



EIGHTH EDITION

DEVELOPMENTAL PROFILES

PRE-BIRTH THROUGH ADOLESCENCE

Lynn R. Marotz
K. Eileen Allen





NAEYC Professional Preparation Standards: Correlations with Chapter Content

The National Association for the Education of Young Children (NAEYC) **naeyc** Standards provide a guiding framework for the preparation of professional early childhood teachers based on extensive research and evidence-based practices. **NAEYC Standards Chapter Links** feature at the beginning of each chapter illustrates how the content aligns with these standards.

| NAEYC Standards and Outcomes | Chapter and Topical Location |
|--|--|
| STANDARD 1. Promoting Child Development and Learning | |
| 1a. Knowing and understanding young children's characteristics and needs. | Chapter 1: Case Study, pp. 1–2; Contemporary Theories, pp. 03; Video Features: <i>Zone of Proximal Development</i> , p. 08; <i>Culturally Responsive Teaching</i> , p. 14; <i>Assessing Children's Development</i> , p. 18. Brain Development, p. 13. |
| 1b. Knowing and understanding the multiple influences on development and learning. | Chapter 2: Case Study, pp. 23–24; Basic Patterns and Concepts, pp. 24; Video Features: <i>Brain Development in Infancy</i> , p. 29; <i>Children and Poverty</i> , p. 36; <i>Temperament and Personality</i> , p. 40. Brain Development, p. 31. Developmental Domains, pp. 36. |
| 1c. Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments. | Chapter 3: Case Study, pp. 46–47. Brain Development, p. 49. Promoting Healthy Fetal Development, pp. 50; Threats to Healthy Fetal Development, pp. 56. Chapter 4: The Newborn, pp. 69–70; One to Four Months, pp. 78; Four to Eight Months, pp. 87; Eight to Twelve Months, pp. 94. Video Features: <i>Newborn Reflex Development</i> , p. 74; <i>Early Infant Learning</i> , pp. 83; <i>Fine Motor Development</i> , p. 88. Brain Development, pp. 86; Learning Activities, pp. 92; Positive Behavior Guidance, p. 101. Chapter 5: Case Study, pp. 106–107; The One-Year-Old, pp. 108; The Two-Year-Old, pp. 116; Brain Development, p. 121. Video Features: <i>Speech and Language Development</i> , p. 111; <i>Toddler's Cognitive Development</i> , p. 112. Learning Activities, pp. 122–123; Positive Behavior Guidance, p. 125. Chapter 6: Case Study, pp. 129–130; The Three-Year-Old, pp. 131; The Four-Year-Old, pp. 140; The Five-Year-Old, pp. 146; Learning Activities, pp. 137; Positive Behavior Guidance, p. 153. Video Features: <i>Preschooler's Motor Development</i> , p. 133; <i>Preschoolers and Language Development</i> , p. 143; <i>Social Skill Development</i> , p. 149. Chapter 7: Case Study, pp. 158–159. Brain Development, p. 168; The Six-Year-Old, pp. 160; The Seven-Year-Old, pp. 169; The Eight-Year-Old, pp. 176; Video Features: <i>Cognitive Development</i> , p. 163; <i>Learning About Responsibility</i> , p. 167; <i>Cognitive Development and Concrete Operations</i> , p. 172; <i>Moral Development</i> , p. 179. Learning Activities, pp. 165–166; Positive Behavior Guidance, p. 183. Chapter 8: Case Study, pp. 188–189. Nine- and Ten-Year-Olds, pp. 190; Eleven- and Twelve-Year-Olds, pp. 198; Brain Development, p. 197–198. Video Features: <i>Emotional Development and Bullying</i> , p. 194; <i>Middle Childhood and Cognitive Development</i> , p. 202. Learning Activities, p. 204; Positive Behavior Guidance, p. 206. Chapter 9: Case Study, pp. 211–212; Thirteen- and Fourteen-Year-Olds, pp. 213; Fifteen- and Sixteen-Year-Olds, pp. 221; Seventeen- and Eighteen-Year-Olds, pp. 227; Brain Development, p. 221. Video Features: <i>Understanding Adolescent Emotions</i> , p. 217; <i>Technology and Learning</i> , p. 233; <i>Peer Influence</i> , p. 230. Learning Activities, p. 218; Positive Behavior Guidance, pp. 233. Chapter 10: Community Screening, p. 239–240; When and Where to Seek Help, p. 246; The Developmental Team, pp. 251; Brain Development, p. 244–245. Video Features: <i>Including Children with Developmental Disabilities</i> , p. 242; <i>Children with Disabilities in the Classroom</i> , p. 247. |

STANDARD 2. Building Family and Community Relationships

- 2a.** Knowing about and understanding diverse family and community characteristics.
- 2b.** Supporting and engaging families and communities through respectful, reciprocal relationships.
- 2c.** Involving families and communities in young children's development and learning.

- Chapter 1:** Families as Observers, pp. 15; Bioecological Theory, p. 09.
- Chapter 2:** Growth, p. 24; Development, pp. 25; Gender Roles, pp. 33; Ecological Factors, pp. 35; Developmental Domains, pp. 36.
- Chapter 3:** Threats to Optimum Fetal Development, pp. 56; Maternal Depression, pp. 62.
- Chapter 4:** Learning Activities, pp. 76–77.
Video Features: *Attachment*, p. 92. Safety Concerns, p. 94; Positive Behavior Guidance, p. 101.
- Chapter 5:** Learning Activities, pp. 114–115; Social-Emotional Development, p. 111; Safety Concerns, p. 116; Positive Behavior Guidance, p. 125.
- Chapter 6:** Brain Development, p. 139; Learning Activities, pp. 137; Safety Concerns, pp. 138–139; Positive Behavior Guidance, p. 153.
- Chapter 7:** Learning Activities, pp. 165–166; Brain Development, p. 168–169; Safety Concerns, p. 168; Positive Behavior Guidance, p. 183.
- Chapter 8:** Learning Activities, pp. 196; Safety Concerns, p. 197; Positive Behavior Guidance, p. 206.
- Chapter 9:** Learning Activities, pp. 218–219; Safety Concerns, p. 219–220; Positive Behavior Guidance, p. 233.
- Chapter 10:** When to Seek Help, p. 246; Observing and Recording, pp. 247; Screening Tests, p. 248.

STANDARD 3. Observing, Documenting, and Assessing to Support Young Children and Families

- 3a.** Understanding the goals, benefits, and uses of assessment—including its use in development of appropriate goals, curriculum, and teaching strategies for young children.
- 3b.** Knowing about assessment partnerships with families and with professional colleagues to build effective learning environments.
- 3c.** Knowing about and using observation, documentation, and other appropriate assessment tools and approaches, including the use of technology in documentation, assessment, and data collection.
- 3d.** Understanding and practicing responsible assessment to promote positive outcomes for each child, including the use of assistive technology for children with disabilities.

- Chapter 1:** Data Gathering, pp. 13; Families as Observers, pp. 15.
Video Features: *Portfolio Assessment*, p. 18.
- Chapter 3:** **Video Features:** *Prenatal Assessment*, p. 56; *Newborn Assessment*, p. 61.
- Chapter 4:** Developmental Alerts, pp. 77.
- Chapter 5:** Developmental Alerts, pp. 115.
- Chapter 6:** Developmental Alerts, pp. 138–139.
- Chapter 7:** Developmental Alerts, pp. 166–167.
- Chapter 8:** Developmental Alerts, pp. 196–197.
- Chapter 9:** Developmental Alerts, pp. 219.
- Chapter 10:** Case Study, pp. 254.
Video Features: *Including Children with Developmental Disabilities*, p. 242; *Assessing Children's Development*, p. 249. Is There a Problem? pp. 245; When to Seek Help, p. 246; Information Gathering, pp. 247; Diagnosis and Referral, pp. 251.

STANDARD 4. Using Developmentally Effective Approaches

- 4a.** Understanding positive relationships and supportive interactions as the foundation of their work with young children.
- 4b.** Knowing and understanding effective strategies and tools for early education, including appropriate uses of technology.
- 4c.** Using a broad repertoire of developmentally appropriate teaching/learning approaches.
- 4d.** Reflecting on own practice to promote positive outcomes for each child.

- Chapter 2:** Age-level expectancies or Norms, pp. 26; Brain Growth and Development, pp. 29.
Video Features: *Brain Development in Infancy*, p. 29. Typical Growth and Development, pp. 28; Temperament, p. 32; Developmental Domains, pp. 36.
- Chapter 4:** Brain Development, p. 86; Learning Activities, pp. 76–77; Safety Concerns, pp. 94.
Video Features: *Attachment*, p. 92; Positive Behavior Guidance, p. 101.
- Chapter 5:** Learning Activities, pp. 114–115; Safety Concerns, pp. 116; Positive Behavior Guidance, p. 125.
- Chapter 6:** Learning Activities, pp. 137; Safety Concerns, pp. 138–139; Positive Behavior Guidance, p. 153.

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| | <p>Chapter 7: Brain Development, p. 168–169; Learning Activities, pp. 165–166; Safety Concerns, pp. 168; Positive Behavior Guidance, p. 183.</p> <p>Chapter 8: Learning Activities, pp. 196; Safety Concerns, pp. 197; Brain Development, p. 197–198; Positive Behavior Guidance, p. 206.</p> <p>Chapter 9: Learning Activities, pp. 218–219; Safety Concerns, pp. 219–220. Video Features: <i>Understanding Adolescent Emotions</i>, p. 217. Positive Behavior Guidance, pp. 233.</p> <p>Chapter 10: Video Features: <i>Children with Developmental Disabilities in the Classroom</i>, p. 247. <i>Is There a Problem?</i> pp. 245; <i>When to Seek Help</i>, p. 246; <i>Screening Tests</i>, pp. 248; <i>IQ Tests</i>, p. 250.</p> |
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STANDARD 5. Using Content Knowledge to Build Meaningful Curriculum

5a. Understanding content knowledge and resources in academic disciplines: language and literacy; the arts—music, creative movement, dance, drama, visual arts; mathematics; science, physical activity, physical education, health and safety; and social studies.

5b. Knowing and using the central concepts, inquiry tools, and structures of content areas or academic disciplines.

5c. Using own knowledge, appropriate early learning standards, and other resources to design, implement, and evaluate developmentally meaningful and challenging curriculum for each child.

Chapter 4: Video Features: *Early Infant Language*, p. 83; *Fine Motor Development*, p. 88. Learning Activities, pp. 76–77.

Chapter 5: Video Features: *Speech and Language Development*, p. 111; *Toddlers' Cognitive Development*, p. 112. Learning Activities, pp. 114–115.

Chapter 6: Video Features: *Preschoolers' Motor Development*, p. 133, *Preschooler's Language Development*, p. 143; *Social Skill Development*, p. 149. Learning Activities, pp. 137.

Chapter 7: Video Features: *Cognitive Development*, p. 163; *Cognitive Development and Concrete Operations*, p. 172. Learning Activities, pp. 165–166.

Chapter 8: Video Features: *Emotional Development and Bullying*, p. 194; *Middle Childhood and Cognitive Development*, p. 202. Learning Activities, pp. 196.

Chapter 9: Video Features: *Understanding Adolescent Emotions*, p. 217; *Technology and Learning*, p. 223. Learning Activities, pp. 218–219.

STANDARD 6. Becoming a Professional

6a. Identifying and involving oneself with the early childhood field.

6b. Knowing about and upholding ethical standards and other early childhood professional guidelines.

6c. Engaging in continuous, collaborative learning to inform practice; using technology effectively with young children, with peers, and as a professional resource.

6d. Integrating knowledgeable, reflective, and critical perspectives on early education.

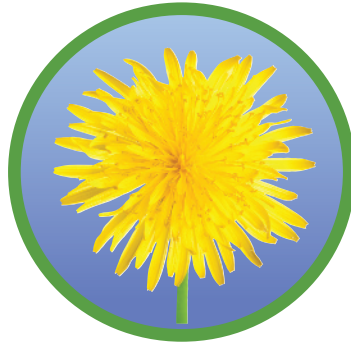
6e. Engaging in informed advocacy for young children and the early childhood profession.

Chapter 3: Promoting Health Fetal Development, pp. 50.

Chapter 10: Legislation Supporting Optimum Development, pp. 241; The Developmental Team, pp. 251.

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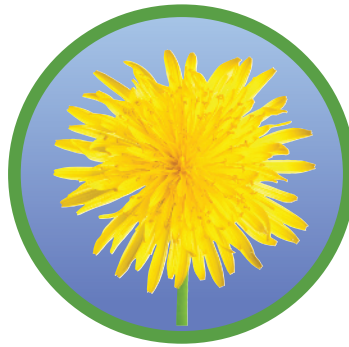
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Lynn R. Marotz, RN, Ph.D

University of Kansas

K. Eileen Allen

Professor Emerita
University of Kansas



Australia • Brazil • Japan • Korea • Mexico • Singapore • Spain • United Kingdom • United States

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Lynn R. Marotz and K. Eileen Allen

Product Director: Marta E. Lee-Perriard

Product Manager: Mark Kerr

Content Developer: Kate Scheinman

Product Assistant: Julia Catalano

Marketing Manager: Chris Sosa

Content Project Manager: Samen Iqbal

Art Director: Marissa Falco

Manufacturing Planner: Doug Bertke

IP Analyst: Jennifer Nonenmacher

IP Project Manager: Brittani Hall

Copy Editor: Susan McClung

Production Service/Project Manager:
Teresa Christie, MPS Limited

PMG Photo Researcher:
Sofia Priya Dharshini, PMG

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Contents in Brief

- 1 • Child Development Theories and Data Gathering 1
 - 2 • Principles of Growth and Development 23
 - 3 • Prenatal Development 46
 - 4 • Infancy: Birth to Twelve Months 69
 - 5 • Toddlerhood: Twelve to Twenty-Four Months 106
 - 6 • Early Childhood: Three-, Four-, and Five-Year-Olds 129
 - 7 • Early Childhood: Six-, Seven-, and Eight-Year-Olds 158
 - 8 • Middle Childhood: Nine-, Ten-, Eleven-, and Twelve-Year-Olds 188
 - 9 • Adolescence: Thirteen- to Nineteen-Year-Olds 211
 - 10 • When and Where to Seek Help 239
- APPENDIX A Developmental Checklists 257
- APPENDIX B Selected Screening and Assessment Instruments 273
- APPENDIX C Resources for Families and Professionals 279

Preface xii

About the Authors xxi

1 • Child Development Theories and Data Gathering 1



Contemporary Theories 3

Maturation Theory 3

Psychoanalytic and Psychosocial Theory 4

Cognitive-Developmental Theory 5

TeachSource Video Connections: Zone of Proximal Development 8

Behaviorism and Social Learning Theory 8

Bioecological Theory 9

Maslow's Essential Needs Theory 10

Spotlight on Brain Development: Why Do Brain Research, and What Have We Learned? 13

Data Gathering 13

TeachSource Video Connections: Culturally Responsive Teaching 14

Teachers as Classroom Observers 14

Families as Observers 15

Observation Methods 15

Anecdotal Notes 16

Time or Event Sampling 16

Frequency and Duration Counts 17

Checklists and Rating Scales 17

TeachSource Video Connections: Assessing Children's Development 18

Portfolios 18

Summary 19

Key Terms 19

Apply What You Have Learned 19

Online Resources 20

References 21

2 • Principles of Growth and Development 23



Basic Patterns and Concepts 24

Growth 24

Development 25

Typical Growth and Development 28

Interrelatedness of Developmental Domains 28

Brain Growth and Development 29

TeachSource Video Connections: Brain Development in Infancy 29

Spotlight on Brain Development: Poverty's Toxic Effects 31

Temperament 32

Gender Identity 33

Ecological Factors 35
Transactional Patterns of Development 35
Children at Risk 35

TeachSource Video Connections: Children and Poverty 36

Atypical Growth and Development 36

Developmental Domains 36

Physical Development and Growth 37

Motor Development 37

Perceptual Development 39

Cognitive Development 39

Language Development 40

Social and Emotional Development 41

TeachSource Video Connections: Temperament and Personality Development 41

Age Divisions 41

Summary 42

Key Terms 42

Apply What You Have Learned 43

Online Resources 43

References 44

3 • Prenatal Development 46



The Developmental Process 47

Spotlight on Brain Development: Learning Before Birth 49

Promoting Healthy Fetal Development 50

Prenatal Care 50

Nutrition 51

Weight 53

Rest and Stress 54

Age and General Health 54

TeachSource Video Connections: Prenatal Assessment 56

Threats to Healthy Fetal Development 56

Alcohol 57

Smoking 58

Chemicals and Drugs 58

Maternal Infections 59

An Infant's Arrival: Labor and Delivery 60

TeachSource Video Connections: Newborn Assessment 61

Maternal Depression 62

Summary 64

Key Terms 64

Apply What You Have Learned 65

Online Resources 65

References 66

4 • Infancy: Birth to Twelve Months 69



The Newborn (Birth to One Month) 70

TeachSource Video Connections: Newborn Reflex Development 74

TeachSource Digital Download: Learning Activities to Promote Brain Development 76

One to Four Months 78

TeachSource Video Connections: Early Infant Learning 83

TeachSource Digital Download: Learning Activities to Promote Brain Development 84

Spotlight on Brain Development: Breast-feeding and Brain Development 86

Four to Eight Months 87

TeachSource Video Connections: Fine Motor Development 88

TeachSource Video Connections: Attachment 92

TeachSource Digital Download: Learning Activities to Promote Brain Development 92

Eight to Twelve Months 94

TeachSource Video Connections: Assessing Language Development 97

TeachSource Digital Download: Learning Activities to Promote Brain Development 99

Positive Behavior Guidance 101

Summary 102

Key Terms 103

Apply What You Have Learned 103

Online Resources 104

References 104

5 • Toddlerhood: Twelve to Twenty-Four Months 106



Twelve to Twenty-Four Months 107

The One-Year-Old 108

TeachSource Video Connections: Speech and Language Development 111

TeachSource Video Connections: Toddlers' Cognitive Development 112

TeachSource Digital Download: Learning Activities to Promote Brain Development 114

The Two-Year-Old 116

TeachSource Video Connections: Assessing Motor Development 118

Spotlight on Brain Development: The Brain-Autism Connection 121

TeachSource Digital Download: Learning Activities to Promote Brain Development 122

Positive Behavior Guidance 125

Summary 125

Key Terms 126

Apply What You Have Learned 126

Online Resources 127

References 127

6 • Early Childhood: Three-, Four-, and Five-Year-Olds 129



Three-, Four-, and Five-Year Olds 130

The Three-Year-Old 131

TeachSource Video Connections: The Preschooler's Motor Development 133

TeachSource Digital Download: Learning Activities to Promote Brain Development 137

Spotlight on Brain Development: The Importance of Sleep 139

The Four-Year-Old 140

TeachSource Video Connections: Preschoolers and Language Development 143

TeachSource Digital Download: Learning Activities to Promote Brain Development 144

The Five-Year-Old 146

TeachSource Video Connections: Social Skill Development 149

TeachSource Digital Download: Learning Activities to Promote Brain Development 151

Positive Behavior Guidance 153

Summary 154

Key Terms 154

Apply What You Have Learned 154

Online Resources 155

References 156

7 • Early Childhood: Six-, Seven-, and Eight-Year-Olds 158



Six-, Seven-, and Eight-Year-Olds 159

The Six-Year-Old 160

TeachSource Video Connections: Cognitive Development 163

TeachSource Digital Download: Learning Activities to Promote Brain Development 165

TeachSource Video Connections: Learning About Responsibility 167

Spotlight on Brain Development: Toxic Stress and Abnormal Brain Development 168

The Seven-Year-Old 169

TeachSource Video Connections: Cognitive Development and Concrete Operations 172

TeachSource Digital Download: Learning Activities to Promote Brain Development 174

The Eight-Year-Old 176

TeachSource Video Connections: Moral Development 179

TeachSource Digital Download: Learning Activities to Promote Brain Development 181

Positive Behavior Guidance 183

Summary 183

Key Terms 184

Apply What You Have Learned 184

Online Resources 185

References 185

8 • Middle Childhood: Nine-, Ten-, Eleven-, and Twelve-Year-Olds 188



Nine-, Ten-, Eleven-, and Twelve-Year Olds 189

Nine- and Ten-Year-Olds 190

TeachSource Video Connections: Emotional Development and Bullying 194

TeachSource Digital Download: Learning Activities to Promote Brain Development 196

Spotlight on Brain Development: Physical Activity and Neurocognitive Function 197

Eleven- and Twelve-Year-Olds 198

TeachSource Video Connections: Middle Childhood and Cognitive Development 202

TeachSource Digital Download: Learning Activities to Promote Brain Development 204

Positive Behavior Guidance 206

Summary 206

Key Terms 207

Apply What You Have Learned 207

Online Resources 208

References 208

9 • Adolescence: Thirteen- to Nineteen-Year-Olds 211



Thirteen- to Nineteen-Year-Olds 212

Thirteen- and Fourteen-Year-Olds (Early Adolescence) 213

TeachSource Video Connections: Understanding Adolescent Emotions 217

TeachSource Digital Download: Learning Activities to Promote Brain Development 218

Spotlight on Brain Development: Self-Control and the Adolescent Brain 221

Fifteen and Sixteen-Year-Olds (Middle Adolescence) 221

TeachSource Video Connections: Technology and Learning 223

TeachSource Digital Download: Learning Activities to Promote Brain Development 225

Seventeen- and Eighteen-Year-Olds (Late Adolescence) 227

TeachSource Video Connections: Peer Influence 230

TeachSource Digital Download: Learning Activities to Promote Brain Development 231

Positive Behavior Guidance 233

Summary 234

Key Terms 235

Apply What You Have Learned 235

Online Resources 236

References 236

10 • When and Where to Seek Help 239



Public Policy and Social Attitudes 240

Legislation Supporting Optimum Development 241

TeachSource Video Connections: Including Children with Developmental Disabilities 242

Early Identification and Intervention Programs 243

Infants and Children at Medical Risk 243

Community Screening 243

Spotlight on Brain Development: Premature Birth and Cognitive Development 244

Is There a Problem? 245

When to Seek Help 246

Information Gathering 247

TeachSource Video Connections: Children with Developmental Disabilities in the Classroom 247

Observing and Recording 247

Screening Tests 248

TeachSource Video Connections: Assessing Children's Development 249

IQ Tests: Are They Appropriate for Young Children? 250

Achievement Tests 250

Diagnosis and Referral 251

The Developmental Team 251

Service Coordinator 252

Referral 252

Summary 253

Key Terms 254

Apply What You Have Learned 254

Online Resources 255

References 255

APPENDIX A Developmental Checklists 257

APPENDIX B Selected Screening and Assessment Instruments 273

APPENDIX C Resources for Families and Professional 279

Glossary 283

Index 287

Architectural engineers know that a structurally sound building requires a strong foundation. Similarly, early childhood teachers understand that children require a strong foundation if they are to develop to their fullest potential. The quality of children's environments, early learning opportunities, and adult support and encouragement plays an influential role in shaping the groundwork upon which all future skill acquisition is built. When adults understand children's developmental needs, capabilities, and limitations, they are able to provide effective behavioral guidance and the types of learning experiences that ultimately create a strong foundation.

Developmental Profiles: Pre-birth Through Adolescence is designed to be a concise, user-friendly resource for teachers, families, caregivers, practitioners, and service providers. The eighth edition has been thoroughly revised and updated, yet it maintains the authors' original purpose to provide a comprehensive yet nontechnical, easy-to-follow overview of children's development. It links contemporary research, theory, and application to the guidance of children's behavior and the promotion of developmentally appropriate learning experiences.

Purpose and Philosophical Approach

The common practice of dividing infancy and childhood into age-related units of months and years may initially appear to distort the realities of human development. However, when describing developmental expectations, developmental progress, and delays, other systems seem to work even less well. Let it be stressed here, as it is again and again throughout the text, that *age specifications are only approximate markers derived from averages or norms*. In a way, they can be thought of as midpoints that are not intended to represent any one particular child. Rather, age expectations represent summary terms for skills that vary from child to child in form and time of acquisition. The truly important consideration in assessing a child's development is *sequence*. The essential question is not chronological age, but whether the child is moving forward step by step in each developmental area. *Developmental Profiles* has long proven itself to be an invaluable resource in addressing this issue.

As in the previous editions, the early days, weeks, and months of infancy are examined in great detail. New research findings on brain and early development clearly support the critical importance of this relatively short time span. What is now known about the infant's capacity for learning is indeed amazing given conventional wisdom, which suggests that young babies simply flounder around in a state of confusion. Far from it! With more and more infants and young children entering early education programs and receiving intervention services at ever earlier ages, it is most important that teachers and practitioners are knowledgeable about their development and ability to learn. It is also crucial that families and service providers hold appropriate expectations and be able to describe to teachers what they want and believe is best for children.

The first year of life is essential for building a foundation of learning in every developmental domain. The vast array of new and complex behaviors that toddlers and preschoolers must learn in three or four short years is also monumental. At no other period in a person's lifetime will so much be expected in so short a time. With other-than-parent child care being the norm rather than the exception, it is necessary for teachers and families to have a comprehensive understanding of how young children grow, develop, and learn. Thus, an underlying philosophy of *Developmental Profiles* continues to be partnerships with families. No matter how many hours children spend with caregivers or teachers in school each day, families still play the most significant and influential role in their lives. Families must be supported and encouraged to share their observations and concerns with teachers because this information is integral to each child's development and well-being. In turn, teachers and service providers must listen to families with focused attention and respond with genuine interest and respect.

Partnerships with families become even more critical when an infant or older child is suspected of having a developmental problem or irregularity. The *Developmental Alerts* identified for each age group can be especially useful to families, teachers, and service providers for initiating a discussion about their concerns. Let it be emphasized, however, that under no circumstances should this book or any other book be seen as an instrument for diagnosing a developmental problem. That is the job of professional clinicians and child development specialists.

Thus, the stated purposes of this text can be summed up as follows:

- To provide a concise overview of developmental principles
- To provide easily accessible information about what to expect at each developmental level
- To suggest appropriate ways for adults to facilitate learning and development
- To pinpoint warning signs of a possible developmental problem
- To suggest how and where to get help
- To describe cultural and environmental diversity in terms of its impact on the developmental process
- To emphasize the value of direct observation of children in their natural settings, whether in a classroom, early childhood program, or the child's own home
- To help adults encourage every child to achieve his or her potential, develop a positive sense of self-esteem, and feel loved and respected
- To highlight contemporary child development research

The Intended Audience

Teachers—caregivers, families, and professionals—play an essential role in guiding children's development. It is through their ability to foster learning and self-esteem and identify challenges that interfere with developmental progress that adults can ultimately

make a difference in children's lives. Thus, *Developmental Profiles* is designed for adults who care for and work with children of all ages, including:

- Students and preservice teachers.
- Teachers in home-based settings, early childhood centers, Early Start and Head Start programs, public and private schools, and before- and after-school programs; home visitors; and nonparental caregivers in the child's home.
- Allied health professionals and service providers in nursing, nutrition, audiology, social work, physical and occupational therapy, psychology, medicine, language and speech therapy, and counseling who provide services for children and their families.
- Families, the most important contributors to a child's development.

Organization and Key Content

Developmental Profiles opens with a brief overview of major child development theories and principles. These chapters (1 and 2) serve as a refresher of basic concepts and provide background material on age-level expectancies for the chapters that follow. Chapter 3 is devoted to maternal practices that are essential for promoting healthy fetal development. Detailed word pictures of child and adolescent development across six developmental domains, including typical daily routines, safety alerts, developmental alerts, learning activities to promote brain development, and positive behavioral guidance are described in Chapters 4 through 9. Pages include color-coded tabs with age designations for quick, easy-to-locate reference. When and where to seek help if there are concerns about a child's developmental progress are discussed in Chapter 10. A new feature included in each chapter presents cutting-edge research on children's brain development. Developmental checklists and additional resource material of interest to families, teachers, and service providers are provided in the appendices. We believe that this format encourages vigilance in identifying delays in their earliest stage and supports adults in creating developmentally appropriate interventions and learning opportunities for children of all ages.

Developmental Profiles provides nontechnical, key information about the following:

- What to expect of young children and adolescents at each succeeding developmental stage
- The ways in which all areas of development are intertwined and mutually supportive
- The unique pathway that each child follows in a developmental process that is alike, yet different, among children of a similar age
- Sequences, not age, being the critical concept in evaluating developmental progress
- The use of developmental norms in teaching, observing, and assessing children and in designing individualized as well as group learning experiences

New Content and Special Features

The eighth edition of *Developmental Profiles* continues to bring readers important content features that support understanding and practice in an easy-to-reference format:

- The **Learning Objectives** at the beginning of each chapter show students what they need to know to process and understand the information in the chapter. After completing the chapter, students should be able to demonstrate how they

can use and apply their new knowledge and skills. The learning objectives are also reflected in the end-of-chapter summary.

- **Standards:** New and improved coverage of **National Association for the Education of Young Children Professional Preparation Standards (NAEYC)** standards includes a chapter-opening list of standards to help students identify where key standards are addressed in the chapter. These callouts, as well as the standards correlation chart, help students make connections between what they are learning in the textbook and the professional standards.
- **Digital Downloads:** Downloadable and often customizable, these practical and professional resources allow students to immediately implement and apply this textbook's content in the field. The student can download these tools and retain them for future use, enabling preservice teachers to begin building a library of practical, professional resources. Look for the **TeachSource Digital Downloads** label that identifies these items.
- **TeachSource videos** feature footage from the classroom to help students relate key chapter content to real-life scenarios. Critical-thinking questions provide opportunities for in-class or online discussion and reflection.
- **New Spotlight on Brain Development:** This feature, included in each chapter, draws attention to the latest neurocognitive research on critical issues (e.g., autism, breast-feeding, premature birth, abuse and neglect, physical activity, and adolescence) and their connections to children's brain development.
- **New Did You Know?** Offers interesting facts in a marginal feature to arouse students' curiosity and interest in chapter content.
- **New Chapter to Practice:** Field-based exercises, included in each chapter, provide opportunities for students to apply developmental concepts learned in the chapter and to critique their experiences.
- **New What Do You See?** Reinforces students' observational skills by asking them to answer questions based on what they see in a photograph.
- **New and expanded information on contemporary topics:** Additional material on brain development, children and technology, cultural awareness and sensitivity, gender identity and sexual orientation, dual-language learners, observational skills, and strategies for supporting children's transitions has been incorporated throughout the book. Updated references reflect the latest empirical research on these subjects.
- **Concise developmental profiles:** Highlight children's sequential progress across six developmental domains, from prebirth to age nineteen in a bulleted format.
- **Case Studies:** Presented at the onset of each chapter, the case studies reflect the ethnic diversity in today's schools. They set the stage for chapter content that follows and encourage students to relate what they learn to real-life situations. The **new Case Study Connections** located at the end of each chapter feature questions that require students to reflect on and apply what they have learned.
- **Developmental Alerts** are highlighted at each age level to aid in the early identification of potential delays, developmental problems, or both that warrant further evaluation.
- **Daily Activities and Routines** typical at each age level are offered in each chapter to help families and teachers anticipate and respond appropriately to children's developmental interests and needs.

- **Positive Behavior Guidance sections** outline effective strategies for responding to children’s behavior in a constructive manner in order to promote healthy social and emotional competence.
- **New Learning Activities to Promote Brain Development** are now available in digital format for easy downloading. These sections offer suggestions for developmentally appropriate learning experiences that can be used to promote children’s curiosity, creativity, problem-solving abilities, and skill acquisition across all domains.
- **Safety Alerts** reflect updated safety concerns associated with each developmental stage and are designed to help adults create safe environments, maintain quality supervision, and support children’s safety education.
- **New TeachSource Digital Download Developmental Checklists** are provided for each age group in Appendix A. The checklists are also available in digital format and can be downloaded for teachers and families to use in monitoring children’s developmental progress.
- **Screening and Assessment Instruments:** A sampling of screening tests commonly used to evaluate infants, young children, and adolescents development are identified and described in an annotated listing (Appendix B).
- **Resources:** An overview of early intervention resources is provided in Appendix C and at the end of each chapter to aid families and professionals in locating additional information and technical assistance.

Chapter-by-Chapter Changes

Chapter 1, “Child Development Theories and Data Gathering”

- *New* and expanded descriptions of contemporary child development theory and theorists
- *New* learning objectives and summary aligned with chapter content
- *New* case study with questions for student reflection, class discussion, or both
- *New* research feature, *Spotlight on Brain Development: Why Brain Research and What Have We Learned?*
- *New TeachSource Video Connections* features: *Zone of Proximal Development and Scaffolding; Culturally Responsive Teaching; Assessing Children’s Development*
- *New, Did You Know?* marginal feature: Offers facts to pique reader interest

Chapter 2, “Principles of Growth and Development”

- Expanded case study focused on diversity with *Your Turn* questions for self-reflection
- *New, What Do You See?* feature designed to reinforce students’ observation skills
- *New* information on early brain development, temperament, gender identity, sexual orientation, and children at risk
- *New* research feature, *Spotlight on Brain Development: Poverty’s Toxic Effects*
- *New TeachSource Video Connections* videos (*Brain Development in Infancy; Children and Poverty*)

Chapter 3, “Prenatal Development”

- *New* graphics illustrating key elements and current research data
- Increased emphasis on diversity awareness and sensitivity integrated throughout the chapter.

- *New* brain research box drawing attention to research on learning before birth
- *New* *What Do You See?* feature, which invites readers to make observations based on a photo
- Expanded and updated information on maternal depression and its effect on children’s development, maternal practices to promote healthy fetal development, and reproductive technologies
- *New TeachSource Video Connections* videos and thought-provoking questions (*Prenatal Assessment; Newborn Assessment*)

Chapter 4, “Infancy: Birth to Twelve Months”

- Additional information on developmental changes and needs across domains and cultural differences
- *New* safety recommendations
- *New TeachSource Video Connections* videos reinforcing chapter content (*Newborn Reflex Development; Early Infant Learning; Fine Motor Development; Attachment; Assessing Language Development*)
- *New* developmentally appropriate learning experiences to promote infant brain development
- *New* brain research feature highlighting contemporary findings on breastfeeding and brain development

Chapter 5, “Toddlerhood: Twelve to Twenty-Four Months”

- Expanded information on typical development, developmental needs and interests, and cultural diversity provided throughout the chapter
- *New, TeachSource Video Connections* illustrating children’s behavior in everyday situations (*Speech and Language Development; Toddlers’ Cognitive Development; Assessing Motor Development*)
- *New* brain research feature presenting the latest neurocognitive findings on the brain-autism connection
- *New* chapter features, including *What Do You See?* and *Chapter to Practice*

Chapter 6, “Early Childhood: Three-, Four-, and Five-Year-Olds”

- *New* measurable objectives numbered and aligned with chapter and summary content
- Additional information on dual-language learners, diversity in milestone achievement, children’s developmental interests and learning needs, media and technology, children’s safety, social-emotional development, and the role of friendships
- *New TeachSource Video Connections* videos (*Preschool Motor Development; Preschoolers and Language Development; Social Skill Development*)
- *New* brain research feature on sleep and its influence on children’s brain development and learning

Chapter 7, “Early Childhood: Six-, Seven-, and Eight-Year-Olds”

- *New* research findings on chronic exposure to maltreatment and toxic stress and their negative effects on children’s brain development
- *New* Case Study that draws attention to cultural differences
- Expanded list of activities to promote children’s brain development
- *New* information on bullying, culture, play-based learning, sleep, bullying, media safety, and the physical activity-learning link

- *New, TeachSource Video Connections* videos and thought-provoking questions (*Cognitive Development; Learning About Responsibility; Cognitive Development and Concrete Operations; Moral Development*)

- *New* descriptions of children’s developmental needs and interest at each age level

Chapter 8, “Middle Childhood: Nine-, Ten-, Eleven-, and Twelve-Year-Olds”

- *New* Case Study and *Ask Yourself* questions
- *New* information on early puberty and preparing children for this important transition, language patterns, safety concerns, and eating disorders
- Expanded information on cultural differences in children’s development
- *New TeachSource Video Connections* videos showcasing contemporary issues (*Emotional Development and Bullying; Middle Childhood and Cognitive Development*)
- *New Brain Research* feature describing the empirical research supporting a positive relationship between physical activity and brain development

Chapter 9, “Adolescence: Thirteen- to Nineteen-Year-Olds”

- *New* references and expanded information on adolescent development, including risky behaviors, experiences to promote brain development, and positive behavior guidance
- *New* research feature, *Spotlight on Brain Development*, provides empirical findings on adolescent brain development and behavior (self-control, impulsivity)
- *New TeachSource Video Connections* featuring video footage and content-related questions (*Understanding Adolescent Emotions; Technology and Learning; Peer Influence*)

Chapter 10, “Where and When to Seek Help”

- Updated information on legislation supporting education for all children and special intervention services
- Additional information on multiple births and medical conditions that can affect children’s development, achievement testing, and cultural awareness and evaluation
- *New* brain research feature that draws attention to premature birth and its detrimental effect on children’s cognitive development
- *New TeachSource Video Connections* features addressing the needs of children who have disabilities (*Including Children with Developmental Disabilities; Children with Developmental Disabilities in the Classroom; Assessing Children’s Development*).

Ancillaries

The eighth edition of this book is accompanied by an extensive package of instructor and student resources.

For Students

CourseMate

Cengage Learning’s Education CourseMate brings course concepts to life with interactive learning, study, and exam preparation tools that support the printed textbook. Access the eBook, Digital Downloads, TeachSource Video Cases, flashcards, and other ancillaries in your Education CourseMate. Go to CengageBrain.com to register or purchase access.

TeachSource Videos

The TeachSource videos feature footage from the classroom to help students relate key chapter content to real-life scenarios. Critical-thinking questions provide opportunities for in-class or online discussion and reflection.

For Instructors

CourseMate

Cengage Learning's Education CourseMate brings course concepts to life with interactive learning, study, and exam preparation tools that support the printed textbook. CourseMate includes the eBook, quizzes, Digital Downloads, TeachSource Video Cases, flashcards, and EngagementTracker, a first-of-its-kind tool that monitors student engagement in the course. The accompanying instructor website, available through login.cengage.com, offers access to password-protected resources such as Microsoft® PowerPoint® lecture slides and the online Instructor's Manual with Test Bank. CourseMate can be bundled with the student text. Contact your Cengage sales representative for information on obtaining access to CourseMate.

PowerPoint Lecture Slides

These vibrant PowerPoint lecture slides for each chapter assist you with your lecture, by providing concept coverage using images, figures, and tables directly from the textbook!

Online Instructor's Manual with Test Bank

An online Instructor's Manual accompanies this book. It contains information to assist the instructor in designing the course, including sample syllabi, discussion questions, teaching and learning activities, field experiences, learning objectives, and additional online resources. For assessment support, the updated test bank includes true/false, multiple-choice, matching, short-answer, and essay questions for each chapter.

Cognero

Cengage Learning Testing Powered by Cognero is a flexible online system that allows you to create, edit, and manage test bank content from multiple Cengage Learning solutions; create multiple test versions in an instant; and deliver tests from your LMS, your classroom, or wherever you want.

Acknowledgments

First and foremost, we wish to recognize Cengage Learning for their longstanding commitment to education. Their vision and dedication have contributed to an improved understanding of children and families and continue to support teachers in their efforts to help children develop to their fullest potential.

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ABOUT THE AUTHORS

Lynn R. Marotz, Ph.D., R.N., has taught undergraduate and graduate courses in the Department of Applied Behavioral Science, University of Kansas, and served as the Associate Director of the Edna A. Hill Child Development Center for over 35 years. She has worked closely with students in the Early Childhood teacher education program and offered courses in parenting, health/safety/nutrition for the young child, administration, and foundations of early childhood education.

Lynn has authored invited chapters on children's health and development, nutrition, and environmental safety in national and international publications and law books. She is also the author of *Health, Safety, and Nutrition for the Young Child* and the co-author of *Motivational Leadership*, and *By the Ages: Behavior & Development of Children Pre-birth Through Eight*. Her involvement in state policy development, health screenings, professional development training, working with families and allied health professionals, and the referral process is extensive. She has presented at international, national, and state conferences, and held appointments on national, state, and local committees and initiatives that advocate on children's and families' behalf. However, it is her daily interactions with children and their families, students, colleagues, and her beloved family that bring true insight, meaning, and balance to the material in this book.

K. Eileen Allen, professor emerita, was a member of the Early Childhood faculty at the University of Washington in Seattle and at the University of Kansas in Lawrence. For 31 years, she taught graduate and undergraduate courses in child development, developmental disabilities in young children, parenting, early education, and an interdisciplinary approach to early intervention and inclusion. She also trained teachers and supervised research-focused classrooms at both schools and has published seven college textbooks as well as numerous research articles and position papers in major professional journals. During her retirement, she continues to write and advocate on behalf of children and families. Her most recent book is entitled *I Like Being Old: A Guide to Making the Most of Aging*.





Child Development Theories and Data Gathering

Learning Objectives

After reading this chapter, you will be able to:

- 1-1** Compare and contrast the fundamental contemporary child development theories described in this chapter.
- 1-2** Explain why authentic assessment is the most developmentally appropriate method for evaluating children's progress.
- 1-3** Describe five methods that can be used for gathering observational data about children.

naeyc NAEYC Standards Linked to Chapter Content

1a and 1b: Promoting child development and learning

2a: Building family and community relationships

3b and c: Observing, documenting, and assessing to support young children and families

Shortly after Tucker celebrated his first birthday, social workers removed him from his nineteen-year-old mother's home because of malnourishment and severe neglect. He was placed temporarily with an older couple who had long served as foster parents for many children. Several weeks after Tucker's initial placement, he was moved again to a different foster home where there were other children closer to his age. However, soon after Tucker arrived, the family decided that they no longer wanted to remain foster parents. This necessitated moving him yet again, and several additional times thereafter.

Tucker recently celebrated his fifth birthday and has been living with his current foster parents, Serena and James Martinez, for almost a year. They have two little girls of their own, ages four and six, and three additional foster children ranging in age from four to nine years. All the children are vigorous and outgoing except for Tucker, who seems to tire easily and is quite small for his age. Serena discussed her concerns with Tucker's pediatrician during his recent well-child checkup. When the

nurse weighed and measured Tucker, he was only in the 30th percentile for height and weight, despite the fact that Serena says he eats far more than the other children.

Serena and James learned from their social worker that Tucker sat up, crawled, and eventually began to walk much later than most children his age. He continues to experience some motor delays, but he is working with a therapist who believes that he is making good progress. Serena and James also have noted that Tucker seldom joins in play or conversation with the other children. However, they have occasionally overheard him holding lengthy and comprehensible discussions with his imaginary friend, Honey, at times when he thinks he is alone. The talk is usually about things he fears, possibly the root of recurring bad dreams from which he often wakes up screaming. Yet, despite his problems, Tucker is a kind and lovable child. He seizes any opportunity to curl up on Serena's lap, suck his thumb, and snuggle his free hand into hers. The Martinezes have come to love Tucker as one of their own and are currently in the process of formalizing his adoption.

Ask Yourself

- What aspects of Tucker's development pose a concern?
- In what ways are Serena and James attempting to meet Tucker's fundamental needs?

Children's development has interested philosophers and psychologists for decades (Figure 1-1). Early attempts to explain the origin of children's ideas and the processes involved in learning were derived primarily from personal observations and interpretations. Theories built solely on this information were later found to be incomplete, inconsistent, and vastly divergent in their explanations. The introduction of formalized scientific methodologies during the twentieth century enabled child development researchers to produce data that was more comprehensive, consistent, and reliable.

Figure 1-1 Children's development has been the subject of study for many decades.



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Although many earlier theories were abandoned, significant differences of opinion regarding how children learned persisted among child development researchers.

It is unlikely that any one theory could ever adequately explain the complexities of human behavior. Each has contributed in some way to our understanding of children's development and reminds us that behavior is a product of multiple and complex factors. It is also important to remember that theories reflect the prevailing beliefs and conditions (e.g., social, economic, religious, and political) at a given historical point. As a result, existing children's development theories are often revisited and refined and are likely to continue changing over time.

Contemporary Theories

A longstanding debate in the child development field has centered on whether learning is the result of heredity (innate abilities) or environment (experiences). This argument is commonly referred to as the **nature vs. nurture** controversy (Tucker-Drob, Briley, & Harden, 2013). Early philosophers, including Plato and Aristotle, believed that all behavior was biologically predetermined (nature). In other words, it was thought that children were born hardwired to think and act in specific ways. This conclusion was derived from the fact that most children learn to walk, talk, and feed themselves when they reach certain specific ages. By contrast, John Locke and other philosophers suggested that children were born with blank minds (*tabula rasa*, or clean slate) and that all behavior is learned and a product of one's environment and experiences (nurture).

Scientific advancements subsequently have criticized both theories for explaining human behavior in overly simplistic terms. Brain imaging studies, for example, have confirmed that development is not an either/or process. Rather, researchers have demonstrated that learning causes physical changes in the brain's composition and structure. These changes are the product of complex interactions that occur between genetic materials (such as brain cells and an intact neurological system) and learning opportunities in the child's environment.

Much of our current knowledge about how children learn, grow, and mature is derived from several longstanding theories: maturational, psychoanalytic and psychosocial, cognitive-developmental, behaviorism and social learning, bioecological, and essential needs. An overview of the fundamental constructs associated with each theory follows.

Maturational Theory

Maturational theory focuses on a biological or *nature* approach to human development. All behavior is explained in terms of genetics and the biological changes that must occur before a child is able to perform certain skills; this capacity is often referred to as a stage of *biological readiness*. For example, maturational theory would argue that an infant learns to walk only when his or her neurological system has matured sufficiently to permit this activity, regardless of any other factors, including opportunity or environment.

Arnold Gesell's historic research contributed significantly to our understanding of genetic influences on children's development. He believed that all development is governed primarily by internal forces of biologic and genetic origin (Dalton, 2005; Gesell & Ilg, 1949). This led to several notable publications in which he described children's achievements by age and explained them in ways that parents could understand and put into practice.

Few scientists would disagree that genetics play a critical role in human development and, in some cases, even has a limiting effect. For example, the genes that a child inherits from his or her biological parents determine height, skin color, shoe size, hair

nature vs. nurture Refers to whether development is primarily due to biological-genetic forces (heredity-nature) or to external forces (environment-nurture).

What Do You See?

Development as a biological manifestation. Every child differs in terms of genetic makeup and daily experiences. How would Arnold Gesell explain any differences in the way these two children perform on this counting task?



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color, and other distinguishing features. Genes are also responsible for chromosomal abnormalities, such as those causing Down syndrome, congenital deafness, vision defects, and a host of other limiting conditions. Neuroscientists are also investigating genetic links to various personality traits (e.g., shyness, aggressiveness) as well as predispositions to certain mental health disorders (Ashare et al., 2013; Smillie, 2013).

Although most experts acknowledge that genetics are important to human development, they also do not accept it as the sole cause of behavior. Most experts believe that the maturational theory overlooks individual differences and the ways in which they influence learning experiences and outcomes. Yet it is interesting that some current educational practices, such as admission standards based on birth dates and “redshirting” a child whose birthday falls close to a predetermined cutoff date, continue to accept a maturational position.

Gesell’s contributions continue to serve a functional purpose despite some of this criticism. His observations have been translated into **norms**, or benchmarks that have proven useful for assessing and monitoring children’s developmental progress. More recently, they have been incorporated into several commonly used screening tools, including the Denver Developmental Screening Test and the Bayley Scales of Infant and Toddler Development. Scientists continue to update Gesell’s original standards so that they more accurately reflect today’s diverse population.

Psychoanalytic and Psychosocial Theory

Psychoanalytic and psychosocial theory postulates that much of human behavior is governed by unconscious processes, some of which are present at birth and others that develop over time. Sigmund Freud, considered the originator of psychoanalytic theory, believed that children’s behavior is a reflection of their inner thoughts and sexual desires. He proposed a series of stages (e.g., oral, anal, phallic, latency, and genital) and suggested that children must resolve and satisfy certain emotional conflicts fully before they can advance to the next developmental phase. The degree to which these emotions are or are not fulfilled ultimately shapes the child’s basic personality, which Freud believed was established during the first five years of life.

norms Age-level expectancies associated with the achievement of developmental skills.

Psychosocial theory is based on the work of Erik Erikson, who expanded on Freud's ideas about personality development. He, too, believed that each developmental stage is characterized by certain conflicts that must be resolved. After a successful resolution has been achieved, a person is motivated to undertake the next developmental challenge.

However, unlike Freud, Erikson's theory acknowledges the influence of environment and social interactions. He coined the term *ego identity* to describe an individual's conscious awareness of self (who I am in relation to others) and the lifelong changes that occur as a result of social interactions. Erikson was also the first to describe development across the life span by introducing his eight universal stages of human development (Erikson, 1950). The first four stages address the early years; the remaining four cover the span from adolescence to the later years:

- **Trust vs. mistrust (0–12 months)** Establishing a sense of trust with primary caregivers
- **Autonomy vs. shame and doubt (1–3 years)** Learning to gain control over some behaviors (e.g., eating, toileting, and sleeping) and developing a sense of autonomy or independence
- **Initiative vs. guilt (3–5 years)** Using social interaction to gain control over one's everyday world
- **Industry vs. inferiority (6–12 years)** Developing a sense of competence and pride through successful accomplishments
- **Identity vs. confusion (13–20 years)** Learning about self in relationship to others
- **Intimacy vs. isolation (20–35 years)** Exploring and forming intimate relationships
- **Generativity vs. stagnation (35–55 years)** Focusing on family, career, and ways of contributing to society
- **Integrity vs. despair (60s–death)** Reflecting on one's life and forming a sense of satisfaction or dissatisfaction

Psychoanalytic and psychosocial theories have contributed to our understanding of personality and social-emotional skills and their influence on all aspects of children's development. They also have helped us to better understand the universal challenges that children face at each stage and how to create environments that support children's social and emotional needs along a developmental continuum. Although these theories are no longer as popular as they once were, they continue to foster research in areas such as caregiver consistency, attachment, morality, and sibling relationships.

Cognitive-Developmental Theory

Jean Piaget was the first psychologist to study the qualitative and maturational changes that occur in children's cognitive development. He theorized that children were born with basic genetic capabilities that enabled them to construct knowledge and meaning through active exploration of their environment (Figure 1-2). The term **constructivism** often is used today to describe this mode of learning.

According to Piaget, children progress through four distinct stages of intellectual development, beginning in infancy and continuing into the late teens (Piaget, 1954):

- **Sensorimotor (birth–2 years)** The infant's reflexive behaviors gradually give way to intentional actions during the sensorimotor period. Children explore and discover the world around themselves primarily through their senses, and

Did You Know

.....Freud was the oldest of eight children and considered himself to be his mother's favorite, "darling Siggie"?

constructivism A learning approach in which a child forms his or her own meaning through active participation.

Figure 1-2 Jean Piaget believed that children learn best through exploration.



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they begin to learn that they have the power to control some elements in their environment. For example, a toddler sees an object, picks it up, examines it while turning it around in his hands, and finally puts it into his mouth.

- **Preoperational (2–7 years)** Children begin thinking about things in their immediate environment in terms of symbols. For example, the three-year-old picks up a long stick, calls it a fishing pole, and pretends to catch a fish. This example also illustrates a second aspect of the preoperational stage (the emergence of language), which is another form of symbolic representation.
- **Concrete operational (7–11 years)** During this stage, children are developing the ability to comprehend and formulate ideas about their immediate world. Although their ideas remain quite rigid, they are beginning to think logically, to anticipate outcomes, to classify objects, and to solve problems. These emerging *schema* (Piaget's term) lead to a rudimentary understanding of abstract concepts, such as those associated with math and spatial relationships.
- **Formal operational (11–15 years)** Children are able to use complex thinking skills to visualize and manipulate ideas and experiences in their heads without having immediate access to real or concrete objects (abstract thinking). In addition, they are able to think logically, weigh consequences, and use memory for problem solving.

Piaget alleged that children's cognitive development involves far more than the passive accumulation of new information. He described cognition as an active process defined by increasingly sophisticated thought processes that emerge as children transition from one developmental stage to the next. Piaget introduced several terms to describe these changes:

- *Schemas*—Mental patterns or categories (e.g., food, objects, places, or animals) that a child begins to form and use for organizing and storing information.
- *Assimilation*—The process of incorporating new information into preexisting schemas. For example, a carrot is food, and a rabbit is an animal.
- *Accommodation*—The process of modifying preconceived schemas or forming additional schemas based on new information. For example, a carrot is a vegetable, and a rabbit is a mammal.

- *Disequilibrium*—The period of confusion, conflict, tension, or all three that results when new information does not fit within existing schemas.
- *Equilibrium*—The process of using assimilation and accommodation to alleviate intellectual conflict.

Although experts have criticized some of Piaget's ideas, his contributions continue to influence contemporary educational practices, including discovery learning, the importance of play, peer teaching, and developmentally appropriate curriculum.

Lev Vygotsky also was interested in children's cognitive development, but he considered the processes involved in its formation to be different from those proposed by Piaget. He agreed with Piaget's notion that development follows a unique pattern and that children learn through active involvement and hands-on experiences. However, Vygotsky felt strongly that social and cultural environments (e.g., values, beliefs, and practices) shaped and ultimately determined the nature of children's learning (Vygotsky, 1986). He believed that culture provided the mental framework for all thoughts and behavior, while language served as the mechanism for transmitting this information from one individual to another. For example, he explained that children initially learn how to behave in a certain way through a series of adult directives: "Don't touch," "Come here," "Eat this," "Stop that." As children begin to internalize social rules and cultural expectations and develop self-control, the nature of these directives gradually changes. Adults stop telling children what to do and shift their attention to encouraging and assisting the acquisition of new skills. Vygotsky referred to this as the Zone of Proximal Development.

Vygotsky also considered children's speech and language development a critical step in the socialization process. He believed that young children spend considerable time learning new words, thinking about their meanings, making associations, and forming an understanding about how they are to be used. Vygotsky observed that during this process, some children hold conversations with themselves as a way of thinking out loud. He referred to this stage as "self-talk," or inner speech, and suggested that the process provides children an opportunity to rehearse the meanings of words and how they function as communication tools before actually using them in social situations (Vygotsky, 1986).

Marie Montessori's ideas also have contributed to our understanding of cognitive-developmental theory. Trained as a pediatrician, she later became interested in educating children who were considered not capable of learning. She was convinced that all children had potential, but that traditional instructional methods might not always be effective. Her observations led to her belief that children learned best through a process of self-directed exploration. She designed a collection of sensory-based, self-correcting materials that required limited adult intervention. She also developed educational programs based on a philosophy that emphasized children's natural curiosity and self-directed involvement in learning experiences.

Cognitive-developmental theorists have advanced our understanding of how children learn and construct meaning. They have raised educational awareness about differences in children's rate and style of learning and the importance of individualizing instruction to address each child's unique developmental needs. Their ideas have influenced policy formation and are evident in the position statement of the National Association for the Education of Young Children (NAEYC) on developmentally appropriate practice (DAP), as well as the philosophies and activities of other early childhood organizations (NAEYC, 2009). For example, the concept and delivery of early intervention services is built on a foundation of cognitive theory. Children's cognitive development also continues to serve as a source of scientific study, particularly as it relates to curriculum, instructional methods, family involvement, social interaction, and the effects of cultural influence on children's development.

Did You Know

....that Vygotsky was considered a genius of his time and often was referred to as the "Mozart of psychology"?

Zone of Proximal Development Vygotsky's term for tasks that initially prove too difficult for children to master by themselves but that they can perform with adult guidance or assistance.

 TeachSource Video Connections


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Zone of Proximal Development

Adults intuitively use a variety of instructional methods to help children learn a new skill until they are able to perform it independently. Respond to the following questions after you have watched the learning video *5-11 Years: Lev Vygotsky, the Zone of Proximal Development and Scaffolding*:

1. What is the Zone of Proximal Development?
2. What role do adults play in this process?
3. What is scaffolding? How did the teacher illustrate this instructional concept in the video?

Behaviorism and Social Learning Theory

In its modern form, behaviorism and social learning theory stem from the works of B. F. Skinner and John B. Watson, who formulated a *nurture*, or environmental, approach to learning (Skinner, 1938). They argued that development, for the most part, involves a series of learned behaviors based on an individual's positive and negative interactions with his or her environment (Figure 1-3). For example, they would suggest that reinforcing a behavior typically causes it to be repeated. In other words, telling a child that he has done a great job on his spelling test is likely to motivate him to study even harder for the next one. However, the opposite is also true: giving in to a crying child's demands for a much-wanted toy may encourage her to repeat the behavior the next time she wants something. Ignoring the child's demands eventually extinguishes the behavior because there is no reinforcement (attention).

Skinner also explained how the association between two events (stimulus-response) results in learning. For example, a toddler bumps her head (stimulus) when she stands up under the table, so she abruptly ends the activity (response). A preschooler touches a hot pan (stimulus) and is careful to avoid repeating the same behavior (response). You promise to read a favorite book

to your daughter (stimulus) if she picks up her toys (response), and she does so quickly.

Albert Bandura modified several of Skinner's earlier ideas when he formulated his own theory of social learning (Bandura, 1977). He viewed behavior as a combination of environmental influences (nature) and cognitive abilities (nurture). He also believed that children learned both positive and negative behaviors through observation and modeling (imitation). However, unlike Skinner, he did not agree that reinforcement was necessary to motivate or change behavior. He believed that children learned, for example, not to hit another child or not to take away a toy after having observed another child being punished for the same act.

Figure 1-3 Social learning theory explains development as behavioral changes that result from observation and imitation.



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Families and teachers employ the principles of behavioral theory on a daily basis. They expect children to comply with requests and then reward or punish them accordingly. They model behavior that children are likely to imitate. They provide attention and encouragement, thus reinforcing the children’s efforts (good or bad). Behavioral interventions also are commonly used in the treatment of behavior and developmental problems, such as aggression, feeding disorders, anger management, substance abuse, bullying, and obesity (Matson & Goldin, 2014; Cole et al., 2013; DeBar et al., 2013).

Bioecological Theory

There is little dispute among child development experts that environment has an influential effect on development. However, Urie Bronfenbrenner, a noted American scholar and psychologist, alleged that environment played a pivotal role in this process, especially during a child’s early years. He proposed his ecological model of human development based on this conviction and described environment from a multilayered, subsystem perspective: microsystems (e.g., face-to-face interactions with primary caregivers, siblings, and friends); mesosystems (e.g., school-home linkages and interactions with relatives); exosystems (e.g., mass media, parent’s workplace, and social services); macrosystems (e.g., cultural values and customs, ethnicity, economic conditions, and politics); and chronosystems (e.g., changes that occur over time, such as moving to a new location, birth of a sibling, divorce, or a military deployment) (Bronfenbrenner, 1979) (Figure 1-4). Bronfenbrenner suggested that development is a product of the reciprocal interactions and relationships that an individual experiences across and within each of these subsystems. He also believed that as a result, developmental research was more insightful and meaningful when conducted in children’s natural settings.

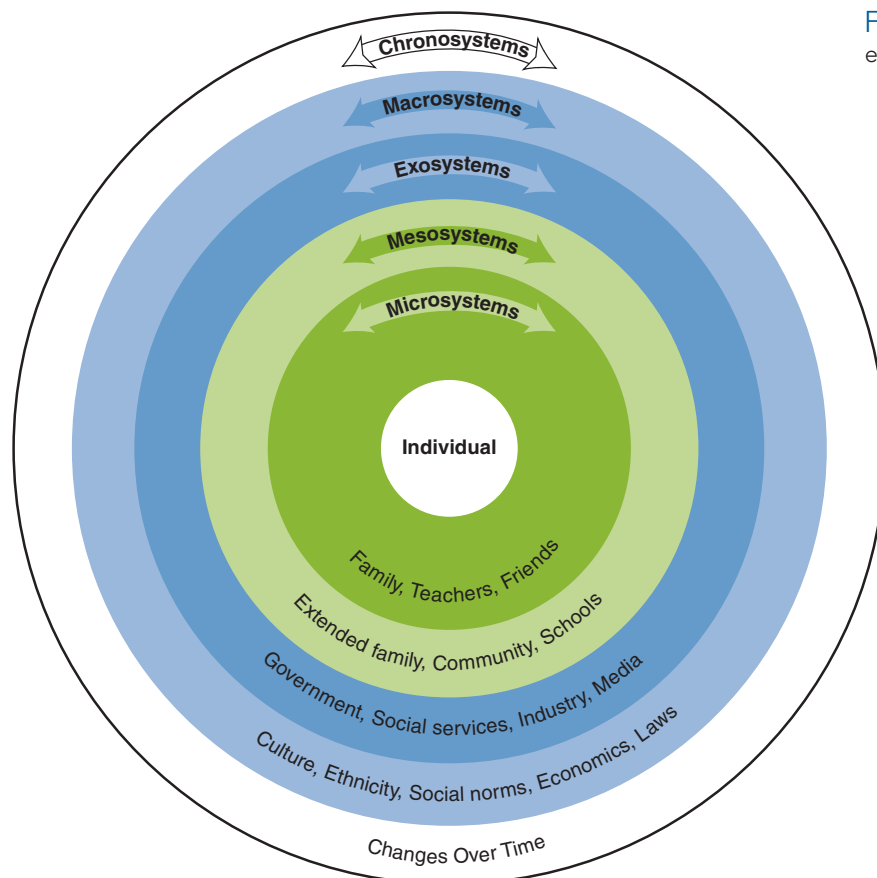


Figure 1-4 Bronfenbrenner’s ecological model.

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