Preface

“I touch the future—I teach!”

Christa McAuliffe

Welcome to the field of early childhood education! Chances are, you are thinking about becoming a teacher of children ages 3 through 6 because you want to make a positive difference in young children’s lives. Nowhere will that difference be more keenly felt than in an early childhood classroom. Whether you work in a preschool, child-care setting, Head Start classroom, or kindergarten, you will be someone who introduces children to the world of formal learning early in their lives. What you say and do will either enhance or detract from children’s sense of themselves as learners. That is an awesome responsibility.

Our goal in writing Developmentally Appropriate Curriculum in Action is to provide you with the professional knowledge and skills you will need to be an effective early childhood teacher. For example, you will learn such things as:

• How to plan learning activities for the children in your classroom
• What you might do when children have difficulty getting along
• Ways to communicate with families about what their children are learning
• Sample strategies for supporting children who are dual-language learners

The material in this text has been thoroughly researched, making use of the latest theories and findings about how young children learn and about how great teachers teach. As a result, it is filled with the latest information about effective practices in early education. This means you will learn what to do with young children as well as how to translate your knowledge into effective actions. We expect this combination of knowledge and skills to enhance your work with children and your enjoyment of the profession you have chosen.

Distinctive Features of This Text

Developmentally Appropriate Curriculum in Action incorporates several unique features to increase your understanding and skill development.

• This comprehensive book addresses all aspects of classroom life, including children and adults, the physical and social environments, and teaching and learning from a “whole-child” perspective. It also covers all portions of the classroom day from preplanning through implementing a daily routine to post-session reflections.

• Developmentally appropriate practice (DAP) is woven throughout the book. Every chapter addresses principles of age appropriateness, individual appropriateness, and sociocultural appropriateness. All of the DAP material incorporates the latest version of Developmentally Appropriate Practice in Early Childhood (NAEYC, 2009).

• We combine a play-based approach with intentional teaching strategies in every chapter.

• National standards and NAEYC guidelines are referenced in every chapter.

• Many chapters open with an example of an artifact a teacher or child might create to represent work in the classroom. These items help readers recognize the wide array of artifacts that teachers may use throughout the year to assess children’s learning.

• Each chapter includes a glossary of terms. This helps readers identify professional vocabulary.
Each chapter includes a *Try It Yourself* feature. These are exercises embedded within the chapter to encourage you to pause and reflect on what you are learning and to apply a concept immediately, based on your personal experience.

- **Newsletter/Web-Ready** features are incorporated into all chapters. These items give you actual words you might use to explain chapter-related content to family members via a newsletter, bulletin board, blog, web site, or social media outlet.

- Examples of *children with special needs and diverse families* are integrated within each chapter.

- All chapters end with a feature entitled *Applying What You’ve Learned*. These are specific exercises and assignments that enable readers to translate the reading into practical applications in early childhood settings.

- The curriculum focuses on *developmental domains* (aesthetics, affective, cognitive, language, social, and physical). Each domain incorporates cutting-edge *subject matter content* and skills.

- This text addresses individual curricular domains (in separate chapters) as well as curriculum integration in multiple chapters and in Chapter 16, which focuses on projects and themes.

- All of the curriculum chapters (9 through 15) include the following:
  - **Sample content**: Examples of terms and facts associated with the domain and relevant subject matter.
  - **Sample materials and resources**: You will get clear ideas about specific materials, common objects, and children's books that can be used to teach within each domain.
  - **Sample teaching strategies**: Focus on methods—specific guidelines for teaching in all portions of the program including individual, small-group, and whole-group teaching methods.
  - **Sample activities**: Written as short-form lesson plans, these provide concrete examples of activities for younger and older preschoolers and kindergartners. There is one example for each of six types of lessons: exploratory play, guided discovery, problem solving, discussions, demonstrations, and direct instruction.
  - **Tech Tips**: Explicit examples of how teachers can use technology to support early learning in every curricular domain.

This is very much a “how-to” book that emphasizes teaching methods and strategies. We believe it provides the foundations you need to begin a productive career in early childhood education.

### Special Note to Instructors

Over the years, many instructors have asked us to write a book for entry-level practitioners that has a strong emphasis on the *how* of teaching and a briefer emphasis on the *why*. *Developmentally Appropriate Curriculum in Action* represents our response to those requests. Although we have used the same curricular domains and curricular goals as in *Developmentally Appropriate Curriculum* (Pearson), our original text on early childhood curriculum, nothing else has been duplicated. This volume does not repeat any of the same stories, examples, or sample activities of the original text, which emphasized theory and research. In addition, *Developmentally Appropriate Practices in Action* is firmly focused on young children ages 3 to 6, rather than 3 to 8 years, as in our other texts. Finally, this book has only half the number of pages. We made these modifications to the present
text to give instructors the opportunity to choose the book that best fits their needs and the needs of their students. We hope you enjoy the results.

Chapter Sequence

*Developmentally Appropriate Curriculum in Action* is divided into two parts. **Part 1,** *Teaching in Early Childhood Programs,* consists of an introduction to developmentally appropriate practice and the fundamental things teachers must know to create effective programs for children. Within a series of eight chapters, readers become familiar with the principles of DAP as well as basic teaching strategies that are useful in all domains and in all parts of the early childhood day. Child guidance strategies and how to assess children’s learning are addressed in detail. Next comes lesson planning, with attention to lessons for younger and older children as well as strategies for adapting lessons to children of varying abilities and interests. Attention to the physical learning environment indoors and outdoors as well as strategies for teaching children in small groups or in whole group scenarios are also covered within the eight chapters that make up Part 1. These chapters are viewed as fundamental building blocks of effective teaching. **Part 2,** *The Curriculum,* consists of Chapters 9 through 16. These chapters address six developmental domains (aesthetic, affective, cognitive, language, social, and physical). Because there is such keen interest in cognition as it relates to mathematics and science at the preprimary level, we have divided cognition into two chapters to allow adequate coverage of these important curricular areas. The curricular domains are presented in alphabetical order to underscore the idea that no one domain is more important than any of the others. The curriculum chapters are written in such a way that instructors may introduce them in any order that makes sense to them and their students. Chapter 16, *Putting It All Together: Organizing Children’s Learning Over Time,* is the last chapter in this volume. It introduces the notion of daily planning, planning for multiple days, and making use of themes and projects to extend children’s learning over time. The book closes with an appendix that presents a series of six long-form lessons plans that provide an example of each of six activity types—exploratory play, guided discovery, problem-solving, discussions, demonstrations, and direct instruction. These plans give readers tangible models to emulate in their own work.

Supplementary Materials for Instructors

All of our instructor supplements are posted online at www.pearsonhighered.com. Click on “Educators,” then click on “Download Instructor Resources.” You may register there, and download and print ancillaries.

**Online Instructor’s Manual**

The Instructor’s Manual supports lesson planning and the concepts and terms students learn in this course.

**PowerPoint® Slides**

Slides are provided for each chapter to support learning in any class format.

**Online Test Bank**

The Test Bank consists of multiple-choice, true-false, and essay questions for each chapter.
Acknowledgments

We are indebted to the teachers in the child development laboratories at Michigan State University for their early work on curriculum, for providing continuous and easy access to their classrooms for observation, and for inspiring many of the ideas represented in this book. Teachers in the Ruth Staples Child Development Laboratory School and the 3E International School in Beijing, China, also contributed significantly to our work.

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Julie Peters, our editor at Pearson, was a tremendous support, as were all members of the production team. During the preparation of this manuscript, we discussed our ideas with and received feedback from a number of University of Nebraska students and faculty members, as well as Head Start, Chapter 1, child-care, preschool, and elementary school teachers and administrators. We heard the concerns of many parents of young children and listened to the children themselves as they responded to diverse program practices in their classrooms. We are especially grateful for all these contributions in shaping our vision of appropriate practices and in motivating us to share this vision with others.

Marjorie J. Kostelnik
Michelle Rupiper
Anne K. Soderman
Alice Phipps Whiren
Ready, Set, Go! Teaching in Developmentally Appropriate Programs

Tanya examined her sunflower closely. She said it had yellow petals, brown “fuzz” inside, and green leaves. The words she used to describe parts of the flower were pretty, big, soft, scratchy, and hard. Then she put the biggest flower on her head and said it would make a good hat. We all laughed at that!

Tanya learned several lessons this day—she learned about petals and stems and leaves. She learned to be a better observer, she expanded her vocabulary, and she learned that her teacher valued her playfulness.
Tanya is fortunate. She is in a high-quality early childhood program. According to James Hymes, a pioneer in early education, “a high quality early childhood program, no matter what its name, is proud of the youngness of its children. It is geared to honest, real-life children, the noisy, messy, active, dirty, imaginative kind” (1994, p. 23).

Appreciating the unique qualities of young children is a hallmark of the very best early childhood education programs worldwide. Think about what a program would look like if it were tailored to match the traits of young children described by James Hymes. For instance, if children are noisy, messy, active, and imaginative, what kinds of activities should occupy their time? What kinds of materials should teachers provide? What kind of schedule should they follow from the start of their day to the end? How should adults behave toward children and what should be the content of the lessons they plan? Questions like these have been asked and studied for years. Based on much research and conversation among practitioners, early childhood professionals have come to agree that certain principles and practices characterize programs that respect and celebrate what makes young children special and different from their older peers. These principles and strategies are known as developmentally appropriate practices, or DAP.

Today it is nearly impossible to discuss early childhood education without knowing about DAP. Every aspect of children’s learning in the early childhood classrooms in which you will teach will be influenced by your understanding of DAP. Thus, learning more about DAP is the first step you will take in becoming an effective teacher of young children.

A Sample Developmentally Appropriate Classroom

Early childhood classrooms characterized by DAP have a certain look and feel. Most important is that these classrooms are action-oriented places where children are on the move, exploring one material and then another, talking with peers and adults, and seldom sitting still. In developmentally appropriate classrooms children gain knowledge and skills through hands-on experiences with people and objects. They construct, create, explore, experiment, invent, find out, build, and compose throughout the day. Teachers are moving and learning too. They hold conversations with children, guide activities, question children, challenge children’s thinking, observe, draw conclusions,

LEARNING OUTCOMES

After you read this chapter, you will be able to:

• Describe the principles that define developmentally appropriate practices and how these principles influence curriculum.
• Identify your role in supporting a developmentally appropriate approach to teaching young children.
• Recognize developmentally appropriate practices in action.
Developmentally appropriate classrooms are action-oriented places where children are engaged in a variety of activities.

and plan for and monitor children’s learning. To further understand DAP, consider the learning going on in this early childhood setting.

In the art area Sara, Raj, and Emma are examining two posters: Rivera’s *Girl with Sunflowers* and Van Gogh’s *Sunflowers*. The children are discussing what they like best about each painting. Leon is seated nearby at a table with a vase of real sunflowers, painting a still life with watercolors. Not far away, Tanya and Simone are also looking at sunflowers of different sizes spread out on a table. They tell a teacher words that describe the look, feel, and smell of the sunflowers. (See the Teacher’s Observation Record in the chapter opening.) In the block area, four boys are discussing how to create a tower that doesn’t fall over. They use trial and error as they balance blocks atop one another, adjusting their approach with each attempt. Jason and Mara are each rocking baby dolls in the dramatic play area. As they rock, Jason sings quietly to his doll. Another child approaches Mara and announces, “The doctor is ready to see you.” The “doctor” holds a stethoscope to the doll and then writes *bab ne dre medsn* (baby needs medicine) on a piece of paper and hands it to Mara.

Other children in the classroom are looking at books, building puzzles, and talking with one another. Some work individually, some in pairs or small groups. A buzz of happy voices fills the air. The adults in the classroom are active as well. They move among groups of children, asking questions, helping them solve problems, and listening to children’s ideas and theories. The teachers make note of what children are doing and how they are doing it. They participate with the children in their activities to understand the children’s thinking and to support children’s learning. Although it may look as though the children are *only playing*, the teachers have planned the environment and activities with specific goals and objectives in mind. They document children’s progress toward these goals by observing children in action. Adult observations help them to see what children are trying to figure out and to consider ways in which children’s active learning can be facilitated.

From this description of an active classroom, you can see that teachers in developmentally appropriate classrooms take seriously something the Chinese philosopher Confucius observed more than 2,500 years ago:

> I hear, and I forget.  
> I see, and I remember.  
> I do, and I understand.

To find out how DAP has become such an important influence today, let us begin by looking at the history of developmentally appropriate practice.

**Some Background on Developmentally Appropriate Practices**

Following is some discussion about how DAP came about and how it will affect you as an early childhood professional. In the mid-1980s, early childhood educators became worried that many early education programs were not as high quality as they needed to be. Some were too rigid in their approach to teaching, requiring preschoolers to
What Does It Mean to Be Developmentally Appropriate?

Understanding how young children develop and learn informs our practice and acts as a guide to planning activities and experiences for the children in our care. When working with young children, it is easy to see that a one-size-fits-all approach does not work well. You must meet children where they are, both as individual learners and as a group. Developmentally appropriate practice means utilizing your knowledge and skills about how children learn and adapting your teaching strategies to fit the age, ability, interests, and experience of individual children. Teachers using DAP consider three fundamental questions when planning and carrying out activities:

1. Is it age appropriate?
2. Is it individually appropriate?
3. Is it socially and culturally appropriate?

Let's look at each of these questions in more detail.

**DAP IS AGE APPROPRIATE**

To address age appropriateness, first think about what children are like within a general age range. Next, develop activities, routines, and expectations that accommodate and complement these characteristics. Early childhood teachers recognize that expectations appropriate for 4-year-olds are not appropriate for 18-month-old children. Think about how two children of different ages might use the same material. Rae, who is 2 years old, fills a bucket with small wooden blocks, dumps the blocks out, and fills the bucket once again. Malik, age 4, uses the same blocks to build a skyscraper, complete with windows and doors. You would not expect Rae and Malik to use the blocks in the same way because they are not the same age. Different materials, environments, and activities are needed to challenge and support children in these different age groups. Knowing the typical expectations of an age group is helpful in predicting the interests and abilities you are likely to observe. However, knowing a child's age is not sufficient by itself to provide developmentally appropriate experiences. You also
need to continually observe the specific children in your classroom to identify their particular abilities, interests, and needs.

**DAP IS INDIVIDUALLY AppROPRIATE**

Children come to preschool with different developmental strengths. All children within a given age group are not alike; each child has individual strong points, dispositions, interests, needs, and abilities. What is appropriate for one 4-year-old might not be appropriate for another. For example, Melody and LaTisha are each age 4 and were born in the same month. LaTisha has participated in dance lessons and gymnastics for the past year; she spends a lot of time outdoors with her family and enjoys riding a two-wheeler. Melody spends much of her free time exploring books and being read to by her grandmother. She can already identify many written words by sight and enjoys copying down print she sees in the environment. These two girls have had different experiences and demonstrate different abilities and interests. Expectations that may be appropriate for Melody in physical development may be surprisingly easy for LaTisha. On the other hand, LaTisha may not demonstrate Melody’s strength in language development. Teachers must take into account the individual knowledge, experience, and skills of each child to determine if a practice is developmentally appropriate.

**DAP IS SOCIApLly AND CULTUrAlly APPROPRIATE**

Children and families live in the context of their communities and cultures and need meaningful, supportive early childhood programs. From early on, children learn rules about values, attitudes, and what is considered appropriate behavior. These rules may be directly taught to children or may be absorbed as children watch people important in their lives. For example, Sue Yeon has learned to look down and smile politely when an adult corrects her. Kendra has learned to look an adult in the eye and keep an expressionless face under the same conditions. Culture also influences how you interpret behaviors exhibited by children. Based on Western practice, you might think Sue Yeon finds it amusing that she is being corrected and is not taking what you are saying seriously, or that Kendra is not remorseful for her behavior. Don’t assume that just because children share an ethnic or cultural group that they also share a common cultural experience. There may be differences within an ethnic group based on the region from which they emigrated and also between families from the same region, especially determined by when they emigrated.

Practices appropriate in one culture might not be considered appropriate in another. Think about Brook, who is Navajo. She stands back and watches as other children in the class gleefully experiment with new materials the teacher has just introduced. The teacher tries to engage Brook by offering her some of the items, but Brook just shakes her head ‘no’ and continues to observe. After several minutes, the teacher comments to her assistant, “I don’t know what to do; Brook never wants to try new things!” The teacher doesn’t understand that traditional Navajo culture expects children to observe carefully before trying something new and that Brook’s behavior is in keeping with her culture. A more culturally appropriate adult response would be
to keep the materials available for more than one day and to allow Brook to gradually become involved in using them as she feels more comfortable.

**General Practices Associated with Developmentally Appropriate Practice**

Teachers using DAP choose goals that are challenging yet achievable for children. Of course what is challenging and achievable will vary depending on the individual child. Children also need multiple opportunities to practice skills related to these goals.

DAP provides a framework for thinking about, planning, and implementing high-quality programs for young children. It informs our decision making and gives us a basis for continually scrutinizing our professional practices. In 2009, NAEYC published the third edition of the book *Developmentally Appropriate Practice in Early Childhood Programs: Serving Children from Birth through Age 8* (Copple & Bredekamp, 2009). This publication contains examples of appropriate practices (effective practices supported by research) and contrasting practices (less effective or even harmful strategies) for infants and toddlers, 3- to 5-year-olds, 5- to 6-year-olds, and for 6- through 8-year-olds. (See Table 1.1 for an example.)

As you can tell from Table 1.1, inappropriate practices sometimes reflect errors of omission (missing an opportunity to assist or support children as they problem solve) as well as errors of commission (teachers focus only on teaching children to count). Appropriate practices are often defined between these extremes (to promote reasoning and problem solving, teachers engage children in thinking about solutions to everyday situations). Although many examples of appropriate or less appropriate practices could be described, the spirit of DAP can be captured in 12 overarching principles (Kostelnik & Grady, 2009; Miller, 2009).

1. Adults develop warm, caring relationships with children.
2. Adults acknowledge children’s positive behaviors, reason with children, and treat their misbehaviors as learning opportunities to help children learn to manage their emotions and behaviors.
3. Programs focus on the “whole child,” addressing all domains of child development: the children’s aesthetic, emotional, cognitive, language, social, and physical needs.
4. Programs address the learning needs of *all* children, including children who have special needs and those who do not speak English as their home language.

**TABLE 1.1 • Examples of Appropriate Practices and Inappropriate Practices Related to Mathematics with Children Ages 3 to 5**

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>APPROPRIATE PRACTICES</th>
<th>CONTRASTING/INAPPROPRIATE PRACTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3- to 5-year-olds</td>
<td>To promote reasoning and problem solving, teachers engage children in thinking about solutions to everyday situations (e.g., balancing a block structure, dividing crackers fairly) and in interesting, pre-planned mathematics activities. They talk about the problem, draw children into the process of investigating and solving it, and ask how children came up with their solutions.</td>
<td>Teachers focus heavily on children getting the right answer to a problem. Instead of teachers giving children time and guidance to assist their reasoning and problem solving, teachers tell children the answers or solve problems for them. Teachers stand back and leave children to solve problems on their own without adult assistance or support, therefore missing important opportunities to scaffold children’s mathematical thinking and reasoning.</td>
</tr>
</tbody>
</table>
5. Indoor and outdoor environments are safe and stimulating; routines are well suited to the needs of young children.
6. Children have numerous opportunities to learn by doing through hands-on activities that are relevant and meaningful to them.
7. Children are active decision makers in their own learning. They have many opportunities to initiate activities and to make choices about what and how they will learn.
8. Children have many opportunities to play throughout the day.
9. Teachers are intentional in their teaching. They have specific goals in mind for children’s learning and use relevant instructional strategies to address those goals.
10. Activities address more than one discipline, such as reading and science, and more than one developmental domain at a time.
11. Assessment takes place continuously throughout the day and addresses all developmental domains. Adults gather information about what children know and can do through observations and annotation by collecting work samples and by inviting children to document their own learning.
12. Early childhood practitioners establish positive, two-way relationships with children’s families.

RESEARCH SUPPORTS THE USE OF DEVELOPMENTALLY APPROPRIATE PRACTICE

What began as common sense for many people is becoming a confirmed reality. Documentation is mounting that using developmentally appropriate principles in early childhood programs leads to positive outcomes for children. When compared to programs that ignore such principles, developmentally appropriate curricula are more likely to produce long-term gains in children’s cognitive development, social and emotional skills, and life-coping capabilities (Montie, Claxton, & Lockhart, 2007; Payton et al., 2008; UNICEF, 2008). Although more remains to be learned, we have a growing body of research that supports the idea that DAP has long-lasting benefits for children, as summarized in Figure 1.1.

### FIGURE 1.1 Research findings associated with DAP

<table>
<thead>
<tr>
<th>Social outcomes</th>
<th>Cognitive outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children whose teachers use DAP tend to exhibit:</td>
<td>Children whose teachers use DAP tend to exhibit better:</td>
</tr>
<tr>
<td>Better social problem-solving skills</td>
<td>Creative-thinking skills</td>
</tr>
<tr>
<td>More cooperation</td>
<td>Memory skills</td>
</tr>
<tr>
<td>More favorable attitudes toward school and teachers</td>
<td>Mathematical problem-solving skills</td>
</tr>
<tr>
<td>More positive attitudes about themselves as learners</td>
<td>Grasp of mathematical concepts</td>
</tr>
<tr>
<td>Fewer negative social behaviors</td>
<td>Ability to generalize numeracy skills from one situation to another</td>
</tr>
<tr>
<td>Fewer stress-related behaviors</td>
<td>Reading comprehension</td>
</tr>
<tr>
<td></td>
<td>Listening skills</td>
</tr>
<tr>
<td></td>
<td>Letter-word identification</td>
</tr>
</tbody>
</table>

Addressing the Needs of Diverse Learners

The population of the United States is becoming more and more diverse. Most early childhood programs today already serve children from varied cultural and linguistic backgrounds as well as children with a range of abilities. To be successful, you will need to embrace this diversity in order to help all the children in your group to reach their full potential. You will need to utilize materials, activities, and teaching strategies that reflect the diversity of the children and families in your program. DAP provides a framework for you to individualize curriculum to meet the needs of each child. Your knowledge of child development combined with your knowledge of individual children will enable you to provide these developmentally appropriate educational experiences. Figure 1.2 includes ideas you can use to support linguistically and culturally diverse learners in your classroom.

The nature of DAP encourages the placement of children with and without disabilities in the same classrooms (Filler & Xu, 2006). Inclusive programs, those serving children with disabilities alongside their nondisabled peers, benefit all young children. At the heart of DAP is meeting children where they are and supporting them to meet achievable yet challenging goals. Effective teachers support children who have special learning and developmental needs to participate fully in classroom activities and routines. However, it is not enough simply to place children with disabilities in inclusive programs. Programs emphasizing the acceptance and full participation of all students regardless of the student’s ability. Children are included in all program activities as members who belong, with the supports and services they need to participate.

**FIGURE 1.2 Supporting linguistically and culturally diverse learners in your classroom**

Support the child’s home language

- Know words the child uses for basic needs and wants *(What words does the child use to indicate having to go to the bathroom?)*.
- Learn key phrases *(Good morning)* in the child’s home language.
- Post simple phrases *(Tell me what you’re building)* in children’s home languages in interest areas so that you can communicate in the child’s home language. Include pronunciations if needed.
- Label classroom areas and items in all the languages spoken by children in your class.
- Provide books, games, and other materials written in other languages.
- Sing simple songs in children’s home languages. Learn and sing familiar songs *(Twinkle, Twinkle, Little Star)* in different languages.

<table>
<thead>
<tr>
<th>English Version</th>
<th>Spanish Version</th>
<th>French Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twinkle, Twinkle Little Star</td>
<td>Estrellita, Donde Estas</td>
<td>Petite Etoile</td>
</tr>
<tr>
<td>Twinkle, twinkle little star, How I wonder what you are, Up above the world so high, Like a diamond in the sky, Twinkle, twinkle little star, How I wonder what you are!</td>
<td>Estrellita, donde estás? Me pregunto qué serás. En el cielo y en el mar, Un diamante de verdad. Estrellita, donde estás? Me pregunto qué serás.</td>
<td>Petite étoile, où es-tu? Je me demande ce que tu peux être. Dans le ciel et dans la mer, Un véritable diamant. Petite étoile, où es-tu? Je me demande ce que tu peux être.</td>
</tr>
</tbody>
</table>

- Include authentic items from each child’s culture in all interest areas.
- Provide puzzles, pictures, and books that represent various cultures and languages.
- Display art from around the world.
- Play authentic music from different cultures.
- Ask parents or family members to create audi-taped versions of books by telling the story in their home language. Add these versions to your listening area.
- Include photographs or posters of international buildings or icons in the block area.
- Add empty food containers, restaurant menus, magazines, and newspapers written in children’s home languages to the dramatic play area.
- Serve foods from various cultures at meals and snacks.
an inclusive classroom without making appropriate accommodations. Many special education experts believe that DAP is not sufficient on its own to meet the needs of young children with disabilities (Gargiulo & Kilgo, 2005). Specialized services for children with identified disabilities are also needed. These are most effective when built on a developmentally appropriate foundation that recognizes that children with disabilities are children first and foremost. The DAP guidelines and those developed by the Division for Early Childhood (DEC) and the Council for Exceptional Children (CEC) have many similarities. They both stress:

• individualization of instruction
• appropriate and meaningful assessment
• integration of assessment and curriculum
• focus on child-initiated activities
• emphasis on child’s active engagement
• importance of social interaction
• social and cultural appropriateness (Fox, Hanline, Vail, & Galant, 1994)

In order for children to benefit from inclusion, we must ensure the full participation of all children. Full participation often means that materials, routines, or activities must be adapted in some way to accommodate the needs of a child with a disability. The physical setup of the room should also be considered. Are pathways wide enough to accommodate a child in a wheelchair? Are materials that are meant for children placed where they are accessible to all children? It may be overwhelming at first to think of accommodating a child with special needs in your classroom. However, early childhood teachers make accommodations all the time. Adding a step stool so that children can reach the water fountain, providing paint smocks to keep clothes clean, and encouraging shoes with Velcro are all examples of accommodations for young children. Of course, the accommodations you make for any individual child will depend on the needs of that specific child. For children who have verified disabilities, early childhood teachers will work with a team of specialists to determine appropriate goals and strategies to meet that child’s specific needs, which will be outlined in the child’s individualized education plan (IEP).

Federal law mandates that all children with a documented special need that adversely affects educational performance receive special education services early in life. For children age 3 and older, the local school system develops and coordinates an IEP. Every IEP includes the same elements: a description of the child’s strengths; needs; goals; short-term objectives; special education services and program modifications; and the frequency, duration, and location of the services to be provided. These services must take place in the least restrictive environment possible. For young children, that often includes an early childhood classroom. What services children receive, how services are provided, and the outcomes a child might reasonably be expected to accomplish in a year are described within an IEP. In each case, these elements are individualized to address the educational needs of a specific child. Figure 1.3 provides additional information about an IEP.

Teachers must be knowledgeable about the needs of the children they teach in order to utilize the strategies most effective in supporting children’s learning. Families will likely be the best source of information about the specific needs, strengths, and interests of individual children. Listening attentively, demonstrating interest, and asking open-ended questions of family members can further your understanding of children’s competence. This is one reason that developing positive, two-way relationships with families is essential for effective teachers.

At this point you may be wondering if developmentally appropriate practices work for all children or if it meets the needs of some children but not others. Studies conducted a decade ago seem to indicate that these practices are widely applicable. Researchers at the time noted that DAP “has the potential to provide strong foundational experiences
Addressing the Needs of Diverse Learners

for males and females from different racial and socioeconomic backgrounds” (Hart et al., 1997, p. 8). Later studies have supported these findings. Over the past 10 years, the favorable results reported in Figure 1.1 have been found to be true for boys and for girls, for children from higher- and lower-income families, for children of color as well as white children in the United States, and for children in many countries around the world (e.g., Australia, England, France, Greece, Poland, Indonesia, and Thailand) (Bennett, 2008; National Institute of Child Health and Human Development [NICHHD], 2005). Such results indicate that DAP is a promising approach for working with various populations of children. However, more research specifically designed to answer questions of diversity are necessary before we can say with certainty that DAP meets the needs of all the children and families that early childhood educators serve.

### Figure 1.3 Carmen’s Individualized Education Plan

Carmen is a 3-year-old girl with an engaging smile and big brown eyes; she has also been identified as having a speech delay. Carmen likes to play with dolls, draw at the art table, and listen to books. She spends much of her time in solitary play but appears to enjoy playing near other children in her preschool class. If a teacher draws her attention to a peer, she will join in, but she needs the teacher’s help to continue the interaction. Currently, she uses very few words but is learning to use picture cards and gestures to aid her communication. Sometimes Carmen becomes frustrated and will scream in protest when others do not understand what she wants or needs. Carmen is enrolled in a full-day program that includes children who are developing typically as well as children who have special needs.

Carmen’s IEP was created in a group meeting that included her mom, dad, and grandmother (who lives with Carmen, her parents, and younger brother Luis). Her early childhood special education (ECSE) teacher, her pre-K teacher, an occupational therapist, and a speech pathologist also attended. The adults first reviewed Carmen’s assessment data, noting when her last formal assessment was given and the results. Her family offered examples of what she likes to do at home. The teachers brought written notes as well as checklists of behaviors they had observed Carmen display at preschool. The pre-K teacher also had work samples of Carmen’s art, a list of words she has used at preschool, and digital photographs of her playing at school to share with the group.

Together the team created specific social, behavior, and communication goals and objectives for Carmen to address during the year. They agreed that the plan would be reviewed and revised annually. Following are three examples of individually appropriate goals identified for Carmen.

### IEP Goals

- Carmen will imitate a pretend play sequence of 4 to 6 steps with peer and adult models to facilitate and maintain the play activity.
- Carmen will use appropriate social greetings with familiar adults and children (hi, bye), using names when appropriate.
- Carmen will request a desired item or activity by giving a picture to an adult or peer.

### Supporting Practices

The pre-K teacher agreed to incorporate the following individually appropriate practices in his classroom to facilitate Carmen’s progress toward her IEP goals. Carmen’s family will also use some of these techniques at home.

#### Create Communication Opportunities

- Teach Carmen to get a peer’s attention by tapping the peer on the shoulder and then saying the peer’s name. She could then give the peer a picture card to request an item or activity. (The teacher will also work to teach the other children how to respond appropriately to Carmen.)
- Provide Carmen multiple opportunities throughout each day to greet different people including peers, teachers, and other adults in the building (e.g., lunch personnel, custodian, principal).
- Encourage peers to ask questions and make comments to Carmen.
  - “Luke, ask Carmen where she would like to play next.”
  - “Sasha, tell Carmen what you are building.”

#### Facilitate Social Opportunities

- If Carmen is playing alone, bring a peer to her play area or ask a peer to invite Carmen to play along.
- When transitioning in the classroom or going outside, have a peer hold Carmen’s hand.
- Utilize Carmen’s preferred play materials (e.g., dolls) as a way to encourage interaction with her peers. Draw Carmen’s attention to peer’s actions. For example, “Carmen, Justin is brushing his doll’s hair. Do what Justin is doing.”
DEVELOPMENTALLY APPROPRIATE PRACTICE AND CURRICULUM

DAP affects every component of the curriculum. Your understanding of DAP will affect your choices as teachers, including:

- How we structure the physical learning environment
- How we organize the schedule of the day and daily routines
- How we interact with children and families
- What goals we choose for children

The key ideas addressed in DAP center on what children know and can do, and adults working with children make intentional decisions about curriculum with these characteristics in mind. Developmentally appropriate curriculum is created while considering specific children’s strengths, needs, interests, and abilities. Table 1.2 provides key principles associated with appropriate curriculum and examples of what these principles look like in operation.

DEVELOPMENTALLY APPROPRIATE PRACTICE INVOLVES JUDGMENT

Teachers make hundreds of large and small decisions in their classrooms every day. Such decision making lies at the center of effective teaching. Teachers must rely on their knowledge and understanding of young children to determine what is appropriate for the children they teach. Good teachers are intentional in everything they do (Epstein, 2007). They think carefully about the decisions they make and are able to articulate the rationale for their decisions. They make informed decisions based on what they know about children in general as well as what they know about the specific children in their care.

<table>
<thead>
<tr>
<th>TABLE 1.2 • Five Principles Associated with Appropriate Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRINCIPLE</strong></td>
</tr>
<tr>
<td>Curricula address the whole child, providing for all areas of development.</td>
</tr>
<tr>
<td>Curricula include content that is meaningful to children.</td>
</tr>
<tr>
<td>Curricula are culturally relevant and value children’s home cultures and languages while also supporting all children to participate in the shared culture of the school.</td>
</tr>
<tr>
<td>Curricula have clearly stated outcomes for children. Effective teachers also plan teaching strategies appropriate for helping children make progress towards these outcomes.</td>
</tr>
<tr>
<td>Curricula are developed by teachers who believe in themselves and their abilities to influence children’s learning.</td>
</tr>
</tbody>
</table>

Source: Based on Jalongo and Isenberg (2008).
Thinking about what you have just read regarding DAP, consider whether or not the following scenarios are examples of developmentally appropriate practice.

- Jenny Wolensky has read the book *It Looked Like Spilt Milk* to her group of 4-year-olds and now is engaging in an art activity where children have made fold-over paintings with white paint on blue paper. She asks each child to describe what his or her painting looks like and records the responses on the bottom of the painting.
- Marcus Wentworth has planned a trip for his morning preschool class to the petting zoo, which features goats, pigs, and sheep.
- Mrs. McNamara has a workbench in her classroom for 3-year-olds, complete with an authentic hand saw that the young preschoolers can use to saw wood.

Your first impression might be that creating paintings based on a book the children enjoyed and planning a trip to the petting zoo are clear examples of DAP. You may have concerns about the safety of a hand saw being used by 3-year-olds and think a sharp saw is not a developmentally appropriate choice of materials. However, closer scrutiny may prompt you to reassess your original judgments.

You may revise your assessment of the painting activity after viewing the following interaction between Leo and his teacher, Jenny. When Leo tells Jenny his painting looks like a truck, she responds, “Look, Leo, it looks like a bunny. See the long ears here?” and points to the painting. Leo replies, “No, a truck.” Jenny again points to the painting and says, “Leo, your painting looks like a bunny. It has long ears just like a bunny.” Leo simply replies, “Truck.” Jenny writes at the bottom of his painting “It looks like a bunny,” and tells Leo to put the painting in his cubby. Leo takes the painting and sulks off toward his cubby. Although the painting activity was appropriate for young children, the interaction between Leo and his teacher created an inappropriate experience for Leo. It is not enough to simply choose activities that are appropriate; teachers must implement the activity in an appropriate manner as well.

A trip to the petting zoo would be appropriate for many preschool classes, but further examination of the children in Marcus’ class reveals that two of the children are Muslim, and petting a pig would not be appropriate for them. Another child in the class is tactile defensive and becomes very agitated and distraught when asked to touch unfamiliar things, and a third child has autism and would likely react negatively to this change in the schedule. Considering the individual and cultural needs of the children in this class, you may decide that the trip is not appropriate.

Further examination of Mrs. McNamara’s class shows us that the children are very interested in building and woodworking. They have been well instructed in the correct use of all the tools, including the saw, and take using the saw very seriously. Mrs. McNamara makes sure the workbench area is well supervised and that the tools are not accessible to the children at other times. Based on these observations, you may determine that the materials are developmentally appropriate.

As the previous examples show, the answer to whether or not a specific practice is developmentally appropriate is “It depends.” It depends on the experiences, abilities, and cultures of the individual children with whom you are working. Scenarios such as these illustrate that determining what does or does not constitute DAP requires more than simply memorizing a set of dos and don’ts or looking at children’s activities in isolation. It involves considering every practice within the context in which it is occurring and making a judgment about what is happening to a particular child in a particular place at a particular time. The best judgments are those you make consciously.

To determine whether specific teaching practices are developmentally appropriate, many early childhood educators ask three questions:

1. Does this practice support what I know about child development and learning?
2. Does this practice take into account children’s individual strengths and needs?
3. Does this practice demonstrate respect for children’s social and cultural lives?
Teachers may use these questions to answer immediate concerns or to think about more long-term DAP issues. These questions might be considered by an individual teacher or by an entire program staff. You might use these questions to consider the appropriateness of a specific activity or program policy. In every circumstance, the answer to each question should be “yes.” Answering no to any question is a strong indication that the practice is not appropriate and should be reconsidered, adapted, or discarded. Your knowledge of child development and learning, your understanding of curriculum, your awareness of family and community relationships, your knowledge of assessment, and your interpretation of your professional role will also influence what you do (Copple & Bredekamp, 2009).

All of these factors, combined with an understanding of DAP, should guide early childhood decision making.

THE ROLE OF THE TEACHER IN DAP PROGRAMS

In developmentally appropriate programs, the teacher has a critical role. The guidelines developed by NAEYC (Copple & Bredekamp, 2009) for DAP describe five interrelated functions of excellent early childhood teachers:

1. creating a caring community of learners
2. teaching to enhance development and learning
3. planning curriculum to achieve important goals
4. establishing reciprocal relationships with families
5. assessing children’s development and learning

Successful teachers are intentional in each aspect of their jobs. That is, they leave little to chance. They think carefully about the children, their goals in the program, and how they will address those goals every day. They realize that each feature of DAP is related to the rest, and none can be shortchanged without seriously undermining the others.

CREATING A CARING COMMUNITY OF LEARNERS

Good teachers realize that children learn best in an environment where they feel valued and safe. Teachers make a genuine effort to get to know each child and family well and develop a warm and positive relationship with each individual. Everyone is included and treated with respect as a part of the classroom community. This community of learners provides the positive relationships through which children learn best.

TEACHING TO ENHANCE DEVELOPMENT AND LEARNING

Effective early childhood teachers need specialized knowledge about how children learn and develop as well as effective strategies to teach children. Teachers make intentional decisions about which materials to use, how to design the environment, and what learning experiences are most appropriate for the group and each individual child within it. Successful teachers utilize a broad array of teaching formats such as small groups, whole group, and learning centers for different learning purposes. They also use a wide variety of teaching strategies to best address the goals and situation at hand. In later chapters you will learn more about these topics.

PLANNING CURRICULUM

Teachers of young children must plan curriculum to assist children in meeting important goals. The curriculum includes the knowledge and skills you plan to have
the children acquire as well as the experiences through which the children's learning will take place. Good curriculum should address all the domains associated with childhood development and learning (aesthetic, cognitive, physical, social, emotional, and language). Activities should be flexible in order to be adapted to the needs of individuals and be worthy of children's time. Much of this text is devoted to creating meaningful and effective curriculum for young children.

**ASSESSING CHILDREN'S DEVELOPMENT AND LEARNING**

Another role of the teacher is linking assessment and curriculum to guide planning and decision making. Intentional teachers use assessment to monitor children's progress and base subsequent curriculum planning on assessment results. Teachers ensure that any assessment used is appropriate for the child’s age and developmental status and is individually and culturally appropriate. Most often in a preschool classroom, useful assessment data is gathered by close observation of children, talking with them, and examining their work. We address assessment further in Chapter 4.

**Communicating with Families About Developmentally Appropriate Practice**

**ESTABLISHING RECIPROCAL RELATIONSHIPS WITH FAMILIES**

Excellent teachers recognize that family members are the most important people in a child’s life. Parents and other family members have knowledge and understanding of the child that the teacher does not. This information helps the teacher to better understand the child as an individual, and therefore better meet the child’s needs. Reciprocal relationships with families can be enhanced by ongoing, two-way communication with families where information is regularly exchanged. Welcoming families and consistently treating them with respect and as a valued partner in their child’s education communicates to families their importance as a member of the classroom community. Figure 1.4 includes information you can share with families regarding developmentally appropriate practice.

**TRY IT YOURSELF**

Prepare to interview a family member of a young child. Develop a set of questions to ask during the interview. What information do families have that will assist you in developing appropriate activities and experiences for this child? What questions will help you determine which activities will be *individually appropriate* for this child? What questions will help you determine which activities would be *socially and culturally appropriate* for this child? Compare your ideas with some of the questions listed here.

1. What are your child’s favorite activities?
2. How does your child respond to new people or new situations?
3. What family rituals, routines, or holidays do you follow?
4. What hobbies or interests might you be willing to share with our program?
Early childhood classrooms are abuzz with excitement and activity. Children are busy building with blocks, creating masterpieces in the art area, and moving to music during group time. It may look as though the children are only playing, but there is learning going on within the commotion! As children play, they are able to test their theories about how things work, develop social skills that enable them to cooperate with each other, and solve problems they encounter with materials. Research and experiences tell us that in order for us to foster children’s learning, we must be developmentally appropriate. This means teachers must have a thorough understanding of how children grow and develop and what to expect at what age. At the same time, teachers must also meet the needs of each individual child in their classes. Developmentally appropriate practice means teaching that takes into account children’s ages, experiences, abilities, interests, and cultures while helping them reach challenging and achievable goals. For example, some children have had little experience being a part of a group and may need help taking turns or sharing materials. Other children have already developed these skills. Good teachers strive to be developmentally appropriate in their interactions with children and families, and are eager to learn about each family’s culture and circumstances.

### DEVELOPMENTALLY APPROPRIATE PRACTICE IS STILL EVOLVING

The guidelines for DAP were developed as a living document that would continue to evolve in order to reflect the current educational context (Copple & Bredekamp, 2009). The guidelines are subject to change as thinking and recommended practices in the field change over time. This means that you will need to continue developing as a professional, thinking carefully about changing perspectives in the field and how they affect your work. Early childhood teachers should also advocate for policies based on what research has demonstrated is effective in supporting children’s learning and development. Figure 1.5 suggests several ways that early childhood teachers can advocate for appropriate practices. As you have learned in this chapter, early childhood professionals approach their work with the understanding that young children’s learning differs significantly from that of older children and adults. The application of DAP makes the nature and well-being of children the central focus of professional practice. Now take what you have learned and apply it within the professional activities that follow.

### Applying What You’ve Learned

1. Describe the principles that define developmentally appropriate practice and how these principles influence curriculum.

2. Identify your role in supporting a developmentally appropriate approach to teaching young children.

Review several websites or activity books that contain activities for preschool children. Choose two to three activities and analyze each activity by answering the following questions:

- How does this activity match with what I know about child development and learning?
• How does this activity take into account children's individual strengths and needs?
• How does this activity demonstrate respect for children's social and cultural lives?
• How might this activity need to be adapted or modified to make it more developmentally appropriate?

3. Recognize developmentally appropriate practices in action.
• Observe two classrooms that have adopted a developmentally appropriate philosophy.

Describe ways the adults use the principle of age appropriateness in terms of materials, activities, and routines in each classroom. Identify the similarities and the differences between the two rooms and write a summary of your findings.
• Observe an inclusive early childhood classroom. Describe ways in which the materials, routines, and activities have been modified to be individually appropriate for a child with special needs.

References

New York: Delmar Learning.
Kate had always wanted to be an early childhood teacher—and she was determined to be a good one. As she sat through her course work to earn her degree, she found her instructors emphasizing three areas of knowledge. First, she learned that it was important to gain a good understanding of how children develop and learn, and she felt she had worked hard on that. Second, she found that she needed a good grasp of content knowledge in a variety of areas, such as language and literacy,
social learning, mathematics, and science, as well as an understanding of relevant learning outcomes. Her administrator identified what the program expected children to learn during the preschool, kindergarten, and primary years. Finally, she discovered that she needed to develop a broad repertoire of effective teaching strategies. Her readings, volunteer experience, and student teaching had helped with that. Today was her first day on the job—her chance to put it all together.

This chapter explores these essential facets of early education (see Figure 2.1) and how to combine them to create a holistic approach to teaching and learning in the early years.

**Early Childhood Educators Need to Know About Child Development and Learning**

Three-year-old Megan and her 6-year-old sister Anna are enjoying playing with paper dolls, though it’s clear they are playing in entirely different ways. Megan talks out loud about what her doll is thinking and pretends she is “going inside and outside” again and again, changing the doll’s clothing each time. Anna is intent on creating new clothes for both dolls, skillfully measuring and cutting them out. She carefully arranges her created doll clothes in distinct piles, sorting them at first as “tops” and “bottoms” and then categorizing them further into sweaters, jackets, tee shirts, skirts, and pants. When Megan mistakenly puts a “bottom” into the tee-shirt pile, an exasperated Anna says, “Megan, look. No bottoms here. I told you that!”

An early myth about early childhood education was that anyone with a “good heart” could teach young children—that it was mostly intuitive and dependent on having lots of activities to keep children busy. Evidence shows that this is not true. Effective delivery of high-quality programs demands that early childhood teachers know when children are expected to benefit from certain experiences and how children are likely to differ from one another (Copple & Bredekamp, 2009; Stronge, 2002). Equally important is knowledge of strategies to logically move children along in their learning. Teachers who are unskilled in understanding the unique characteristics of the children they serve are most likely to “drop out of the field” (Horowitz, Darling-Hammond, & Bransford, 2005), have management problems with children, and find teaching on a day-to-day basis difficult and unrewarding.

**LEARNING OUTCOMES**

After you read this chapter, you will be able to:

- Connect principles of child development and learning to your teaching practices.
- Describe the cycle of learning or how children gain new knowledge and skills.
- Describe content knowledge and the role that content standards play in early learning programs.
- Identify instructional strategies connected with developmentally appropriate practices.
- Explain how to adapt your teaching to meet the needs of diverse learners.
- Communicate with families about how and what you are teaching.

![Figure 2.1 Teaching-learning knowledge base](image-url)
PRINCIPLES OF CHILD DEVELOPMENT AND LEARNING
Understanding child development and learning will influence how you interact with children, the kinds of environments you create for them, and the kinds of learning outcomes you will expect of children of different ages and abilities. Following are nine principles consistently cited by early educators throughout the world. As you make them a natural part of your practice, they will allow you to make informed decisions about your thinking, planning, and teaching as an early childhood educator.

CHILDREN DEVELOP HOLISTICALLY
When you think about the children you will teach, remember that the six developmental domains—aesthetic, affective, cognitive, language, physical, and social—are continuously interrelated. One developmental domain never functions without the others. Look back at Megan and Anna's paper doll play and consider how the play was influenced by each facet of the children's development: Their activity included aesthetic development (creating the dolls and clothes), affective development (experiencing satisfaction with their work), cognitive development (sorting, measuring), social development (exchanging ideas), language (creating verbal scenarios), and fine motor development (cutting, coloring). Although one domain may sometimes be more dominant than others in a given task, children always function holistically.

CHILD DEVELOPMENT FOLLOWS AN ORDERLY SEQUENCE
Researchers have been able to identify step-wise processes in which children's understandings, knowledge, and skills build on each other (Berk, 2009). Benchmarks in the six developmental domains emerge in a predictable order and are dependent on children's maturation and opportunities to learn. For example, the various categories for the different types of doll clothes were clear to 6-year-old Anna, but her younger sister did not yet fully understand and needed further coaching, prompting, experience, and time in order to reach the same clarity. It's important to remember, however, that developmental processes are not rigid; they vary with individual children's motivation, special needs, and exposure to certain experiences. A child's current development and your knowledge of how development proceeds will provide reliable clues about what comes next.

CHILDREN DEVELOP AT VARYING RATES
If you were to observe a classroom of 15 three-year-olds as they approach certain developmental milestones, you would find considerable variation in their development based on maturation and experience (Trawick-Smith, 2009). For example, Megan has had plenty of access to construction materials and the modeling of an older sister who enjoys playing with her (at least most of the time)!. Some of the children may never have had a chance or the motivation to hold scissors, sort materials, or even play with another child.

CHILDREN LEARN BEST WHEN THEY FEEL SAFE AND SECURE
During their doll play, Anna may have been irritated with Megan, but she communicated that irritation without being abusive, preserving the girls' ability to play well together. Warm, loving relationships form the context for optimal learning. Thus, one of the most important things that you will do as a teacher is to develop a warm relationship with each child in the classroom so that children can relax, knowing that you genuinely like and value them. When children come to know that you are interested in what they are saying, that you will be patient with them as they are learning, that routines are predictable, and that they can rely on you to set reasonable limits, they
feel safe. Such environments are perceived by children as a good place to spend time, and they look forward to each day of school.

**CHILDREN ARE ACTIVE LEARNERS**

Learning is most apt to take place when children are engaged in plenty of hands-on experiences where they have freedom to investigate, move, and act on their environments as they learn, using all their senses. In our opening scenario, both Megan and Anna have different ideas about what they want to “act on” in their play with the paper dolls and most likely would have lost interest quickly in the activity if it were being overly supervised by a teacher or parent. Although the girls had different goals and were not directly interacting with one another, their play was mobilized by Anna’s active desire to produce the materials and Megan’s equally active enjoyment in using them.

**CHILDREN LEARN THROUGH PHYSICAL EXPERIENCE, SOCIAL INTERACTION, AND REFLECTION**

Young children have a powerful need to make sense of everything they encounter. Their efforts to do so begin at birth and continue as they directly manipulate, listen to, smell, taste, and act on objects. These are the primary ways they gain knowledge about the properties of things, how they work, and how they are similar or different. To the extent that children have opportunities to explore, they develop increasingly complex thinking, which they use to interpret and draw conclusions about the world.

Continuing with our example of Megan and Anna, there is no doubt that Megan’s ability to sort and categorize is enhanced as she pays attention to Anna’s insistence on “only tops in one pile; only bottoms in another.” At first, Megan is thrown out of balance by this, thinking, “Why does it matter?” However, after reflecting further about Anna’s reasoning and then replacing the doll clothing in the relevant categories, her thinking becomes more complex.

Children are unable to learn everything totally on their own. Their interactions with others will yield the names of objects, customs, historical facts, the rules for interacting socially, and certain skills such as learning to read and write. As children talk, work, and play with others, they generate hypotheses, ask questions, and formulate answers (Copple & Bredekamp, 2009). As they do so, they reflect internally on their experiences, recognize discrepancies in their reasoning and that of others, continually shaping, expanding, and reorganizing their thinking.

**CHILDREN ARE MOTIVATED TO LEARN THROUGH A CONTINUOUS PROCESS OF CHALLENGE AND MASTERY OF CONCEPTS AND SKILLS**

We saw an example of this process of challenge and mastery when Anna challenged Megan to get things “in the right pile” during their paper doll play. With prompting and practice, Megan’s mastery of Anna’s rule became internalized or automatic, no longer needing a reminder. Young children have so many things to learn, and the excitement of doing so is what prompts them to continue pursuing concepts and skills just slightly beyond their current levels of proficiency. However, if children lack stimulation and support to master new tasks or become highly stressed because a task...
is too demanding, they eventually give up. You will play a major role in structuring the learning environment so that children remain motivated and engaged rather than frustrated.

**CHILDREN’S LEARNING PROFILES VARY**

Everyone has preferred ways of learning. Think about what your learning preferences are. Now think about Anna and Megan. Anna preferred to create materials while Megan preferred to use them in an imaginative way. These differences probably had more to do with their individual learning styles than they did with other factors. As you get to know the children you are teaching, you will find that each child is a unique combination of eight frames of mind or multiple intelligences (Gardner, 1993). These intelligences (see Table 2.1) are predictive of the way children like to spend their time, where they seem to excel, and where they may need additional support to learn.

**CHILDREN LEARN THROUGH PLAY**

Play is a powerful teaching and learning medium—at all stages of life, but particularly in early childhood. It is voluntary activity, pursued without ulterior purpose and generally with enjoyment or expectation of enjoyment (English, & English, 1958). Play is how children prefer to gather and process information, learn new skills, and practice old ones (Kostelnik, Gregory, Soderman, & Whiren, 2011).

Table 2.2 summarizes these nine principles of child development and learning. Early childhood educators feel strongly that young children must be given time to play so that they can come to understand the use of objects and symbols, explore

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**TABLE 2.1 • Eight Intelligences That Contribute to Children’s Learning Styles**

<table>
<thead>
<tr>
<th>INTELLIGENCE</th>
<th>CHILD LEARNS BEST BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linguistic</td>
<td>Reading, writing, and talking</td>
</tr>
<tr>
<td>The Word Player</td>
<td></td>
</tr>
<tr>
<td>Logical-mathematical</td>
<td>Exploring patterns and relationships, working with numbers, doing experiments</td>
</tr>
<tr>
<td>The Questioner</td>
<td></td>
</tr>
<tr>
<td>Spatial</td>
<td>Drawing, building, designing, creating things, using the mind’s eye</td>
</tr>
<tr>
<td>The Visualizer</td>
<td></td>
</tr>
<tr>
<td>Musical</td>
<td>Listening to and making music, using rhythm and melody</td>
</tr>
<tr>
<td>The Music Lover</td>
<td></td>
</tr>
<tr>
<td>Bodily-kinesthetic</td>
<td>Touching, moving, processing knowledge through bodily sensations</td>
</tr>
<tr>
<td>The Mover</td>
<td></td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>Working alone; pursuing own interests; being aware of inner moods, intentions, motivations, temperaments, and self-desires</td>
</tr>
<tr>
<td>The Individual</td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Sharing, comparing, relating to others, cooperating</td>
</tr>
<tr>
<td>The Socializer</td>
<td></td>
</tr>
<tr>
<td>Naturalistic</td>
<td>Observing nature, interacting with plants and animals, perceiving relationships among natural things</td>
</tr>
<tr>
<td>The Nature Lover</td>
<td></td>
</tr>
</tbody>
</table>

TRY IT YOURSELF
Consider each of Gardner’s eight intelligences. In which of these would you rate yourself highest? In which would you rate yourself lowest? Think back to when you were in high school. How did your talents and interests affect your performance in certain subjects or other activities? How might your talents and interests contribute to your skill as a teacher?

### TABLE 2.2 • Connecting Knowledge of Development and Learning to Teaching Practices

<table>
<thead>
<tr>
<th>PRINCIPLES OF CHILD DEVELOPMENT AND LEARNING</th>
<th>CORRESPONDING DEVELOPMENTALLY APPROPRIATE TEACHING PRACTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children develop holistically</td>
<td>Teachers plan daily activities and routines to address all aspects of children’s development—aesthetic, emotional, intellectual, language, physical, and social.</td>
</tr>
<tr>
<td>Child development follows an orderly sequence</td>
<td>Teachers use their knowledge of developmental sequences to gauge whether children are developing as expected, to determine reasonable expectations for children, and to figure out what steps are next in the learning process.</td>
</tr>
<tr>
<td>Children develop at varying rates</td>
<td>Children need opportunities to pursue activities at their own pace. Teachers plan flexible activities to address the wide range of development represented in their group, including opportunities for more or less advanced learners. They provide experiences according to children’s changing needs, interests, and abilities.</td>
</tr>
<tr>
<td>Children learn best when they feel safe and secure</td>
<td>Teachers develop nurturing relationships with children, as well as predictable daily routines, activities, and transitions that respect children’s attention span and need for movement. Adults use positive discipline to enhance children’s self-esteem, self-control, and problem-solving abilities. Teachers address aggression and bullying calmly, firmly, and proactively. The early childhood environment complies with the safety requirements of the appropriate licensing or accrediting agency. Children have access to images, objects, and activities in the early childhood program that reflect their home experiences, and there is effective two-way communication between teachers and families.</td>
</tr>
<tr>
<td>Children are active learners</td>
<td>Teachers plan many hands-on experiences. Children investigate, move, and act on their environments as they learn, using all their senses.</td>
</tr>
<tr>
<td>Children learn through a combination of physical experience, social experience, and reflection</td>
<td>Teachers use a variety of strategies to engage learners. They pose questions, offer information, and challenge children’s thinking. They encourage children to handle objects every day and to reflect on their ideas.</td>
</tr>
<tr>
<td>Children learn through mastery and challenge</td>
<td>Teachers simplify, maintain, or extend activities in response to children’s functioning and comprehension. Teachers help children figure out alternative approaches when the task is beyond their current capabilities. Children learn from interacting with others as they engage in activities within or slightly beyond their ability to carry out independently.</td>
</tr>
<tr>
<td>Children’s learning profiles vary</td>
<td>Teachers present the same information and skills in more than one modality (seeing, hearing, touching) and through different types of activities across all domains. Children choose from an array of multi-sensory activities every day.</td>
</tr>
<tr>
<td>Children learn through play</td>
<td>Teachers prepare the environment, provide the materials, observe, and interact playfully with the children. Play is integrated throughout the day within all aspects of the program.</td>
</tr>
</tbody>
</table>

social relationships, work out their differences with others, extend skills in all learning domains, express their emotions appropriately, and release the tensions they experience (Wenner, 2009). Think about all the meaningful learning that was taking place as Megan and Anna enjoyed what they were doing with their paper dolls.

When observing a number of children at play in any single classroom, you'll see that children's participation styles can be very different. Mildred Parten's early study is now a classic classification system used for describing children's developing play behaviors (see Table 2.3) (Parten, 1932).

When watching children at play, you'll also find that their play takes different forms, including movement play, object play, language play, pretend play, construction play, and games. Figure 2.2 describes these forms of play.

### The Cycle of Learning: Gaining New Knowledge and Skills

Ms. Bendick wants to expand the children's understanding of numbers. She realizes that her 3- and 4-year-olds are all in a very different place in their knowledge. When asked how old he is, Max holds up three fingers correctly. Kevin can write numerals from 1 to 5, even though many are backwards, and Michaela can easily count to 25 but cannot count out seven paper cups. Ms. Bendick begins by providing sets of different materials in small baskets and counting the objects one at a time with the children, moving the objects from the basket to a plate as she counts. Today, she introduces a new finger play where she has them pretending to pick apples from a tree, jumping up to get them—1, 2, 3, 4, 5—and then throwing them down into an imaginary basket—5, 4, 3, 2, 1.

#### Table 2.3 • Mildred Parten’s Classification of Stages of Play

<table>
<thead>
<tr>
<th>PLAY CLASSIFICATION</th>
<th>CHILD’S ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unoccupied Activity</td>
<td>The child is not actually “playing” but watches anything that happens to catch his interest. He may become intrigued with his own body, move around, remain in one location, or follow a teacher.</td>
</tr>
<tr>
<td>Onlooker Behavior</td>
<td>This stage is termed “behavior” instead of play because this child is content in watching other children.</td>
</tr>
<tr>
<td>Solitary Independent Play</td>
<td>Children prefer to play by themselves and are not comfortable interacting with other children. They may play apart from other children with chosen toys, yet within listening/speaking distance, and demonstrate little interest in making contact.</td>
</tr>
<tr>
<td>Parallel Play</td>
<td>Children occupy space near others, but seldom share toys or materials. They may talk, but each has his or her own conversation and there is no attempt to communicate with each other. As an example, one child may talk about going to the circus while another interrupts about going to a fast food restaurant.</td>
</tr>
<tr>
<td>Associate Play</td>
<td>Children lend, borrow, and take toys from others. However, it's still “every child for himself.” At this stage, the children are beginning to engage in close personal contact; however, they still consider their own viewpoint as most important. Children are not yet ready to participate in teams or group work, but there should be opportunities for group work so they can gradually learn how to communicate their needs.</td>
</tr>
<tr>
<td>Cooperative Play</td>
<td>This stage is the highest form of children playing together. They share, take turns, and allow some children to serve as leaders for the group. For example, one child may be the police officer, another a nurse, while another is the mother in cooperative play. Three-year-olds play best with approximately three other children; 5-year-olds can play successfully with approximately five children.</td>
</tr>
</tbody>
</table>
FIGURE 2.2 Forms of play

Movement play
The first playthings children have at their disposal are their own bodies. Physical movement is fun! Children delight in racing down a hill, imitating the actions of the “chicken dance,” or twirling until dizzy. All of these activities involve playing with motion itself. Children enjoy both exercise play (such as running, climbing, or hopping) and practice play (a child persists in walking a balance beam over and over until slips off of the beam happen less frequently). In each case, children gain pleasure and confidence from mastering physical challenges and using their bodies in invigorating ways. Children who are proficient at movement play—tossing balls into the parachute, chasing on the playground, or racing to the top of the climber—tend to be admired by peers, making them desirable playmates.

Object play
Children of all ages play with just about anything, starting with everyday materials such as sticks, pots and pans, boxes, or blankets. Obviously, children also play with toys, sports equipment, games and electronic media. No matter the object, children spend time investigating and manipulating to find out what the object can do (this object opens and closes, pulls apart, is heavy, or beeps when you push this button). They also discover what they can do to and with objects to achieve certain outcomes (I can pound, build, or make sounds with this object). Eventually, children transform objects into something else (I can think of what they represent and in the skills children use to produce them. You see this in the constructions by older preschoolers and kindergartners, who may create entire towns out of boxes or make elaborate props for their pretend play.

Language play
Playing with language begins in toddlerhood and continues into grade school. It involves experimenting with and coming to understand words, syllables, sounds, and grammatical structures through playful means. Children who play with language have a vehicle for manipulating and controlling it (Isenberg, J. P., & Jalongo, M. R. 2012). They find humor in imitating or making up sounds and in changing the volume and speed of their words (such as chanting, “red rover, red rover, red rover” more and more quickly until the words tumble over themselves). They enjoy repeating rhymes and making up rhymes of their own (“I’m a whale. This is my tail.”). Although substituting letter sounds and transposing letters leads to hilarity among the preschool set (Anna Banana, Tony Baloney, etc.), it also serves as a key skill in later reading and writing.

Pretend play
Pretending to be someone else, making believe an object is something other than it is, and carrying out imaginary activities are fun things to do. Any child can pretend at any time alone or with someone else. This play begins around 15 months of age with simple actions such as pretending to sleep or putting the dolly to bed (Smith & Pellegrini, 2008). Sociodramatic play, common from around 3 years of age, involves pretending with others. It requires role-playing (“I’m the mom.”), assigning meaning to objects (“This brush is our magic wand.”), and developing story lines (“Let’s play dinosaurs.”). Due to its interactive nature, sociodramatic play gives children plenty of chances to engage in turn taking and sharing, negotiating and compromising (“Okay, we can have two moms.”), and problem solving (“Let’s ask Sara to be the aunt.”). As children navigate these situations with greater success, their social competence increases.

Construction play
Construction play happens when a child envisions something mentally (a house, a car, or a town) and then makes it out of tangible materials such as blocks, sand, or art supplies. This kind of play first becomes evident at about 3 years of age when children name the things they make (“Teacher, see my house.”). From then on, children’s constructions become more elaborate, both in terms of what they represent and in the skills children use to produce them. You see this in the constructions by older preschoolers and kindergartners, who may create entire towns out of boxes or make elaborate props for their pretend play.

Games
Games enjoyed by preschoolers and kindergarten-aged children range from the Farmer in the Dell, to Simon Says, to Candy Land, to Hide and Seek, to Pocket Frogs. They might or might not include props. Some games require physical movement (Hot Potato, Hokey Pokey, Red Light/Green Light); others are table games or ones children play sitting down. Some are played in small groups (Memory), but some can be played only with many children (parachute activities). What games like these have in common are other players, simple rules, and a high degree of social interaction. Children are not automatic experts in the protocol of games—waiting one’s turn is challenging, following rules is a trial and error business, and moving through a structured game such as Candy Land from beginning to end does not happen all at once. Children need many chances to perfect the skills necessary to play increasingly long and complicated games.

As this last principle makes clear, careful attention must be paid to constructing a learning environment that fosters the young child’s preference for acquiring knowledge and skills through play.
Learning something completely new requires moving from initial awareness to actually gaining new knowledge and skills that we can then apply on our own. This happens in what is called the cycle of learning and consists of five phases, each supporting and leading to the next phase: awareness, exploration, acquisition, practice, and generalization (Epstein, 2007; Robertson, 2007) (see Figure 2.3). Let’s look at each of these separately.

- **Awareness.** Young children are constantly confronted with new events, objects, and people. That does not mean that everything catches their attention equally, but adults can mediate awareness through the environments and experiences they create for children. For example, Ms. Bendick knows how important it is to have her children begin to understand one-to-one correspondence, an important early mathematics concept. She frequently plans for engaging activities and materials to draw their attention to mathematical ideas.

- **Exploration.** Once Ms. Bendick has gained the children’s attention, she knows they need plenty of opportunities and time to explore the things that have captured their interest. This is a critical period of discovery as children spontaneously manipulate materials, “play around,” and engage in informal interactions with classmates and adults. They have a chance to talk about their experiences, ask questions, relate what they are doing to prior learning, propose explanations and construct new understandings (the marble can’t get down the chute, which is smaller in the middle than on top), and develop personal meanings that lead them to want to know or do more.

In the exploration phase, it is important that teachers act as facilitators. For example, 3-year-old Ezra was exploring different ways to balance a push-cart. He kept tipping it up on its side, standing it on the front two wheels. The teacher reminded him to keep all the wheels on the floor and helped him put it back down. As she left, he picked it up again, tipped it on its side, removed his hands to see that it was stable, and then placed it back on the floor. The teacher, recognizing that he was exploring how to balance the cart differently, returned and acknowledged his efforts to do so. “You know that the cart usually rolls on the floor, Ezra, but you’ve figured out that it can also sit up on only two wheels as well and want to try that out. You’re being very careful not to let it fall on anyone.”

- **Acquisition.** By signaling that they want to do something else with the materials or activity, children are letting you know that they are no longer satisfied with just exploring and want to refine their understanding or make new connections (“Ms. Bendick, let’s pretend that we pick one apple for every kid who’s here today! Instead of 5, we can pick 17, cause there are 17 kids, right?”). This is when teachers tune in carefully to what children want to learn, offering support as needed and instruction as appropriate.

- **Practice.** Once new knowledge and skills have been acquired, children enjoy practicing what they have learned. For example, when Ms. Bendick suggested substituting a new finger play to replace the familiar apple-picking activity at the beginning of large group, she was met with resistance from a number of children who weren’t yet ready to give it up. When Ezra understood that the push-cart could stand on end, he delighted in going through the entire process, again and again. The expression on his face each time it balanced without holding on to it registered both pride and satisfaction that he had discovered something new and exciting. You will need to offer plenty of time for this important phase as well as find ways to vary the practice conditions to sustain children’s interest.
• **Generalization.** Eventually, sufficient practice results in a child’s ability to apply the newly learned skills in a variety of ways and in new circumstances. In the process of doing so, new discoveries are made that prompt reentry into the cycle of learning at the awareness phase. Once most of Ms. Bendick’s children had internalized one-to-one correspondence, they began to count with real understanding. She introduced various activities where she had children comparing, matching, and sorting groups of objects into sets. A favorite game was when Ms. Bendick wrote a number on the white board and then played “More or Less Than” by showing an array of objects on a tray. It didn’t take children long to guess the correct answer.

The nine principles discussed earlier in the chapter and in Table 2.2 about child development and learning are central to your becoming an effective teacher. However, that alone will not be sufficient to ensure that your teaching will be of high quality (Mellor, 2007). The next step is to become very familiar with content in early childhood education and the content standards that provide an agreed-upon agenda for teaching and learning.

**Early Childhood Educators Need to Know About Content**

Where do butterflies go when it rains?
How many is this?
What does this say?

Children want to know all about the world and how it works. To guide them in their quest for new knowledge and understanding, you must know a lot about the world yourself so you can provide accurate information and relevant experiences. Thus, you need a broad grasp of content knowledge in the following disciplines:

• Language and literacy
• The arts
• Mathematics
• Health and fitness
• Science
• Social studies

In addition, it is likely that your center or school will have established content standards or quality guidelines, you will be expected to address in your classroom. For example, a common science standard for PK–2 is for children to recognize that animals and plants are living things that grow, reproduce, and need food, air, and water to survive. An early literacy standard is for children to understand the relationship between letters and sounds. These standards are grounded in the disciplines just described and, when carefully developed, provide teachers with a credible source for developing early childhood curricula (Seefeldt, 2005). The best standards come about through the collective thinking of experts in the field, giving practitioners access to an agreed-upon agenda for teaching and learning.

You can become familiar with the content standards published by various groups by searching on the web for those published by your state department of education, by individual school districts where you might teach, by Head Start, by various professional societies (e.g., National Council of Teachers of Mathematics or NCTM), and by the National Association for the Education of Young Children (NAEYC.org). A strong
An effort is currently underway to produce national standards for mathematics, language arts, science, and social studies, and some school districts are considering adopting these for their elementary and secondary programs. Most states and school districts have created downward extensions in these disciplines for their preschool programs, and many childcare centers have also developed written plans for what they want children to learn.

Children benefit when standards are used wisely. However, you will want to be aware of certain challenges you may face during implementation and how to address them:

1. **Too many standards.** As you will find, there is a dizzying array of early childhood standards from a number of sources. Sometimes they duplicate one another and sometimes they contradict one another. Sorting through all of these can be eye opening but also confusing and time consuming. In Chapters 9 to 15 in this text, you will see a listing of goals for each of the curricular domains. These are arranged in sequence from the most basic to more challenging. Each addresses expectations for what children should know and be able to do from 3 to 6 years of age.

2. **Standards that are inappropriate.** At times, standards are developed by content experts or by committees dominated by individuals focused on older children and without input from early childhood educators. As a result, some standards are not age appropriate. The standard may be too abstract or not fit the criteria of individual and cultural appropriateness that governs DAP, depending on children’s backgrounds, special needs, and experience. You can assess the appropriateness of standards that are provided to you (or are being developed by your center or district) by asking the following questions (Seefeldt, 2005, pp. 22–23):
   - From the body of knowledge addressed by this standard, what seems to be most meaningful to children this age? What is most meaningful for the particular children in your classroom?
   - What facet of this standard might a beginner need to know?
   - What do the children already know about this standard?
   - What can children learn through firsthand experience related to this standard?
   - How can this standard be integrated with what children are already experiencing in your classroom?

3. **Standards that are expected to be implemented in a lockstep fashion and according to a rigid timetable.** Standards may be well written and even developmentally appropriate. However, there may be unrealistic expectations by program developers about how they are to be covered, not taking into consideration the individual needs of the children in the program or variations in their rates of development and learning. This can be highly stressful unless teachers understand ways to integrate standards throughout the day and are confident that well-planned activities that range over the curriculum will naturally support the required content. Remember that children do not accomplish any standard through a single activity or all in one day. Observe carefully to see how each child responds to activities you have planned, where he or she is in the learning cycle, and what other kinds of learning materials or experiences you can provide to bring each student closer to achieving the skills and concept that need to be learned. There are strategies that will increase your effectiveness with every child, and they are highlighted in this next section.

### Early Childhood Educators Need to Know About Effective Teaching Strategies

Because young children develop and learn in many ways, the teaching strategies that support their learning also vary greatly. Core strategies that you will use regularly are highlighted in this section. You’ll see that they vary in type, complexity, and degree...
Early Childhood Educators Need to Know About Effective Teaching Strategies

of teacher direction needed. They will help you prepare the learning environment, encourage children's participation, and facilitate understanding.

**STRATEGIES FOR PREPARING THE LEARNING ENVIRONMENT**

**SENSORY ENGAGEMENT**

Because all of children's learning begins with perception (seeing, hearing, touching, tasting, and smelling), plan to include a high level of sensory engagement in your program. Find ways to give children direct contact with real objects, people, places, and events (Armstrong, 2006). If no firsthand experience is possible, seriously consider whether the activity is age appropriate. The younger the children, the more you should rely on firsthand involvement.

**ENVIRONMENTAL CUES**

You can use many physical clues to help children know what is expected of them in your classroom. For example, after showing it to children in large group, you may post a **pictogram or rebus chart** by the snack center, showing the steps for preparing individual carrot salads (see Figure 2.4). There may be four places at a table with play dough but only two rolling pins, signaling to the children that these are to be shared. A small center meant for only four children at a time might be managed by putting a sign with the number 4 and four dots. These nonverbal signals foster independence, cooperation, and self-regulation in the children.

**TASK ANALYSIS**

The strategy of **task analysis** involves thinking in advance about a sequence of steps children might follow to achieve some multi-step behavior, such as getting dressed or planting a garden. For example, your goal may be to have children clear their places independently after snack and lunch. However, expecting 4-year-olds to know exactly how to do this without any instruction or modeling is unrealistic. The first thing to do is to consider the knowledge, skills, and procedures necessary to complete the task. Do the children know where the basket is to empty their plates? How should they be taught to carry their plates so that uneaten food doesn’t spill on the floor before they get to the basket? How do you scrape a plate and make sure it goes in the basket and not on the floor? Where do they put their plates once they’re scraped? What do they do with their cups? Do you expect them to wash their hands afterwards before they select a book? Do you teach only a couple of steps at a time or do you model the entire procedure to children? Thinking all of this through carefully before-hand will eliminate confusion and distress on the part of the children and, realistically, a lot of aggravation and backtracking for you.

**STRATEGIES TO ENCOURAGE AND ENHANCE PARTICIPATION**

**INVITATIONS**

Invitations to join you or their peers promote feelings of belonging among children: “Here’s a place for you, right next to me.” Or, “Jack was looking for you. Come play here with him.” Children are quite different in the way they initially navigate a room, even if the activities you’ve planned are appealing. Some need no encouragement to take part; others will drift from place to place or only watch what other children are doing. Even then, they may be reluctant to join without a special role to play or
materials to use ("Kendra, I need someone to stir this cake for our bakery. Come and help me."). It helps to plan what you might say in advance, just in case some children need a bit more support.

**BEHAVIOR REFLECTIONS**

Behavior reflections provide verbal feedback to children about actions they are taking (Kostelnik, Whiren, Soderman, & Gregory, 2011). They are nonjudgmental statements that describe children’s actions and are intended simply to draw children’s attention to certain aspects of an experience or enhance their receptive and expressive vocabulary. “You are building with blue blocks.” Or, “You are making bubbles.” Such statements do not interrupt children’s activity or require children to respond in words. However, they do increase children’s self-awareness and encourage children to maintain their focus. For example, Jorge has blue, yellow, and red paint available to him and is painting yellow over what is apparently a foundation of blue grass. His teacher remarks in passing, “Jorge, you’ve found a way to create green grass with no green paint. That took some thinking!” While Jorge doesn’t respond verbally, the slight smile that appears on his face indicates he is pleased his teacher noticed his achievement.

**PARAPHRASE REFLECTIONS**

Paraphrase reflections restate in your words something a child has said. These reflections (often termed *active listening*) are similar to behavioral reflections in that they are also nonjudgmental; however, they are intended to expand the child’s vocabulary and grammatical structures. There are a number of other benefits, as well. Think about a situation where Alma is watching two fish swimming together in a bowl and points, wanting her teacher to notice. “Fish,” she says.

Her teacher responds, “You’ve been observing those two fish and have noticed that one seems to be taking the lead.”

“The big fish,” Alma agrees.

“Ah,” says the teacher. “The big fish may be teaching something to the smaller fish.”

Taking time to have a conversation like this with a child develops positive relationships between teacher and child and enhances the learning climate significantly in the early childhood classroom. It helps both the teacher and the child refine and clarify key concepts and messages. Teachers also learn more about children’s interests and ways to shape instruction and future planning.

**DO-IT SIGNALS AND CHALLENGES**

Simple directions to children, such as “Watch me,” “Tell me what you see,” “Put together the blocks that are alike,” “Listen for the word *dinosaur* as I read this book” are called do-it signals. You’ll notice that they all begin with a verb, that they are brief, and that they are intended to prompt children to take action. Using them consistently, teachers can evaluate what children understand and where they still need help or additional experience.

Do-it signals should not be phrased as questions. They should be phrased as positive statements that give children a clear idea about what you’d like them to do. For example, questions such as, “Can you take this to your cubby for me?” “Take
this to your cubby, okay?” or “Would you like to put this in your cubby?” may result in the child deciding not to do what you’ve asked and require another request from you. Be clear and direct: “Take this to your cubby, please.”

Challenges are open-ended variations of do-it signals that motivate children to create their own solutions to teacher-suggested tasks. For example, instead of simply saying, “Walk quietly down the hall,” a teacher may ask a group of 4-year-olds in a whisper: “Think of a way that we can be as quiet as possible so that no one can hear us while we’re walking down the hall today. How can we do this?” In the block area, you might challenge the children to use a certain number of blocks and see how many different structures they can create with that amount.

**EFFECTIVE PRAISE**

Did you know that some forms of praise are not always helpful to young children and that praise can even lower children’s self-confidence and inhibit achievement (Miller, 2009)? If you want to promote positive behavior and encourage children to persist at a task, you will want to differentiate between the use of effective and ineffective praise. Saying something like, “Good job” or “Wow! Way to go!” is ineffective because it is general, repetitive, and not very genuine. Ineffective praise also evaluates children, compares them with one another in unfavorable ways, or may imply to children that they were successful because of luck. Thus, your “praise” may serve no other purpose than to interrupt their focus. Conversely, effective praise is very specific (e.g., “You finally found the right key to open that lock.” “You stayed with it until you did!”), links their success to effort and ability, fits individual children and the situation, and may compare their progress with their past performance. It is nonintrusive in that it can be delivered in passing to acknowledge effort and outcome without requiring any response from the child.

**STRATEGIES TO FACILITATE UNDERSTANDING AND PROMPT FURTHER LEARNING**

**TELLING, EXPLAINING, AND INFORMING**

Giving children appropriate information involves more than simply lecturing. It involves looking at the experiences you plan and the age-appropriate information children need to learn and anticipating the questions they may ask spontaneously. This is why effective teachers take time to gain sufficient background before introducing new information. Planning a recent trip to the aquarium, Ms. Crawford visits it ahead of time, talking with aquarium staff about the kinds of sea creatures the children will see, how the museum obtained them, and a little bit about how they are taken care of. Still not satisfied, she learns still more on the Internet and downloads pictures of fish she knows the children will see. She shows the children a picture of Otto the puffer fish, who can grow to twice his normal size by swallowing air or water when he is afraid. She also shares a picture of Barney the barrel-eye fish that has a transparent head and two barrel-like eyes that rotate or turn when looking for food. To help the children understand what “transparent” means, she shows them a clear baggy filled with water and another one that is opaque.

As noted earlier in the chapter, children must be told the names of things and about conventional facts and behaviors that they would not discover on their own. When you want to convey this kind of information to children, explain new
concepts in relation to familiar skills and situations they have already experienced. Whenever possible, take advantage of “teachable moments”: those times when new information makes the best sense to children because it helps them with an issue, question, or problem they have at the present moment. For example, when children are using brushes and pails of water to write on the sidewalk under a sunny sky, it would be an opportune time to talk about evaporation and to experiment with how long it takes for certain amounts of water to turn into vapor and disappear. In doing so, a teacher would be conveying information through telling, but supporting her explanation with hands-on involvement by the children to enhance understanding.

**CHAINING AND SUCCESSIVE APPROXIMATION**

Sometimes, what you want to teach to children seems too complex to teach all at once. It may be age appropriate, but they may benefit when you build the task up a little at a time—called chaining (Malott & Trojan, 2008). After you have done a task analysis to sequence the series of steps necessary, introduce the steps one at a time, building patiently on one and then another until there is total completion of a task. For example, you would not expect children who are just beginning to write their names to be totally accurate. You might begin by drawing their attention to the shape of the letters on their name tags, dismissing them at large group with signs of their first name and other name-related activities. You could eventually introduce a “sign-up sheet” on the writing table with their first names printed individually and a space for them to copy it, accepting their initial attempts with encouraging comments. Later, you may call each child’s attention to using upper and lower case and help them with reversals. Once they have had time to practice the first name and it becomes fairly automatic, introduce a model of their entire name on the daily sign-in sheet and have them try, asking them to write both names on all of their work every day.

**Successive approximation** is a bit different. It involves modeling the entire task all at once and then gradually shaping behavior so that children’s responses become more and more accurate. For example, remember our example of children clearing their places after snack and lunch. That might be a time when you can model the entire sequence (it may take more than once, of course) and then assist children in becoming more and more successful each day as they go through the process. For example, you would encourage them to do all the steps you modeled to them as well as they could and narrow your focus each day on teaching one of the steps in more depth (e.g., making sure that everyone knows where the basket is to empty their plates) until everyone is able to do each of the steps well.

**MODELING AND DEMONSTRATING**

Think of something new that you have learned to do this year and how you learned to do it. Often, it is much easier (and quicker) to watch someone do what we want to learn—that is, to watch someone model and demonstrate—than simply to read about it or be told how to do it. Most of what we have learned to do in life has been through imitating others. This includes how we learned to take care of our self needs, how we learned to play games, use a computer, interact with others in social situations, write, and perform hundreds of others skills that we no longer have to think about as we do them.
Children have much to learn, and they profit enormously when adults show them new or more appropriate behaviors by:

1. Drawing children’s attention to what we want them to learn or do.
2. Describing in simple language what we want them to do while showing them how to do it.
3. Having children repeat in words or actions what we want them to do.

GUIDED PRACTICE AND REPETITION
Real learning does not occur in a single episode. To have children internalize skills or concepts, they need many, many opportunities to practice what they are learning and to apply it in new situations. You can provide for this in your classroom by including the following experiences that allow for guided practice and repetition:

- **Rehearsal.** Children may watch the teacher model purchasing some things in the play store that has been set up and then have an opportunity to play store themselves. They can be helped to take various roles, moving through the process of being both a seller and a buyer for a couple of weeks before the dramatic play area is reassembled into something else.
- **Repeating an activity with variations.** The play store could be a grocery store initially, eventually turn into a jewelry store, and subsequently be a shoe store.
- **Elaborations.** The teacher may suggest that children make menus for the restaurant they have set up in the dramatic play area, provide “take out” for their customers, create pizzas to sell the next day, or keep track of the number of customers they have during the morning.

QUESTIONS
Questions are basic instructional tools in any educational setting. However, you need to be careful that the questions you ask are:

- Purposeful and tied directly to the objectives you are trying to teach
- Thought-provoking so that they go beyond the obvious to stimulate higher levels of thinking
- Clear and understandable
- Brief and to the point

Develop the habit of asking children open-ended questions that require more than one word or yes/no responses. There are many ways to do this, depending on your goals for children (see Table 2.4).

Closed-ended questions are appropriate in functional situations in which critical thinking is not necessary (Epstein, 2007). For example, at snack, when Ms. Gage asks Mandy, “Would you like some melon?” she is not expecting anything more from Mandy than, “Yes, please” or “No, thank you.” The preference for asking open-ended questions in early childhood settings is an important one because it prompts children to offer opinions and to think in new and different ways (Charlesworth & Lind, 2010).

In addition to becoming expert at asking open-ended questions, you’ll also want to keep a few other factors in mind (Kilmer & Hofman, 1995; Marzano, 2003):

- **Limit amount.** Ask only one question at a time and plan your questions carefully.
- **Provide time.** Give children enough time to respond to a question. Wait several seconds for children to answer. Do not appear impatient or undermine their
thinking by answering your own questions or always calling on children who readily volunteer answers.

- **Use do-it signals.** Phrase some of your questions as do-it signals to add variety: “Show me how you might divide this cookie into three parts.”
- **Ask all.** Phrase questions to the entire group of children, not only to individuals: “Let’s all think of a way we could share this play dough.”
- **Listen and reflect.** Listen carefully to children’s responses. Acknowledge their remarks by using behavior reflections and paraphrase reflections. Focus on the process of their thinking, not merely the correctness of their response.
- **Redirect.** If a child’s answer indicates a lack of understanding, follow up: “Mmmm. Tell me more about why you think that.” Or “Why do you think those two go together?” Children sometimes make connections that are reasonable to them but less obvious to an adult.
- **Address misconceptions.** If a child’s answer to a question indicates a true misconception, handle the situation matter-of-factly. Paraphrase the child’s idea and then offer more accurate information: “You think the cars go in the block bin because we played with the cars and trucks together here. The cars have their own special place so we can find them if we want to use them for something else. Put them in this basket, please.”

### Table 2.4 • Open-Ended Questions

<table>
<thead>
<tr>
<th>TO ENHANCE CHILDREN’S ABILITY TO</th>
<th>SAMPLE QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observe</td>
<td>What do you see/hear/smell/taste/feel?</td>
</tr>
<tr>
<td>Reconstruct previous experiences</td>
<td>What happened the last time we mixed two different colors?</td>
</tr>
<tr>
<td>Relate cause and effect</td>
<td>What happens when/if you do...?</td>
</tr>
<tr>
<td>Predict</td>
<td>What do you think will happen next?</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Which of these is your favorite? Why?</td>
</tr>
<tr>
<td>Generalize</td>
<td>Now that we made these sets of the same, what happens if I add one more object to this set?</td>
</tr>
<tr>
<td>Compare</td>
<td>How are these the same? Different?</td>
</tr>
<tr>
<td>Reason</td>
<td>Why do you think we have that rule?</td>
</tr>
<tr>
<td>Discriminate among objects/events</td>
<td>Which one of these doesn’t belong?</td>
</tr>
<tr>
<td>Solve problems</td>
<td>How can we keep the paint from dripping?</td>
</tr>
<tr>
<td>Quantify</td>
<td>How many? How long? How far?</td>
</tr>
<tr>
<td>Imagine something</td>
<td>What if we lived outdoors instead of in a house?</td>
</tr>
<tr>
<td>Propose alternatives</td>
<td>In what other way could we group these?</td>
</tr>
<tr>
<td>Utilize factual knowledge</td>
<td>Given what you learned about why objects sink or float, what do you think will happen if I push this ball under the water?</td>
</tr>
<tr>
<td>Infer</td>
<td>Why do you think it happened?</td>
</tr>
<tr>
<td>Become aware of their thinking processes</td>
<td>How did you know....? Why did you decide....?</td>
</tr>
<tr>
<td>Apply</td>
<td>How can you use what you learned?</td>
</tr>
<tr>
<td>Make decisions</td>
<td>What do you think we should do?</td>
</tr>
<tr>
<td>Communicate</td>
<td>How can you share with others what you think?</td>
</tr>
</tbody>
</table>
SCAFFOLDING

What happens when a child becomes stuck and is unable to move forward with a particular skill or concept? In any learning process or continuum, the learner has what Russian psychologist Lev Vygotsky called a zone of proximal development (ZPD) or the difference between (1) a learner’s ability to solve a problem independently and (2) the learner’s “maximally assisted” problem-solving ability under the guidance and in collaboration with an adult or a more knowledgeable peer (Vygotsky, 1979). Providing this kind of guidance is called scaffolding. As the child and partner work together toward a common goal (for example, understanding patterns and how to change them), the child stretches to understand the new information. At the same time, the child is helped by the teacher pointing out the connection between what he or she already understands and the new skill or concept.

Vygotsky believed that it was important not to work outside of the child’s ZPD. However, he was also certain that it was important not to have children spending time on what they had already mastered. Adults, he believed, needed to be constantly nudging children to move along on the developmental pathway toward more complex learning. Scaffolding is likely to be more successful if the following is true (Soderman, Gregory, & McCarty, 2005):

- Rapport has been established between the teacher and the learner.
- The coaching adult or peer is sensitive to the child’s responses.
- The task is neither too tough nor too easy.
- The adult or more experienced peer knows when to back away and let the child take the next step.
- The coach lets the child control the activity as much as possible, gradually relinquishing support.

It is important that teachers recognize and respect the value of peers to act as scaffolders, for children are often quick to pay attention when another child attempts to show them how to do something (for example, how to tie shoes, make the letter B, or work the water fountain). Purposefully placing a child with a more knowledgeable classmate for a task or in a group where at least one other child has more advanced knowledge or skills multiplies a teacher’s ability to be effective and a child’s chances to be successful.

SILENCE

Sometimes, the best strategy to support children’s involvement and learning is to remain silent. As previously noted, we want to give children time to think about open-ended questions. We also need to be sensitive about interrupting children who are having a discussion about something that is important to them, intensely involved in dramatic play where each child is playing a role, or deep in thought about what they are painting or constructing. Children view the learning environment as more supportive and respectful when teachers refrain from inserting themselves into the center of every interaction.

As you gain experience in applying these varied strategies thoughtfully and skillfully, your competence and confidence will also expand. Watch to see how knowledgeable educators use each of these tactics and in what kinds of situations they employ them with young children.

Meeting the Needs of Diverse Learners

In Chapter 1, you learned about considerations that would help you be successful in serving children with diverse cultural and linguistic backgrounds and those with
a variety of abilities. Being able to adapt what we are doing in the classroom to support every learner is the essence in delivering high-quality DAP programs.

Strategizing to accommodate the needs of individual children calls for understanding what each of them can do independently and what they can do if they had additional support from a peer or teacher mentor. Stretching children’s abilities and moving them toward mastery of certain skills represents higher-order learning. This will call for your assessment of where children are having difficulty in moving to the next step in applying what they have already learned or simply at a stand-still and not progressing. Your ability to do this will keep children from feeling overwhelmed by a task or unable to move on because they don’t know what the next step is. Again, remember that children at a more advanced level of understanding may also be good teachers in helping their peers move forward.

Communicating with Families

One thing to keep in mind when teaching children is that parents appreciate and need ongoing reassurance that their children are safe, receiving a good education, and learning every day to work and play well with others. Some may be vocal and tell you about worries they have. Others may not. Keep on top of issues by finding ways to establish healthy two-way lines of communication with each family. Some questions families have may be taken care of by telephone or e-mail. Others may require a face-to-face meeting with enough time for family members and teachers to discuss topics of importance, to find areas of agreement, and to work toward resolution of concerns. In Figure 2.5, see how one teacher addressed a few parents’ questions about why the preschool children were allowed so much time for play when ‘they could just do that at home.’ In a respectful way, she made sure to get a critical point across about the developmental issues involved in balancing free play and directed teaching time effectively.

In this chapter, you have learned about the foundations of teaching and learning within a developmentally appropriate framework. Now, you are ready to set the stage for children’s learning, and the first step will involve using the effective child guidance strategies that will be discussed in Chapter 3.

NEWSLETTER/WEB READY COMMUNICATION

FIGURE 2.5 • Developmentally Appropriate Activities in Your Child’s Classroom

Our goal here at Wexton Elementary School is to strike a good balance in each classroom between activities your child initiates and those more formally planned by our teachers. Research strongly suggests that this is the most successful way to teach young children new skills, expand their understanding of the world, foster language growth, and encourage self-control and friendship building. You’ll notice that for our 3- and 4-year-olds, the balance is tipped in favor of more time for children to choose activities of interest. This helps accommodate their growing attention span, need for individual attention and language building, and motivation to learn through play. For our 5-year-olds, you’ll find there is somewhat more teacher-directed activity. In both cases, however, teachers carefully construct the learning environment and are thoughtful about the kinds of materials they highlight in order to focus your child’s attention toward exploring and experimenting with what is provided in the classroom each day.

Plan to visit our parent website to read about the themes your child’s teacher has planned and ideas for connecting learning at home with what goes on at school. Teachers share information about favorite books being read in the classroom, and you might consider checking out some of them at your local library. Ask your child to teach you some of the finger plays or songs he or she is learning. Children love to be the teacher!
Applying What You’ve Learned

1. **Remembering the Principles.** In this chapter, nine principles of child development and learning were described. See how well you remember each of these and name specific practices you will implement in your own teaching to make sure each is acknowledged.

2. **Recycling.** Think about a new skill or concept you have learned in the last year or two. Connect it to the cycle of learning described in this chapter and reflect on each phase—awareness, exploration, acquisition, practice, and generalization. How confident are you that you have mastered the skill or concept?

3. **Exploring Content.** Visit a college, university, or community bookstore. What do they carry in terms of content-related ideas for teaching young children? Would suggestions for implementing these ideas support the content and standards approved by your program? What are the names of three books that seem to provide the highest-quality activities and engaging experiences for a classroom of 3- to 6-year-olds?

4. **Strategizing.** Go back to look at the various categories of strategies described in this chapter. Which one seems the easiest and most comfortable at this point in your own development as an early childhood educator? Which one would you need additional time and practice with? Where do you believe you can gain that practice before you actually have to carry the strategy out independently with a class of young children?

5. **Twenty Questions.** Do a self-survey to determine whether you are in the habit of asking mostly open-ended or closed questions. Keep track of the next 20 times you ask a question of someone in a conversation (remember that functional questions require only a yes/no or one word answer, so don’t count those). How many times did you ask a closed question? Challenge yourself for the next 20 times to ask only open-ended questions. Did this have any effect on the quality of your conversations?

6. **Adaptations.** Observe an early childhood classroom and describe three ways you saw adults adapt their teaching strategies to the diverse needs of children with whom they were interacting.

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**References**


