Seventh Edition

Child Development and Education

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To the many teachers, principals, counselors, psychologists, nurses, and other educational professionals who cherish every child in their care.

About the Authors

Teresa M. McDevitt (left) is a psychologist with specializations in child development and educational psychology. She received a Ph.D. and M.A. in child development from Stanford University's Psychological Studies in Education program, an Ed.S. in educational evaluation from Stanford University, and a B.A. in psychology from the University of California, Santa Cruz. Now Professor Emerita of Psychological Sciences at the University of Northern Colorado, she served the University of Northern Colorado since 1985 in a variety of capacities—in teaching courses in child psychology, human development, educational psychology, program evaluation, and research methods; advisement of graduate students; administration and university governance; and research and grant writing. Her research focuses on child development, families, and teacher education. She has published articles in *Child Development, Learning and Individual Differences, Child Study Journal, Merrill-Palmer Quarterly, Youth and Society,* and *Science Education,* among others. She has gained practical experiences with children, including by raising two children with her husband and working as an early childhood teacher of toddlers and preschool children, early childhood special education teacher, and volunteer in school and community settings. Teresa enjoys spending time with her husband, their sons and their beloved partners, and, when she has the chance, traveling internationally with her family.

Jeanne Ellis Ormrod (right) is an educational psychologist with specializations in learning, cognition, and child development. She received a Ph.D. and M.S. in educational psychology at The Pennsylvania State University and an A.B. in psychology from Brown University; she also earned licensure in school psychology through postdoctoral work at Temple University and the University of Colorado, Boulder. She has worked as a middle school geography teacher and school psychologist and has conducted research in cognitive development, memory, problem solving, spelling, and giftedness. She is currently Professor Emerita of Psychological Sciences at the University of Northern Colorado; the "Emerita" means that she has officially retired from the university. However, she can't imagine ever *really* retiring from a field she enjoys so much, and so she continues to read and write about current research findings in educational psychology and child development. She is the author or coauthor of several other Pearson books, including *Educational Psychology: Developing Learners; Essentials of Educational Psychology; Human Learning; Practical Research: Planning and Design;* and *Our Minds, Our Memories: Enhancing Thinking and Learning at All Ages.* Jeanne has three grown children and three young grandchildren.

Preface

As psychologists and teacher educators, we have taught child and adolescent development for many years. Our primary intention has been to help students translate developmental concepts into practical implications in their own teaching. In past years, the child development textbooks available to our students were thorough in their descriptions of theory and research but limited in concrete suggestions for working with infants, children, and adolescents. With this book, now in its seventh edition, we bridge the gap between theory and practice. We draw from innumerable theoretical concepts; research studies conducted around the world; and our own experiences as parents, teachers, psychologists, and researchers to identify strategies for promoting young people's physical, cognitive, and social-emotional growth. As in the previous editions, this book focuses on childhood and the adolescent years and derives applications that are primarily educational in focus.

Several features of the book make it different from other textbooks about child and adolescent development. In particular, the book

- Continually relates abstract theories to educational practices in schools
- Not only describes but also *demonstrates* developmental phenomena
- Guides observations of children
- Facilitates analysis of what children say, do, and create
- Offers concrete strategies for effective teaching of, and working with, children
- Fosters a thorough understanding of children's growth from infancy to late adolescence within the domains of physical, social-emotional, and cognitive development.

In the next few pages, we explain and illustrate how the book helps readers learn how to:

- Apply developmental insights in their work with children
- Refine their observations, assessments, and decisions
- Appreciate and accommodate children's upbringing
- Take a strategic approach to learning concepts in child development.

Concepts and the multitude of exercises are organized within sections devoted to specific learning objectives. For each objective, readers can engage with several exercises that solidify conceptual understandings and practical knowledge. Readers can review children's artwork and essays, observe children's actions and statements in video clips, and check their comprehension at the end of each section, with explanations immediately accessible to confirm expectations and correct misconceptions.

Seventh Edition

A primary goal for the seventh edition was to deepen readers' ability to employ a developmentally informed manner with children. That has been our goal since the first edition, yet our motivation intensified with the rising tide of research on strategies for nurturing children's academic skills and resilience. There is so much to share! We also realized that telling the developmental story effectively required thoughtful attention to pedagogy. We knew from our teaching and reading that fostering conceptual change requires accurate information; repeated exposure to abstract, difficult, and

counterintuitive ideas, a safe environment for trying out new knowledge; and feedback. We doubled our efforts to present concepts clearly, and we improved exercises by clarifying dimensions of a high-quality education. We hope that the resulting presentation is effective in promoting accomplishments in readers.

Focus on Development-Enhancing Education in the New Edition

In the seventh edition, we became more explicit about the whole and parts of developmentally informed instruction. To give our readers a coherent perspective on the field of child development, we distilled separate insights into a single notion. The insights came from investigations into developmentally appropriate practice, culturally responsive education, developmental systems perspectives, resilience, positive psychology, psychopathology and mental health, cognitive science, and youth-asset frameworks. Previously, these and other frameworks articulated single aspects of a high-quality education, yet collectively, they were fragmented. For the seventh edition, these frameworks were integrated into the powerful theme of a *development-enhancing education*.

Development-enhancing education refers to schooling that is warm, individualized, age appropriate, health promoting, culturally inclusive, and academically challenging. When teachers and other school professionals emulate these qualities, children thrive academically *and* developmentally. Educators need not choose between a strong education and attention to holistic childhood. With the right training, practice, and dispositions, educators can do both, and the result is a more vibrant learning environment for children. To help readers learn about development-enhancing education and its implications, we created several opportunities for exposure and practice:

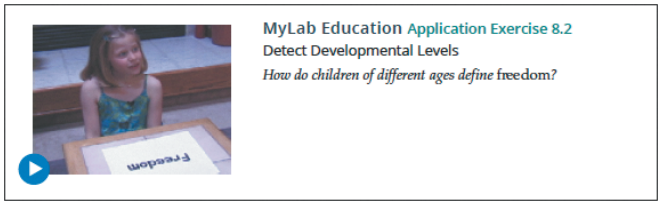
1. In Chapter 1, the theme is introduced in text and its properties are illustrated in Table 1.2. Educators who provide children with a development-enhancing education exhibit five qualities: compassion, age-appropriate instruction, cultural inclusivity, attunement with individual needs, and encouragement of children's initiative.

Table 1.2 Properties of a Development-Enhancing Education

QUALITIES	EXAMPLES OF INDICATORS
Is compassionate with children	• Expresses interest, concern, and positive emotions when interacting with children • Over time establishes warm and secure relationships with children • Warmly invites children's contributions during class, validates their knowledge, and gently nudges them toward more advanced understandings
Harmonizes lessons, interactions, classroom procedures, and other services with children's age-related abilities	• Sets instructional objectives that are within the grasp of children • Selects academic concepts that are relevant, understandable, and consequential for children • Facilitates positive peer relationships in age-appropriate groups, classroom rules, and guidance on friendships
Is inclusive of the cultures, identities, and demographic backgrounds of the children, families, and communities being served	• Speaks to a classroom of children in a way that is inclusive and compatible with their cultural traditions • Shows sensitivity to the identities that children develop depending on their gender, race, ethnicity, religion, and national origin • Addresses the assets and hardships children experience in their communities
Is attentive to children's individual needs	• Designs instruction such that children of varying ability levels can achieve reasonable progress • Adapts instructional objectives, the format of the lesson, and assessment strategies for children for whom the lesson is not an optimally challenging exercise • Provides coaching for children who have trouble coping with transitions between subjects, dealing with anger or frustration, and attentional demands of school
Is encouraging of children's initiative during lessons, interactions, and decision making	• Arranges for children to share their knowledge at the beginning of a lesson, actively process information during the lesson, and demonstrate new knowledge at its conclusion • Allows children to make meaningful choices in curricular matters, for example, in which of several books to read or topics to examine in an essay • Engages children in active exploration of topics, for instance, by exploring a local habitat, acting out a scene in a play, and making predictions and analyzing data

2. The new *MyLab Education Application Exercise—Identify Development-Enhancing Education* asks readers to review videorecordings of lessons and interactions with children and determine which of the five qualities are present in the interactions recorded in the video. The same rubric is used in each exercise.

3. New MyLab Education Application Exercises—*Detect Developmental Levels* and *Meet Individual Needs*—concentrate on two specific qualities of Development-Enhancing Education: age appropriateness and individualization. The *Detect Developmental Levels* exercises give learners practice in identifying age-appropriated tasks and curriculum. The *Meet Individual Needs* exercises help learners recognize and address variations in childrens' understandings and experiences.



4. The *Development in Culture* features foster readers' sensitivity to the traditions and values children inherit from their cultures, another essential feature of a development-enhancing education.

Development In Culture

Playing Around

From the perspective of cultural learning, play is a productive medium through which children voluntarily socialize themselves into their community's traditions (Boyette, 2016; F. P. Hughes, 2010).

To some degree, lessons in cultural practices change as children grow. Early on, adults guide the direction of play. Mothers, fathers, and other adults invite infants to join games of peekaboo, pat-a-cake, and other good-humored exchanges that vary from one cultural group to the next. One psychologist, Heidi Keller, found distinct patterns in infant play in mothers and infants from urban German middle-class families and rural Cameroonian Nso families (H. Keller, 2003). German mothers tended to spend a considerable amount of time interacting verbally with their infants—talking with them and encouraging themselves—developing verbal skills and playing with objects in German families and staying physically close to mothers and exercising new motor skills in Nso families.

Children continue to integrate familiar cultural routines into play as they grow. In societies that encourage serious chores in children, children pretend to be adult laborers (F. P. Hughes, 2010). In Botswana, men herd oxen, and boys regularly play the "cow game." Taking on complementary roles, some boys pretend to be oxen yoked with twine, and others act as drivers who control them (Bock & Johnson, 2004). Girls pretend to pummel grain with reeds, sticks, dirt, and imaginary mortars (Bock & Johnson, 2004). In industrialized cultures that separate children from the daily work of adults, children are apt to include fantasy figures that they have seen on television and in video games (F. P. Hughes, 2010; Lehrer & Petrakos, 2011). Not every culture values or encourages pretend play, and in some groups children play creatively with objects and with one another without taking on defined roles (Farver & Shin, 1997; F. P. Hughes, 2010; Smilansky, 1968).

In middle childhood and after, youngsters participate in structured games. Children in many societies play competitive games, wherein participants follow prescribed rules and vie to be the winner (Bonta, 1997; F. P. Hughes, 2010). In hunting societies, children play games of physical dexterity, including foot races and contests of tracking and spear-throwing, pursuits that allow for practice of valuable motor skills. In nomadic groups, children play games whose outcomes are determined by chance, perhaps preparing them for largely uncontrollable environmental conditions, as their parents must do to survive.

PLAYTIME. These boys enjoy a morning swim at a lake in Sri Lanka. While sharing a fun pastime, they are acquiring cultural knowledge about friendship and leisure time.

5. In addition to formulating recommendations for teachers and other professionals throughout the text, we provide *Development-Enhancing Education* features with concrete techniques for facilitating children's development. To help readers move from research to practice, each strategy is followed by examples of a professional implementing it in a classroom or other setting. You will find the *Development-Enhancing Education* illustrations in every chapter.

Development-Enhancing Education

Scaffolding Children's Performance on Challenging Tasks

Ask questions that get children thinking about a task.

- A middle school teacher asks her students a series of questions as they prepare to deliver a persuasive speech: *What are the main points you want to make? Who will make them? What kind of objections and counterarguments can you anticipate? How will you respond to them?* (Early Adolescence)
- As students in a high school science class begin to plan their experiments for an upcoming science fair, their teacher encourages them to separate and control variables with the following questions: *What do I think causes the phenomenon I am studying? What other possible variables might influence it? How can I be sure which variables are influencing the results I obtain?* (Late Adolescence)

When learners are unfamiliar with a task, provide explicit guidance and give frequent feedback.

- A preschool teacher watches children attempt to write their names. With a girl who writes the sequence backward, the teacher puts a green dot under the first letter and tells her to start with it. With a boy who forgets a few letters, the teacher highlights missing letters with a color pen. With another boy, the teacher writes the letters he cannot remember and asks has him to add the letters he knows. (Early Childhood)
- When an outdoor educator takes 12-year-olds on their first camping trip, he has the children work in pairs to pitch their tents. Although he has previously shown the children how to put up a tent, this is the first time they've actually done it themselves, and so he provides a sequence of pictures with instructions for each step. In addition, he circulates among campsites and provides assistance as necessary. (Early Adolescence)

Teach children how to talk themselves through a complex procedure.

- A school psychologist teaches children with cognitive disabilities to classify shapes by asking themselves questions (e.g., Does the object have three or more sides? Is it round?). The children begin to ask themselves these questions and learn to classify shapes more accurately. (Middle Childhood)
- A physical education teacher shows beginning tennis players how to use self-instructions to remember correct form when swinging the racket:
  1. Say *ball* to remind yourself to look at the ball.
  2. Say *bounce* to remind yourself to follow the ball with your eyes as it approaches you.
  3. Say *hit* to remind yourself to focus on contacting the ball with the racket.
  4. Say *ready* to get yourself into position for the next ball to come your way. (Early Adolescence)

Divide a complex assignment into several smaller, simpler tasks, and ask children to complete each in small groups.

- A fourth-grade teacher has his students create a school newspaper with news articles, a schedule of upcoming events, a couple of political cartoons, and classified advertisements. Several students work together to create each feature, with students assuming distinct roles (e.g., fact finder, writer, editor) and occasionally switching parts. (Middle Childhood)
- A film analysis teacher asks high school students to divide up their assignments into manageable parts and then share the results. After the class watches *Citizen Kane*,

Content Changes in the New Edition

More than 800 new citations are included with this edition, reflecting the many important discoveries that have been made in recent years. Every chapter includes updates that create a cutting-edge perspective on children's growth. With up-to-date knowledge, readers will be better prepared to meet the needs of children from many walks of life. Selected examples from each of the chapters include:

- **Chapter 1.** Added coverage of holistic perspective on childhood; development-enhancing education; educational equality and equity.
- **Chapter 2.** New material on measurement of stress; developmental dimensions with assessments, including progressions in children's vocabulary, physical coordination, and reasoning skills; children's understanding of the broad implications of achieving at a certain level on standardized achievement tests.
- **Chapter 3.** Reorganized sections of the chapter to allow for more foundational treatment of ethnicity and race, implicit bias, discrimination, prejudice, and educators' roles in ameliorating these problems; added strategies for reducing bias and addressing disparities; expanded coverage on the effects of divorce on children, school programs for children undergoing family transitions, parents raising children with special needs, and foster care.
- **Chapter 4.** Expanded coverage of transactions among genes, the environment, and the child (co-action, passive-gene environment, evocative reactions, active gene-environment relations); added evidence-based strategies for children with particular genetic conditions; material on universal design, educational needs of pregnant adolescents, and the learning capacity of the human fetus.
- **Chapter 5.** Added coverage of self-regulation of eating, sleep, and executive functions in the brain; food allergies; critical functions of sleep; brain connectivity; explicit age-related changes in brain during childhood; assistive devices and mobile applications for children with delayed motor skills; transgender youth.
- **Chapter 6.** In Piaget's theory, expanded section on association between assimilation and accommodation, discouragement of rushing children through childhood, and appreciating the legacy while accepting the need for revisions. In Vygotsky's theory, expanded section on digital literacy as a cognitive tool; age-related issues with computer use; strategies for cultivating digital literacy; universal design and meeting the needs of children with diverse learning needs.
- **Chapter 7.** Added new material on non-cognitive factors in the operations of cognitive processes, emotional needs and goals, and informational processing framework, stress and self-regulation, mindfulness, training and working memory, strategies for children with attention disorders, educational techniques recognizing variations in background knowledge.
- **Chapter 8.** Clarified basic features of intelligence, such as why children's abilities change with age while their IQ scores do not. Included new material on emotional intelligence (evidence for and against); school-based interventions for fostering children's emotional understanding and regulation; factors other than cognitive brainpower that affect performance on intelligence tests; relationships between intelligence and academic achievement; applications for children who are gifted and talented and peers with intellectual disabilities; neurological basis of intelligence; and Kagan Test of Intelligence.
- **Chapter 9.** Expanded sections on instrumental functions of neurological bases of language; working memory and prior knowledge in listening comprehension; strategies for helping children listen, attend, follow verbal instructions, draw inferences from what they hear, and develop metalinguistic insights. Elaborated on

diversity of language needs with attention to children growing up in low-income backgrounds; connections between bilingualism and metalinguistic awareness, ethnic dialects and formal English, and nonverbal learning disorders.

- **Chapter 10.** Expanded on the value of learning developmental changes in academic areas. Included digital applications for scaffolding steps and orchestration of cognitive processes for reading and writing. Added recommendations related to metacognition in mathematics and science.
- **Chapter 11.** Added educational applications for children with insecure attachments, applications for fostering healthy emotional development in children, and recommendations for fostering empathy in children. Provided an explanation of applications from the medical model, special education model, and three-tier models for intervention.
- **Chapter 12.** Added coverage of young people's communication on social networking sites and effects on self-perceptions and cyberbullying; characteristics and needs of gender nonconforming and transgender youth; challenges to self-esteem during adolescence; no-tease zones for disabilities; contexts in which children with autism might not understand the perspectives of other people; and neurological research on autism.
- **Chapter 13.** Added discussions of educational relevance of self-regulation; cultural contexts of self-regulation; effects of toxic stress on concentration and self-control; and how to strengthen self-regulation in children who have faced multiple significant hardships. Expanded discussions of achievement goals and cultural research; goal achievement theory; recent evidence regarding occasional benefits of performance approach goals; cultural dynamics of performance-avoidance goals; growth and fixed mindsets and interventions.
- **Chapter 14.** For moral development, expanded coverage of young children's emotional intuitions about morality, infants' reactions to unequal distribution of goods, neurological basis of morality, and contributions of theories to current understanding of moral development. For prosocial development and aggression, added discussions of animal maltreatment and other indicators of problems in adjustment, moral disengagement and aggressive tendencies, bystanders during bullying, and three-tier intervention model for addressing aggressive tendencies.
- **Chapter 15.** For peers, added strategies for helping children get along with classmates; a discussion of the benefits of friendships across ethnic lines; section on youth subcultures and descriptions of Hip Hop, Goths, Pro-Ana, and gangs. For schools, provided an introduction of Eccles's notion of stage-school fit; Pianta's theory of classroom processes. For society, discussed advantages and risks with social networking and video gaming; self-management skills with digital media.

MyLab Education

One of the most visible changes in the seventh edition, also one of the most significant, is the expansion of the digital learning and assessment resources embedded in the eText and the inclusion of MyLab Education in the text. MyLab Education is an online homework, tutorial, and assessment program designed to work with the text to engage learners and to improve learning. Within its structured environment, learners see key concepts demonstrated through real classroom video footage, practice what they learn, test their understanding, and receive feedback to guide their learning and to ensure their mastery of key learning outcomes. Designed to bring learners more directly into the world of K–12 classrooms and to help them see the real and powerful

impact of child development concepts covered in this book, the online resources in MyLab Education with the Enhanced eText include:

- **Video Examples.** About four to seven times per chapter, an embedded video provides an illustration of a child development principle or concept in action. These video examples most often show students and teachers working in classrooms. Sometimes they show students or teachers describing their thinking or experiences.
- **Self-Checks.** In each chapter, self-check quizzes help assess how well learners have mastered the content. The self-checks are made up of self-grading multiple-choice items that not only provide feedback on whether questions are answered correctly or incorrectly, but also provide rationales for both correct and incorrect answers.
- **Application Exercises.** These exercises give learners opportunities to practice applying the content and strategies from the chapters. The questions in these exercises are usually constructed-response. Once learners provide their own answers to the questions, they receive feedback in the form of model answers written by experts.
- **Practice for Your Licensure Exam features.** Every chapter ends with an exercise that gives learners an opportunity to answer multiple-choice and constructed-response questions similar to those that appear on many teacher licensure tests. As with the other exercises in MyLab Education, Practice for Your Licensure Exam exercises provide feedback.

Supplementary Materials

The following supplements are available to help instructors organize, manage, and enliven their courses and to enhance students' learning and development as teachers.

Online Instructor's Manual

Available to instructors for download at www.pearsonhighered.com/educator is an *Instructor's Manual* with suggestions for learning activities, supplementary lectures, group activities, and class discussions. These have been carefully selected to provide opportunities to support, enrich, and expand on what students read in the textbook.

Online PowerPoint® Slides

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

Online Test Bank

The *Test Bank* that accompanies this text contains both multiple-choice and essay questions. Some items (lower-level questions) simply ask students to identify or explain concepts and principles they have learned. But many others (higher-level questions) ask students to apply those same concepts and principles to specific classroom situations—that is, to actual student behaviors and teaching strategies. The lower-level questions assess basic knowledge of development and its implications in educational settings. But ultimately it is the higher-level questions that can best assess students' ability to use principles of child and adolescent development in their own teaching practice.

TestGen

TestGen is a powerful test generator available exclusively from Pearson Education publishers. You install TestGen on your personal computer (Windows or Macintosh) and create your own tests for classroom testing and for other specialized delivery options, such as over a local area network or on the web. A test bank, which is also called a Test

Item File (TIF), typically contains a large set of test items, organized by chapter and ready for your use in creating a test, based on the associated textbook material. Assessments—including equations, graphs, and scientific notation—may be created for both print and testing online. The tests can be downloaded in the following formats:

TestGen Testbank file—PC

TestGen Testbank file—MAC

TestGen Testbank—Blackboard 9 TIF

TestGen Testbank—Blackboard CE/Vista (WebCT) TIF

Angel Test Bank (zip)

D2L Test Bank (zip)

Moodle Test Bank

Sakai Test Bank (zip)

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