

Early Education Curriculum

A Child's Connection to the World

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Early Education Curriculum: A Child's Connection to the World, 8th Edition Nancy H. Beaver & Susan Skinner Wyatt

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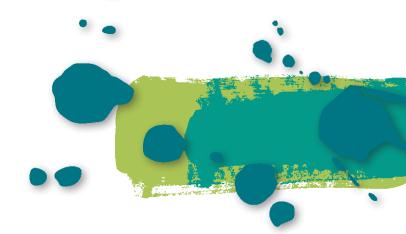
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I dedicate this text to my daughter, Stephanie, the light of my life, and in memory of my husband, Dom, who supported me with loving care throughout his last days.

-NB

I dedicate this book to all my loved ones: Frank, my recently deceased husband, my children, Ellie, Patrick, and Brandon, who have never questioned or complained about my late nights and the bags of work I bring home on a regular basis. And also to my newest children, Sarah and Kara, and my multiple grandchildren, Seth, Jacob, Noah and Kenna, who let me try out new ideas on them.

-SW

We both want to dedicate this edition to our dear friend and original author of this book, Hilda Jackman, who passed away this year. Thank you for creating such a wonderful, practical resource for students; it has served as the basis for the last few editions of this textbook.



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Preface

Research confirms the value of early education for young children. Our early childhood profession continues to guide us with new and effective teaching applications, position statements, and developmentally appropriate practices. Both authors are colleagues with 89 years of combined experience as early childhood educators. They have worked together as part of the Dallas County Community College District's Child Development/Early Childhood Education department. Our goal is to help students and developing professionals make informed decisions about curriculum content. To that end, the focus of *Early Education Curriculum: A Child's Connection to the World, eighth edition*, remains on *the children* and the dedicated early childhood professionals who contribute daily to improve the lives of children everywhere.

Philosophies of This Book

We should listen to the children and concentrate our efforts on the development, needs, abilities, and interests of all of them, including those with cultural, linguistic, and ability differences, as we plan our early childhood curriculum. In response to the needs of our students, the early childhood profession is dedicated to discovering new knowledge through research and new professional positions, and to establishing inclusiveness, equity, equality, and diversity through developmentally appropriate practices. The early education curriculum aims to integrate these insights into each classroom, from infancy through the early primary years.

In this eighth edition, the following interconnecting philosophies are italicized.

- The first philosophy advocates that curriculum be child centered and child initiated, that it is sensitive to, and supportive of, the development of young children, individually and in a group, emphasizing acceptance of every child. This philosophy includes acceptance of cultural, linguistic, gender, family orientation, and differences in ability in young children.
- The second focus is on the *curriculum* itself, which provides all a child's development by planning developmentally appropriate experiences that build on what children already know and can do. New findings inform us even more about early cognitive, physical, social, and emotional development. These facts help us make connections about how we teach and how children learn.
- The third philosophy of this text is to encourage children to *learn by doing*. This
 philosophy encourages experimentation, exploration, self-control, and the building of
 a positive self-image ("I can do it myself!").
- The fourth recognizes each child's unique strengths and supports the *inclusion of each and every child* given differences in culture, family structure, language, racial identity, gender, abilities and disabilities, or economic class. Growing up as members of families and communities, children come to us with rich backgrounds of cultural experiences. Now, more than ever, the curriculum should promote opportunities to support a child's culture, language, gender orientation, and family structure.
- The fifth belief advocates developing a learning environment that invites *creativity*.
 This philosophy provides opportunities for unevaluated discovery and activity, while promoting acceptance and respect for one another's creations. This work also helps one develop an awareness of the complexity of creative thinking.

- The sixth concept involves reciprocal relationships between teachers and families. Positive communication and partnerships between home and school is crucial to providing a consistent and beneficial experience for young children.
- The seventh philosophy recommends that curriculum facilitate physical activity and play by integrating movement within activities throughout the day. Each of these philosophies allows children to make choices and is nourished by play. With less time and opportunity for children to play, it is critical for us to encourage and support play in all our early childhood programs.

To best address these interconnecting philosophies, this edition continues to cover all age groups through second grade and includes brain research, reflective practice, intentional teaching, hands-on teaching ideas, and using the environment as a teaching tool. The research behind the techniques discussed has been further highlighted in this eighth edition.

Intended Audience

This book is designed for a beginning student, as well as an experienced teacher looking for current early childhood philosophies, research, curriculum resources and activities, and fresh ideas and insights. It can be used by those in associate or baccalaureate degree early education curriculum courses, graduate classes, mini/fast-track courses, distance learning, and workshop/seminar courses for continuing education of teachers. It is also applicable for students working toward the Council for Professional Recognition (CDA) credential or any professional working with children and families.

Chapter Changes and Highlights

The text has been divided into four parts to better reflect the disciplines within the early learning curriculum.

Part One, "Preparing for Learning through Assessment, Curriculum, and the Environment," presents the elements of the foundation of early education curriculum and includes four chapters, as follows:

- Chapter 1, Starting the Process, gives early childhood historical information, learning, and developmental theories of early childhood education; the importance of play in the lives of children; and communication with parents. The chapter has been thoroughly updated, including new standards and new references; outdated references and material have been deleted. The Brain Research feature identifies how knowledge of brain development is crucial to an understanding of how to create curriculum.
- Chapter 2, Observation, Assessment, Evaluation and Documentation, is newly revised and contains content

from Chapters 2 and 14 in the seventh edition to better describe the purposes and process of observing and assessing children, as well as environment and program evaluation. Guidelines for assessment are included. This topic area is important because of the increased reliance on the use of standards to guide our decisions about what and how we teach. These standards have been updated and are based on the use of strong statistical data that help formulate our observation and assessment practices. Teachers must be able to use appropriate observation and assessment techniques to create the data needed to begin the development of curriculum, experiences, and environments to support children's development and learning. This newly revised chapter examines the purpose, use, and process of evaluation, including identifying standards for evaluation and ethical issues. This chapter explores the process used to create a documentation plan and describes the methods for interpreting and using evaluation results. It defines types of evaluation, including quantitative, qualitative, formative, and summative evaluation. Samples are provided to illustrate types of documentation used in evaluations. An important feature of this chapter is the use of technology in assessment.

- Chapter 3, Creating Curriculum, offers examples of curriculum models and programs; explains the process of curriculum development, including considerations of diverse cultural influences, anti-bias, and inclusion; and describes the development of concepts and skills, themes, and specific lesson and activity plans.
- Chapter 4, *The Learning Environment*, reflects the continuing focus of this text on the learning environment. It describes developmentally appropriate early learning environments, both indoor and outdoor; selection of equipment, materials, and supplies; and play guidance, including transitions. It also includes the first environment checklists, which are also found in Chapters 5 through 15. The checklists will be on specific environmental areas that are described in each particular chapter. A floor plan was added to this chapter to accommodate the primary grades that were not covered in the previous edition.

These four chapters form the foundation for the remaining chapters.

Parts Two, Three, and Four "explore each curriculum area in depth, taking into consideration the individual child, group of children, the process of setting up appropriate environments with a chapter checklist for use in observing environments, special subject content, information on the use of technology, more ideas to involve parents, meeting diverse needs, and integration of all areas of the curriculum. Chapters 5 to 15 present developmentally appropriate activities for each age group and encourage self-esteem and creativity development. These chapters are organized to provide

clarity and consistency to support better student comprehension. Each of these parts focuses on a unique discipline within the early childhood curriculum. All chapters in these sections include updated references.

Part Two, STEM: Science, Technology, Engineering and Math focuses on the more technical and scientific topics of the curriculum.

- Chapter 5, Science, describes an approach for teaching young children science by engaging them in the active construction of ideas and explanations to develop both inquiry and process skills. The chapter defines categories of science to be explored, identified by the National Research Council, and explains the development of the brain's executive function. The chapter relates the stages of child development to scientific learning; it also evaluates how the preparation of the environment supports that learning as children use the scientific process to make and test predictions, observe, solve problems, and make connections. The chapter contains many activity ideas for integrating science throughout the curriculum, including explorations of earth elements such as water, ecology, animals, nutrition, and cooking. The use of cooking experiences to explore diversity is discussed. New information on brain research has been added. A focus on nature includes the creation of outdoor classrooms that incorporate a variety of natural elements for children's play.
- Chapter 6, *Technology*, is a new chapter in this edition. The chapter includes key technology terms for children, relates stages of child development to the use of technology, evaluates components of planning, and discusses the preparation of the environment to support technology. The chapter also discusses ways to incorporate equity and diversity into the use of technology and analyzes the teacher's role in promoting appropriate integration and use of technology in the classroom.
- Chapter 7, Engineering/ Construction (Blocks and Woodworking), describes well-planned engineering explorations, block play, and woodworking experiences where children create, build, construct, and stay engaged to facilitate their development across domains in an engaging context. The unit block shapes and storage, as well as the developmental stages of block play, are visually represented to facilitate student understanding. A list of equipment and materials to use in woodworking is provided. The chapter discusses using an engineering design process, which consists of three core steps: "Explore, Create, and Improve" to solve problems as they build projects. The chapter includes information about how children learn geometry through block play and engineering projects. The Brain Research feature discusses how construction play supports the development of spatial

- reasoning. Ideas for addressing diversity through block play are shared.
- Chapter 8, Math, discusses the importance of providing hands-on, developmentally appropriate math experiences in a meaningful context to give young children opportunities to develop math awareness and understanding. The chapter contains a thorough explanation of mathematical terms and teaching strategies. There is a focus on how the environment is set up to provide opportunities for children to develop number sense and logical ways of thinking about time, space, and other mathematical ideas as they discover math concepts through the process of play. The chapter's structure has been reorganized to be better aligned with national Common Core standards.

Part Three, Arts—The "A" in STEAM focuses on the language and creative arts topics in the curriculum.

- Chapter 9, *Language and Literacy*, describes the acquisition of languages with an emphasis on duallanguage learning. A major focus is teaching strategies and providing practical experiences and materials to support the development of language and literacy skills through literature. This edition distinguishes ways to incorporate diversity into literacy experiences. The chapter updates the newest common core English Language Arts Standards. The brain research feature includes a description of research related to the 50-million-word gap by age 3 for low-income children.
- Chapter 10, Art, describes the creative process with a specific emphasis on art. This chapter is new as a standalone focus on art. It focuses on how children discover their own original ways to explore forms of art. Ideas are shared concerning the creation of an aesthetic environment and the use of the outdoors to foster creativity. Practical teaching strategies, experiences, and materials support the development of creativity. The use of diverse, cultural materials is discussed. The Brain Research section focuses on how art encourages the brain to visualize and interpret things to promote creative and inventive thought, as well as critical thinking skills.
- Chapter 11, Music, describes the creative process with a specific emphasis on how children discover their own original ways to explore forms of music and dance. This chapter is new as a standalone chapter with a focus on music. The chapter includes key terms related to music development and relates the stages of child development to music. The chapter describes the child's involvement with music through listening, creative activities related to singing, body movement, playing and making instruments and the aesthetic aspect of music. The chapter discusses how movement supports neurological development.

The Brain Research section focuses on music's ability to strengthen the connection between the body and brain and to build up a mental organization system to help with memory. Practical teaching strategies, experiences, and materials (including homemade instruments) support the development of creativity using diverse materials, instruments, and songs from many cultures.

Chapter 12, Performing Arts: Dramatic Play and Social Studies, describes themes and appropriate content for social studies in early childhood curriculum. The chapter was revised to link dramatic play as a beginning stage of social studies for very young children. The chapter includes developmental theories and research on the stages of play and types of social dramatic play. A thorough discussion of dramatic play includes the use of puppets and prop boxes and provides practical ideas for use in the classroom. The chapter includes a discussion of field trips as concrete experiences introducing children to the social world. The chapter covers multicultural play and includes materials from different cultures.

Part Four, Physical and Sensory Play, focuses on motor and sensory development.

- Chapter 13, Fine Motor and Manipulatives, describes the different types of small muscle movement and coordination and how teachers can support the development of this coordination for different age children. The chapter describes how fine motor play is integrated throughout the curriculum with specific details on the importance of crossing midline and the use of scissor activities to develop cutting skills and pincer grasp. Suggestions for supporting every child's success address student diversity and activity ideas for parents to do at home. The Brain Research section discusses how the circuitry of the brain connects fine motor skills and cognition leading to future math and reading success.
- Chapter 14, Large Motor/Outdoor Play, explores how through large muscle and outdoor play, children develop their eye-hand coordination, balance and coordination, large muscles skills, general health, a sense of freedom, an understanding of nature, creativity, social play skills, multisensory integration and learning, ability to explore and solve problems, and their imaginations. Different types of movement are defined, and suggestions for equipment selection are identified. Ideas describe how to include motor development and physical fitness within activities designed to target other curriculum areas, such as music and art. Guidance on the crucial role of recess in school by The Council on School Health is included, as well as a Brain Research feature that shows the relationship of physical fitness to better relational memory.

Chapter 15, Sensory Play, discusses how the senses are used as learning portals and how every day, the early childhood classrooms should be filled with activities that involve multiple senses. Piaget's sensory motor period of learning, Goscoyne's continuum of fluid play process, and sensory integration are defined. A curriculum planning web for the book My Five Senses demonstrates how to integrate sensory learning throughout the curriculum. The chapter discusses how to incorporate diversity into sensory play.

All chapters of the text are separate and complete, and at the same time, they connect to other chapters to form curriculum for children from infancy to age 8. This approach allows each instructor to use the chapters in any sequence. It is helpful in meeting the individual needs of the teacher, the student, and ultimately the children.

New to This Edition

New to this edition is that the content is specifically aligned with the new Professional Standards and Competencies for Early Childhood Educators position statement and the new NAEYC position statement on Developmentally Appropriate Practices (DAP). Key elements of the Professional Standards and Competencies, the DAP Guidelines, as well as InTASC standards, have been integrated within the text of each chapter to support faculty, programs, and students in understanding and implementing these new standards.

Updated and Revised Coverage

Early Education Curriculum takes an application-based approach that provides hands-on teaching tools, techniques, and tips for infant/toddler, preschool, primary and after-school programs through second grade. Building on the foundations of previous editions, the eighth edition has been thoroughly updated and revised:

- **Organization and Coverage:** The text has been updated and completely reorganized into four parts. This reorganization was done to better align similar curriculum topics within broader disciplines of study. The four parts are as follows:
 - Part One: Preparing for Learning through Assessment, Curriculum, and the Environment
 - Part Two: STEM: Science, Technology, **Engineering and Math**
 - Part Three: Arts: The "A" in STEAM
 - Part Four: Physical and Sensory Play

The curriculum (Parts Two, Three, and Four) continues to maintain a consistent chapter structure.

Case Studies: Case studies continue to be included in Chapters 5 through 15 to help apply the information in each chapter to different teaching situations. New case studies have been designed for new Chapters 6, 10, and 11.

- Brain Research: Information on brain research related to the specific curriculum area appears throughout the textbook. While the text retains seminal information about brain research from the seventh edition, the eighth edition includes new research for the added chapters:
 - Chapter 6, Technology
 - Chapter 10, Art
 - Chapter 11, Music
- Technology: This eighth edition has created a new standalone chapter that focuses on the impact of technology related to each curriculum area. This chapter includes more information about the use of technology across the curriculum.
- Cultural and Linguistic Diversity: The importance of culturally relevant curriculum appears throughout this edition and remains a continuing emphasis in the text. The eighth edition is aligned with the Advancing Equity in Early Childhood Education, the new NAEYC position statement. Chapters 5 through 15 each contain a section on how diversity and equity impact that chapter's specific subject area.

Chapter Pedagogy and Features

- Student Learning Outcomes (SLOs): Student learning outcomes provide a clear road map of the major topics in each chapter and allow for better assessment of student learning. SLOs related to technology have been removed from each chapter and added to the new technology Chapter 6.
- National Standards: Discipline-specific national standards in literacy, mathematics, science, art, social studies, and music continue to appear at the beginning of each curriculum chapter, and more specific information about the organization is contained in Appendix F. Essential recommendations and position statements of the NAEYC are included. In particular, as mentioned in the "New To This Edition" section, the text content is specifically aligned with the new Professional Standards and Competencies for Early Childhood Educators position statement and the new NAEYC position statement on Developmentally Appropriate Practices (DAP). Key elements of the Professional Standards and Competencies, the DAP Guidelines, as well as InTASC standards, have been integrated within the text of each chapter to support faculty, programs, and students in understanding and implementing these new standards.
- The major standards—NAEYC, DAP, and InTASC have been identified by chapter inside the front and back of the text. Additional standards more specific to a subject or group of students, such as ILA, CEC/ DEC Recommended Practices, Common Core State Standards, and Head Start, are included in the chapters they relate to and in Appendix F.

- **Brain Research:** This feature provides information about significant brain research targeted at the content of each chapter. New research is found in Chapters 6, 10, and 11, and research is updated throughout the text.
- Videos: TeachSource videos and questions are included in the MindTap digital learning platform.

More Features to Look For

Current and improved children's book lists—available as digital downloads in the Professional Resources section within MindTap—are included at the end of each curriculum chapter throughout the text. Information is provided on themes, projects, webs, and developmentally appropriate activities. All the features in this eighth edition are created to provide a resource of ideas, methods, suggested practices, and guidance goals that will give teachers and students guidelines to create and enrich their own curriculum.

Special Learning Features

This book is designed to help students build knowledge with each chapter. Concepts are introduced in a specific chapter and then reviewed for elaboration and application throughout the text. Topics are approached developmentally and placed appropriately within the curriculum area where students can benefit from their content. Each topic becomes a part of the entire curriculum.

In addition to the new features discussed previously, numerous learning aids appear in the text to help student comprehension:

- Key terms are bolded and listed as a running glossary in the text margins so that students can identify them as they read the chapters.
- Icons visually highlight concentrated coverage that relates to developmentally appropriate practice, NAEYC standards and competencies, and InTASC teaching standards. Icons for these major standards are identified specifically within the chapter content where the alignment with specific standards and/ or key elements applies. Depending on the topic of a chapter, additional standards icons have been added at the beginning of the chapter, such as ILA for language and literacy and NSES for science.
- **Chapter organization** is formatted around the student learning outcomes for that chapter.
- Observation, Assessment Strategies, and Evaluation guidelines, forms and suggestions provide effective tools to be used throughout the early childhood curriculum. Guidelines and forms are available as digital downloads in the Professional Resources section within MindTap.
- Learning Environment Checklists provide centerbased checklist to assist students as they complete observations in the children's classrooms. These are

- also available as digital downloads in the Professional Resources section within MindTap.
- Activity Plan Samples provide detailed plans with guidance tips and assessment strategies and are included as digital downloads in the Professional Resources section within MindTap.
- Lesson Plan samples provide guidance in weekly planning for different age groups.
- Appendices are designed to give teachers practical information to use across the curriculum. Appendix A, My Self, is an integrated curriculum theme with developmentally appropriate activities. Appendix B, Additional Activities and Songs, include activities for use in curriculum development. Appendix C, Songs and Poems, provides songs appropriate for curriculum topics. Appendix, D, Forms, provides a collection of forms to support classroom activities. Appendix E, Resources for Teachers, includes updated and new resources. Appendix F, Additional Standards by Chapter including Common Core State Contact Information, describes additional early childhood standards and their alignment with the text content. Appendix G, Professional Organizations, includes updated and new resources.
- Detailed Major Standards Chart: A chart of NAEYC Standards and Competencies for Early Childhood Professionals, DAP, and InTASC is correlated to each chapter and is included on the inside covers of this edition. The chart identifies how the content in this text aligns with these standards.

Ancillaries

Instructor Resources

Additional instructor resources for Early Education Curriculum: A Child's Connection to the World, eighth edition, are available online. Instructor assets include an Instructor's Manual, Educator's Guide, PowerPoint® slides, and a test bank powered by Cognero®. Sign up or sign in at www.cengage.com to search for and access this product and its online resources.

MindTap™: The Personal Learning Experience

MindTap for Early Education Curriculum: A Child's Connection to the World, eighth edition, is a fully customizable online learning platform with interactive content designed to help students learn effectively and prepare them for success in the classroom. Through activities based on real-life teaching situations, MindTap elevates students' thinking by giving them experiences in applying concepts, practicing skills, and evaluating decisions, guiding them to become reflective educators.

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Biography: Nancy H. Beaver, M.Ed., retired as full-time program administrator for the Child Development and Teacher Education department and Adjunct Professor at Eastfield College, a campus of Dallas College, in early 2020 after 25 years of service. She has continued to teach Early Childhood Education courses as an adjunct professor at the University of North Texas at Dallas. She holds a B.S. in Education from the University of Texas and a master's degree in Early Childhood Education from the University of North Texas.

In her career, Nancy has held a variety of early childhood roles, from a consultant providing training and technical assistance to Air Force Family Member Services program staff, to a licensing representative and child development specialist for the state of Texas. She has been executive director of a nonprofit agency and has raised more than \$5,500,000 for nonprofit agencies and community colleges. She successfully led the Eastfield College Children's Laboratory School staff to earn NAEYC program accreditation in 2008 and 2013. She was awarded the Texas AEYC's Trainer of the Year Award in 2005.

Nancy is currently serving as a commissioner on the NAEYC Commission on Early Childhood Higher Education Accreditation. From 2018 through 2019, Nancy served on an NAEYC convened workgroup to develop the Professional Standards and Competencies for Early Childhood Educators. She has served in many roles on the Dallas Association for the Education of Young Children (DAEYC) board, including serving as president twice. She served as vice president of the Texas AEYC. She also served as president of ACCESS: American Associate Degree Early Childhood Educators in 2013 and 2014.

Nancy was married to her college sweetheart, Dom, for 48 years before his death in 2019. She has one daughter, Stephanie.



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Author Name: Susan Skinner Wyatt

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Biography: Dr. Susan Skinner Wyatt brings more than 40 years of experience in the field of child development/early care and education to this book. She holds a master's degree in Child Development and Family Living and a Doctor of Philosophy in Child Development with an emphasis in Adult Education and Educational Administration, both from Texas Woman's University.

Her experiences include child-care center educator, director of a child-care center, public school teacher from elementary through high school, community college professor, counseling, curriculum development, public speaking/workshop presentation, and is an author. She also has experiences as a Professional Development Specialist for the national CDA credential training, a Child Care Health Consultant and National Association for the Education of Young Children Validator and Peer Reviewer for both center-based and higher education accreditations. She has served as the chair of the Child Development/Early Childhood Education and Teacher Education departments at Eastfield College in the Dallas, Texas area and has recently retired from more than 20 years of service in that position.



Dr. Susan Skinner Wyatt

Susan has served on the boards of the Dallas Association for the Education of Young Children (Past President and Treasurer), Dallas Association for Parent Education (Executive Director/President), and Child Development Educator's Association of the Texas Community College Teachers Association (Past President and Secretary).

Susan has received the Innovator of the Year Award for the Dallas County Community College District, Teacher Educator of the Year for the Texas Association for the Education of Young Children, Educator of the Year for Eastfield College, Excellence Award by the National Institute for Staff and Organizational Development (NISOD) and the state of Texas' Minnie Stevens Piper Professor Award.

Susan is the mother of three adult children (Ellie, Patrick, and Brandon) and four grandchildren (Seth, Jacob, Noah, and Kenna). She was married to her husband, Frank, for 40 years before his death in 2021.

Welcome to the world of early education. We are glad you are here. Our profession needs caring, committed individuals to encourage and support children through their early years.

To the Students

Each of you has a different reason for wanting to be in an early childhood classroom. Some of you are just beginning. Others are experienced teachers. No matter what type of program or what age group you work with, it is important that you understand the development of young children, help them connect with the changing world of their families, and promote developmentally appropriate practices in early education environment and curriculum.

This text is designed to be a practical guide to help you develop a curriculum appropriate for young children. By learning about theory, underlying research, and developmentally appropriate activities found in this text, you can develop your own curriculum.

Use the resources that accompany this text to get started creating curriculum webs. Write lesson and activity plans using the digital forms as well. We hope these resources will help you develop appropriate curriculum for young children. Your experiences with young children are most important to your academic and professional development. We encourage you to use this curriculum text to stimulate your own creativity and knowledge of children. Mix and match, add to, and redesign the ideas and activities presented. Take the time to enjoy the uniqueness of each individual child, as well as the group of children, as they explore and interact with the curriculum.

It is also important to remember that professional ethics and confidentiality are concerns that are inseparable from all observation, assessment, and participation activities. It is crucial that you deal with each child or adult without prejudice or partiality and refrain from imposing your own views or values upon children or adults.

We hope this text will prove helpful to you as you strive to make a difference in the lives of young children and their families. We are all in this profession together, and, like the children, we too are growing and developing.

- Nancy H. Beaver
- Susan Skinner Wyatt







Preparing for Learning through Assessment, Curriculum, and the Environment





Standards Covered in This Chapter

NAEYC NAEYC 1a, 1b, 1c, 1d, 2a, 2b, 3c, 4b, 4c, 5a, & 5b

DAP DAP 1a, 1b, 1d, 2a, 2b, 2c, 2d, 2e, 2f, 4b, 4c, 4d, 4e, 4f, 4g, 4h, 5a, & 5c

InTASC 1, 2, 3, 4, 6, 7, 8

HeadStart HEAD START

Domain: Approaches to

Learning, Domain: Perceptual,

Motor and Physical Development

CEC DEC CEC DCC 3.0, 4.0, 6.0

Student Learning Outcomes

After studying this chapter, you should be able to:

- Analyze the importance of historical information and theories to the field of early childhood education.
- Identify developmentally appropriate practices as they relate to child development including social and cultural contexts.
- Discuss the importance of play in the lives of young children, describe the developmental stages of play, and identify ways teachers foster play.
- Explain the value and techniques for communicating with families.

Please think of the children first. If you ever have anything to do with their entertainment, their food, their toys, their custody, their day or night care, their health care, their education—listen to the children, learn about them, learn from them. Think of the children first.

These words of Fred Rogers (2003) are meaningful to us as students and teachers. Children must be at the center of all we do. As adults who genuinely care about them, we should honor the uniqueness of each child and the child's family. Give them teachers with commitment, training, experience, and knowledge about child development and how children learn. As children enter the world, they have a desire to learn about everything they see and experience. Whether it is the home where they are raised, the child care center where they spend many hours of the day, or the playground where they experience nature, these environments are key to how children develop and what they learn.

Research is showing in early and elementary education that "all children can and will learn when educational communities are ready for them... This requires a commitment that makes explicit the responsibility of education professionals to broaden their repertoires and hone their skills to create classrooms in which all children maximize their potential" (New, Palsha, and Ritchie, 2009, p. 3).

As you read this chapter, its focus on making the environment and the curriculum child centered will be apparent. This chapter extends this philosophy by studying historical aspects of early education, learning and developmental theories, developmentally appropriate practices (DAP), social and cultural contexts, importance of play for young children, curriculum planning, early childhood schedules and routines, and communicating with parents. Also included are ideas to enhance instruction and activities that respect a child's culture, language, and learning style. Additionally, in-depth attention should be paid to language development, cognition, physical development, and social and emotional competence.

Early Childhood Education





InTASC

The field of early care and education has changed profoundly in the last decade. In some ways, many long-time early childhood educators find it nearly unrecognizable. Standards and guidelines abound. Increasing numbers of early childhood programs are required to address state early learning standards (or guidelines) that will soon include three-year-olds and next, perhaps, even infants and toddlers (Freeman and Feeney, 2006, pp. 10–16).

With this in mind, it is important to look back at our profession to see how changes produced new ways to help children and families. Historical information gives us an opportunity to see how past generations viewed children and their acquisition of knowledge, based on religious, ethnic, political, and economic pressures of the times. Almy (cited in Greenberg, 2000, pp. 6–10) believes that "it's most important not to leave behind everything we already know about children as we go on learning new things. ... New knowledge should build on prior knowledge, not erase and replace it."

Exploring the storied history and philosophy of early childhood education presents us with significant individuals and far-reaching developments that have impacted and influenced our thinking. "The history of early childhood education is like a tapestry—woven

NAEYC Standard 1: 1c & 1d DAP Guideline 4: 4b, 4c, & 4d INTASC Standards 1, 2, & 7 of many influences. . . . The ingredients that early-childhood educators consider essential today—that care and education are inseparable, that teaching practices are developmentally appropriate, and that adequate funding is critical for success—all stem from historical events and people" (Gordon and Browne, 2016, p. 4).

The professional organizations mentioned in the timeline are all striving to improve the field of early childhood education. Their efforts emphasize the importance of advocacy, an attitude that encourages professionals, parents, and other caring adults to work together on behalf of young children.

Anyone who cares about children can be an advocate. Classroom teachers who work with school boards to change conditions for children and teachers are advocates. Caregivers who contact their elected officials to ask them to vote for child and family friendly policies are advocates. Professional associations who create opportunities to educate policy makers about problems that children face are advocates. Families that ban together to ask that the arts and music programs be returned to their school are advocates. Business leaders who form coalitions with early care and education caregivers are advocates. College students who support high educational standards so that they can be better teachers are advocates. Advocacy has many forms, and any person or group that is willing to stand on behalf of children is an advocate. (See Table 1-1.)

It is also essential for teachers to use every resource available to them, such as having membership in local, state, and national professional organizations. Attending meetings, workshops, and conferences offers opportunities for networking with other teachers. Reading professional journals keeps one up to date with current information as well. (See Appendix G for a comprehensive listing of professional organizations and their websites.)

Learning and Developmental Theories of Early Childhood Education

As we continue to consider the influences that have contributed to the field of early child-hood education, it is beneficial to review the developmental theories that examine children's growth, behavior, and process of learning. A **theory** refers to a systematic statement of principles and beliefs created to explain a phenomenon or group of facts that have been repeatedly tested or are widely accepted. All curricula should be based on our beliefs about how children develop and learn. These beliefs guide how we see teaching and supporting children as learners.

Following are a few of the most influential theories and information about the individuals who developed them.

Behaviorist Theory

Behaviorism is the most functional of the modern psychological ideologies that describes both development and learning. *B.F. Skinner* (1904–1990) was one of the most influential psychologists in history. Skinner believed that the purpose of science was to predict and control behavior and that the environment is the primary cause of behavior. Skinner maintained that behavior can be modified or changed. According to behaviorists, behavior is learned and that **learning** is relatively permanent. If the behavior does not change, the child has not learned.

Behaviorists use the term **conditioning**, or creating situations that result in learning, to describe the learning process. Conditioned behavior is the same as learned behavior (Bergin and Bergin, 2019).

There are two forms of conditioning that are relevant to children: classical conditioning and operant conditioning.

Classical conditioning starts with a stimulus that causes an involuntary response without learning. Classical conditioning can result in both positive and negative responses

theory: A systematic statement of principles and beliefs created to explain a phenomenon or group of facts that have been repeatedly tested or are widely accepted.

behaviorism: The scientific study of observable behavior.

learning: Relatively permanent change in behavior that occurs as a result of experience.

conditioning: Creating situations that result in learning.

classical conditioning: A form of conditioning in which a neutral stimulus is paired with a stimulus that causes an involuntary response until the neutral stimulus becomes a conditioned stimulus and also causes the response.

operant conditioning:Conditioning in which voluntary behavior is conditioned through its consequences.

TABLE 1-1: Timeline of Early Education Historical Highlights

1000 s	Plato expressed the value of play.	1890s	Hull House, a settlement house for immigrants, established a day nursery.
1630s	Locke emphasized importance of firsthand experiences as a means for learning. Children considered a blank page that could be molded by experience. John Comenius, father of modern education, was first to recognize that play of childhood was learning and produced first children's picture book, The World Illustrated. Jean-Jacques Rousseau proposed that children and adults think differently and children learn best through hands-on experiences.	1900s	Patty Smith Hill created a curriculum that provided foundation for kindergartens in the United States, founded laboratory school at Columbia University Teacher's College as model for training early childhood educators and began a professional organization of early childhood educators. Maria Montessori opened Children's House in Rome.
1800s	Johann Pestalozzi established the first school to teach preschool-age children.	1910s	Nursery schools reflecting the principles of a child-centered approach were conceived and introduced in America by Margaret and Rachel McMillian (Gordon & Browne, 2016).
1830s	Froebel created the concept of kindergarten (children's garden) and Elizabeth Peabody organized first American Froebel union.	1920s	At least one other adult living in home other than the parents. Nursery schools linked to child development and psychology and day nurseries focused on meeting the needs of poor and immigrant families were available (NAEYC, 2001).
1840s	Child Study movement created by G. Stanley Hall and Arnold Gesell.	1930s	Depression produced economic and social crisis in the United States. Works Progress Administration (WPA) nurseries designed "to develop physical and mental well-being of preschool children in needy unemployed families or neglected or underprivileged homes resulting in almost 2,000 WPA nursery schools in operation by 1935" (NAEYC, 2001).
1850s	Nursery School for Children of Poor Women opened in cooperation with Children's Hospital of New York City.	1940s	Lanham Act allowed public funds to be used for child care while millions of women went to work for the World War II effort. Using Lanham Act funds, the Kaiser Shipyards opened child care centers that functioned 24 hours a day, year long and closed when the war ended (Gordon & Browne, 2011; NAEYC, 2016). Reggio Emilia established in Italy influenced early childhood thinking around the world (Essa, 2014; Gordon & Browne, 2016).
1870s	First public school kindergarten started in St. Louis.	1960s	High/Scope Perry Preschool Project began to serve at-risk children from impoverished neighborhoods. Based on landmark long-term study on the effects of high-quality early care and education on low-income 3- and 4-year-olds (Gordon & Browne, 2016).

TABLE 1-1: Timeline of Early Education Historical Highlights (continued)

National Committee on Nursery Schools (NANE) became National Association for the Education of Young Children (NAEYC) and now includes a membership of over 100,000.

Landmark court decisions established responsibility of states to educate children.

Project Head Start, part of the Economic Opportunity Act's "War on Poverty," was funded to counteract the effects of poverty among children.

1990s Association of Childhood Education International (ACEI) celebrated its centennial and is the oldest professional association of its type in the United States (ACEI, 2002).

National Association for Family Day care changes to the National Association of Family Child Care with a goal of providing assistance for developing leadership, professionalism, and quality for family child care providers (NAFCC, 2002).

T.E.A.C.H. Scholarship program enacted. The Stand for Children Campaign begins.

1970s National Black Child Development Institute (NBCDI) was created to provide and support programs, workshops, and resources for African-American children, their parents, and communities (NBCDI, 2002).

Child Development Associate (CDA) created as part of the U.S. Department of Health, Education, and Welfare (NAEYC, 2001).

Education for All Handicapped Children Act, now known as Individuals with Disabilities Education Act (IDEA), passed to include early childhood services.

2000s No Child Left Behind Act of 2001 placed more emphasis on program accountability and assessment in grades 3–8 (Essa, 2011; United States Department of Education, 2001).

Campaign launched to avoid SIDS in child care settings.

Operation Military Child Care started to address the child care needs of parents who were activated and deployed.

1980s National Association for Family Day Care established.

Position statements defining and describing developmentally appropriate practice in early child-hood programs serving young children published by NAEYC (Copple & Bredekamp, 2009).

San Francisco became first large city to require developers to set aside funds for child care space.

National Academy of Early Childhood Programs established by NAEYC voluntary accreditation of center based programs.

CDA Credentialing administered by NAEYC moved to Council for Professional Recognition (NAEYC, 2001).

U.S. Department of Education established Even Start, a parent education/literacy program.

2010s President Barack Obama called on Congress to expand access to high-quality preschool for every child in America through the Preschool for All initiative.

Every Student Succeeds Act replaces No Child Left Behind Act allowing states more control related to alternatives to high-stakes testing.

in children. Children can be trained to start putting toys away when they hear the clean-up song signaling the end of playtime. Classical conditioning can also account for children's development of phobias such as disliking school when they are having negative experiences there. If this happens too often, the mere sight, smell, or sounds of school can elicit sweaty palms and anxiety.

Operant conditioning focuses on voluntary behavior such as learning to walk or talk. It focuses attention on the response rather than the stimulus and concentrates on what reinforcements can be used to increase a behavior. The reinforcements can be either positive reinforcements or negative reinforcements. Negative reinforcement is often confused with punishment, which refers to consequences that reduce the probability of a behavior. It does not necessarily refer to physical punishment.

Modeling is another technique used by behaviorists that uses learning and teaching by example. For instance, children who see their parents smoke are likely to also smoke.

Behaviorist theories, of all the theories, attend the closest to the conditions for learning. The theorists describe development more in terms of nurture than nature and tend to view development as continuous. A teacher arranges the environment so that positive learning is enhanced and utilizes close interactions with the children in shaping their behavior (Bergin and Bergin, 2019, Gordon and Browne, 2016).

Cognitive Development Theory

Cognitive development is described as the intellectual acquisition of information, facts, or data and includes reasoning, understanding, problem solving, and language acquisition. Much of what is known about cognitive development has come from the work of *Jean Piaget* (1896–1980). He introduced the study of children's thinking and was the first to describe how children create their own mental image of the world based on their encounters with the environment. Piaget describes the system of thought that develops through common stages of all cultures and goes through all children.

A careful consideration of Piaget's concepts, along with close observation of children, helps teachers provide appropriate environments and experiences. Piaget believed that **learning**, or change in behavior, occurs as children construct knowledge through active exploration and discovery in their physical and social environments. He also asserted that learning happens through the dual process of assimilation and accommodation.

Assimilation is a process that occurs when a child handles, sees, or otherwise experiences something (see Figure 1-1).

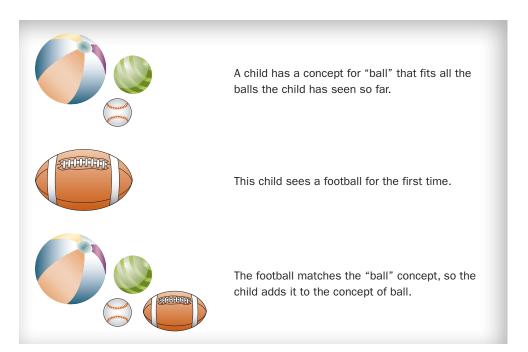


Figure 1-1 Ex

Example of Piaget's concept of assimilation.

NAEYC Standard 1: 1c DAP Guideline 4: 4d INTASC Standard 3

reinforcements: Consequences that increase the probability of a behavior.

positive reinforcements: Reinforcements that increase the probability that a behavior will occur again by presenting a consequence such as praise or treats.

negative reinforcements: Reinforcements that increase the probability that a behavior will occur again by removing an undesirable or aversive stimulus such as seat-belt buzzers.

punishment: Consequences that reduce the probability of a behavior but that do not necessarily refer to physical punishment.

modeling: The process of learning and teaching by example; also known as observational learning.

cognitive development: The mental process that focuses on how children's intelligence, thinking abilities, and language acquisition emerge through distinct ages. Piaget's study of children's thinking, involving creating their own mental images of the world, based on encounters with the environment.

learning: Change in behavior or cognition that occurs as children construct knowledge through active exploration and discovery in their physical and social environments.

assimilation: Piaget's process of cognitive development, which occurs when a child handles, sees, or otherwise experiences something.

A **schema** (plural, *schemata*) is an integrated way of thinking or of forming mental images. This requires constant change, creation, modification, organization, refinement, and reorganization of our schemata.

Accommodation occurs when a schema is modified as a result of experience. (See Figure 1-2.)

Equilibrium happens when there is a balance between assimilation and accommodation. According to Piaget, this continues until new information causes the process to begin again (Piaget, 1926).

Piaget divided cognitive development into four stages:

- 1. Sensorimotor stage (birth to about 2 years). During this time, children grow from helpless newborns to children who are able to walk and talk. Infants begin learning through the use of their sensory system and reflexes. Gradually, these reflex behaviors are changed and new behaviors develop. Babies enjoy repeating behaviors. Often, something unexpected happens during repetitions and a new behavior is discovered. They then try to repeat the new behavior. Throughout the sensorimotor stage, infants are developing the concept of object permanence. According to Piaget's theory, a baby thinks that objects, including people, cease to exist the moment the child stops seeing them. For example, if an object that has left returns, the infant considers it a new, though identical, object. As children develop, however, they begin to search for the missing object or person.
- 2. Preoperational stage (about 2 to 7 years). Piaget believed that children's thinking during this stage is egocentric—that is, they think about the world only in relation to themselves. Along with this, the preoperational period is characterized by symbolic thinking. Symbols or mental representations are formed, allowing children to solve problems by thinking before acting. They begin to enjoy pretend play. As thinking

NAEYC Standard 1: 1a INTASC Standard 1

schema: An integrated way of thinking of or forming mental images.

accommodation: Piaget's theory of modification of existing cognitive information. Cognitive schemes are changed to accommodate new experiences or information.

equilibrium: A balance of one's cognitive schemes and information gathered from the environment; assimilation and accommodation.

object permanence: A mature state of perceptual development. According to Piaget's theory, a baby thinks that objects, including people, cease to exist the moment they stop seeing them. An older child starts to search for the missing object or person.

egocentric: A stage when individuals think about the world only in relation to themselves.

symbolic thinking: The formation of symbols or mental representations, allowing children to solve problems by thinking before acting.

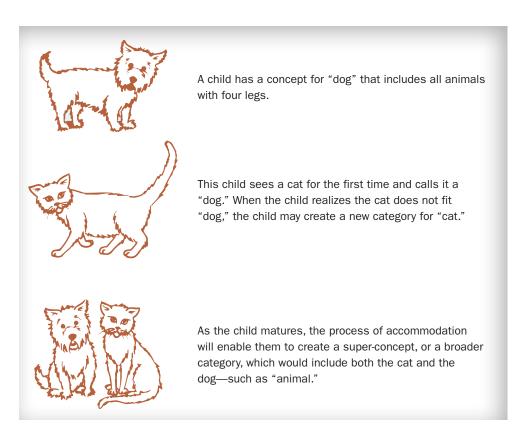


Figure 1-2

Example of Piaget's concept of accommodation.

- emerges as verbal expression, language acquisition proceeds rapidly. Intellectual and language development blend together. The more children use all the senses and broadens their experiences, the more they have to think and talk about.
- **3. Concrete operations stage (about 7 to 12 years)**. During this stage, children are developing concepts of numbers, relationships, and processes, as well as thinking problems through mentally. Logical thought requires actual physical objects or events. Piaget explains:
- Manipulation of materials is crucial. In order to think, children in the concrete stage need to have objects in front of them that are easy to handle, or else be able to visualize objects that have been handled and that are easily imagined without any real effort.
- **Children learn through the use of materials. They should be selected based on their ability to allow the child to become conscious of a problem and seek ways he/she can solve the problem. If the child generalizes too broadly, the teacher should provide additional materials to allow the child to refine his/her solution. **
- **4. Formal operations stage (12 years through adulthood)**. The individual reasons logically and moves from concrete manipulations to abstract thinking. The ability to hypothesize and think about what might be rather than what is usually occurs during this stage.

Each of these stages involves a period of formation and a period of attainment. Each builds on the development of the preceding stage. Teachers and parents should provide appropriate environments and ask appropriate questions, moving from simple to complex and from concrete to abstract.

For exploration of other Piagetian concepts, see the section on play in this chapter and Chapter 8, "Math."

Humanistic Psychological Theory

In the mid-1950s, *Abraham Maslow* (1908–1970), an American psychologist who developed a hierarchy of needs to explain human motivation, described a form of psychology he called **humanistic psychology** that focused on what motivated people to be well, successful, and mentally healthy. This was a change from the study of mental illness as in the psychotherapy or the study of animal behavior in the case of behaviorist research (Gordon and Browne, 2016). Maslow's theory is based on a set of ideas about what people need, regardless of their age, gender, race, culture, or geographic location. Maslow developed a hierarchy of needs in the shape of a pyramid to better describe his theory. At the bottom of the pyramid are the most basic needs that must be met before a person can reach **self-actualization**.

The steps of Maslow's hierarchy of needs are as follows: (Bergin and Bergin, 2019)

DAP Guideline 1: 1e INTASC Standard 3



Figure 1-3 Maslow's hi

Maslow's hierarchy of needs.

humanistic psychology: Theory that focuses on what motivates people to be well, successful, and mentally healthy. self-actualization: The process of fulfilling one's potential. Over the years, there have been several adaptations of Maslow's hierarchy of needs but currently there are only five levels of needs. The bottom four levels are known as the basic needs or deficiency needs because they are critical for a person's survival. Until those four are met, no significant growth can take place. The lowest level is physiological needs and includes air, water, food, sleep, shelter, and clothes. The second level is safety. This can refer to both physical and psychological safety. Social needs are the next level and include love and acceptance. The final basic need level is esteem such as admiration from others and self-respect.

The final level is self-actualization and is the process of fulfilling one's potential. Self-actualizing of people are ethical, compassionate, unpretentious, and creative. Self-actualization is a very long process and less than 5 percent of people truly achieve it. A variety of ages in early childhood education can be seen in some of the following unmet levels of the pyramid:

Children deprived of basic physiological needs may only be able to think of these

A child who lives in an unpredictable home cannot find any sense of consistency and worries and is anxious.

Needs for love, belonging, and esteem are often expressed inappropriately.

Children must be well-fed, rested and feel cared for if they are to achieve in school. This is why understanding children's physical and socioemotional needs will help teachers become more effective (Gordon and Browne, 2016).

Multiple Intelligences Theory

Howard Gardner (1943–), an American psychologist and professor at Harvard Graduate School of Education, is also a researcher who has studied the mind and brain with particular reference to learning and education. He has challenged the view that something called "intelligence" can be objectively measured and reduced to a single number or "IQ" score. In fact, Gardner's definition of intelligence is multifaceted. His ongoing research at Harvard, Project Zero, suggests that an individual is not born with all of the intelligence they will ever have. Rather, intelligence can be learned and improved on throughout a lifetime.

Gardner identifies his cross-cultural exploration of the ways individuals are intelligent as **multiple intelligences**. His philosophy also proposes that one form of intelligence is not better than another; all are equally valuable and viable. Gardner's theory also suggests that teachers should take seriously the child's individual differences. An understanding of each child's intelligence is critical in the development of curriculum to prepare children to learn in new situations.

The following explanations of Gardner's multiple intelligences are adapted from Gardner (1997), Hine (1996), and Nicholson-Nelson (1999):

- 1. Verbal-linguistic intelligence: From the babbling of infancy to the toddler's simple sentences, the ability to use language and words continues to grow throughout early childhood. Whether written or spoken, it develops with sensitivity to the order and rhythm of words. The learning environment should include a language- and printrich classroom with opportunities for reading, writing, speaking, and creative writing. Children who are accomplished in verbal-linguistic abilities enjoy reading, writing, telling stories, playing word games, and communicating effectively.
- 2. Logical-mathematical intelligence: Starting with babies inspecting their world and continuing on to toddlers recognizing similar characteristics of objects, the ability to categorize and to use numbers, patterns, sequencing, and cause and effect to solve problems develops and grows throughout early childhood. The learning environment should offer opportunities to relate math and science to real-life situations while providing activities that make math and problem solving fun, relevant, and challenging. Children who are adept in logical-mathematical abilities learn through asking questions in a logical manner, making connections between pieces of information, exploring, and developing strong problem-solving and reasoning skills.

NAEYC Standard 1: 1a INTASC Standard 1

NAEYC Standards 1 & 5: 1b, 1c, 5a & 5b

DAP Guideline 4: 4c INTASC Standard 2

multiple intelligences:
Gardner's theory, which proposes that we may possess several different kinds of intelligence and that one form of intelligence is not better than another; all nine are equally valuable and viable.

- **3.** Musical-rhythmic intelligence: Starting with the prenatal awareness of noises and rhythms and, later, imitations of sounds and pitches, a child soon develops the ability to produce and recognize simple and then complex songs and to perceive pitch, tone, and rhythmic pattern. The child becomes immersed in the music and sounds of the world. The learning environment should provide opportunities for singing, listening, movement activities, sound awareness, and musical instrument appreciation and practice, while emphasizing cultural awareness through music. Children who are strong in musical-rhythmic abilities think in rhythms and melodies; enjoy listening to music, singing, dancing, humming, and playing musical instruments; and exhibit a sensitivity to environmental sounds.
- **Visual-spatial intelligence:** From the infant's ability to discriminate among the faces around them to the toddler's first steps, the facility to perceive the visual world with a great deal of understanding continues throughout early childhood. Creating visual images with shape, color, and form opens up new understanding. The learning environment should be a graphic-rich classroom that encourages opportunities for visual processing as well as thinking and planning in three dimensions. Children who are highly capable in visual-spatial abilities think in images and pictures; like to draw, design, and create things; and often see things from different points of view. (See Figure 1-4.)
- Bodily-kinesthetic intelligence: From an infant's looking for and grasping different objects to the strength and coordination of an older child, the ability to use the body for self-expression develops through information gained from muscles, sensations, reflexes, coordination, and movement. The learning environment should reflect opportunities for physical challenges throughout the day, not just outdoors but indoors as well. The classroom should facilitate tactile experiences and the use of manipulatives in math, science, and language arts. Children who are resourceful in bodily-kinesthetic abilities learn through moving, doing, and touching. They enjoy physical activities, such as those involving hand-eye coordination and hands-on experiments.



Figure 1-4 Creating visual images with shape, color, and form opens up new understanding for young children.

- 6. Interpersonal intelligence: From an infant's bonding with parents to the meaningful relationships with others outside the family, the ability to understand other people and their actions, moods, and feelings develops as young children deal with personto-person relationships and communication. The learning environment should provide opportunities for children to relate to others by cooperatively participating, sharing, negotiating, and communicating in groups or with individuals. Children who show interpersonal abilities learn through listening, cooperating in shared projects, demonstrating leadership skills, seeing things from other perspectives, and organizing and negotiating group activities.
- 7. Intrapersonal intelligence: Starting with a baby's realization that they are a separate person from the mother, children's ability to understand themselves grows throughout early childhood and at the same time helps in the identification of feelings, moods, strengths, and weaknesses. The learning environment provides plenty of space and time for self-reflection and working alone in a safe environment that encourages appropriate risk taking. Children who are accomplished in intrapersonal abilities learn through understanding their role in relationship to others, have a strong sense of self, and enjoy setting goals, planning, and working on self-paced projects, all of which involve having choices.
- 8. Naturalistic intelligence: A child's interest in seeing, smelling, and touching a flower, reacting to the sound of a bird, or playing with the family pet demonstrates the ability to recognize important distinctions in the natural world. The learning environment should offer opportunities for exploring outdoors and bringing the outdoors inside by providing field trips, books, visuals, objects, and materials relating to the natural world. Children who show naturalist abilities learn through observing nature, being sensitive to all features of the natural world, and enjoying books, visuals, and objects related to the world around them. (See Figure 1-5.)
 - **9.** Existential intelligence: This ninth intelligence can be defined as the ability to be sensitive to, or have the capacity for, conceptualizing or tackling deeper or larger questions about human existence, such as the meaning of life, why are we born, why we die, what is consciousness, or how did we get here. Children pose, and sometimes even answer, life's larger questions such as: Why am I here? Why are we here? Can animals understand us, or do animals go to heaven? Where do we go when we die? These may be those children who can be described as "fully aware" of the cosmos—of its diversity, complexity, and wonder. Frequently, these are the children who persist in asking those "big" questions that adults cannot

The multiple intelligences theory is a useful model for developing a systematic approach to nurturing and teaching children and honoring their individual needs and strengths within a classroom setting.

The concept of multiple intelligences does not require discarding previous ideas. Teachers can supplement current appropriate activities with new ideas that will reach even more of their students. In fact, Gardner contends that teachers need to guide students into using their combination of intelligences to help them learn whatever they want to learn, as well as what teachers and society believe they have to learn.

The multiple intelligences approach provides a framework for us to identify how children learn to build on their strongest assets, to help them become more intelligent by exposing them to a variety of ways of learning, to better individualize for their interests and needs, and to use teaching strategies that make learning more appropriate, successful, and enjoyable for all children. Examples of using Gardner's multiple intelligences theory in the classroom can be found in the curriculum content chapters of this book.

Psychosocial Theory

Erik Erikson (1902-1994) made significant contributions to psychoanalysis, personality theory, education practice, and social anthropology over five decades.



Figure 1-5 A child's interest in seeing, smelling, and touching a flower demonstrates the ability to recognize important distinctions in the natural world.

Erikson recognized growth and development to be continuous throughout an individual's life. His eight psychosocial stages describe the interaction between an individual's social-emotional condition and the interpersonal environment. His stages of development help us understand the importance of allowing children to play out their feelings in an environment of acceptance. The first four stages are relevant to early childhood educators:

- 1. Basic trust versus mistrust (birth to one year). This developmental stage is important to an infant's learning that people can be depended on and so children can learn to depend on themselves. Love and acceptance are important for the child to learn that the world is a safe place in which to live. This foundation of trust will be developed if the infant's needs are met. This is observable when the infant babbles, coos, laughs,
- 2. Autonomy versus shame and doubt (second year). This stage helps a child develop a basic sense of self-control and independence. The child is growing rapidly. It is significant during this stage that toddlers have opportunities to do things for themselves. This is observable when toddlers feed and dress themselves, and generally have an "I can do it myself" attitude that is accepted and reinforced by the adults in their lives.

crawls, pulls up, and is comfortable with the environment.

- Initiative versus guilt (3 to 5 years). During this stage of life, children are becoming interested in exploring and are ready to learn. Children need to express their natural curiosity and creativity through opportunities in the environment. This stage of development is observable by watching how children demonstrate body control and motor skills while riding a tricycle and running. Initiative is reinforced when children are given freedom to engage in fantasy and other dramatic play activities. Social roles in dramatic play continue to show children identifying with adult roles. They enjoy making adult situations conform to their notion of the ways things are. Roles can be reversed and new roles can be tried out.
- **Industry versus inferiority (6 to 11 years).** At this stage of life, the child is ready for challenges of new and exciting ideas. The child needs opportunities for accomplishment in physical, intellectual, and social development. This is observable by watching older children during creative dramatic activities. They improvise their own dialogue, play the scenes, and evaluate the results. This is informal and demonstrates individual and group imagination, problem solving, critical thinking, and cooperation with others.

The last four of Erikson's (1963) psychosocial stages follow the individual from the teenage years through the rest of the life span:

- **5.** *Identity versus role diffusion (12 to 18 years).*
- **6.** *Intimacy versus isolation (young adulthood).*
- **7.** Generative versus stagnation (adult middle years).
- **8.** Ego integrity versus despair (older years).
- **K**Erik Erikson's work and wisdom have profoundly shaped the field of child development. What comes through most strongly in Erikson's work is his empathy and respect for children—and for their parents and the societies in which they live. . . . Erikson's work has more than withstood the test of time; it continues to inform and inspire the fields of child development, life-span studies, anthropology, history, sociology, and others (Stott, 1994, p. 43). **

Sociocultural Theory

Over the past two decades, the educational theories of Russian developmental psychologist Lev Vygotsky (1896-1934) have been translated and made available in the United States. Vygotsky asserted that a child's learning development is affected by the child's culture, including the culture of family environment. He focused on the whole child and incorporated ideas of culture and values into child development, particularly the development of NAEYC Standard 1: 1a & 1b

NAEYC Standard 1: 1a & 1c

psychosocial: Erikson's eight stages that describe the interaction between an individual's socialemotional condition and the interpersonal environment.

Reflect On This

Some teachers think that to be fair, you have to teach all children the same. What do you think?

NAEYC Standard 4 & 5: 4b & 5a

DAP Guideline 4: 4f & 4g

INTASC Standard 2 & 3

zone of proximal development: The level of competence between what a learner can do alone and what they can do with assistance.

scaffolding: The adjustable support the teacher offers in response to the child's level of performance.

language and self-identity. "Because Vygotsky regarded language as a critical bridge between the sociocultural world and individual mental functioning, he viewed the acquisition of language as the most significant milestone in children's cognitive development" (Berk and Winsler, 1995, p. 20). It is from language that the child constructs reality.

Much of what a child learns comes from the surrounding culture. In addition, interactions with teachers, parents, and more experienced peers contribute significantly to a child's intellectual development. Vygotsky believed that a difference exists between what children can do on their own and what they can do with help. Vygotsky called this difference the **zone of proximal development**. In other words, the "zone" is the range of potential each child has for learning, with that learning being shaped by the social environment in which it takes place. This potential ability is greater than the actual ability of the individual when the learning is facilitated by someone with greater expertise (Bergin and Bergin, 2019).

Vygotsky felt that children develop lower mental functions such as associative learning, simple perceptions, and involuntary attention through social interactions with people who possess more knowledge. Higher mental functions will eventually develop including problem-solving, moral reasoning, language, memory schemas, and logic.

For teachers of young children, the zone of proximal development may be used to provide a theoretical base from which to understand cooperative learning. In the culture of the classroom, this can translate into small-group instruction in which students work together to solve problems. This approach encourages children to construct their own knowledge while engaging in activities that build and rebuild, or construct, ideas based on previous experiences. In addition, the role of the teacher includes both designing an educative environment and collaborating with children by scaffolding their efforts to master new skills. Vygotsky-based teaching is activity-centered and encourages teachers to create opportunities for children to engage in culturally meaningful opportunities with the teacher's guidance. This kind of teaching emphasizes scaffolding, which occurs as the teacher (adult) continually adjusts the level of help offered in response to the child's level of performance. Scaffolding can help instill the skills necessary for independent problem solving in the future, and teachers must become experts in this experience. To do that, teachers must effectively utilize observation skills to learn each and every child's level of learning. Only then can they make a determination of the steps to take to meet each child's unique needs. For further application of this and other theories, see the curriculum models and programs in Chapter 3.

Developmentally Appropriate Practice

NAEYC Standards 1 & 4: 1b, 1c, & 4b

DAP Guidelines 1, 4 & 5: 1a, 4b, 4c,

4d, 4h, 5a, & 5c

INTASC Standards 1, 2, & 3

developmentally appropriate practice: The curriculum planning philosophy expressed by NAEYC that defines and describes what is developmentally appropriate for young children in childhood programs serving children and families, birth through age eight.





InTASC

Developmentally appropriate practice (DAP) provides the context for learning environments, teaching strategies, and family engagement in which children's cultural, linguistic, and ability differences are matched to the developmental tasks they need to learn. It is based on what we know about how children learn and what we know about individual children and their families (Gordon and Browne, 2017).

Developmentally appropriate early education recognizes the social nature of learning, and it values cultural and linguistic diversity. Also included is the understanding that children need an environment that allows them to interact at their own level of development with a minimum amount of adult direction. (See Figure 1-6.) A strong emphasis is placed on children learning to think critically, work together cooperatively, and solve problems. Because developmentally appropriate classrooms are not only age and stage appropriate but also individually appropriate, they will not all look alike. To enhance the quality of educational experiences for young children, DAP is a framework for continuing to meet the diverse needs of all the children in our care. Kostelnik, Soderman, and Whirin (2014, p. 17) explain weaving the strands of age appropriateness, individual appropriateness, and sociocultural



Brain Research: Structure and Function of the Brain

"Brain differences occur in infancy and have a biological base, so you might assume they're caused by genes. This is not necessarily true. They may because by differences in experience. The brain adapts to experience, so that experience becomes biology. Both nature and nurture shape the brain (Bergin and Bergin, 2019).

The basic unit of the brain is the brain cell called a neuron. When prompted by an electrical signal, neurons release a chemical called a neurotransmitter, which is then received by another neuron....You can think of the brain as a mass of these neurons. This mass has two

sides or hemispheres. The left hemisphere is biased toward language, analytical, and sequential processing. The right hemisphere is biased toward spatial, holistic, and integrative processing. Within each hemisphere are specialized regions. However, there is no such thing as a single place where complex functions, like memory or language, occur. Instead, they use both hemispheres and draw on a network of interconnected systems. The particular function of a region in the brain depends on which system it belongs to and where it is in the system. (adapted by Bergin and Bergin, 2019) (Standard 1 -1a) >>

appropriateness into a cohesive philosophy requires deliberate effort and continuous reflections by early childhood practitioners.

Developmentally appropriate practice will be described in depth in Chapter 3, and throughout this book, DAP will be discussed in relation to chapter content.

NAEYC Standards 1 & 4: 1c & 4c DAP Guidelines 1, 4, & 5: 1a, 1e, 4b, 4h, & 5a INTASC Standard 2

Child Development and Learning

First, let us focus on what is developmentally occurring with young children, the variations in their development, and their developmental process for learning. Development, in relationship to early childhood education, can be defined as systematic and adaptive changes in the body and mind based on sequence and patterns of growth and maturity (Charlesworth, 2017).



In a developmentally appropriate environment, teachers develop relationships with children that are consistent and supportive.

development: Systematic and adaptive changes in the body and mind.

NAEYC Standard 1: 1a INTASC Standard 1

NAEYC Standard 1: 1b DAP Guideline 1: 1b INTASC Standard 2 These development trends occur for all children but not in a uniform manner. Individual differences can be brought on by social and cultural contexts or experiential/genetic variations on development.

As we think about development and learning, it is important to remember that the areas of physical, intellectual, emotional, and social growth may overlap, even as age groups may. As children develop and learn, all domains are affected.

Infants

The early months of infancy are crucial in creating a foundation for all areas of development. Infants are actively involved with their world. They explore with all their senses (seeing, hearing, tasting, smelling, and feeling) and are acutely aware of their environment. Infants and the significant adults in their lives establish special relationships that involve getting to know each other and adjusting to each other. What adults do can modify how infants behave and what they will imitate.

As soon as infants are able to move about their environment and interact with adults, they are learning. (See Figure 1-7.) A typically developing child needs frequent opportunities for movement and interactions with people and objects. Fixed pieces of equipment such as playpens, high chairs, and bouncy seats provide little opportunities for varied and active experiences. As they are learning, the sight of the adult who feeds, holds, and comforts the infant is reinforced when that adult shows pleasure in caring for the infant. Emotional attachment develops as the child learns to expect that special person to make them feel good. The infant then seeks more contact with that adult. Even after crawling and walking have begun, the child frequently asks to be held. Research and clinical findings over the past decades confirm the connection to later emotional well-being of a secure attachment between each baby or young child and a warm, stable adult (Bergin and Bergin, 2019).

The teacher's interactions are synchronized with each child's response, each influencing the other. The challenge occurs when the teacher is responsible for more than one infant.



Figure 1-7

Infants are actively involved with their world.

As families and infants enter child care, it is most important that a solid relationship is built between each of them and the teachers. Teachers of infants need to observe and learn from the experiences, knowledge, culture, and childrearing beliefs of family members. Daily communication between teachers and families is crucial. It fosters involvement and support and offers a culturally sensitive approach to dealing with caregiver/family member conflicts.

Decades of research by neuroscientists and others have found what we in early childhood education have been saying for years, namely, that children's foundation for behavior and learning for the rest of their lives is laid in the early years. The better the child's early nurturing, the better are that child's prospects for future development (Gabbard and Rodrigues, 2002).

Although it has been known for many years that most of a child's brain cells are formed in the prenatal stage, the brain is not completely developed at birth. Research indicates that important neural (nerve) connections, transferring information from one part of the body to another, occur and strengthen after birth. Formations of the connections depend on the relationships and experiences we are exposed to in our environments. Research continues to refine scientists' insight into brain development, such as "understanding of developmental periods of dramatic brain growth, information about regions of brain growth, and details on brain functions. We know that the brain has growth spurts during certain times of development, such as early childhood and adolescence" (Schore, cited in Gallagher, 2005, pp. 12-20). By using new research techniques, scientists are discovering that babies are aware of the world around them-more so than adults.

An important aspect of a young child's continued mental development is selfregulation, their growing natural ability to exercise control over physical and emotional needs in the face of changing circumstances. Self-regulation is visible in all areas of behavior and is the foundation of early childhood development. For example, by using consistent routines with infants, you are helping young children learn to self-regulate within the structure of a nurturing environment.

All of this, along with new and continuing exploration of brain function, from birth through the first 10 years of life, helps us understand more about the relationship between nature and nurture. The interplay between nurture (the nutrition, surroundings, care, stimulation, and teaching that are provided or withheld) and nature (an individual's genetic endowment) determines how humans develop and learn.

Toddlers

Children aged 16 to 36 months grow and learn rapidly. (See Figure 1-8.) "The toddler is a dynamo full of unlimited energy, enthusiasm, and curiosity. ... The toddler begins this period with the limited abilities of an infant and ends with the relatively sophisticated skills of a young child" (Allen and Marotz, 2016, p. 107). This is a time for development in mobility, autonomy, and self-help skills, children learning what can be done for themselves by their own effort or ability, such as washing and drying hands, and feeding or dressing themselves. "Perhaps one of the best ways to nurture good feelings about self is to encourage toddlers' already strong interest in doing things for themselves" (Gestwicki, 2017). They try many tasks that are often too difficult for them. At this time, the safety of the environment is critical. As a teacher, you should expect this newfound independence and allow for trial and error. Children love to repeat and use these new skills over and over again.

Toddlers are fascinated by words. As these active children become more independent, "their speech is limited, but their understanding of communication is beyond their speech. ... Toddlers learn a great deal through imitation and especially from observing demonstrations accompanied by a verbal explanation" (Charlesworth, 2017). Chapter 9 emphasizes language and literacy development.

NAEYC Standard 1 & 2: 1c & 2b DAP Guideline 2: 2a, 2b, 2d, 2e, & 2f

NAEYC Standard 1: 1a **INTASC Standard 1**

self-regulation: A child's natural ability to exercise control over physical and emotional behavior in the face of changing circumstances.

self-help skills: In early childhood, children's ability to care for themselves, such as dressing, feeding, and toileting.



Figure 1-8 This is a time for rapid development as a toddler learns self-help skills.

NAEYC Standard 1: 1c
DAP Guideline 1: 1b & 1e
INTASC Standard 3

NAEYC Standard 4: 4b
DAP Guideline 1: 1d
INTASC Standard 8



Figure 1-9 Young children are full of enthusiasm and high energy.

Appropriate teaching techniques require the building of trust between the children and the teacher and between the children and their environment. This can develop only if there are safe, consistent, and child-centered surroundings that encourage success for both children and teachers.

There is more information on developmentally appropriate learning environments in Chapter 4.

Three- and Four-Year-Olds

The preschool years are special. The preschool years before kindergarten are considered to be an extremely important time for development and learning in preparation for the public school. Three-year-olds have a distinct period of development with added skills and challenges. They are anxious to try new things but get frustrated when they cannot do what they set out to do. With an enlarged vocabulary, they engage in more extensive conversations; and although they can play along with other children, they often find it difficult to cooperate in a game. The 3-year-old enjoys fantasy and imaginative play, although the difference between fantasy and reality is not always clear.

Generally, the child's interest has become more sustained, but repetition is still important. They begin to enjoy looking at picture and storybooks and have a better understanding of verbal cues. There is a continued need for exploration and experimentation. Teachers of 3-year-olds need to respect their growing skills and competencies without forgetting just how recently they were acquired.

Four-year-olds are full of enthusiasm and high energy. (See Figure 1-9.) The ability to do more things without help, along with increased large and small muscle control, allows these children to develop a greater self-confidence. Children of this age enjoy learning to do new things and like to have an adult's attention. At the same time, because they are so eager to learn and learn so fast, they can use a higher level of language (more and bigger words) than they really understand.

Four-year-olds have broader and more diverse interests. They begin to understand the environment and benefit from field trips. Their interest in others prompts them to ask searching questions about people and their relationships with others. They are interested in the letter carrier, the fire-fighter, the police officer, and everyone around them who performs various services.

These children are conscious of make-believe and begin to "be" other people or animals. They gradually build a background for imaginative play. For fours, play is most often seen as a solitary activity. Even so, peers are becoming even more important to the fours. As a teacher, when you interact with these active children, you will be bombarded with questions. Sometimes they will insist on trying to do things that are too difficult for them. Help them find many things that they can do. Observe the children and set up the environment to match their skills. More information on play is provided later in this chapter.

Prekindergarten programs that support effective teaching practices and opportunities for 4-year-olds are available in approximately 40 states. Many school buildings have been created specifically for eligible preschoolers, which fills an expanding need for low-income children with disabilities (National Institute for Early Education Research [NIEER], 2015).

Teachers are encouraged to take a developmental perspective in implementing the Prekindergarten Guidelines. Teachers should 'meet children where they are' and provide information and activities at a level that children can readily understand and engage with. This will mean building children's skills over time, working toward the school

readiness outcomes step by step as children demonstrate mastery of beginning level skills. Teachers should have the outcome skills in mind, but will need to prepare children to meet these goals through scaffolding experiences and activities that are appropriate for individual children's current developmental levels and capabilities (Texas Education Agency, 2015) Revised Texas PreKindergarten Guidelines.

NAEYC Standard 4 & 5: 4c & 5b DAP Guideline 4: 4c, 4f, & 4h **INTASC Standard 4**

Five-Year-Olds

Five-year-olds are becoming more social; they have best friends and also enjoy playing with small groups of children. Their use of language, especially vocabulary, continues to grow along with the understanding that words can have several meanings. Experimentation with language is evident at this age.

Fives are more self-controlled, but family and teacher have the most influence on how they behave. They take responsibility seriously and can accept suggestions and initiate action. With the increase of large and small muscle abilities, 5-year-olds can run, jump, catch, throw, and use scissors, crayons, and markers easily. (See Figure 1-10.)

Exploration of the environment is important to these children. They are learning about the world and their place in it. They act on their own and construct their own meaning. Each of their actions and interpretations is unique to them. They are developing an understanding of rules, limits, and cause and effect.

"Kindergarten children are undergoing profound transformations—in their capacity to think rationally, persist in the face of challenge, use language, adeptly suppress impulse, regulate emotion, respond sympathetically to others' distress, and cooperate with peers" (Berk, cited in Gullo, 2006, KToday—Teaching and Learning in the Kindergarten Year, NAEYC). Children of this age also believe in their own abilities to master new skills.

The number of children attending child care and preschool programs continues to grow. Standards, guidelines, and academic demands continue to increase as well. These factors have transformed the role of kindergarten. Approximately 95 percent of children kindergarten age in the United States are enrolled in some type of kindergarten program. Kindergarten is now generally considered the first year of school. The teacher's role is to create the appropriate environment, encourage curiosity, and learn along with the children. Kindergarten has to be a place for every child to grow and learn, in every dimension of development.

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

The early grades are a critical time for children as they increase their mastery in all areas of their learning. They explore areas such as science, math, social studies, literacy, and writing in addition to gaining lasting friendships. The body growth of 6- to 8-year-olds is slower but steadier, and physical strength and ability are important to them. Their motor coordination begins to improve, and playing games that require eye-hand coordination, such as baseball, becomes easier at this age. These children are able to think and learn in more complicated ways, both logically and systematically. They are developing the ability to concentrate their attention for longer periods of time.

The language and communication development in these primarygrade children is dramatic. They move from oral self-expression to written self-expression. They are becoming more independent and have strong feelings about what they eat, wear, and do. The 6- to 8-year-olds are extremely curious about their world, and they actively look for new things to do, see, and explore. They are making new friends, and these peers play a significant



Figure 1-10 Young children playing outside can practice their newly discovered physical skills in a safe environment.

role in their lives as they take into consideration the viewpoints and needs of others. Children in early grades have to learn that other children have different points of view and separate abilities that must be considered as relationships grow.

They are becoming more empathetic by developing the ability to see things from another perspective. They are also very sensitive and their feelings get hurt easily. As these primary-age children try out their new independence, they need teachers' and parents' guidance, affection, encouragement, and protection as much as, if not more than, ever.

Including families in the program will encourage their support and provide you more insight into their children. Communication with family members is discussed throughout this book. Suggestions on how teachers can work in partnership with families and communities are discussed later in this chapter.

Diversity: Cultural, Linguistic, and Ability Differences

Individual Strengths, Interests, and Needs

Now let us examine individual appropriateness, which involves adapting an early childhood environment to meet a child's cultural and linguistic needs, as well as their individual strengths and interests. This includes providing each child with the time, opportunities, and resources to achieve individual goals of early education. The teacher should support a positive sense of self-identity in each child. It is important for a teacher to provide many opportunities for teacher-child interaction. However, individual appropriateness should not result in the lowering of expectations.

Individual appropriateness requires the teacher or adult to try to put themselves in the place of the child in the classroom. It means asking questions, such as:

- What would make the environment comfortable for infants, toddlers, preschoolers, kindergarteners, early school-age children, or children with language and ability differences?
- What kind of adult support would be appropriate?
- What is planned to encourage parent participation?
- What is being done to develop a child's sense of trust, sense of self, and feeling of control over the environment?
- What should be happening to encourage positive self-concept development?
- What would I see if I were at the child's level?
- What kind of activities, supplies, and materials should be available?
- What is occurring to support a child's need for privacy or "alone time"?

In answering these questions, take into account what is known about how young children develop and learn, and match that to the content and strategies they encounter in early education programs. Being reflective and carefully listening to what children have to say is also important. As we continue through this book, the activities discussed in all curriculum areas will be developmentally appropriate, with an emphasis on meeting the needs of each and every child.

It is important to include opportunities for interacting with the child's family as well. Communication between home and school offers consistent and beneficial experiences for young children and their families.

Gestwicki (2017) says it clearly:

Developmentally appropriate practice does not approach children as if they were equal members of an age grouping, but as unique individuals... This knowledge

[of specific uniqueness] primarily comes through relating and interacting with children and also their parents, who are important resources of knowledge about their children. Developmentally appropriate practice is based on parents' active involvement both as resources of knowledge and as decision makers about what is developmentally appropriate for their children.

By observing young children, gathering data about who they are, and developing awareness of their strengths, interests, and needs, you are starting to build a child-centered curriculum. You will discover that children benefit from being treated as individuals while being part of a class community. For curriculum and environments to be developmentally appropriate, they must be individually appropriate.

We will study observation, assessment strategies, and evaluation of curriculum and environments in the ensuing chapters of this book.

NAEYC Standards 1 & 3: 1b, 1c, 1d, & 3c DAP Guidelines 1 & 3: 1a & 3c

INTASC Standard 6

Social and Cultural Contexts

Early childhood educators recognize the importance of cultural context in the development and learning of young children. Growing up as members of a family and community, children learn the rules of their culture—explicitly through direct teaching and implicitly through the behavior of those around them. To affirm these differences and similarities, an early education environment should encourage the exploration of gender, racial, and cultural identity, developmental abilities, and disabilities.

The ability to go beyond one's own sociocultural background to ensure equal and fair teaching and learning experiences for all is known as culturally appropriate practice. This expands DAP to address cultural influences that emphasize the adult's ability to develop a multiethnic perspective. To eliminate bias—any attitude, belief, or feeling that results in unfair treatment of an individual or group of individuals—and to create an anti-bias atmosphere, you need to actively challenge prejudice and stereotyping. Prejudice is an attitude, opinion, or feeling that is preconceived or decided, usually unfavorably. Stereotype is an oversimplified generalization about a particular group, race, or sex, often with negative implications (Derman-Sparks, Edwards, and Goins, 2020).

Literature by de Melendez and Beck (2019) explains further:

The Derman-Sparks anti-bias model presents and addresses cultural diversity content with an emphasis on promoting fairness and equality. It also refrains from using a tourist-like approach curriculum where the child 'visits' a culture and usually learns about its more exotic details. Such curricula only offer glimpses of cultures contributing little to development of awareness and knowledge about the daily life and problems people face in other cultures. **

The curriculum goals for an anti-bias approach are: Every child will be able to:

- Construct a knowledgeable, confident self-identity.
- Develop comfortable, empathetic, and just interaction with diversity.
- Develop critical thinking skills.
- Develop the skills for standing up for oneself and others in the fact of injustice.

Early education classrooms today include children with learning, behavioral, or physical differences as well as those with multiple and diverse linguistic and cultural backgrounds. Each child needs to be appreciated by the teacher and other significant adults. Children need to experience an environment that reflects back an awareness of and appreciation for their individual and cultural differences. The results of these positive influences will stay with the child for a lifetime.

bias: Any attitude, belief, or feeling that results in unfair treatment of an individual or group of individuals. Also a test, process, procedure, or use of the results that unfairly discriminates against one individual or group in favor of another.

anti-bias: An attitude that actively challenges prejudice, stereotyping, and unfair treatment of an individual or group of individuals.

prejudice: An attitude, opinion, or feeling that is preconceived or decided, usually unfavorably.

stereotype: An oversimplified generalization about a particular group, race, or sex, often with negative implications.

Importance of Play

NAEYC Standard 1: 1b, 1c, & 1d DAP Guideline 1, 4, & 5: 1a, 4b, 4h, & 5a **INTASC Standard 2**

Reflect On This

What happens if children aren't allowed to play?

NAEYC Standard 4: 4b DAP Guideline 1 & 4: 1d & 4e **INTASC Standard 8**

play: A behavior that is selfmotivated, freely chosen, processoriented, and enjoyable.

unoccupied behavior: Refers to children (infants or toddlers) who occupy themselves by watching anything of momentary interest.

onlooker play: The play of young children introduced to new situations that focuses on an activity rather than the environment. (NAEYC)

Play is at the core of developmentally appropriate practice. Play-a behavior that is self-motivated, freely chosen, process oriented, and enjoyable—is a natural activity for children. It allows them the opportunity to create, invent, discover, and learn about their world. It provides children joy and understanding of themselves and others.

Research has shown that children's play is present in every human society and the adults in all cultures support play with the manufacture of play toys and equipment. But play is different between cultures based on social and economic circumstances and attitudes about childhood and play. Children's rights and opportunities for play are seen to be constrained within some societies depending on stressors related to contemporary life, separation from nature and an increased view within educational circles that "more and earlier is better" (Whitebread, 2012).

Free, spontaneous, and self-initiated play was once the norm for young children. This is no longer the case. Both parents and early childhood educators, who once encouraged young children to choose their own activities, are being pressured to replace them with adult-directed games, sports, and academic instruction. When children have the opportunity to engage in true play, they are learning to consider options and make choices. The question then becomes, "Why are we trying to teach the elementary curriculum at the early childhood level?"

Children coming to early childhood programs and schools today typically have little time or opportunity to engage in informal play. Jambor stated:

This situation is the result of concerns of neighborhood violence, changing family structures, elimination of recess due to academic pressures, increased vehicle traffic, squeezed residential play space, unsafe and unchallenging playgrounds, and an increase in sedentary lifestyle brought on by TV, videos, and, most recently, computers (2000, p. 308). **

Now we can add video games, iPods, cell phones, and other new devices to the mix. With less time and opportunity for children to play, it is crucial for those of us in early childhood education to keep focused on what we can do to encourage and support play in our daily programs. As with all aspects of early childhood growth and development, young children go through a series of stages in the development of play. Each new experience offers opportunities for play exploration. Some types of play are characteristic of children at identifiable stages, but children can use many of these stages in varying degrees of sophistication as they get older. (See Box 1-1.)

Developmental Stages of Play

Children's observable behaviors that reflect social development and participation in play were first identified by Mildred Parten in 1932. She provided this landmark study that is still considered valid today (Gestwicki, 2017). These stages of social play are described as follows.

Unoccupied Behavior

Unoccupied behavior usually occurs during infancy and early toddlerhood. Children occupy themselves by watching anything of momentary interest. Sometimes the child may not appear to be playing at all.

Onlooker Play

Onlooker play is sometimes observed in young toddlers or in children introduced to new situations. This play focuses on the activity rather than the environment. Onlookers place themselves within speaking distance of the activity. Although passive, they are alert to the

BOX 1-1:	Why Play Is Important		
Play	Inspires	Imagination	
	irispires	IIIagiiiatioii	
Imagination	Inspires	Creativity	
Creativity	Inspires	Exploration	
Exploration	Inspires	Discovery	
Discovery	Inspires	Solving Problems	
Solving Problems	Inspires	New Skills	
New Skills	Inspires	Self-Confidence	
Self-Confidence	Inspires	Sense of Security	
Sense of Security	Inspires	More Play	

action around them. During Piaget's sensorimotor state—infancy to toddler—infants explore the sensory qualities of objects and practice motor skills.

Solitary Play

Solitary play surfaces first for a toddler. The child actually engages in play activity alone at home but is within "earshot" of mother or another adult. In an early education setting, the child plays independently without regard to what other children are doing.

Parallel Play

Parallel play can be observed in older toddlers and young 3-year-olds. A child this age is playing for the sake of playing. This child is within "earshot" and sight of another child and can be playing with the same toy but in a different way. Parallel play is the early stage of peer interaction, but the focus is on the object rather than another child.

Associative Play

Associative play finds 3- and 4-year-olds playing with other children in a group, but they drop in and out of play with minimal organization of activity. Two or three children use the same equipment and participate in the same activity, but each in their own way.

Cooperative Play

Cooperative play is organized for some purpose by the 4-year-old and older child. This type of play requires group membership and reflects a child's growing capacity to accept and respond to ideas and actions not originally their own. Group play (social play) is the basis for ongoing relationships with people and requires sharing of things and ideas, organizing games and activities, and making friends.

Another aspect of cooperative play is the emphasis on peers and moving away from the importance of adults in the life of a child. The 6- to 8-year-old extends cooperative and symbolic play to include detailed planning and rule making. Leadership roles begin to emerge as play becomes serious.

Theorists and Play

Erik Erikson (1963) emphasized the importance of play in helping children to develop cooperative relationships and gain mutual trust. He believed that children develop their "self-esteem and sense of empowerment by allowing them mastery of objects" (Tsao, 2002, p. 230). Play can also build ego. It fosters the development of physical and social skills that build a child's self-esteem.

According to the theory of Jean Piaget (1961), play provides opportunities for many types of learning in young children, with emphasis on developing representational language

NAEYC Standard 1 & 4: 1c & 4b DAP Guideline 1 & 4: 1d & 4e **INTASC Standard 8**

solitary play: Independent play behavior of a child without regard to what other children or adults are doing.

parallel play: Observable play in older toddlers and young 3-yearolds that emphasizes being near another child while playing with an object rather than playing with a

associative play: An activity of a 3- or 4-year-old child playing with other children in a group; the child drops in and out of play with minimal organization of activity.

cooperative play: A type of play organized for some purpose by the 4-year-old and older child. It requires group membership and reflects a child's growing capacity to accept and respond to ideas and actions not originally their own.

and thought. Piaget calls play during the first 2 years of life **practice play or sensorimotor play**, the stage in cognitive development during which the young child learns through repetitive sensory and motor play activities, also known as functional play.

In the beginning of Piaget's preoperational stage around the ages of 2 to 4 or 5, symbolic play or dramatic play become observable in young children by the way they spontaneously use objects, images, and language. The use of the environment represents what is important to each child at that moment. This type of imaginative play allows the child to imitate realities of people, places, and events within their experiences, such as pretending to sleep while patting the baby doll to sleep, drinking "coffee" from an empty cup, and talking to imaginary friends. These imaginary friends allow children to work through anxieties in times of stress or change. In addition, symbolic play and language give children an outlet to practice new physical and mental activities for dealing with the world, such as practicing acceptable behaviors that they see around them so that they can act appropriately in different situations (Krissansen, 2002; Tsao, 2002). Superhero fantasy play is considered a type of symbolic play for a child. (Chapter 12 discusses dramatic play for young children in greater depth.)

Piaget's third stage of play, ages 5 to 11, is characterized by games with rules. The roles of the children are clearly defined, the rules of the game are clear-cut, and behavior imitates reality (Sluss, 2019). With increased maturity, children arrive at a complete understanding of rules in both behavior and thought.

Lev Vygotsky's theory (1978) states that social experiences shape children's way of thinking and that social play offers children a way to interpret the world by focusing on rules that underlie all play activities and social interactions. Early imaginative situations created by very young children include social rules, although these rules are not laid down prior to participating in the situations. Supportive guidance scaffolds children's learning, which is required to move children to higher levels of cognitive development.

Psychological research has established that there are five fundamental types of human play, commonly referred to as physical play, play with objects, symbolic play, pretend or sociodramatic play, and games with rules. Each supports a range of cognitive and emotional developments, and a good balance of play experience is regarded as a healthy play diet for children. Some types of play are more fully researched than others and much remains to be understood concerning the underlying psychological processes involved (Whitebread, 2012).

Play also provides children with important insights into themselves and the communities in which they live.

in cognitive development during which the young child learns through repetitive sensory and motor play activities.

sensorimotor play: The stage

practice play or

symbolic play: A type of play that allows the child to transfer objects into symbols (things that represent something else) and images into people, places, and events within their experiences. Symbolic play occurs during Piaget's preoperational stage (2 to 7 years). Superhero fantasy play is considered a type of symbolic play for a young child.

dramatic play: Also known as symbolic play. A type of creative, spontaneous play in which children use their imaginations to create and dramatize pretend characters, actions, or events.

Fostering Play

Teachers have a responsibility to help children develop in their use of play. Play, particularly in preschool and kindergarten, needs to be an integral part of the educational process. Play is neurologically important. Scientific studies of the brain have shown that stress-free, fatigue-free, and anxiety-free environments foster neurological pathways. Play-based activities make connections, combine materials, repeat actions, take risks, extend skills, and create electrical impulses that help make connections and interconnections between neural networks. These connections extend children's capabilities as thinkers, communicators, and learners. Also, we should convey to parents the importance of play in the lives of young children. Play can be a valuable means of gauging a child's developmental progress. This information, in turn, can be communicated to parents. Other teacher responsibilities are to:

- Be aware of current research and resources that validate the importance of play.
- Create a positive and safe place for play.
- Provide open-ended play materials.
- Respect and encourage individual differences in play abilities.
- Have patience with children and give them time to learn new play skills.

- Introduce activities and materials appropriate for each child's age and stage of development.
- Take a sincere interest in learning discoveries.
- Provide a play environment that reflects attitudes and values of the surrounding culture.
- Offer appropriate props from a child's culture that will encourage making connections as the child plays.
- Make available culturally diverse materials for all the children to enjoy and learn from as they play.
- Encourage cooperation.
- Allow children time without scheduled or externally focused activity. This offers an opportunity for children to be internally focused so that imagination and creativity can take over.
- Take time to listen to children as they play and to observe how each child plays, what they play with, who they play with, and what the child can do.

It is also important to know the roles that teachers serve in children's play. These include (Jones and Reynolds, 2011):

- Assessor: builds on each child's strengths
- Mediator: keeps play safe, teaches conflict resolution skills and solves problems to sustain play
- Planner: pays careful attention to play to plan and support children's engagement and competence
- *Player*: moves in and out of play to model, mediate, and encourage children to elaborate on their play
- Scribe: represents children's play to help them communicate their ideas
- Stage manager: clarifies what is important and not important in the play; provides props and enough time for play

The Association for Childhood Education International's (ACEI) position paper, "Play: Essential for All Children," sounds "A Call to Action" (2002). (See Box 1-2.)

Childhood play has a key role in the development of self and identity. Understanding this, you can help the children in your care develop to their fullest potential. As you continue through the chapters of this text, you will find specific examples of how curriculum planning and implementation influence and strengthen childhood play.

Elkind (cited in Koralek, 2004, p. 41) explains further:

As teachers of young children, we need to resist the pressures to transform play into work—into academic instruction. We encourage true play by making certain that we offer materials that leave room for the imagination—blocks, paints, paper to be cut and pasted—and that children have sufficient time to innovate with these materials. When we read to young children, we can ask them to make up their own stories or to give a different ending to the story they are hearing. Most of all we need to adopt a playful attitude that will encourage our children to do the same.

BOX 1-2: A Call to Action

A growing body of research shows that every school success indicator is enhanced by play. Moreover, young children learn by doing because they live in a world of actions and feelings more than words. To reclaim play as a special activity that is crucial to children's development, we should look at play as the foundation from which children venture forth to investigate, to test things out. Play promotes learning for the whole child, providing benefits for all developmental domains (American Academy of Pediatrics, 2007; Elkind, 2010) (Standards 1-1c and 4-4b).

Communication with Families

As previously discussed in this chapter, it is the teacher's responsibility to keep the lines of communication open to families. It is the family's responsibility to be involved with their child's teacher and child care center or school. The following guidelines for DAP, which offer suggestions on how teachers can work in partnership with families and communities, are adapted from Gestwicki (2017).

- 1. Success in the education of young children must be built on a foundation of teamwork involving both teachers and families. It is not the teacher telling the parent what needs to be accomplished. It is both teachers and family members cooperatively sharing knowledge and beliefs about educating children and developing common goals. These partnerships enrich relationships with children and bring together the expertise of both teachers and families for the benefit of the children. (See Figure 1-11.)
- 2. Families are the primary educators of their own children. It is imperative that teachers respect that crucial role by maintaining open communication with families, learning from them, and involving them in the education process.
- 3. There is a learning process that teachers and families always face in the educational experience. The teacher is learning from the children and their families about the children's world apart from the early childhood setting, while family members are developing knowledge about the principles and techniques of early childhood education. Both are necessary and important. With increased communication, mutual respect emerges.
- **4.** Assessing the child's needs and progress must take into account the child's culture and environment. A teacher's failure to do so is likely to create a breakdown in the educational process.
- **5.** A teacher is prepared to meet the special needs of individual children, including those with disabilities.

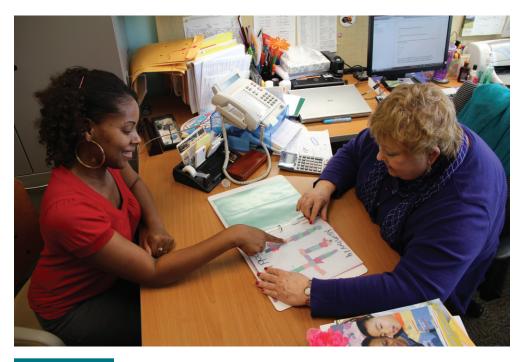


Figure 1-11 Encourage parents to share with you what they know about their children and what is important to them as parents.

6. The early childhood teacher is in a unique position to be an advocate by recognizing the special circumstances of a child and their family and to help link up with whatever community resources are available and appropriate for helping them.

Positive communication between home and school is crucial to providing a consistent and beneficial experience for young children. Just as the teacher deals with each child as a unique individual by employing a variety of teaching guidance methods, so must a flexible approach be maintained in communicating with families to meet their individual requirements.

Children tend to see connections between school and home when their parents are involved. Children's positive attitudes increase when families are involved in the school, which increases children's homework habits and attendance. In the busy and complex lives of parents and teachers alike, this connection between home and school is more important today than ever before.

Teachers and other staff members in early childhood settings should be responsive to cultural and language differences of the children and their families. Affirming and supporting diversity includes being perceptive about differences in caregiving, feeding, and other practices.

Here are some additional suggestions for active communication with parents:

Provide an infant daily report (see Box 1-3).

COMMENTS:

Provide a toddler daily or weekly report (see Box 1-4).

BOX 1-3: Infant Daily Report

(Morning input from parents to te	eachers)	
My Name:	Date:	
When I last ate: F	Food Formula/Milk:	
Time I woke up today:	Time I went to bed last night:	Hours slept:
Last diaper change:	Medication: Yes No	(must sign in)
How I feel today: (circle one) Gre	at! OK Fussy Not well Feverish Upset tumm	у
Teething Diaper rash		
Today, my teachers should know:		
(Teachers, input to parents at en	d of infant's day)	
Feedings: (Time & Description/Amount)	Naps: (Time Slept) (Time)	Changes: (My Diaper D W BM)
My day at school:		
Supply needs: (circle one) Clothe	es Diapers Formula Food Wipes Other:	

BOX 1-4: Toddler Daily Report

Child's Name :	Date:		_	Teacher:				
Morning input from parents to teachers:								
(Note: Weekly menu is posted on parent bulletin board.)								
MORNING SNACK:	Child Ate:	well ()	fair ()				
LUNCH:	Child Ate:	well ()	fair ()				
AFTERNOON SNACK:	Child Ate:	well ()	fair ()				
NAP:								
DIAPER CHANGES:			TOILET USE:					
ACTIVITIES:								
ITEMS NEEDED FROM HOME:								
COMMENTS:								

• Create bulletin boards with information regarding health and safety issues, family meetings, guest speakers, community resources and referrals, and tips for parents.

- Provide family letters, emails, newsletters, online surveys, and web pages discussing
 the goals, objectives, themes, and classroom activities. Offer suggestions for activities
 families can do with children at home to extend or emphasize classroom experience.
- Encourage families to share with you what they know about their children and what is important to them as parents.
- Encourage families to visit the classroom. They should be as welcome as their child.
- Conduct parent-teacher conferences that focus on the accomplishments and needs of the individual child and that ensure privacy and confidentiality for the family.
- Provide multilingual written communications as needed.
- Provide opportunities for families to volunteer.
- Provide advisory committee meetings, trainings and family meeting.

NAEYC Standard 2: 2a & 2b DAP Guideline 2: 2a, 2b, 2c, 2d, 2e, & 2f

Summary

1. Analyze the importance of historical information and theories to the field of early childhood education. Many influences, such as historical aspects of early childhood education, developmental theories, insightful educators, developmentally appropriate practices, and ongoing research have impacted and continue to impact our understanding of what is appropriate for the young children in our care. From them we learn that an early childhood program should be based on fulfilling the developmental needs of all children. It should be planned to meet each child's physical, intellectual, social, and emotional growth. Understanding the interrelationships among development, learning, and experiences is essential to providing the highest quality care and education for young children.

- 2. Identify developmentally appropriate practices as they relate to child development including social and cultural contexts. The program should be founded on the assumption that growth is a sequential process, where children pass through stages of development, and that children learn and grow through their play and by actively participating in the learning experiences offered. It should adapt to the developmental, individual, and cultural differences of the children.
- 3. Discuss the importance of play in the lives of young children, describe the developmental stages of play, and identify ways teachers foster play. As teachers, we need to offer age, individually, and creatively appropriate experiences and activities for each child. We should assist each child in growing to their fullest potential by recognizing each stage of development; by providing an environment that encourages the success of each child; by respecting the culture, language, and special needs of each child; and by welcoming family participation in the program.
- 4. Explain the value of and techniques for communicating with families. As we plan for children and their families, we are saying: "Welcome! This environment is safe and appropriate. We care, we will listen, we will share, and we will nurture you and recognize your uniqueness."

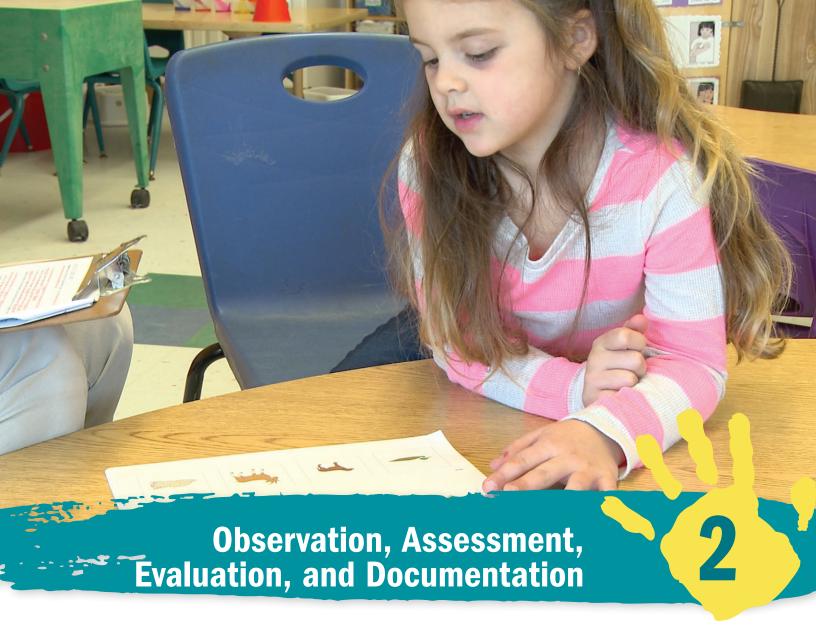
Reflective Review Questions

- 1. If you are going to explain what you do in a classroom to families, colleagues, and administrators, then you need to have knowledge about the contributions of early childhood education history and theorists to the profession. Think about how this information gives you the confidence to express that what you know is based on hundreds of years of experience and research.
- **2.** Why is the term *developmentally appropriate practice* a key concept that every person involved in early childhood should learn about, and how would you explain the concept to someone outside the early education field?
- **3.** What are the distinguishing characteristics of Erik Erikson's *psychosocial theory*, Jean Piaget's cognitive development theory, Lev Vygotsky's sociocultural theory, and Howard Gardner's multiple intelligences theory?
- 4. David Elkind (2002, p. 41) said, "Free, spontaneous, and self-initiated play was once the norm for young children. This is no longer the case. . . . " Think back to your childhood. How did you play as a young child? Why was playing important to you? Using the ideas from your reflective thinking about your childhood and the information from this chapter, do you think the nature of play and the opportunity for play has changed? In what way or ways has it changed? If you think play has changed, what might be some explanations for those changes?

Explorations

- 1. The number of early childhood programs has increased in response to the growing need for out-of-home care and education during the early years. Identify and discuss the indicators of the current need for child care and education, including changing lifestyles and family patterns. How is your local community responding to these needs of young children and their families? Give specific examples.
- 2. Describe what is meant by developmentally appropriate practice. Then, identify and describe at least three specific examples from your experiences and observations of young children that illustrate developmentally appropriate practice. In addition, it is important for you to read through NAEYC's updated Position Statement: Developmentally Appropriate Practice (2020), to note the major areas discussed. Share this assignment with your classmates.

- 3. It is common to hear a comment about a young child such as, "Oh, he's just playing." The implication is that what he's doing is not important. From what you have learned about the developmental stages of play and from Parten, Erikson, and Piaget's theories about the function of play for children, what is incorrect about this type of comment? Why do you think people tend to undervalue play?
- **4.** Select a group of toddlers or kindergarten children. Observe them at play in their classroom and in their outdoor environment. Using the information on *play* in this chapter, describe what activities the children were involved in and what developmental stages of play you observed. How did the teacher plan for the children's play activities? Was it child-directed or teacher-directed play? Would you change anything if you were the teacher? Explain.
- **5.** Visit an early childhood program. Select a classroom and look at its daily schedule and the routines within the schedule. Obtain a copy, if possible. Are the schedule and routines developmentally appropriate? Do they consider the needs of all the children? Explain your answers. Did the teacher follow the posted schedule and routines? What was changed and why? Would you change anything? Why or why not?



Student Learning Outcomes

After studying this chapter, you should be able to:

- Compare uses or purposes for observation and assessment.
- Describe the process of observation and assessment, including various types of observations and assessments and guidelines for assessment.
- Evaluate the advantages and disadvantages of authentic assessment.
- Analyze the relationship between assessment and curriculum planning.

Standards Covered in This Chapter

NAEYC NAEYC 3a, 3b, 3c, 3d

DAP DAP 3

Intasc 3, 6, 7

CEC DEC CEC DCC 1.1, 1.2, 1.3

Intentional teachers gather data that are needed to guide instruction, ensuring that all children grow and learn at the right pace. We use assessments to find our students' strengths and to figure out which areas we need to target for early intervention. We use varying methods of observation and assessment to find out what young learners are able to do, so that we can help them progress. These varied strategies are important for all young children, and especially so for dual language learners (DLLs) (Blessing, 2019).

Daily, teachers and administrators make decisions related to the children they educate, the facility in which they work, and the curriculum they use. These decisions cannot be made without a firm understanding of the individual children, the workplace, and what their goals guide them to teach and how. To make these decisions, planning is required. A part of this planning process involves observation, assessment, and evaluation of each of these components.

Early childhood educators use two distinct processes to help children build lifelong learning skills: assessment and evaluation. Assessment provides feedback on knowledge, skills, attitudes, and work products for the purpose of improving future performances and learning outcomes. Evaluation determines the level of quality of a performance or outcome and enables decision making based on the level of quality demonstrated. These two processes are complementary and necessary in education.

Evaluation Defined

Evaluation is the process of determining whether the philosophy, goals, and objectives of the program have been met. Interpretations and decisions are made based on the collected information. Assessment and evaluation are closely related and can happen simultaneously. Gordon and Browne (2016) explain further: "Evaluation is a continuous process. It is at once a definition, an assessment, and a plan. . . . In its simplest form, evaluation is a process of appraisal." Informal and formal evaluation of a program should include the indoor and outdoor environments, schedule, routines, the curriculum as a whole, themes, lesson plans, activities, performances of the children, and the teacher's role. Ongoing evaluation is part of the curriculum process. Evaluation provides feedback concerning the effectiveness of the program, the goals and objectives, the teaching approach, the observation cycle, and once again the evaluation process.

Evaluation examines a program or process to determine what's working, what's not, and why. Evaluation determines the value of programs and acts as a blueprint for judgment and improvement (Rossett and Sheldon, 2001). Often, programs know the reason that they are conducting an evaluation, such as to seek national accreditation or compare their program to standards in their state's quality rating and improvement system (QRIS). No matter the reason for the evaluation, before you begin the evaluation process, it is important to ask questions to determine the focus and scope of your evaluation. Ask

1. What is the purpose of the evaluation? Why is this evaluation being undertaken? What is it expected to achieve or to provide insight about?

evaluation: The process of determining whether the philosophy, goals, and objectives of the program have been met.

- 2. Who will use the information? Is this evaluation only for your own use? Are there others who are asking for this evaluation? What are their expectations and agendas? Who else might be interested in the process and results of the evaluation?
- 3. How will they use the information? What will the different users do with the evaluation results? What decisions or actions are likely to be influenced by the results?
- **4.** What questions will the evaluation seek to answer? What specifically do you and others want to know?
- **5.** When are the evaluation results needed? What's your timeline?
- **6.** What are your own abilities and skills? Are there others who can help?
- 7. What resources do you have or can you access, including time, money, and people?

Once you have answered these questions, you can develop your plan.

Program evaluations describe and measure both the quantity and the quality of services provided to young children and their families. Quantity measures include factors such as staff to child ratio, qualifications and training of personnel, amount of space, schedule of operations, and components of service. Quality measures tend to focus on the results of services for children and families, such as developmental and early learning outcomes, family involvement, ratings of the physical environment, ratings of interactions, and satisfaction with services.

Quantitative evaluation is defined as an evaluation approach involving the use and analysis of numerical data and measurement. Qualitative evaluation is typically conducted through interviews, observation, focus groups, portfolios, questionnaires, surveys, review of records, and journals to determine the quality of the program. Determine what data you want to collect: Do you want to know how many children participated in the activity (quantitative), or do you want to know that each and every child was successful in completing the activity to the standard you had established for the activity (qualitative)?

Whether quantitative or qualitative in nature, evaluations are normally divided into two broad categories: formative and summative. **Formative evaluation** is a method for judging the worth of a program or project while the program activities are forming or in progress. This part of the evaluation focuses on the **process**. In other words, how are we doing?

Thus, formative evaluations are done regularly, at least annually. They permit the teachers and faculty, administrators, and parents to monitor how well the program goals and objectives are being met. Its main purpose is to catch deficiencies so that the proper interventions can take place that improve program outcomes. Formative evaluation is also useful in analyzing learning materials, curriculum, and teacher effectiveness. Formative evaluation is primarily a building process of collecting information over time to help you improve your program. Children's developmental portfolios are an example of a child assessment that can also serve as a formative evaluation of curriculum effectiveness that allows you to look at a group of children's current level of development, so you can identify areas of the curriculum implementation that need strengthening.

Summative evaluation is a method of judging the worth of a program at the end of the program activities (summation) or end of a specific time period, such as a program year. This type of evaluation is used in accreditation studies to see how your program measures up every 3, 5, or 10 years using the accreditation standards and criteria. Summative evaluation might also be used to determine how well the children in your program did in meeting the learning goals you set out for them before moving on to kindergarten. The focus is on the outcome.

Formative evaluation is intended to foster development and improvement within an ongoing activity or program. Summative evaluation, in contrast, is used to assess whether the results of the program, project, intervention, or person being evaluated met the stated goals.

quantitative evaluation:

An evaluation approach involving the use and analysis of numerical data and measurement.

qualitative evaluation:

An evaluation typically conducted through interviews, observation, focus groups, portfolios, and journals to determine the quality of the program.

formative evaluation:

A method for judging the worth of a program or project while the program activities are forming or in progress.

process: A natural continuing action or series of actions or changes.

summative evaluation:

A method of judging the worth of a program at the end of the program activities or end of a specific time period.