces, "The newspaper shouldn't print those statements without supplying more details." She grabs the newspaper out of Jarrod's hands and says, "Come on. While we are inside getting my papers, we can probably find more information about the study on the web."

"Do we have to do this today?" moans Jarrod, wishing he had kept his mouth shut.

"Yes," replies Tamara.

As they enter Tamara's classroom, Jarrod says, "I still can't get over how old everything seems in the building. When are they going to update the decor, not to mention your textbooks?"

Tamara ignores his comment. She turns on the only computer in the room and retrieves her papers while she waits for the computer to get up and running. Then she launches her Internet browser and begins to alphabetize her papers, because she knows it will take several minutes before the computer is ready.

Jarrod waits impatiently. "How long is this going to take?"

"Well, if we had new computers with wireless Internet connections like at your school, we'd be out of here by now. But I don't have those perks, so just give me a couple of minutes."

Tamara uses the researchers' names from the newspaper article to find the original study online. "Good, it was published early this year," she says, and sends the print job to the printer in the main office. "Come on. I'll grab the printout. I can read while you drive us."

As they walk to the office, Tamara can't help herself. "I suppose you have your own printer in your classroom and don't have to walk to the main office all the time."

"As a matter of fact, I do," replies Jarrod. "You know you could get a job in my school district anytime. Remember, you chose to work here. Don't give me a hard time because I chose not to."

As they drive to their next stop, Tamara begins to read and launches into a tirade: "Well, they used college students, not K-12 students. Oh, can you believe this? They didn't even use official records to find GPAs. They simply asked students to provide their GPA on a survey."

"Why do you care so much? It's just one newspaper article in the back of the paper," replies Jarrod.

Tamara continues her tirade. "Because parents and most other teachers won't take the time to read the actual study and see that the newspaper article is misleading. People won't realize that the achievement

gap is still present in K-12 classrooms and will expect all teachers to have students with similar achievement levels. That's unrealistic. If journalists were actually trying to inform the public—instead of spewing out stories on movie stars in rehab—they would explain why the achievement gap exists. It's not even about ethnicity; it's about socioeconomic status."

"Maybe you should write a letter to the editor," suggests Jarrod.

"Maybe I will," Tamara says.



iStockphoto.com/ Steve Debenpo

ASSESS:

- 1. How might the different schools in which Tamara and Jarrod work influence the importance each places on understanding achievement differences?
- 2. Should teachers be concerned with what type of students participate in research studies like the one reported in the newspaper article? Why or why not?
- 3. How would you respond to a parent whose child is not achieving as well as others but who believes that all students should perform equally well?



© iStockphoto.com/ lai9

MODULE **1**

USING SCIENCE TO INFORM CLASSROOM PRACTICES

OUTLINE	LEARNING GOALS
Educational Psychology: A Resource for Teachers	
	Explain why educational psychology is an important resource for teachers.
Educational Psychology: The Science	
Research DesignsSamplesMeasures	2 Describe three elements of research studies that help determine which studies are worthy of consideration.
Educational Psychology: Classroom Practices	
Best PracticesAddressing DiversityUsing a Case Study Approach	 Oefine best practices and explain why it is important for teachers to base them on scientific evidence. Describe four diversity characteristics that can define an individual's group membership, and explain why teachers need to understand

differences between groups.

EDUCATIONAL PSYCHOLOGY: A RESOURCE FOR TEACHERS

Explain why educational psychology is an important resource for teachers.

People who work outside educational settings may assume that good teaching practices are simply common sense. Yet common-sense approaches to classroom management and instruction often are ineffective or even counterproductive. Assume, for example, that an elementary student continues to get out of his seat during a lesson. A common-sense approach would be to politely ask the student to sit down. However, if the student is misbehaving to attract attention from the teacher and classmates, this approach might simply encourage the behavior.

Research suggests that a more effective approach would be to ignore the unwanted behavior, *depending on the individual characteristics of the student*. Hence, scientific evidence helps teachers determine the best practices for effective teaching. As a teacher, you will encounter situations for which, despite all your training, you are unprepared. When that happens, research can help you formulate an informed response.

When teachers need help dealing with issues of diversity, motivation, achievement differences, behavioral problems, and other concerns, they turn to the field of educational psychology. **Educational psychology** links the science of psychology to educational practice and provides teachers with evidence-based knowledge to support their day-to-day decision making in the classroom. Teachers who implement research-based practices have students with more academic engagement and fewer disruptive behaviors (Sanetti, Collier-Meek, Long, Kim, & Kratochwill, 2014). In short, educational psychology can help teachers become better teachers. We are writing this text to provide theories and empirical evidence you can use to develop a repertoire of skills and knowledge on your path to becoming an effective teacher.



Master the content.

edge.sagepub.com/durwin3e **SAGE** edge[™]

Scientific Approaches Versus Common Sense. Research informs teachers about how best to approach situations in the classroom, such as children playing with one another rather than completing their work, as shown here. The common-sense approach does not always lead to best practices.



© SAGE Publications

To make the most of educational psychology, teachers need both a basic understanding of scientific principles (the science) and an awareness of how these principles can apply to real situations (classroom practices). In this text, you will be considering the same major challenges that scholars face in this field:

- The science: formulating theories and conducting research studies.
- Classroom practices: developing applications of current theories and research to enhance teaching and learning.

EDUCATIONAL PSYCHOLOGY: THE SCIENCE

2 Describe three elements of research studies that help determine which studies are worthy of consideration.

The science of educational psychology involves formulating **theories**—sets of ideas that are used to explain a phenomenon and make predictions about behavior—and then conducting research to determine how well those theories explain the phenomenon. The relationship between theory and research is reciprocal. Research findings may support a theory, but researchers also may alter theories or develop new ones based on accumulated evidence. This process is ongoing—scientists today are building upon (or tearing down) the work of twentieth-century scientists.

For today's teachers, the amount and variety of research material available can be intimidating. The first step in evaluating research is to find appropriate resources (see Guidelines 1.1: Finding Reputable Research). After you have located good research articles, you need to determine which studies are worthy of consideration. To evaluate the quality of research, you need to understand three elements of it:

- 1. Design: What was the purpose of the study (to describe, to show cause and effect)?
- 2. Sample: Who was being studied (elementary-aged children, college students)?
- 3. Measures: How were constructs of interest measured (surveys, observations)?

GUIDELINES 1.1

Finding Reputable Research

Teachers need to become informed consumers of research. News stories and websites commonly misinterpret scientific findings. The first step in evaluating research is to find appropriate resources. To obtain reputable research:

- Don't use newspaper and magazine articles, because they are not research articles.
- Don't do Internet searches using search engines, because they may not yield credible sources.
- Do find peer-reviewed articles in scholarly journals at a local university library.
- Do find peer-reviewed articles in databases such as ERIC and PsycINFO.
- Do visit websites of professional associations to see if they have links to educational research groups such as the American Educational Research Association (AERA) and the American Psychological Association (APA).

Research Designs

TARIF11

Researchers must choose a method for investigating variables of interest. **Variables** are events, characteristics, or behaviors that can be measured, such as age, family divorce, medication, diagnosis of attention deficit hyperactivity disorder (ADHD), math scores, or aggression. To focus on a specific question about certain variables, researchers choose a particular **research design**—a method for investigating how and whether the variables selected are related. Table 1.1 describes four designs that are commonly used in educational research.

Descriptive designs provide basic information about variables in a population without making connections between behaviors, events, or conditions. For example, a descriptive research study might determine what percentage of school-age children are diagnosed with ADHD.

Two descriptive designs can provide in-depth perspectives:

- *Case study* research examines a single individual and creates a rich picture of that individual's psychological functioning. Researchers might observe a child diagnosed with autism both at home and at school, interview teachers and parents, and examine test scores, school records, and other sources of information.
- *Ethnographic study* research closely examines a particular group through direct participation within the group. For example, a researcher might attend a school of Latino students, taking extensive field notes to capture the unique educational values and social challenges of this ethnic group.

To move beyond simply *describing* behaviors, researchers use **correlational designs**, which answer questions about the connections between two variables. For example, in exploring the connection between study time and grades, the researcher might ask whether students who spend more time studying get better grades. These connections are expressed in a statistical computation called a *correlation coefficient*, a number between -1.0 and +1.0 that indicates the type and strength of the relationship between two variables.

Summary of Research Designs

TABLE 1.1 Outliniary of Research Designs					
	DESCRIP	TIVE	CORRELATIONAL	EXPERIMENTAL	QUASI-EXPERIMENTAL
DEFINITION	To systema explain a s factually an accurately.	ituation nd	To assess how changes in one variable correspond with changes in another variable.	To establish a cause–effect relationship between variables.	To infer a cause–effect relationship between variables when the researchers cannot manipulate the independent variable.
RESEARCHER'S Ouestions	What perce students p state maste Does the percentage by grade le socioecono status?	assed a ery test? e differ evel or	To what extent are reading achievement scores correlated with socioeconomic status? How are science project scores correlated with parents' level of interest in science?	How is third-grade reading achievement affected by classroom reading-training? (Researchers randomly assign students into two groups, one with reading- training and one without, and then compare scores on reading achievement tests.)	How is third-grade reading achievement affected by classroom reading-training? (Researchers study two existing classrooms at the same school, one with reading- training and one without, and then compare scores on reading achievement tests.)
LIMITATIONS	Cannot sho connectior between d variables.	is	Can show connections between variables, but cannot prove one variable causes changes in the other.	Requires random assignment into experimental and control groups, which is often not possible.	Can show connections between variables and even infer causation, but cannot confirm that the results were due solely to the independent variable.



- The sign (positive or negative) indicates the type of relationship between the two variables. A positive correlation (+) between study time and grades means that as study time increases, grades also increase. A negative correlation (–) between school absences and grades means that as absences increase, grades decrease.
- The closer a correlation coefficient is to +1 or -1, the stronger the relationship between the two variables. For example, a correlation coefficient of -.56 indicates a stronger connection than a correlation coefficient of +.43 because the absolute value of the number is larger.

Although correlation studies measure the relationships between different variables, they *cannot* determine cause and effect. Although we may find that study time and grades are positively correlated, increased study time may or may not *cause* better grades. Instead, this positive correlation may suggest several possibilities: (a) more study time causes better grades, (b) better grades cause a person to enjoy academics and therefore to study more, or (c) some other variable, such as parental involvement, accounts for the high levels of study time and grades.

When researchers want to establish whether a cause–effect relationship exists, they turn to experimental and quasi-experimental designs. **Experimental designs** are used to establish a cause–effect relationship between an independent variable and a dependent variable. An independent variable is the variable of interest that is presumed to have an effect on the dependent variable, which is the outcome of the study. Researchers conduct experimental studies in two steps:

- 1. Randomly assign participants to one of two groups: an experimental group and a control group.
- 2. Manipulate the independent variable (a treatment or intervention) with the experimental group but not the control group.

Suppose researchers want to determine whether using computers in elementary classrooms (independent variable) affects the academic achievement of students (dependent variable). They might give an academic achievement test to students and then randomly assign some to a computer classroom (experimental group) and others to a no-computer classroom (control group). The experimental group would use computers in the classroom over a specified period of time, while the control group would not. At the end of the study, researchers would give the same academic achievement test to each student. If the experimental group showed greater improvement over time than the control group, researchers could make a claim about a cause–effect relationship: that the independent variable (the use of computers in the classroom) affected the dependent variable (academic achievement).

In situations in which researchers cannot randomly assign individuals to groups or manipulate an independent variable, they use quasi-experimental designs to *infer* a cause-effect relationship. Obviously, researchers cannot randomly assign children to divorced and nondivorced families, abusive and nonabusive homes, male and female genders, or high and low socioeconomic groups. In other cases, researchers' actions may be limited by school district rules or by time or expense, making the manipulation of experimental and control groups impossible. As a result, quasi-experimental designs cannot establish that an independent variable directly affects a dependent variable, and therefore they leave open the possibility that the outcome of the study may be due to other variables the researcher could not control. Say, for example, that researchers study an existing group of students in a computer classroom and compare their achievement to that of students enrolled in a no-computer classroom. Changes in the academic achievement of students in the computer classroom (dependent variable) may not depend solely on the presence of computers (independent variable) but may also be affected by variables beyond the researchers' control: the computer classroom having more high-level readers, fewer behaviorally challenging children, or a teacher with more teaching experience than the teacher in the no-computer classroom. Researchers employ safeguards to account for

Video: Quasi-experiemental designs and control all other possible variables that might affect the experimental and control groups, but their presence and the lack of random group assignment are limiting factors.

Despite these shortcomings, quasi-experimental research does allow researchers to examine questions involving differences between groups or differences over time. Two examples are cross-sectional studies and longitudinal designs, described here:

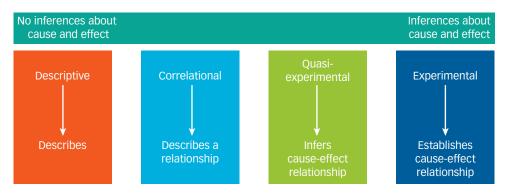
- 1. *Cross-sectional studies* examine two or more groups to compare behaviors. Researchers might examine whether middle school students have more or fewer hours of homework than high school students.
- 2. Longitudinal designs examine the same group of people repeatedly over time to provide information about how behaviors change or how earlier events can be connected to later events. A longitudinal study might follow children over time to determine whether children whose parents divorce in elementary school have more academic difficulties in adolescence than children whose parents did not divorce.

To use science effectively in decision making, teachers need to be informed consumers of research. When you encounter scientific evidence presented in the media, in journals, or at workshops, you should be aware of the various inferences that can be made with each research design, as shown in Figure 1.1. Experimental studies are the only type that can answer questions about cause-effect relationships. However, correlational and quasi-experimental designs are more common in educational research because they are more practical than experimental designs for investigating many hypotheses regarding teaching and learning. They also provide more information than descriptive designs. Nevertheless, you must be cautious when interpreting correlational and quasi-experimental designs. You should always question whether other variables not identified in the studies might account for the findings.

Samples

Once the research design is determined, researchers must identify the population of interest and select a sample. Suppose researchers want to study how students of different ages respond to the stress of transferring to a new school. Because the researchers cannot observe or survey all transferring students—the population of interest—they rely on a **sample**, a smaller set of individuals from the population of interest. The sample needs to be representative, meaning that it has gender, ethnicity, and age characteristics similar to the population of interest. The best method for ensuring a representative sample is to use a **random sample**, meaning every person in the population of interest has an equal chance of being included. Many computer programs can take a large list of individuals (for example, all students registered in a school district) and create a random subset of individuals to be included in a study.

FIGURE 1.1 A Continuum of Research Designs. Design dictates what inferences we can make from educational research studies.



Research Measures. Observations allow researchers to view the behaviors of teachers and students during instruction, such as whether boys or girls are called on more frequently by teachers.



Even when a random sample of individuals within the population is selected, not all the people selected will agree to participate in the research study. (How many website surveys have you declined?) This is called **volunteer bias**, the tendency of those who choose to participate in research studies to differ in some way from those who do not participate. Typically, individuals who have strong feelings or opinions, or who are invested in the outcome of a particular research study, are more likely to participate than are those who do not have a vested interest. For example, a college student might be more willing to participate in surveys and interviews regarding opinions on the effectiveness of the university's financial aid office and less likely to participate in research on the effectiveness of the university president.

Measures

Once researchers have chosen a research design and representative sample, they must decide on a method for taking measurements, which will provide a framework for gathering information. If researchers are investigating the amount of time students spend during school hours completing assignments, they must decide whether to ask students verbally, have them complete a paperand-pencil survey, or observe them within the school setting. Some measures commonly used in educational research are these:

- **Observations**, or watching or viewing the behavior of individuals, might be used to examine how many times a teacher calls on a girl versus a boy in relation to the number of students from each gender who raise their hands.
- Interviews, or questions presented to participants, can be highly structured lists of simple questions (*How many hours do you spend on homework each night?*) or can include open-ended questions (*How do you study for a test?*). Even though open-ended questions allow more information to be gathered, they often result in less consistency across participants. Participants might talk about the number of hours spent studying, the use of a study guide, or strategies they use for reading, note taking, memorizing, and testing themselves.
- Tests and surveys typically are paper-and-pencil measures that include a number of questions. Test and survey research can be done very easily with large groups of

individuals in a relatively short amount of time. One requirement for participation in survey research is the ability to read and write. This might exclude younger children and individuals with language barriers.

When you examine research findings, consider the measurement strategy the researchers chose. Each measurement approach has limitations. In interviews, the researcher must speak the same language as the participant. On a test or survey, the participant must be able to read and write in the same language. Observation research is less valid for measurements of internal states of mind such as self-confidence or sadness.

Consider the research scenarios below and see if you can classify them according to research design.

- There are two sections of a class. Both sections are taught by the same instructor, cover the same content, and have the same number of students. In one class the teacher uses a \$150 textbook, and in the other class the teacher uses no textbook. The final exam scores are compared to determine which practice is a better option.
- 2. An educational psychologist examines how students' levels of motivation toward studying compare with their IQ scores.
- 3. In an effort to decrease obesity and increase movement among students, a superintendent has all the gym teachers in a district record the average number of hours in a week spent doing cardio work in gym class.
- 4. A researcher goes to an urban school and a rural school to observe differences. After much study, the researcher writes a report comparing and contrasting the two schools.

EDUCATIONAL PSYCHOLOGY: CLASSROOM PRACTICES

Define best practices and explain why it is important for teachers to base them on scientific evidence.

Describe four diversity characteristics that can define an individual's group membership, and explain why teachers need to understand differences between groups.

In addition to understanding educational research, teachers must be able to translate practical findings of specific research studies into school settings—diverse school settings. To do this, every teacher needs a systematic process for developing his or her personal educational philosophies.

Best Practices

Effective teachers develop **best practices** for instruction, classroom management, and assessment. Best practices are evidence-based strategies determined by science to help inform decisions. They are not a list of specific strategies that one should and should not use. For example, many states are relying on a new set of academic standards, Common Core. However, the Common Core standards do not inform teachers *how* to teach and *what* material to teach. Instead, educators must develop a set of skills needed to determine best practices for having students reach these standards. Education programs training our next generation of teachers use the standards set forth by the *Interstate Teacher Assessment and Support Consortium* (InTASC) to evaluate skills and competencies of preservice teachers. Table 1.2 shows the standards set forth by InTASC.



Teaching Philosophy

© SAGE Publications



Best Practices. Teachers need to examine current resources and up-to-date scientific evidence in making decisions about instructional methods and techniques, rather than relying on techniques used decades ago.

Note that best practices today may not be the same best practices in 5, 10, or 20 years from now. Best practices are fluid, changing with new research findings. We don't use the same teaching strategies, or best practices, from 50 years ago. It's likely we won't be using the best practices of today 50 years from now. The fluid nature of best practices means that teachers must continue to seek out evidence-based information, or current research, to assist them in making sound decisions regarding classroom management, instruction, and assessment.

Addressing Diversity

Determining effective classroom practices is made more complex by the increasingly diverse nature of the student body in U.S. schools. Aspects of diversity will shape your teaching and the choices you make about the methods, techniques, and strategies you employ in the classroom. Because diversity can be found in all educational interactions, we discuss issues of diversity within specific educational contexts. An icon (like the one in the margin here) will point to pertinent coverage of diversity within a particular topic. To provide a basic understanding of diversity, some of the most important guidelines and concepts related to diversity and effective classroom practices are summarized here.

Effective teachers are aware of the diversity they are likely to encounter in the classroom. Individuals and environments can exhibit a wealth of diverse characteristics. To begin to understand individual and group differences, researchers often ask participants of studies to report their ethnicity or race, sex or gender, socioeconomic status, and disabilities. By grouping people based on these characteristics, researchers can divide any population into subsets for analysis. For example, in the 2010 U.S. Census, respondents were asked to report their race by choosing among the following categories:



© SAGE Publications

- White
- Black, African American, or Negro
- American Indian or Alaska Native
- Asian (with specific check box responses for Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, or Other Pacific Islander)
- Some other race (Individuals of "multiracial, mixed, interracial, or a Hispanic, Latino, or Spanish group" could respond in a write-in space under this category. Also, people of two or more races could fill in multiple race response check boxes and provide additional responses.)

DIVERSITY

TABLE 1.2

InTASC Core Teaching Standards 2011

The standards have been grouped into four general categories to help users organize their thinking about them:

THE LEARNER AND LEARNING

Standard #1: Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

Standard #2: Learning Differences. The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

Standard #3: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.

CONTENT

Standard #4: Content Knowledge. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

Standard #5: Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

INSTRUCTIONAL PRACTICE

Standard #6: Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

Standard #7: Planning for Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Standard #8: Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

PROFESSIONAL RESPONSIBILITY

Standard #9: Professional Learning and Ethical Practice. The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Standard #10: Leadership and Collaboration. The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

SOURCE: Council of Chief State School Officers. (2011, April). Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards: A Resource for State Dialogue. Washington, DC: Author. Retrieved from http://www.ccsso.org/Documents/2011/InTASC_ Model_Core_Teaching_Standards_2011.pdf

A group may be considered a **minority group** if it has less power than the majority group, even if the group is not smaller in number. For example, more women than men live in the United States, but women are considered a minority group due to their relative lack of power in business (lower paying jobs), politics (fewer political positions), and religion (in some religions, women still are not allowed to hold leadership positions). Let's examine group membership further:

• The terms *ethnicity* and *race* are often used interchangeably to express cultural differences, but they actually have different meanings (Spencer, 2014). Although each term has a definition that is so complex entire courses are taught to differentiate the two, our purpose here is to provide a basic distinction. **Ethnic group** includes people who share a similar culture—an environment with a unique history, traditions, rules, attitudes, and perhaps a specific language. In contrast, **racial group** categorizes people who share common biological traits (such as hair texture and skin color). The biological traits that distinguish races are socially defined. In other words, there is nothing particularly

important about hair texture or skin color. Our society could have chosen, or defined as important, other biological traits (eye color, height, and so on). Certain traits were most likely chosen to establish social standing among groups (Moya & Markus, 2010). Most often, a person's ethnicity and racial group overlap. However, because ethnicity is based on environment and race is based on biology, they can diverge. For example, how would researchers categorize the race and ethnicity of an Asian-born child who is adopted and raised by a middle-class White family living in the rural Midwestern United States? Classrooms today are rich with such complexity.

- Like ethnicity and race, the terms *sex* and *gender* are often used interchangeably but differ technically. **Sex** refers to the biological status of male (penis) or female (vagina), whereas **gender** is the social definition, including behaviors learned in the environment about being either male (masculine) or female (feminine). Sexual orientation is another concept related to sex and gender that has been used to denote diversity. The term **sexual orientation** denotes homosexuality, heterosexuality, or bisexuality.
- Many people believe that socioeconomic status (SES) is based solely on income, with families who have higher incomes being considered high-SES and families with low incomes considered low-SES. A more accurate definition of SES relies on the educational level and occupation of family members rather than on their level of income. Although in most circumstances educational attainment and occupation are highly related to income (more education and/or more prestigious occupations lead to higher incomes), in many circumstances less-educated individuals have higher incomes than those who are highly educated. The typical example is the college professor who holds a doctoral degree but whose income is modest.
- **Disability** refers to being limited in one's ability to perform some behavior, task, or skill. The term can refer to physical disabilities (hearing impairment, cerebral palsy), cognitive disabilities (intellectual disabilities, learning disabilities, language delays), or behavioral or emotional disabilities (attention-deficit hyperactivity disorder, anxiety). We consider disability to be a diversity characteristic because a student's disability will result in different learning needs and perhaps different levels of achievement in comparison with students who have no disabilities.

Effective teachers attempt to understand the possible causes of differences among groups. Teachers who understand why differences exist can learn to be sensitive to the individual needs of students from various backgrounds. Typically, environmental differences, not biological or genetic differences, are the root of group differences. Consider SES as an example. Students from high-SES homes tend to score higher on achievement tests, receive higher grades, and stay in school longer than students in lower SES homes (Dawson-McClure et al., 2015). These outcomes can be traced to several environmental differences (Goodman & Burton, 2012; National Center for Education Statistics, 2015):

- Poorer nutrition and more exposure to pollution in lower SES homes.
- Less exposure to school readiness materials such as books and computers in lower SES homes due to lack of financial resources or lack of knowledge about the importance of reading to children at a young age.
- Less parental involvement in lower SES homes, which may be due to work schedules or less education.
- Less well-qualified teachers and higher turnover rates among teachers in lower SES schools and preschools.

One might think these factors are most influential in early childhood, but the SES achievement gap for math actually widens around age 12, typically during the transition to middle school (Caro, McDonald, & Willms, 2009).

Culturally responsive pedagogy: See Module 18



© iStockphoto.com/ Christopher Futcher



Achievement and

SES. Achievement differences stemming from socioeconomic status may be due to differences in access to resources such as books and computers.

Social and political events have highlighted the connection between SES and academic achievement in underserved areas such as urban and rural communities. For example, in 2003 the University of Chicago Urban Education Institute began a two-year master's program for Urban Teacher Education. Similarly, the City University of New York (CUNY) Graduate Center has developed a doctoral program in Urban Education. Both programs focus on training individuals to work in urban educational systems and conducting research to determine the best classroom practices in these areas.

In a similar fashion, many universities have centers focused on rural education within their states. Washington State University has a Rural Education Center that focuses on exchanging information among rural schools and providing a voice in policy development. Likewise, Kansas State University established the Center for Rural Education and Small Schools, which focuses on improving education in those areas. Finally, the National Research Center on Rural Education Support (NRCRES) was established in 2004 with funding from the U.S. Department of Education. The research center examines issues related to retaining qualified teachers, increasing opportunities for advanced courses, and decreasing student dropout rates in rural schools. Knowledge of current research can help inform teachers' best practices. For example, teachers may take extra time with students who lack readiness skills, allow students to borrow books from the classroom for use at home, or find creative ways to involve parents in their children's education, particularly during the transition to middle school.

Effective teachers address and embrace diversity. Their teaching is not guided by assumptions about individuals from diverse groups. **Prejudice feelings** are rigid and irrational generalizations about a group or category of people. Prejudice feelings appear to emerge very early in life and peak at about 5 to 7 years of age, with more than half of 6-year-old White children and 85% of 5-year-old White children showing signs of pro-White, anti-Black biases (Doyle & Aboud, 1995; Katz, 2003; Raabe & Beelmann, 2011). Almost every individual has some prejudice feelings toward one or more groups, even though they may not be aware of those feelings. Teachers themselves may believe that lower achieving students need to focus on basic skills. They may assume that students from lower socioeconomic backgrounds are lower achievers, that girls are not as capable in math as boys, that Asian American students are naturally smarter than members of other ethnic groups, and that gifted students are socially immature. Prejudice feelings tend to become more intense over time due to confirmation bias and belief perseverance.

Confirmation bias is the tendency for people to seek evidence that confirms what they already believe to be true, rather than searching for facts that might refute their beliefs (Mercier, 2011; Nickerson, 1998). **Belief perseverance** is the tendency to continue or persevere our beliefs even when presented with contradictory evidence (Garcia-Mila & Anderson, 2008; Savion, 2009). For example, if a woman believes that green-eyed people are exceptionally intelligent, she will notice or pay attention to all instances in which a green-eyed person says something intelligent (confirmation bias). Likewise, she will ignore or assume it was just a fluke when a green-eyed person says something silly or unintelligent (belief perseverance).

Prejudice feelings can affect the way a teacher makes decisions about instruction, grouping, motivation, and assessment. Treating individuals differently based on prejudice feelings or biased beliefs about a particular group is **discrimination**. A recent study found that 6- to 7-year-old White children discriminated against Black children when distributing coins, even in the presence of an adult. Slightly older White children, 9 to 10 years of age, also discriminated against Black children in the same task, but only when the adult was out of the room (Monteiro, de Franca, & Rodrigues, 2009). Children are not the only ones who might discriminate.

Teachers and educators must identify their own feelings of prejudice and educate themselves on the scientific evidence regarding diversity issues. However, even scientific evidence that points to group differences should be interpreted with caution due to individual differences within each group. For example, Figure 1.2 shows that average math scores are higher for boys than girls, but the amount of overlap in scores is great.

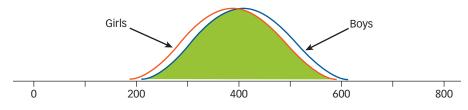


Consider your own experiences and group membership. Have you ever treated someone differently because of the person's race, socioeconomic status, gender, or disability? If you have experienced prejudice feelings—or been on the receiving end of prejudice feelings—how and why have those beliefs persevered?

Using a Case Study Approach

Did you read the opening case study on page 2? You may have skipped it, thinking, *Why do I need to read this? How will reading this before I read the content help me?* Case studies allow preservice teachers to develop decision-making skills by considering how to apply scientific evidence to specific classroom practices. In each unit, there are four cases: (1) early childhood, (2) elementary school, (3) middle school, and (4) high school. Your instructor may ask you to read one or more of the case studies before reading a module will provide you with a realistic classroom situation to consider as you learn about the theories, research, and their application as presented in the module. To get the most out of the case study approach, pay close attention to the different categories of questions we have provided. These prompts will help you uncover important elements, make connections between science and practice, and build problem-solving skills.

FIGURE 1.2 More Similarities than Differences. Comparing boys' and girls' math performance historically has found mean differences, but the overlap of scores between these two groups is great, emphasizing the enormous variability within groups.



PREPARE

The Prepare questions that precede each case study will help you identify the relevant pieces of information within the case study:

- *Who?* Pay attention to characteristics of teachers, students, and parents and the relationships among them. These characteristics may include gender, ethnicity, disabilities, or the SES of students, parents, the teacher, or the school district.
- *What?* Attempt to identify the main problem described in the case study. Is it a behavioral problem, a learning problem, an instructional problem, or a classroom management problem? Each case may address more than one problem.
- *Where?* Consider where the events take place. Is it a traditional classroom, a chemistry lab, an art room, the gym, the hallway, or the principal's office? Try to envision that context and identify any characteristics that might contribute to the problem or to its solution.
- *When?* Identify time-relevant information. Does the story unfold in the morning or the late afternoon; at the beginning, middle, or end of the school year; before or after a holiday? Start thinking about how time might be related to the main problem.

ASSESS

At the end of each case study, you will find three or four Assess questions to help you evaluate your initial understanding and interpretation of the case. Because you will not yet have read the modules in the unit, you will not have the science and application to aid your thinking. Here, we will be asking you to use prior knowledge to make predictions or draw preliminary conclusions. These questions may focus on asking the following:

- *How* you might respond to the situation.
- What characteristics of the individuals involved contributed to the situation.
- *Why* solutions described did not work well.

REFLECT AND EVALUATE

At the end of each module, a series of Reflect and Evaluate questions will ask you to use the information presented in the module to formulate a more educated, scientific-based response to each case study:

- *How?* Rather than relying on your own opinions and experience, use the science and application discussed in the module to address the situation described in the case.
- What? Identify examples of key concepts in the modules.
- *Why?* Move beyond the facts of the case and focus on the characteristics and motivations of individuals. What aspects of the case study were most important, or why did one solution succeed when another failed?
- *What if* . . . ? Consider how the problem and solution presented in the case study would change if some aspect of the case were changed, such as the gender or ethnicity of students or teachers in the case study.

The Reflect and Evaluate questions will help you gauge your level of comprehension of important concepts. They will also encourage you to apply what you have learned in realistic contexts, letting you practice the same type of informed decision making experienced teachers do.

SUMMARY

• Explain why educational psychology is an important resource for teachers. Educational psychology links the science of psychology to educational practice and provides teachers with evidence-based knowledge to support their day-to-day decision making in the classroom. Teachers' choices of techniques and strategies should rely not on common-sense approaches but on scientific research.

2 Describe three elements of research studies that help determine which studies are worthy of consideration. First, the sample selection process for conducting research studies should attempt to use randomized samples and minimize volunteer bias. Second, measures should be selected based on how well the measure answers the research question. Third, the findings of research studies should be interpreted accurately given the limitations of the research design used, such as whether cause and effect can be established.

Oefine best practices and explain why it is important for teachers to base them on scientific evidence. Best practices are evidence-based strategies determined by science to help inform decisions. Because best practices of appropriate teaching methods have changed throughout history and will continue to change in the future, teachers should become lifelong learners by using current scientific information to make decisions about best practices.

Describe four diversity characteristics that can define an individual's group membership, and explain why teachers need to understand differences between groups. (1) Ethnic groups share a common culture or environment, while race denotes a group of people who share common biological traits. (2) An individual's sex refers to his or her biology, whereas gender refers to the social definitions of masculine and feminine. (3) Socioeconomic status (SES) is defined by the educational level and occupational status of family members. (4) Disabilities also can be used as a characteristic of diversity, because individuals differ in physical, cognitive, and emotional capabilities. Teachers need to understand that group differences typically result from environmental differences and to be aware of their own prejudice feelings, which may easily be reinforced by attending to information that confirms their beliefs and by ignoring information that contradicts their beliefs or prejudice feelings.

KEY CONCEPTS

belief perseverance, 16 best practices, 11 confirmation bias, 16 correlational designs, 7 descriptive designs, 7 disability, 14 discrimination, 16 educational psychology, 5 ethnic group, 13 experimental designs, 8 gender, 14 interviews, 10 minority group, 13 observations, 10 prejudice feelings, 15 quasi-experimental designs, 8 racial group, 13 random sample, 9 research design, 7 sample, 9 sex, 14 sexual orientation, 14 socioeconomic status (SES), 14 tests and surveys, 10 theories, 6 variables, 7 volunteer bias, 10

CASE STUDY: REFLECT AND EVALUATE

MIDDLE SCHOOL: ACHIEVEMENT GAP

These questions refer to the case study on page 2.

- Why are the resources available in school districts important for understanding differences among teachers and students?
- Why is knowledge that the sample was college students important for interpreting the results of the study?
- 3. Why is the survey measure used in the study problematic? What might be an alternative measure?
- 4. What type of research design was used in the study? What type of information can be interpreted from this type of research design?
- 5. Based on the information presented in the module about prejudice feelings, why would some people have a difficult time believing that African American students and White students can achieve at equal levels?
- 6. If the study had been done with K-12 students in various school districts assessing their GPA from official records over several years, how would this alter the way the results might be interpreted?

APPLY AND PRACTICE WHAT YOU'VE LEARNED

edge.sagepub.com/durwin3e

CHECK YOUR COMPREHENSION ON THE STUDENT STUDY SITE

- eFlashcards to strengthen your understanding of key terms
- Practice quizzes to test your knowledge of key concepts
- Videos and multimedia content to enhance your exploration of key topics



UNIT ONE

PERSONAL DEVELOPMENT





CASE STUDIES

EARLY CHILDHOOD: CRY BABY, 22 ELEMENTARY SCHOOL: TEAM, 24 MIDDLE SCHOOL: BASKETBALL STAR, 26 HIGH SCHOOL: STEAL, CHEAT, AND FIGHT, 28

MODULE 2: CONTEXTS OF DEVELOPMENT

Outline and Learning Goals, 30 Bronfenbrenner's Bioecological Theory, 30 Family Context, 32 Peer Context, 36 Broader Contexts, 40 Summary, 44 Key Concepts, 44 Case Studies: Reflect and Evaluate, 44

MODULE 3: SOCIAL-EMOTIONAL DEVELOPMENT

Outline and Learning Goals, 46 Erikson's Psychosocial Theory, 46 Aspects of Identity, 51 Understanding the Self, 55 Social Competence, 58 *Applications:* Fostering Social Competence, 61 Summary, 63 Key Concepts, 63 Case Studies: Reflect and Evaluate, 64

MODULE 4: MORAL DEVELOPMENT

Outline and Learning Goals, 66 Cognitive-Developmental Moral Reasoning, 66 Prosocial Behavior, 70 Aggressive Behavior, 73 *Applications:* Advancing Moral Development, 76 Summary, 80 Key Concepts, 80 Case Studies: Reflect and Evaluate, 80

Early Childhood: CRY Baby

PREPARE:

As you read the case, make notes:

- 1. WHO are the central characters in the case? Describe them.
- 2. WHAT is taking place?
- 3. WHERE is the case taking place? Is the environment a factor?
- 4. WHEN is the case taking place? Is the timing a factor?

Edward Abbott and Linda Harsted are teachers at a local child care facility in the 4-year-old preschool room. The 20 students are from diverse backgrounds with a range of levels of socioeconomic status. At this preschool, the children are taught letter recognition, colors, fine and large motor skills, and many other readiness skills. The teachers also spend a large portion of the day encouraging social behaviors such as sharing, helping, expressing assertiveness without aggression, and behaving respectfully toward others. Each year the teachers prepare kindergarten readiness reports to share with parents during a brief individual conference. To prepare for parent-teacher conferences, Ms. Harsted spent last week observing the children during centers to assess their educational skills while Mr. Abbott supervised the children. This week, Mr. Abbott will observe the children to assess their social behaviors while Ms. Harsted supervises. Centers include a number of activities, including playing house, having a snack, coloring, and playing with blocks and puzzles. Children in groups of four spend 15 minutes on each activity.

Mr. Abbott begins during snack time, when the children are having cheese crackers and juice. He quickly notices that Joe is helping Allison clean up her spilled juice that has soaked her crackers. Joe offers to share his crackers with Allison. Mr. Abbott thinks about how typical this behavior is of Joe. He is a very considerate child, always willing to help others. Mr. Abbott then turns his attention to Annie and Zada, who are arguing.

Annie says, "Zada, you aren't my best friend anymore!"

Zada replies, "Well, you didn't share your crayons with me before, so I don't have to share my crackers with you. You got your crackers! I don't have to give you some of mine."

Mr. Abbott has already commented in his notes for Annie and Zada that both girls tend to be natural leaders, which can result in problems, as both want to be "boss."

Ms. Harsted intervenes and asks Zada, "How did you feel earlier when Annie wouldn't share her crayons?"

Zada replies, "She was mean, so I was sad."

"Well, I bet that Annie is sad now because you won't share with her," states Ms. Harsted.

"Okay, she can have this one cracker, but only if I get to be the mommy when we play house," replies Zada.

Annie quickly responds, "Okay."

Mr. Abbott and Ms. Harsted exchange looks, because both know that Annie's home life is much different from Zada's. Zada's parents are married and middle class and spend much of

EE

their extra time with Zada and her brother. Both children were adopted when their parents were in their 40s. Yesterday, Zada told everyone about a recent family trip to a museum. Annie's parents are divorced. Her father lives halfway across the country with his new wife and Annie's new baby sister. Annie's mother works first shift at the local hospital as a nurse's aide and spends several evenings a week

Mr. Abbott moves over to the block area. He notices that Tyler and Tanner are building a tall tower. Erica begins to place more blocks on the tower, but Tyler shouts, "That one doesn't go there!" The loud shout startles Erica, who bumps the tower, and all the blocks come tumbling down.

Tanner yells, "You did that on purpose. We told you that girls aren't supposed to play with blocks."

"Yeah," adds Tyler, "you ruined everything!"

socializing with friends.

Erica begins to cry. Tyler adds, "See, you are just a little cry baby. Cry baby. Cry baby"

"Boys, I want you to stop talking to Erica that way," interjects Mr. Abbott. "I saw the whole thing, and Erica didn't mean to knock down the tower. How do you think she feels when you make fun of her like that?"

Tyler jumps in, "Well, she's probably sad, but that's not our fault. We didn't knock down the tower."

"Maybe she's sad because you were blaming her for an accident and then calling her a cry baby," says Mr. Abbott. "Wouldn't you be sad too if someone blamed you and called you a cry baby?" he asks.

"I wouldn't care," answers Tanner.

Mr. Abbott comments in his observation notes that Tyler is always quick to blame others yet rarely takes responsibility for his own actions. Mr. Abbott thinks about how all the children have difficulty understanding how another child might feel, but some have more trouble than others.



iStockphoto.com/ vgaji

ASSESS:

- 1. How typical are the behaviors in this classroom?
- 2. Why do you think some children are so eager to be helpful and to share while other children are so quick to assign blame and respond in a negative manner?
- 3. How do you think the gender of each child plays a role in his or her behaviors?

ELEMENTARY SCHOOL: TEAM

PREPARE:

As you read the case, make notes:

- 1. WHO are the central characters in the case? Describe them.
- 2. WHAT is taking place?
- 3. WHERE is the case taking place? Is the environment a factor?
- 4. WHEN is the case taking place? Is the timing a factor?

Rocío Barone is one of two first-grade teachers at a small rural elementary school. She was raised in a large metropolitan area and is continually amazed at the connections her students share. For example, three students in the first grade this year—Patricia, Kelly, and Samantha—are all cousins. In addition to familial connections, many of the parents attended high school together and have been friends for years, with their children growing up highly connected to one another outside school. Ms. Barone has always had a soft spot for the children who lack those connections within the community. Kashi is a good example. She moved to the small rural community last year. Kashi is the only student in first grade who is African American. All the other students and almost everyone in the community are White. She had a rough transition to the school because her parents were getting a divorce that led to the move. Kashi seemed to have made friends and to have adjusted to the new curriculum last year. But this year she is struggling academically, and the children appear uninterested in playing with her on the playground or being her partner during classroom activities.

As Kashi enters the classroom, she squabbles with Patricia, one of the oldest but smallest children in the class, who also has experienced challenges adjusting to first grade. After kindergarten, Patricia was placed in a special pre-first-grade program for children who need extra time to develop academically or socially. Having her cousins in the same class has helped with the transition, but she continues to struggle with reading and math.

"Well, if you don't want to sit with me at lunch," says Kashi, "then you can't be on my team."

"I don't want to be on your team," Patricia replies. "My mom says I can do whatever I want on the playground. You know, Kashi, you aren't the boss!"

Ms. Barone intervenes and attempts to calm the situation. "Girls, please try to get along and speak nicely to each other. Now, take your seats so we can start our day."

As the day continues, Ms. Barone notes that Patricia and Kashi appear to have resolved their differences for the moment and are working on their science project together without bickering. This is typical for these two girls. One minute they are playing or working nicely together, referring to each other as "best friends," and the next minute one is telling on the other for saying or doing something "mean." Ms. Barone has always had trouble getting either of them to give specifics of the mean behavior.

As Ms. Barone asks the children to form their line and leave for lunch, two boys—Bill and Zach—begin pushing and shoving each other in the back of the line.

Bill shouts, "I am tired of you always bumping into me!"

Ms. Barone moves quickly to the back of the line and says, "Boys, please keep your hands to . . . "

Zach interrupts, saying to Bill, "Well, I didn't mean to bump you, and besides I am tired of you always cutting in line at lunch. You are such a bully to everyone—my dad says you are just like your dad was in school!"

"At least my dad isn't a sissy," says Bill, who is very tall and athletic. "I didn't hurt you or anyone else. You're just like a little girl."

Ms. Barone states firmly, "Both of you stop right now. You should be ashamed of yourselves for talking to each other that way."

Both boys keep looking at each other with angry faces, but they discontinue their verbal and physical assaults. Ms. Barone sends the other children to lunch and has a short talk with the boys.

"Now, Bill, accidents do happen, and Zach may not have meant to bump into you. And Zach, it is not nice to call others names. You both need to keep your hands to yourself."

The boys give a quick "okay" and walk to lunch.

During the lunch break, Ms. Barone checks her e-mail. Patricia's mom, Mary, has sent an e-mail to tell Ms. Barone that Patricia has been very upset about how Kashi treats her at school. The e-mail reads as follows:

Ms. Barone,

We have been having several conversations in the evening about Patricia and Kashi. Patricia tells me that Kashi has a "team" of girls and if Patricia doesn't do what Kashi asked then she cannot be on the "team." Her dad and I have tried to explain that Patricia should not allow others to boss her around and talk her into doing things she doesn't want to do. I am already somewhat concerned about Patricia's self-esteem and want her to have enough self-confidence to stand up for herself. I typically would have continued to try and work with Patricia at home on this issue, but now something else has happened and I thought you should be aware. Last week I was told

by my friend who works in the cafeteria that Patricia doesn't always take all the food options because Kashi is whispering to her to only take the food that Kashi likes. I understand that a teacher cannot know everything that happens during the day, especially on the playground or at lunch, but I wanted you to know about this issue. Any advice you can give us to help Patricia deal with these issues would be helpful.



ockahoto com/carrollaho

Mary

ASSESS:

- 1. How well do you think Ms. Barone handled the girls entering the classroom? How well do you think she handled the boys in the lunch line? Do you think gender played a role in her treatment of the incidents?
- 2. What examples of aggression did you notice?
- 3. What factors in the children's lives might have contributed to their behavior?
- 4. How would you respond to Mary's e-mail?

MIDDLE SCHOOL: BASKETBALL STAR

PREPARE:

As you read the case, make notes:

- 1. WHO are the central characters in the case? Describe them.
- 2. WHAT is taking place?
- 3. WHERE is the case taking place? Is the environment a factor?
- 4. WHEN is the case taking place? Is the timing a factor?

Tyrone Martin is the middle school girls' basketball coach. The middle school is located in a suburb of a large metropolitan city, with students from mostly middle- to upper-middle-class homes. Mr. Martin has been teaching English at the school for three years. He was the coach for boys' basketball at his last job and enjoyed the out-of-class experience with his students. When he was asked by the principal to coach girls' basketball this year while the usual coach takes a leave of absence, he was excited about the opportunity. However, he has experienced some difficulties getting the girls to work as a team.

As Jill and Sierra enter the gym for practice, he overhears them whispering about Darla. Darla is very athletic but doesn't seem to fit in with the "popular" group of girls. Darla is already practicing and too far away to hear their conversation.

Mr. Martin overhears Jill saying, "If she thinks we are going to let her steal the show on the basketball court, she can forget it."

"The only reason she is any good is because her dad makes her play basketball every night for like three hours!" adds Sierra. "He thinks Darla is going to be some big star! Too bad she doesn't have a mother around to show her how to act."

Claudia, who appears to socialize with Darla, walks up behind the girls and overhears their conversation. She states loudly, "Well, Sierra, you have had three mothers now with all your dad's divorces and remarriages, and you're still not a lady. Maybe you should spend a little more time with your father. Oh, that's right, he's too busy to pay attention to anything you're doing."

Mr. Martin defuses the situation by announcing that the girls need to take their positions for a scrimmage. He begins to think about Darla. Mr. Martin has noticed in the past that Darla does not seem to have many friends. Claudia has repeatedly attempted to include Darla in social events, but Darla doesn't seem to respond with excitement, appreciation, or even a simple "Thanks, but no thanks." Rather, she seems to be uninterested in having friends or a social life.

Mr. Martin decides to have a talk with Darla after practice to see if he can help determine what might be the problem. He begins by asking Darla, "How do you like basketball this year?"

Darla replies, "I like it. I just wish the other girls were more dedicated to the game. They seem to think they are going to be movie stars or models."

"Well, what would you like to be when you grow up?" asks Mr. Martin.

LEMENTARY SCHOOL

"My dad says I should be a basketball player because I have a lot of natural talent. That's why I don't worry too much about those other girls and what they say about me. I know I am a good athlete. And I am going to take business classes in high school so that I can manage my own career and money when I make it big," says Darla with a slight smile.

Mr. Martin pushes her on the issue a bit. "Have you ever considered doing anything else?"

Darla replies quickly, "No way! My dad really wants me to be a basketball player. That's who I am. It's in my blood. Basketball is what makes me Darla. I am not good at many other things, especially school and making friends off the basketball court. So I'm sure I'll be a basketball player."

Mr. Martin ends the conversation, saying, "Well, Darla, I am glad you have such a clear vision of your future, but don't be afraid to change that vision. As people make their way through high school and college, most change their minds about what and who they want to be in the future. Just keep your options open, okay?"

"Okay, but I already know who I am and where I'm going," says Darla.

As Mr. Martin begins to put away the equipment, he thinks about a boy at his last school. Mark also didn't have many friends or the skills to make friends. Rather, he had a short temper and typically was in other students' faces about something they had done to him or, at least, what Mark thought they had done to him. He never thought his remarks or retaliatory behaviors were as bad as those of the other kids. Mark and Darla had similar backgrounds, in that their parents were divorced and each lived with their father. Mr. Martin wonders how two children from such similar backgrounds could act so different yet have so few friends.

Stockphote.com/Craig Dingle

ASSESS:

- 1. Darla seems to be a loner. Is this a bad thing? Why or why not?
- 2. What are some examples of appropriate social behavior? What are some examples of aggressive behavior?
- 3. How likely do you think it is that Darla will become a basketball player? Give the reasons for your answer.

HIGH SCHOOL

HIGH SCHOOL: STEAL, CHEAT, AND FIGHT

PREPARE:

As you read the case, make notes:

- 1. WHO are the central characters in the case? Describe them.
- 2. WHAT is taking place?
- 3. WHERE is the case taking place? Is the environment a factor?
- 4. WHEN is the case taking place? Is the timing a factor?

Rebecca Durbin is the principal at one of the three high schools located in a small city with a population of approximately 100,000. The school enrollment is approximately 2,500 students. Recently, there have been a number of incidents related to cheating, stealing, and drinking, as well as a number of verbal and physical fights. Ms. Durbin decides to use next Friday's school improvement day to address these behavioral issues. To prepare for the workshop, she sends an e-mail to all the teachers and staff asking for examples of these behaviors and suggestions for how the school system should handle the issue. She receives a number of responses, including the following:

Mr. Smith (freshman English) wrote: Last week I wasted five minutes of class time breaking up an exchange between Lisa and Kiana. Basically, the girls were engaged in a verbal assault on each other, saying things such as "You're fat and ugly" and "Your mom is a slut." I was very disturbed by their comments, but I don't have many suggestions. I am just thankful they didn't start a cat fight during my lecture!

Ms. Baxter (advanced mathematics) wrote: I know we have several groups of students who don't apply themselves. For instance, there is that whole group of kids who stand across the street after school smoking (one of whom spent the night in jail last weekend for driving under the influence) and the group of girls who walk around the school like they are dressed for a night out on the town. However, I don't think it is the school's place to dictate how they dress or to meddle in their behavior outside the school. I am much more concerned about the students who are here to learn and their inability to determine their career paths. Many of them are very academically talented yet have no direction or ideas about where to go to college or what their major will be. I think our time is better spent guiding them into good colleges and career paths.

Ms. Presley (office staff manager) wrote: I have been working in high schools for over 20 years now and honestly believe that the school has little control over these teenagers. The problem is the breakdown of the family. So many of our students come from broken homes without a mother or a father, or they have the opposite problem—too many parents and stepparents. Plus, almost all of our mothers are out working full-time jobs, leaving no one at home to take care of these children when they leave school in the afternoon. I suggest we offer parenting classes and family counseling to keep families together.

Mr. Ruestman (biology) wrote: The problem is that we simply don't have the time to deal with all these issues. I have too much course content to cover to continually be dealing with the problems students have with their friends. Very few seem to know how to

control their anger or how to think about how others might be feeling, and they don't understand that the world does not revolve around them. They all seem to be overly concerned about their friendships, who is friends with whom, who was and wasn't invited to the party, yet they lack the skills to make and keep friends. Maybe some form of social skills training would help, but not during my class time.

Mr. Cargill (physical education) wrote: Just yesterday, Jimmy was sent to the office for hitting Bob. Apparently, Bob was talking about another Jim, commenting on his sister. The whole thing was taken out of context, and Jimmy hauled off and hit him. If Jimmy would have taken two seconds to look at Bob and pay attention to his tone of voice and nonverbal behaviors, Jimmy would have realized that the comments were not inappropriate or derogatory, and they were not even about his sister but another Jim's sister. Bob was actually commenting on how nice this young lady had been, helping him with his math homework during study hall. These kids need a lesson in how to read others' intentions and behaviors as well as how to handle their own emotions.

Ms. Kennel (chemistry) wrote: I am mostly concerned about the girls and minority students in our school. The girls seem to be lacking in confidence, particularly in academics and even more so in math and science. I think we need to find a way to boost their egos and give them the confidence they will need out there in the real world. Maybe with a little more confidence they would stop worrying so much about their friends, boyfriends, and other relationships. The minority students may also need a boost, but even more they need to stop grouping together according to their ethnicity. Do you know we now have a whole group of students who are referred to as the "Spans" because they all speak Spanish? We need to incorporate all ethnic groups into our school and educate every student on the issues of diversity in our country.

Ms. May (special education) wrote: The behaviors of stealing, cheating, and aggression in this school are due to a basic lack of respect for authority. We need to have firm policies on these issues and stick to them. Most students simply don't think it is a big deal to cheat, lie, or steal, and in many classes it is because teachers let them get away with these behaviors. We need every teacher on board to enforce the rules of the school.



ASSESS:

- 1. What are some of the recurring themes within these responses from the teachers and staff?
- For each person's e-mail, give a score based on how much you agree with the view

 (1 = completely disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = completely agree).
 Briefly explain why you agree or disagree with each e-mail response and whether your rating is
 based on experience, observation, or opinion.
- 3. Do you think gender might be important in handling these issues? Why or why not?
- 4. Do you think it is appropriate for the principal and teachers to use school time to address issues related to social and emotional behaviors?

HIGH SCHOO



MODULE **2**

CONTEXTS OF DEVELOPMENT

Peter Cade/The Image Bank/Getty Images

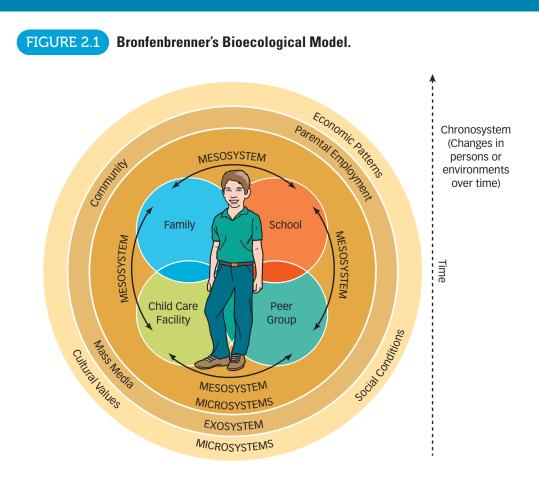
OUTLINE	LEARNING GOALS
Bronfenbrenner's Bioecological Theory	
	1 Describe Bronfenbrenner's bioecological theory.
Family Context	
Parenting PracticesDivorce and Remarriage	2 Describe how parenting styles and family transitions interact with the school system.
Peer Context	
Friendships and Peer GroupsPeer Statuses	3 Describe how aspects of the peer context interact with the school system.
Broader Contexts	
Parental EmploymentCultural Factors	Explain how broader contexts of development influence microsystems and individual outcomes.

BRONFENBRENNER'S BIOECOLOGICAL THEORY

1 Describe Bronfenbrenner's bioecological theory.

Who is the most influential person in your life now? Who was it five years ago? You can probably think of several people who have made a difference in your life. As children and adolescents, we grow and develop with the support and influence of people and places: our family members, friends, and teachers, and our neighborhoods and schools. Because of their influence on development, these people and places are considered *contexts of development*. Urie Bronfenbrenner's (1994, 2005) bioecological theory of human development, the best-known theory on the

30



Master the content.

edge.sagepub.com/durwin3e **\$SAGE** edge[™]

contexts of development, emphasizes the combined function of the person (or genetics) and the many systems that exist in the environment and interact to influence development, as shown in Figure 2.1. Let's examine this model more closely. It will be the framework for our discussion on the contexts of development throughout this module.

- The **microsystem**, the immediate environment surrounding an individual, includes the people, relationships, and systems that directly interact with the developing individual, such as family, peers, and school.
- The **mesosystem** links two or more microsystems. For example, the communication between parents and teachers links home and school environments or home and child care settings.
- The **exosystem** is the interaction among two or more environments, one of which does not directly include the individual. For developing children and adolescents, the exosystem includes links between home and their parents' places of work. The developing child typically has no direct interaction with a parent's workplace but is influenced by that environment indirectly. For example, parental work stress influences children's adjustment.
- The macrosystem includes many of the broader cultural patterns, such as beliefs, customs, knowledge, and morals. Bronfenbrenner suggests that this is not simply the ethnicity or social class of individuals but rather the social features that affect individuals. For example, low-income children may experience more stressors in their



31

DIVERSITY <

macrosystem—substandard housing, crowding, or community violence—than do middle-class children (Santiago, Wadsworth, & Stump, 2011).

• The **chronosystem** refers to the chronological nature of development within the individual as well as the history of the surrounding environment. The social environment changes over time and affects developing individuals differently at various points in history. For example, the impact of divorce on child development was viewed more negatively during the 1950s than it is today.

Much of the research on development in the past 30 years has been conducted from a bioecological perspective. In this module, we will examine:

- the microsystems of families and peers, with special emphasis on the interaction of these within the educational system (in other words, mesosystem);
- the influence of parental employment on development (exosystem);
- connections to ethnicity and socioeconomic status (macrosystem) as they relate to the microsystems.

FAMILY CONTEXT

2 Describe how parenting styles and family transitions interact with the school system.

Arguably, the most influential microsystem in the lives of individuals is the family. Several basic aspects of families—parenting practices, divorce and remarriage—directly influence the child and how the family interacts with the school system as a component of the mesosystem.

Parenting Practices

Parenting practices, also called parenting styles, are the patterns of discipline and affection parents display with their children. These have an important influence on child and adolescent development. Diana Baumrind (1966) described parenting practices as typically including two broad dimensions: control and responsiveness. **Control** is the manner and strictness with which parents provide their children with limits and discipline. **Responsiveness** includes the affection, acceptance, and caring involved in parenting. In short, control describes the *behavioral* aspects of parenting, while responsiveness describes the *emotional* aspects. Based on the levels of these two dimensions, Baumrind describes four parenting styles, as shown in Table 2.1.

- Authoritative parenting includes setting limits or having rules for children and adolescents and enforcing those rules. Parents and children also exhibit a high level of emotional connectedness that allows the parents to be flexible when necessary. For example, parents may be less strict than usual because they understand that their child is having difficulty with peers at school or is upset about not making the cheerleading squad.
- Authoritarian parenting includes a high level of control in which limits are set and rules are enforced yet emotional connectedness is lacking. Parents may be viewed as "dictators" who are inflexible, unable to bend the rules to accommodate special or unusual circumstances. For example, a parent might make a negative comment regarding the B on the child's report card when all the other grades are As.
- **Permissive parenting** involves less control, with parents either not setting rules for behavior or not enforcing rules. However, parents do have a close connection to their





Reference: Parenting Styles