Brief Contents

Chapter 1
Teaching: Interdisciplinary Connections 1

- Educational Psychology
- Becoming an Effective Teacher
- Interdisciplinary and Collaborative Education

Chapter 2
Developmental Foundations I: Thinking, Reasoning, and Language 33

- Typical Development and Developmental Differences
- Cognition and Developmental Neuroscience
- Vygotsky and the Interactive Nature of Thinking
- Piaget and the Inquisitive Child
- Language Development

Chapter 3
Developmental Foundations II: Personal Identity and Social and Moral Development 85

- The Development of Self-Perceptions
- Bronfenbrenner's Ecological Systems Theory
- Erikson's Theory of Psychosocial Development
- Personal Development and Socialization
- The Development of Morality and Social Responsibility

Chapter 4
Behavioral and Social Learning Theories 127

- Behaviorism—A Focus on What We Do
- Classical Conditioning—Learning by Association
- Operant Conditioning—Learning by Consequence
- Social Theories: Learning by Observation

Chapter 5
Cognitive Learning Theories 167

- Cognition—A Focus on What We Think
- The Information-Processing Model of Memory
- The Organization of Knowledge and Memory
- Metacognition

Chapter 6
Complex Cognitive Processes 213

- Problem-Solving and Critical Thinking
- Metacognition and Study Strategies
- Transfer

Chapter 7
Motivation 251

- Motivation—A Focus on Why We Act
- Perspectives on Motivation
- Goals and Motivation

Chapter 8
Individuals, Groups, and Society 285

- Individual Variation and Shared Education
- We're Not All the Same
- Culture and Society

Chapter 9
Standardized Testing and Understanding Learner Differences 335

- What Is Testing?
- Issues in Standardized Testing
- Types of Testing
- Types of Standardized Tests
- Interpreting Standardized Test Scores

Chapter 10
Special Education: Student Identification and Learning Needs 391

- Special Education: Legislation and Practice
- Special Education: Collaborative Evaluation and Intervention
- Special Education Disability Classifications

Chapter 11

Exceptional Learning: Attention, Giftedness, Creativity, and the Family 447

- Accommodating Special Learning Needs: Legislation and Practice
- Special Needs: Attention-Deficit/Hyperactivity Disorder and Giftedness and Creativity
- Exceptionality: Families and Culture

Chapter 12

Constructivism & Student-Centered Learning 489

- Constructivism—A Focus on Constructing Knowledge
- Constructivist Foundations
- A Closer Look at Social Learning and Constructivism
- Constructivism and Student Learning

Chapter 13

Creating Effective Learning Environments 523

- Establishing a Positive Instructional Context
- Teachers Creating Positive Learning Environments
- Students as Management Agents
- Effective Learning Environments Through Collaboration
- Discipline in Schools

Chapter 14

Instructional Excellence 571

- Development of the Instructional Plan
- Management of the Instructional Plan
- Instructional Delivery
- Models of Teaching and Learning

Chapter 15

Assessment of Learning 617

- Assessment in the Classroom
- Traditional Classroom Assessments
- Alternative Assessments
- Grading and Assessment
- Technology and Classroom Assessment

Glossary 649

References 671

Name Index 719

Index 727

Contents

About the Author xvii

Preface xix

Supplements and Resources xxviii

Chapter 1

Teaching: Interdisciplinary Connections 1

From Today's Headlines 3

1.1 Educational Psychology 4

1.1a What Is Educational Psychology? 4

1.1b Why Is Educational Psychology Important to Teachers? 5

1.1c Educational Psychology: Building a Science-Based Practice 6

1.1d Discovering Action Research 16

Summarize and Reflect 19

1.2 Becoming an Effective Teacher 19

1.2a Professional Knowledge 19

1.2b The Expert Teacher Prototype 21

Summarize and Reflect 21

1.3 Interdisciplinary and Collaborative Education 22

1.3a Teaching Today: The Importance of an Interdisciplinary Foundation 22

1.3b Using Interdisciplinary and Collaborative Tools in the Classroom 25

Summarize and Reflect 28

The Chapter in Review 29

Interdisciplinary Case Focus 29

Key Terms 31

Chapter 2

Developmental Foundations I: Thinking, Reasoning, and Language 33

From Today's Headlines 36

2.1 Typical Development and Developmental Differences 37

2.1a The Developmental Process 37

2.1b Developmental Differences: Relative Perspective 39

Summarize and Reflect 42

2.2 Cognition and Developmental Neuroscience 42

2.2a Neuronal Communication 43

2.2b Brain Development 44

2.2c Developmental Neuroscience 46

2.2d Implications for Teaching and Learning 46

Summarize and Reflect 47

2.3 Vygotsky and the Interactive Nature of Thinking 48
2.3a Perspectives on Development: Which Skills Develop versus How Skills Develop 48
2.3b The Importance of Social Interaction and Language 49
2.3c Instruction: The Zone of Proximal Development and Scaffolding 52
Summarize and Reflect 55
2.4 Piaget and the Inquisitive Child 55
2.4a Equilibration 55
2.4b Assimilation and Accommodation 56
2.4c Organization 58
2.4d Stages of Development 58
2.4e Evaluating Piaget's Theory 66
2.4f Piaget and Developmentally Appropriate Instruction 68
2.4g Piaget and Vygotsky: Important Comparisons 70
Summarize and Reflect 71
2.5 Language Development 71
2.5a Components of Language 72
2.5b Language Acquisition Theories 73
2.5c Language and Linguistic Diversity in the Classroom 75
Summarize and Reflect 79
The Chapter in Review 80
Interdisciplinary Case Focus 80
Key Terms 82

Chapter 3

Developmental Foundations II: Personal Identity and Social and Moral Development 85
From Today's Headlines 88
3.1 The Development of Self-Perceptions 89
3.1a Self-Concept 89
3.1b Self-Esteem 90
3.1c Self-Efficacy 93
3.1d Influences on the Development of Self-Perceptions 93
3.1e Self-Perceptions and Academic Success 94
3.1f Promoting Accurate and Positive Self-Perceptions in the Classroom 95
Summarize and Reflect 97
3.2 Bronfenbrenner's Ecological Systems Theory 98
3.2a Ecological Spheres of Influence 98
3.2b Bronfenbrenner in Action 98
Summarize and Reflect 100
3.3 Erikson's Theory of Psychosocial Development 100
3.3a Basic Principles: Psychosocial Crises and Lifespan Development 100
3.3b Erikson's Stage Theory of Psychosocial Development 101
3.3c Promoting the Development of Personal Identity in the Classroom 105
Summarize and Reflect 107
3.4 Personal Development and Socialization 107
3.4a Agents of Socialization 108
3.4b The Development of Social Behavior and Social Thinking 110

3.4c Promoting Social Development in the Classroom 111
Summarize and Reflect 113
3.5 The Development of Morality and Social Responsibility 113
3.5a Piaget's Theory of Morality 114
3.5b Kohlberg's Theory of Moral Development 114
3.5c Criticisms of Kohlberg's Theory and Alternatives 116
3.5d Problematic Moral and Social Behaviors in School 118
3.5e Promoting Moral and Socially Responsible Behaviors in the Classroom 120
Summarize and Reflect 122
The Chapter in Review 123
Interdisciplinary Case Focus 123
Key Terms 125

Chapter 4
Behavioral and Social Learning Theories 127
From Today's Headlines 130
4.1 Behaviorism—A Focus on What We Do 131
4.1a Learning 131
4.1b Behavioral Perspective 132
Summarize and Reflect 134
4.2 Classical Conditioning—Learning by Association 135
4.2a Pavlov and Watson: Importance of Contiguity 135
4.2b Basic Components of Classical Conditioning 136
4.2c Generalization versus Discrimination 138
4.2d Extinction 139
4.2e Limitation of Classical Conditioning 140
Summarize and Reflect 140
4.3 Operant Conditioning—Learning by Consequence 141
4.3a Thorndike and Skinner 141
4.3b Reinforcement 142
4.3c Schedules of Reinforcement 143
4.3d Punishment 147
4.3e Shaping and Extinction 150
4.3f Cueing and Prompting 152
4.3g Applied Behavior Analysis 152
4.3h Functional Behavioral Assessments (FBAs) 154
4.3i Positive Behavioral Intervention and Supports (PBIS) 155
4.3j Limitations of Operant Conditioning 156
Summarize and Reflect 157
4.4 Social Theories: Learning by Observation 158
4.4a Bandura—Modeling and Observational Learning 158
4.4b Social Cognitive Theory 159
4.4c Self-Regulation 160
Summarize and Reflect 161
The Chapter in Review 162
Interdisciplinary Case Focus 162
Key Terms 165

Chapter 5

Cognitive Learning Theories 167

From Today's Headlines 169

5.1 Cognition—A Focus on What We Think 170

5.1a Cognitive Perspective 170

5.1b Memory as a Foundation for Knowledge 172

Summarize and Reflect 173

5.2 The Information-Processing Model of Memory 174

5.2a Sensory Memory 175

5.2b Working Memory 178

5.2c Long-Term Memory 184

Summarize and Reflect 189

5.3 The Organization of Knowledge and Memory 190

5.3a Multiple Types of Knowledge 190

5.3b Building Knowledge and Improving Memory 194

5.3c Cognitive Diversity and Assessment 199

Summarize and Reflect 202

5.4 Metacognition 202

5.4a Metacognitive Knowledge 203

5.4b Metacognitive Regulation 204

5.4c Metacognitive Instruction 204

5.4d Early Development of Metacognition 205

Summarize and Reflect 207

The Chapter in Review 208

Interdisciplinary Case Focus 208

Key Terms 211

Chapter 6

Complex Cognitive Processes 213

From Today's Headlines 215

6.1 Problem-Solving and Critical Thinking 216

6.1a Defining a Problem 216

6.1b Problem-Solving Strategies 217

6.1c Factors Affecting Problem Solving 218

6.1d Differences Between Experts and Novices 220

6.1e Critical Thinking 224

Summarize and Reflect 228

6.2 Metacognition and Study Strategies 229

6.2a Metacognition and Learning 229

6.2b Study Strategies 231

Summarize and Reflect 238

6.3 Transfer 239

6.3a General versus Specific Transfer 239

6.3b Positive, Negative Transfer 239

6.3c Strategies Affecting Transfer 240

Summarize and Reflect 245
The Chapter in Review 246
Interdisciplinary Case Focus 247
Key Terms 249

Chapter 7
Motivation 251
From Today's Headlines 253
7.1 Motivation—A Focus on Why We Act 254
7.1a Defining Motivation to Learn 254
7.1b Motivational Concepts 254
Summarize and Reflect 257
7.2 Perspectives on Motivation 258
7.2a Behavioral Views of Motivation 258
7.2b Humanistic Views of Motivation 259
7.2c Cognitive Views of Motivation 269
7.2d Sociological Views of Motivation 272
Summarize and Reflect 275
7.3 Goals and Motivation 276
7.3a Achievement Goals: Mastery and Performance 276
7.3b Work Avoidance Goals 277
7.3c Social Goals 278
7.3d Goal Setting 278
Summarize and Reflect 279
The Chapter in Review 280
Interdisciplinary Case Focus 280
Key Terms 282

Chapter 8
Individuals, Groups, and Society 285
From Today's Headlines 287
8.1 Individual Variation and Shared Education 288
8.1a The Diverging Educational Landscape 288
8.1b Diversity, Individuals, and Instruction 291
Summarize and Reflect 295
8.2 We're Not All the Same 296
8.2a Girls and Boys 296
8.2b Linguistic Differences 301
8.2c Families 305
Summarize and Reflect 311
8.3 Culture and Society 312
8.3a Socioeconomic Status (SES) 312
8.3b Ethnicity 317
8.3c Culturally Sensitive Instruction 326
Summarize and Reflect 329

The Chapter in Review 330
Interdisciplinary Case Focus 330
Key Terms 333

Chapter 9

Standardized Testing and Understanding Learner Differences 335

From Today's Headlines 337

9.1 What Is Testing? 338

9.1a Testing versus Assessment 338

9.1b Measurement versus Evaluation 339

9.1c Standardized versus Classroom Assessment 339

9.1d Uses of Standardized Testing in Education 340

Summarize and Reflect 342

9.2 Issues in Standardized Testing 343

9.2a High-Stakes Testing 343

9.2b Diversity and Testing 346

9.2c Teaching the Test 349

Summarize and Reflect 350

9.3 Types of Testing 350

9.3a Norm versus Criterion Referenced Testing 350

9.3b Assessment Categories 353

Summarize and Reflect 356

9.4 Types of Standardized Tests 357

9.4a Aptitude Tests 357

9.4b Achievement Tests 357

9.4c Behavioral Tests 359

9.4d Intelligence Tests: A Special Case 361

9.4e Standardized Assessments for Teachers 370

Summarize and Reflect 371

9.5 Interpreting Standardized Test Scores 372

9.5a Basic Testing Concepts 372

9.5b Type of Scores 377

9.5c Reliability and Validity 380

9.5d Sharing Testing Results with the Student and Family 382

Summarize and Reflect 383

The Chapter in Review 384

Interdisciplinary Case Focus 385

Key Terms 388

Chapter 10

Special Education: Student Identification and Learning Needs 391

From Today's Headlines 393

10.1 Special Education: Legislation and Practice 394

10.1a Person-First Language 394

10.1b Labeling 395

10.1c Legislation 398

10.1d Inclusion 399
Summarize and Reflect 403
10.2 Special Education: Collaborative Evaluation and Intervention 403
10.2a Process Overview 404
10.2b Special Education Evaluation Team 405
10.2c Individualized Education Program (IEP) 406
10.2d Diversity and Identification Under IDEA 408
Summarize and Reflect 410
10.3 Special Education Disability Classifications 410
10.3a Developmental Delay 411
10.3b Cognitive and Academic Challenges 411
10.3c Social and Behavioral Problems 421
10.3d Sensory, Physical, and Health Challenges 428
10.3e Multiple Impairments 438
Summarize and Reflect 441
The Chapter in Review 442
Interdisciplinary Case Focus 442
Key Terms 445

Chapter 11
Exceptional Learning: Attention, Giftedness, Creativity, and the Family 447
From Today's Headlines 449
11.1 Accommodating Special Learning Needs: Legislation and Practice 450
11.1a Rehabilitation Act of 1973—Section 504 451
11.1b Americans with Disabilities Act (ADA) 451
11.1c Comparing Section 504, ADA, and IDEA 452
Summarize and Reflect 456
11.2 Special Needs: Attention-Deficit/Hyperactivity Disorder and Giftedness and Creativity 457
11.2a Attention-Deficit/Hyperactivity Disorder 457
11.2b Giftedness and Creativity 470
Summarize and Reflect 477
11.3 Exceptionality: Families and Culture 478
11.3a Exceptionality and the Family 478
11.3b Exceptionality and Cultural Diversity 481
Summarize and Reflect 482
The Chapter in Review 483
Interdisciplinary Case Focus 484
Key Terms 486

Chapter 12
Constructivism & Student-Centered Learning 489
From Today's Headlines 491
12.1 Constructivism—A Focus on Constructing Knowledge 492
12.1a Defining Constructivism 492
12.1b Constructivist Learning 494

12.1c Problems and Limitations in Constructivism 494
12.1d Misconceptions 496
Summarize and Reflect 496
12.2 Constructivist Foundations 497
12.2a Psychological Foundations 497
12.2b Social Foundations 498
12.2c Comparing Individual and Social Constructivist Theories 498
Summarize and Reflect 499
12.3 A Closer Look at Social Learning and Constructivism 500
12.3a Promoting Classroom Dialogue 500
12.3b Collaborative Classroom 502
12.3c Importance of Experimenting 504
Summarize and Reflect 505
12.4 Constructivism and Student Learning 506
12.4a Discovery Learning 506
12.4b Inquiry Learning 508
12.4c Problem-Based Learning 510
12.4d Instructional Conversations 513
Summarize and Reflect 515
The Chapter in Review 517
Interdisciplinary Case Focus 518
Key Terms 520

Chapter 13
Creating Effective Learning Environments 523
From Today's Headlines 525
13.1 Establishing a Positive Instructional Context 526
13.1a What Is Classroom Management? 526
13.1b Classroom Management Styles 529
13.1c Managing Instructional Times 530
Summarize and Reflect 533
13.2 Teachers Creating Positive Learning Environments 533
13.2a Encouraging Engagement 533
13.2b Positive Behavioral Supports 535
13.2c Prevention 537
13.2d Rules and Procedures 538
13.2e Learning Spaces 541
13.2f Communication Style 545
Summarize and Reflect 549
13.3 Students as Management Agents 549
13.3a Social Skill Development 549
13.3b Conflict Resolution and Peer Mediation 551
13.3c Student-Teacher Relationship 552
Summarize and Reflect 553
13.4 Effective Learning Environments Through Collaboration 554
13.4a Teacher Collaboration 554

13.4b Parental Collaboration 556
Summarize and Reflect 559
13.5 Discipline in Schools 560
13.5a Defining Discipline Problems 560
13.5b Strategies for Managing Discipline Problems in Schools: A Dual Approach 561
13.5c The Role of Parental Involvement in Managing Discipline Problems in Schools 563
Summarize and Reflect 564
The Chapter in Review 565
Interdisciplinary Case Focus 566
Key Terms 568

Chapter 14
Instructional Excellence 571
From Today's Headlines 573
14.1 Development of the Instructional Plan 574
14.1a Planning for Instruction 574
14.1b Translating Goals into Lessons 577
Summarize and Reflect 584
14.2 Management of the Instructional Plan 585
14.2a Timing (Yearly, Term, Unit, Weekly, Daily) 585
14.2b Topic Selection and Lesson Plans 586
14.2c Integrated and Thematic Learning 589
Summarize and Reflect 590
14.3 Instructional Delivery 590
14.3a Teacher Qualities 591
14.3b Effective Instruction 593
Summarize and Reflect 599
14.4 Models of Teaching and Learning 600
14.4a Social Cognitive Approaches to Instruction 600
14.4b Information Processing Approaches to Instruction 603
14.4c Behavioral Approaches to Instruction 605
14.4d Individual Differences Approaches to Instruction 607
Summarize and Reflect 611
The Chapter in Review 612
Interdisciplinary Case Focus 613
Key Terms 615

Chapter 15
Assessment of Learning 617
From Today's Headlines 619
15.1 Assessment in the Classroom 620
15.1a Measuring and Monitoring Learning 620
15.1b Supporting Student Learning 623
Summarize and Reflect 626

15.2 Traditional Classroom Assessments 626
15.2a Informal Assessments 626
15.2b Formal Assessments 627
Summarize and Reflect 632
15.3 Alternative Assessments 632
15.3a Performance-Based Learning 633
15.3b Portfolio 634
15.3c Exhibits and Demonstrations 635
Summarize and Reflect 635
15.4 Grading and Assessment 636
15.4a Function of Grading 636
15.4b Approaches to Grading 638
Summarize and Reflect 639
15.5 Technology and Classroom Assessment 640
15.5a Electronic Portfolios 640
15.5b Maintaining Student Records 641
15.5c Technology-Assisted Test Construction 642
15.5d Technology-Assisted Test Analysis 643
Summarize and Reflect 644
The Chapter in Review 645
Interdisciplinary Case Focus 646
Key Terms 648

Glossary 649

References 671

Name Index 719

Index 727