

THIRD EDITION

# *Creating* ENVIRONMENTS *for* LEARNING

BIRTH TO AGE EIGHT



JULIE BULLARD

# Creating Environments for Learning

## Birth to Age Eight

*Third Edition*

**Julie Bullard**

*University of Montana*

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For my sister, Nancy Boothe, who displayed courage, fortitude, an indomitable spirit, and a positive attitude in spite of severe disabilities and life-threatening illnesses. She was an inspiration to everyone who knew her.

# About the Author



Julie Bullard is an early childhood professor at the University of Montana. During her 35 years in the early childhood field, she has been a preschool and elementary teacher, childcare director, and Head Start administrator, and has taught adults receiving CDAs, associate degrees, and bachelor's degrees in early childhood as well as students receiving master's degrees in curriculum and instruction. Julie has taught higher education coursework

both face-to-face and online for over 20 years and was named the Carnegie Professor of the Year for Montana in 2011. She also received the 2015 National Association of Early Childhood Teacher Educators (NAECTE) Outstanding Early Childhood Teacher Educator Award.

Julie has had a passion for the importance of the early learning environment since completing coursework in architecture more than 30 years ago. She also has a special interest in curricular standards and has served on several state and national committees that are working on developing and implementing standards using play-based curriculum. She has served on the National Association for the Education of Young Children (NAEYC) Professional Development Panel, as a national reviewer of early childhood higher education programs, and on an oversight committee for NAEYC/NCATE accreditation. Julie served on an NAEYC committee to revise the national early childhood higher education standards. She was on the National Council for Accreditation of Teacher Education Board of Examiners (NCATE BOE), is a Council for the Accreditation of Educator Preparation (CAEP) reviewer, and is on the editorial board for the *Journal of Early Childhood Teacher Education*. She has been involved in the development of the Montana early childhood knowledge base, infant–toddler guidelines, preschool guidelines, kindergarten standards, and early childhood and elementary higher education standards. Julie received her doctorate from Montana State University.



# Preface

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*Creating Environments for Learning: Birth to Age Eight* is designed for college courses taught at 2- and 4-year institutions that focus on quality early childhood learning environments and curriculum. The book's content spans the birth to age 8 range and is appropriate for teachers-in-training as well as practicing teachers in family childcare homes, childcare centers, preschools, or elementary schools.

How did this book come to be written? Philosophically, I value play as the primary way of learning for young children and have become increasingly alarmed that children's time for play is disappearing. Through play, children construct knowledge by engaging in self-chosen, integrated experiences at their ideal levels of development. Play is a time-honored, tested, and valued method of learning in early childhood.

Why has play diminished in early childhood settings? I believe this has occurred for several reasons. As we've entered the era of accountability, teachers worry about whether children will be able to achieve all the standards or outcomes if they are involved in self-chosen activities. Additionally, children now spend many more years in group settings. Children may find the same materials present for several years as they stay in the same classroom or even when they move from classroom to classroom. Boredom due to lack of challenging and interesting environments results in children displaying behavioral issues. Teachers often mistakenly reduce the amount of play in favor of more teacher-controlled groups, hoping to manage children's behavior. Finally, in an overemphasis on safety and cleanliness, we've often stripped children's environments and lives of many types of experiences and challenges.

In the past, many teachers believed that play was the only catalyst for learning. However, most teachers now realize that children's learning through play is profoundly affected by the social and physical environments. If we want to prevent boredom and help children meet outcomes primarily through play, we need to intentionally design environments that provide children with the materials, tools, and challenges that allow development to flourish. For children to gain the most from play, we also need to be available to scaffold children's learning.

I believe that if we want to preserve play, we must ensure that teachers are able to integrate developmental and curricular outcomes into play-based learning. To do this, teachers must have a deep understanding of the outcomes they want to achieve, know how to design a "rich" environment to realize the desired outcomes, and understand their role as facilitators. Quality environments are the foundation upon which a quality, play-based curriculum is built.

## Important Elements in a Resource for Designing Environments for Learning

How do we learn about quality environments? Our Montana early childhood higher education program demonstrates the belief in the importance of the environment by requiring a course on early childhood learning environments. The following are the criteria we want a textbook resource to possess. In developing and writing this textbook, I have strived to meet each of these criteria:

**We want a textbook that not only provides basic information on environments, but also helps students to see environmental possibilities.** To enhance children's learning, teachers must be able to develop "rich" environments, but to do so teachers must have a firm foundation of knowledge. The book provides students the foundation of knowledge they need to design "rich" environments.





**We want students to consider early childhood theories, child development, current research, and curriculum standards and outcomes in designing environments.** For students to understand the importance of these areas, they are transparent in the textbook, with specific research information and citations. Research and theory are then translated into practice and are written in user-friendly language. Since many early childhood programs struggle with financial barriers, the book contains many practical, inexpensive ideas.

**It is also important that the interests, developmental levels, and cultural and geographic backgrounds of the children in the classroom be considered in establishing environments.** The book provides information and an abundance of examples that assist students in seeing that every effective early childhood environment will be unique based upon these criteria and that a cookie-cutter approach will not be effective.

**Finally, the book needs to cover the entire early childhood age range, from birth to age 8.** Even if students will work exclusively in pre-K programs, they need to understand the full early childhood age range since many pre-K children will be developmentally advanced and ready for more challenging activities. The book covers the entire early childhood range.

## New to This Edition

This book continues to meet the philosophy previously stated and the goals set forth for earlier editions of the book. However, this third edition expands upon this foundation by providing **additional information about how this philosophy translates into K–3rd grade classrooms.** Current and future teachers must also be prepared to use the latest research as they design their early childhood environments, plan curriculum, and defend the use of play as a teaching method. Therefore, this revised edition provides the most up-to-date **information on research, curriculum standards, and play-based learning.** Furthermore, this edition continues to focus on creating a resource that is **practical, interesting, and understandable through examples and photos.** An addition to this third edition is a section in most chapters on **designing your own teaching and learning materials.** An exciting aspect of this new book is the **opportunity for students to continually assess their understanding of key concepts** through pop up short-answer and multiple-choice quizzes in the Pearson eText, which has been enhanced since the last edition. Here is a list of the key changes to this edition:

- **Additional sections on meeting the needs of children K–3** were added to many chapters. These sections assist students in understanding how this philosophy applies to children in elementary schools.
- Twenty percent of the **research** cited in the book is new. This includes 180 new research references. It is crucial that students receive up-to-date information that is supported by research, allowing them to make research-informed decisions and to defend their practices based upon research.
- **Thirty-six new or updated figures and tables** call attention to important and timely information. For example, a new figure on strategies for working with dual-language learners will assist students to meet the needs of this group of children.
- There is more **emphasis on the Common Core State Standards (CCSS)** and the addition of **new curriculum standards** in this textbook. For example, new national standards on the arts were incorporated into the music and art chapters. As a result of these new standards, dance was added to the music chapter. To preserve play, students must understand the standards and how these standards can be integrated into a play-based environment.



- In addition to an updated chapter on technology, **technology resources** have been integrated throughout the chapters. For example, there is a section on choosing e-books in the literacy chapter and apps to accompany different units in the science chapter. Technology, when well chosen, can assist in the learning process. It is important that students are able to effectively critique technology and use it wisely.
- **Short answer “Check Your Understanding” assessments (in the Pearson eText) at the end of each major heading** allow students to continually assess their understanding of chapter content and concepts. These authentic tasks and scenarios allow students to apply what they have just learned. For example, when learning about appropriate schedules, the student is then asked to critique a schedule. Answers and feedback are immediately available so that students can determine whether they understand the section or whether they should review it again.
- **A short, digital multiple-choice quiz at the end of each chapter in the Pearson eText** allows students to assess their overall understanding of chapter concepts. In addition to providing the correct answer, the student receives feedback about why this is the correct answer and why the other answers are incorrect. This helps to reinforce understanding.
- A new special section in most chapters called **“Create Your Own”** provides photos and directions for creating teaching tools that are inexpensive, durable, appropriate for a range of ages, hands-on, and rich in play value. For example, the “Create Your Own Ball Roll” is made from empty water bottles and magnetic tape. The ball rolls are placed on an auto magnetic drip pan, allowing children to experiment with different patterns as they arrange the ball rolls.
- **Additional videos** are embedded throughout the chapters, allowing students enhanced learning opportunities and the ability to learn using more than one modality.
- **More theorists** have been added to the textbook, including information on Steiner, Maslow, and Erickson, providing a context for students’ learning.
- A pop-up **glossary** has been added to the Pearson eText, permitting students to easily check or clarify the meaning of a term.

## Features of This Text

This textbook combines “the basics” or foundational information about how to arrange an environment with an exploration of the characteristics and abundant examples of centers rich with materials and possibilities. Several themes and features are embedded throughout the book.

- **Content and examples from each age group**—infants and toddlers, preschoolers, and primary grades—in the entire early childhood age span provide information on how to work with a variety of age groups.
- **Scenarios about children and teachers in classrooms** introduce each chapter, illustrating how research appears in practice.
- **Photos** from a variety of programs across the country are interwoven throughout the chapters, helping to illustrate points and bring theory and principles to life.
- The specific **role of the teacher** in relationship to each center provides information on how to facilitate learning (specifically, in promoting concept development and using and developing children’s vocabulary unique to each center).





- **Research citations** help students to understand the knowledge base upon which learning environments and curriculum are built.
- Specific topics and strategies assist students in understanding and meeting the needs of **diverse learners**, such as special sections on English language learners and children with attention deficit hyperactivity disorder.
- **Curricular standards** and **children’s developmental progression** related to each learning center assist students in understanding the goals and content to be facilitated in each learning center.
- Numerous examples provide information about how teachers consider children’s **individual needs and interests** when designing the environment and curriculum.
- Inexpensive **tips** for environmental design and materials and the “Create Your Own” feature provide practical ideas.
- **“Pop-up,” Interactive “Check Your Understanding” quizzes, end-of-chapter exercises, and Apply Your Knowledge** boxes found throughout the text help students apply and demonstrate their learning.
- **Embedded video links** help to deepen students’ understanding of concepts they’ve read about by seeing what they are reading about.
- Comprehensive **Environmental Checklists** at the end of each chapter provide a tool to assess early childhood environments and review chapter content.
- Content and examples from **a variety of settings**, such as special sections on family childcare and afterschool programs, allow students to see the application of information to different environments.

Throughout the book you will notice the term *teacher*. This is used as an inclusive term to designate providers, educarers, educators, and practitioners, whether working with infants, toddlers, preschoolers, or elementary-age children in home, center, or school settings. I hope that this text will inspire teaches to design environments for miracles where children learn through play, explore friendships, experience wonder and joy, and continually make new discoveries as they meet standards and learn needed content.

## Instructor Resources

The following instructor resources are available for instructors to download at [www.pearsonhighered.com](http://www.pearsonhighered.com). Click on *Educators*, then click on the *Download Instructor Resources* link.

- **Online Instructor’s Manual (013401460X)**. The *Instructor’s Manual* gives professors a variety of helpful resources supporting the text. These include chapter overviews, teaching strategies, classroom activities, and discussion questions.
- **Online Test Bank (0134037235)**. The *Test Bank* contains multiple-choice and essay (short-answer) questions. The items are designed to assess the student’s understanding of concepts and application to classrooms.
- **Online PowerPoint® Slides (0134015401)**. A collection of PowerPoint® slides is provided for each chapter.
- **Computerized Test Bank Software (0134014618)**. Known as TestGen, this computerized test bank software gives instructors electronic access to the Test Bank items, allowing them to create and customize exams. TestGen functions in a variety of learning management system (LMS) formats.
  - **Course Management**. The assessment items in the Test Bank have been converted to operate in a variety of LMS formats.



## Acknowledgments

There is a saying that it takes a village to raise a child. The same may be said about writing a textbook. A book is not written by an individual in isolation. Books build upon the research and knowledge of others. Others also provide support, encouragement, critiques, and examples. It would be impossible to list all of those who provided inspiration, support, and encouragement in writing this book. However, I would like to mention a few people who provided outstanding assistance. First, I want to thank my daughter, Lisa Bullard. Lisa reviewed, critiqued, and edited chapters; made trips across the country with me for photo shoots; provided sketches and personal photos; and provided examples of practice from her experience in a range of early childhood settings. Danny, Scott, and Christopher Bullard (my sons); Cassie Bergum and Cassie Schmit (their significant others); Justin O’Dea (my son-in-law); and Dave Browning (a special friend) also deserve thanks for the many ways they assisted with the book—creating props, and providing ideas, computer assistance, and photos—and for their patience with my preoccupation and the countless hours that I spent writing. I also want to thank my grandchildren (Seamus Bullard, Ember Bullard-O’Dea, Michael Stufflebean, and Suzi Stufflebean), who continue to be a source of delight, inspiration, photo subjects, and willing participants in trying out new ideas. Special thanks needs to go to Suzi, who is a wonderful illustrator and drew the fairies for the fairy garden. Finally, I want to thank my sister, Marysue Davis, for her dedication and strong commitment to family.

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# CHAPTER 1

## Understanding the Importance of the Environment

### Learning Outcomes

After reading this chapter, you will be prepared to:

- Explain why the environment is important in children's learning
- Explain the importance of play-based learning
- Describe how an effective environment supports developmentally appropriate principles
- Explain how behavioral issues can be reduced through environmental design
- Discuss how major theorists and early childhood approaches confirm the importance of the environment
- Describe the role of the teacher in creating effective learning environments



Cathy Jackson

**C**lose your eyes and visualize an environment from your childhood that evoked positive emotions. Remember how you felt when you spent time there. Think of the sounds, smells, and experiences in this place. Now sketch this special space, compose a brief poem depicting this place, or write a list of descriptive words that capture the essence of this environment.

*Over the past years, I have asked hundreds of students to engage in this exercise. There are common threads in the students' descriptions of their favorite places. These special places typically include exploration, rich sensory experiences often involving nature, and freedom to choose activities. This place was*





*a refuge that the student had in some way personalized or made his or her own. Is this true of your special environment?*

*Do the children you know or work with today have environments that meet these needs? This book will explore ways that allow us to create rich environments that become the kinds of places that children will remember as their favorites; places of rich sensory experiences, exploration, choice, and freedom—a personalized, pleasant refuge.*

## Why Is the Environment Important for Children's Learning?

The environment we are in affects our moods, ability to form relationships, effectiveness in work or play—even our health. In addition, the early childhood group environment has a very crucial role in children's learning and development for two important reasons.

First, young children are in the process of rapid brain development. In the early years, the brain develops more synapses or connections than it can possibly use. Those that are used by the child form strong connections, while the synapses that are not used are pruned away. Children's experiences help to make this determination. The National Scientific Council of the Developing Child compares the development of the brain to constructing a house, stating, "Just as a lack of the right materials can result in blueprints that change, the lack of appropriate experiences can lead to alterations in genetic plans." They further state, "Building more advanced cognitive, social, and emotional skills on a weak initial foundation of brain architecture is far more difficult and less effective than getting things right from the beginning" (National Scientific Council of the Developing Child 2007, p. 1). Because children's experiences are limited by their surroundings, the environment we provide for them has a crucial impact on the way the child's brain develops (Strong-Wilson & Ellis, 2007, p. 43). Not only does experience affect the development of the brain, but new research also reveals that the environment affects whether or how genes are expressed (National Scientific Council on the Developing Child, 2010).

The second reason that the early childhood group environment has such a strong role in children's development is because of the amount of time children spend in these environments. Many children spend a large portion of their wakeful hours in early childhood group settings. For example, a baby beginning child care will spend up to 12,000 hours in the program. This is more time than he or she will spend in both elementary and secondary school (Greenman, 2005a, p. 1). Children will typically spend another 4,000 hours in kindergarten through third-grade classrooms. It is important that these environments are high quality since this affects children's short- and long-term development. For example, many studies show that children in lower quality early learning environments have higher cortisol levels than children in higher quality environments. High cortisol levels are an indication of stress. Chronic levels of stress can have detrimental impacts on children's physical health, learning, and development (Sajaniemi et al., 2014).

The early childhood environment that this baby enters will reflect the teacher's philosophy, values, and beliefs about children and learning through either deliberate design or lackadaisical overlook. It provides messages to all those who enter—children, parents, and staff. Is this a place where I am welcomed and where my physical, social, and intellectual needs will be met? Is this an environment where I am seen as worthwhile and competent? Do I passively receive information in this environment, or am I actively engaging in the construction of knowledge? Is this a play-based environment? Does

▶ Watch the video to learn more about early brain development. How does experience shape brain development?

<https://www.youtube.com/watch?v=VNNsN9lJkws>



Julie Bullard

Clear glass containers highlight these natural and recycled materials. What is the message that this light table and materials provide to children?

someone think I am special enough to provide a beautiful environment for my benefit? Anita Rui Olds, a well-known environmental designer, believes that we should design our early childhood environments for miracles, not minimums. She states:

Children are miracles. Believing that every child is a miracle can transform the way we design for children's care. When we invite a miracle into our lives, we prepare ourselves and the environment around us. We may set out flowers or special offerings. We may cleanse ourselves, the space, or our thoughts of everything but the love inside us. We make it our job to create, with reverence and gratitude, a space that is worthy of a miracle! Action follows through. We can choose to change. We can choose to design spaces for miracles, not minimums. (Olds 2001, p. 13)



### Check Your Understanding 1.1

Click here to gauge your understanding of section concepts.

In this chapter we will examine the environment with regard to play-based learning and developmentally appropriate practice, discuss how environments reduce behavioral issues, review environments through the eyes of theorists, examine early childhood approaches that emphasize the environment, and finally examine the teacher's role in the environment. This chapter builds the foundation for the remaining chapters in the book, helping us on our quest to design environments for miracles.

## Why Is Play-Based Learning Important?

### Importance of Play

A well-designed environment allows children to participate in in-depth play opportunities. The environment "is the backdrop to play, supplying content, context, and meaning" (Cosco & Moore, 1999, p. 2). What is play? Although there are many definitions, most contain the following: play is voluntary, requires active involvement of the participants, involves **symbolic activity** (pretend is involved), is free from external rules with rules being determined by the players, focuses on the **process** (the act of creating) rather than the **product** (the final result), and is pleasurable (Sluss, 2005).

Why is play important? Play promotes social-emotional, literacy, cognitive, and self-regulation skills. In fact, many argue that for young children it may be one of the best vehicles for doing so. The value of play has a long history within early childhood. In the early 1800s, Froebel, often called the father of kindergarten, stated, "Play is the highest expression of human development in childhood for it alone is the free expression of what is in the child's soul" (Froebel, 1912, p. 50). Play continues to be valued in early childhood today as exemplified by its inclusion in the Developmentally Appropriate Practices principles, which were developed by the National Association for the Education of Young Children (NAEYC).

Play has been recognized globally as not only an important learning tool but also an important right for children. For example, play is included in the United Nations Convention on the Rights of the Child (1989), an international, legally binding instrument. Worldwide, all children engage in play. However, the cultural context determines how play is expressed, the role of adults in the play, the type of play that is encouraged



(whether individual or group), and gender roles in play (Johnson, Christie, & Wardle, 2005). Play allows children to practice cultural roles and to try out new roles. “During play, children not only explore and reproduce cultural roles and expectations of gender, race, and class, but also test and resist these cultural conventions as they set up and break down boundaries in their play groups” (Wohlwend, 2005, p. 78).

Through play, children learn the rules for social interaction, build social competence, practice cooperation, and gain confidence in working with others. While playing, they can adopt the persona of another, trying out their role and seeing a new perspective. Play allows children to “construct meaning from emotionally challenging experiences” (Haight, Black, Ostler, & Sheridan, 2006, p. 210). Additionally, play can help to alleviate stress (Hirsh-Pasek, Golinkoff, Berk, & Singer, 2009).

Play in a rich environment also provides the vehicle for optimal cognitive development (Hirsh-Pasek et al., 2009). During play, children actively participate in an integrated activity that is motivating and rewarding. This often involves solving complex dilemmas. Because the players control the action and the play script, the play is at the child’s ideal developmental level (Johnson et al., 2005). Play also encourages flexibility in thinking and risk taking (Sluss, 2005). Lev Vygotsky, a famous Russian theorist, believed that play served several additional purposes. First, play encourages abstract thought by separating meaning from an object. For example, a building block might become a boat, house, or phone. Second, play allows learning to be supported or scaffolded by more competent peers. Third, play encourages self-talk, which leads to greater self-regulation (Johnson et al., 2005). Self-regulation is critical for academic success allowing children to focus, pay attention to what is important, and exercise self-control (Johnson, Sevimli-Celik, & A-Mansour, 2013). Play also provides children with authentic reasons to use cognitive skills, such as writing an order while playing restaurant.

Children also gain language and literacy skills as they play using speech to define plots and to designate props. A research study that followed 74 children found that three dimensions accounted for later literacy success. These were extended discourse, exposure to varied vocabulary, and home and school environments that are cognitively and linguistically challenging (Dickinson & Tabors, 2002). A well-designed early childhood environment promotes all three of these dimensions. As children play in a rich environment, they engage in extended discourse in play. Varied vocabulary is enhanced as adults facilitate learning through items they place in the environment. The well-designed environment provides a variety of activities that offers challenges for children with different interests and developmental levels.

Play, particularly outdoors, is linked to many health benefits. Playing outdoors increases physical fitness and exercise, reduces obesity, and improves motor development and health outcomes. But, did you know that playing outdoors also enhances academic performance, social skills, and mental health (Gill, 2014)? See Chapter 17 for more information.

## What Are the Outcomes for Children in Play-Based Programs Versus Programs That Focus on Teacher-Directed Learning?

A long-term study examined the outcomes of preschool children that used a play-based approach versus direct instruction. The curriculums were:

- DISTAR—a direct instruction model with scripted lessons
- High/Scope—children learned through play in a well-developed environment; engaged in active learning of key experiences individually, in small groups, and in whole-class groups; used a plan, do, and review process
- traditional Nursery School—loosely structured setting where teachers’ responded to children’s self-initiated play, and used themes or topics of study



Watch the video to learn more about play. How is the value of play supported by research?

<https://www.youtube.com/watch?v=vnH4ljen70I&index=6&list=PLyizHCAockpoWzLf4kDaq3BirJXl5mEpR>



Although initially each of the models produced similar results in academic performance, longitudinal evidence showed differences between these models. These differences began to surface when children were examined at age 15 and were more pronounced when the same group was examined at age 23. For example, at age 23, the DISTAR group had three times as many felony arrests. Additionally, only 6% of children in the Nursery School model and the High/Scope model needed treatment for emotional disturbance compared to 47% in the DISTAR group (Schweinhart & Weikart, 1997). Researchers believe that the play-based learning promoted social competence and organizational skills in children that produced these long-term results (Heckman, Pinto, & Savelyev, 2013; Schweinhart & Weikart, 1997).

Another example is found when comparing preschools in Germany. In Germany in the 1970s many kindergartens began to use a more academic, teacher-directed approach. This change allowed researchers to examine the difference in achievement between children in 50 centers who were play-based versus children in 50 centers who were more teacher-directed. The study found that by the age of 10, children in the play-based programs had higher skills in math, reading, oral expression, and creativity. They also had better social and emotional adjustment (Darling-Hammond & Snyder, 1992). The results of this study caused most programs in Germany to return to play-based learning.

Another interesting large-scale study examined 632 programs and 1897 children in 10 different countries including the United States and countries in Europe and Asia. The study found that children in preschool settings where the predominant activity was free choice had better language performance at age 7 than programs where pre-academic activities or group social activities predominated. Children's cognitive performance at age 7 was higher when children spent less time in whole group activities and when the number and variety of materials available increased (Montie, Xiang, & Schweinhart, 2006).

But, what about primary-age children, can they still learn what is needed through a play-based environment? Let's look at one study that examined this. In this study the achievement of elementary children who were in a HighScope program were compared with children who were in other comparable classrooms. Most of the comparison classrooms used a more teacher-directed approach while in HighScope the children used play-based learning centers, where they engaged in self-initiated activities. The HighScope program also involved families. The children in the HighScope programs scored higher on achievement tests in the areas of reading, writing, language, math, science, and social studies (Schweinhart & Wallgren, 1993). Throughout the book, we will be looking at many more studies that examine play-based learning.

**Concerns about Lack of Play Opportunity.** Worldwide there is concern about the opportunity for children to participate in play. Poverty, violence, an overreliance on media entertainment, inadequate space, and an overemphasis on academics affect children's ability and time for play (Milteer et al., 2012). For example, studies in child care centers between 1982 and 2002 found that the prevalence of pretend play had dropped from 41% to 9% (Hirsch-Pasek et al., 2009).

In addition, time for play is reduced by changing cultural values, including valuing arranged, structured activities over free play. The International Play Association (1989), in response to these alarming trends, developed a Declaration of the Child's Right to Play. They stress that play is critical for children's physical health, mental health, and education, and that we must ensure that children have the opportunity to play in educational, family, and community settings. The American Academy of Pediatricians, also alarmed by the decreasing opportunities for play, developed a position statement stressing that play is needed for healthy development. They further state that while play promotes emotional development, the lack of play and free time can lead to stress, anxiety, and possibly depression in children (Ginsburg, 2007, p. 285).



Do children have the opportunity to play in early childhood environments? In pre-K programs, it is common for teachers to provide learning centers where children can play (Early et al., 2010). However, there is concern that this is not as evident as children get older. In *Crises in the Kindergarten: Why Children Need to Play in School*, the authors examined a variety of studies, including large studies conducted in New York City and Los Angeles. They found that while most classrooms have blocks, dramatic play materials, and art supplies, children have little time to use them. For example, in most classrooms children in full-day kindergarten had 30 minutes or less for choice time and some had none (Miller & Almon, 2009).

However, this is not true for all kindergarten children. In Boston public schools, kindergarten children participate in a play-based program where rich, interdisciplinary centers are at the heart of the curriculum. Children spend 80 minutes in the centers, with a small-group pull-out during that time. They also participate in a circle time before the center time where the teacher introduces and helps children plan for center work and a circle after center time where the children reflect upon what they have learned. In addition to centers, children meet in small and large groups, participate in writing and storytelling workshops, and engage with math investigations. To learn more about this program see the Boston K2 website.

Play, engaged in by children throughout the world, is a critical vehicle for children’s development. A rich environment can support children’s play, providing social, emotional, physical, and cognitive benefits.

**Check Your Understanding 1.2**  
Click here to gauge your understanding of section concepts.

## How Does an Effective Environment Support Developmentally Appropriate Principles?

Drawing upon the views of a variety of theorists, NAEYC, the largest early childhood association in the world, wrote a position statement titled *Developmentally Appropriate Practice in Early Childhood Programs* (Coppole & Bredekamp, 2009). In addition to play, several developmental principles set forth in the DAP position statement relate to the environment. See Table 1.1 to explore these principles and relationships.

**Table 1.1 How a Well-designed Environment Support DAP Principles**

Developmental Principles	A well-designed environment:
<b>Active Learning Is Important</b>	provides children with multiple opportunities to construct their knowledge through first-hand experiences and through interactions with peers and teachers. Teachers facilitate children’s learning as they use the environment, individualizing their interactions to meet each child’s needs.
<b>Domains Are Related and Influence Each Other</b>	allows integrated learning. For example, as children play with blocks they use gross and fine motor skills, practice cooperative and language skills, and use cognitive skills (problem solve building issues, learn about shapes, weight, and balance). The well-designed environment encourages children to be independent, to exercise control, and to build competence and mastery, assisting children in developing a healthy self-concept. When children have a healthy self-concept, they are more likely to be successful socially and academically.
<b>Learning Follows Well-Documented Sequences, Becoming More Complex over Time</b>	provides materials at a variety of levels meeting the needs for different levels of complexity. A preschool math center would contain materials for children working on one-to-one correspondence, counting, recognizing numerals, and adding and subtracting.

(Continued)





**Table 1.1 How a Well-designed Environment Support DAP Principles (Continued)**

Developmental Principles	A well-designed environment:
<b>Development Is Variable</b>	provides a variety of materials and activities that meet the needs and interests of individual children with varying abilities. Allows the individual child to work at different levels in different areas. For example, the child may be able to read simple books but be very low in math skills.
<b>Social and Cultural Contexts Influence Learning</b>	assists in cultural understanding by accurately reflecting the lives of children and families in the program through classroom materials, photos, and written and spoken language. Multicultural books, pictures, music, art, manipulatives, and dramatic play props representing children in the classroom as well as other cultures expand the children's understanding.
<b>Biological Maturation and the Environment Interact</b>	provides a range of challenges, so that as a child successfully completes a challenge, another one awaits. The child controls the amount of time engaged in a particular activity and whether to work alone or with others. This freedom allows children to be self-directed learners, learning from both the physical and the social world. It also recognizes and honors the individual child's maturity level.
<b>Practice Advances Development</b>	provides opportunities for children to practice skills in an authentic way (using skills in a real-life context rather than through drill). Authentic tasks are more engaging and a more effective way to learn than those same tasks performed through drill or direct instruction (Cooper, Capo, Mathes, & Gray, 2007).
<b>Development Occurs in the Context of Secure, Consistent Relationships</b>	provides a place where children and adults can find sanctuary, nurturance, comfort, compassion, and community (Greenman, 2005a). Relationships flourish as children have the opportunity to play with peers in self-chosen activities. The one-on-one time with an adult that occurs as children interact in learning centers facilitates positive relationships.
<b>Experiences Shape Future Dispositions and Behaviors</b>	provides multiple ways of learning the same skill through different learning centers. This allows children to choose the learning modality that is most effective for them, while exposing them to a wide range of different learning options. Persistence and initiative are increased when children have the opportunity to learn in ways that are interesting and motivating to them.
<b>Early Experiences Are Critical</b>	allows children to participate in activities that that are ideally matched to the child's interests and development, thus providing a solid foundation for current and future learning.



### Check Your Understanding 1.3

Click here to gauge your understanding of section concepts.



## How Does an Effective Environment Support Positive Behaviors?

In addition to helping support play and developmental principles, a well-designed environment reduces behavioral issues, allowing children to spend more time engaged in learning and teachers to spend more time scaffolding children's learning. The environment can help prevent behavioral issues in five ways. The well-designed environment:

1. provides children with many choices at different developmental levels allowing children's unique skill levels, preferred learning styles, and interests to be addressed. Children who are actively engaged in developmentally appropriate, interesting activities that they choose usually display fewer behavioral issues.



2. reduces stress by allowing children to learn in developmentally appropriate ways and by providing private spaces where children can escape. When children have private areas to retreat, they learn more and have lower levels of stress.
3. includes a variety of activities that assist children to manage emotions such as soothing water play, pounding on clay, or dancing to music.
4. promotes positive relationships. Research shows that there is a link between appropriate classroom environments and secure, positive relationships between the teacher and children (Howes, Fuligni, Hong, Huang, & Lara-Cinisomo, 2013).
5. is intentionally designed to prevent common behavioral issues.

To prevent common behavioral issues:

- Teachers design learning centers (dedicated areas, indoors or outdoors, that have intentional purposes) that allow small groups to work together, without interruption from others.
- Dividers are placed between areas to provide a protected space for play, and to assist children to stay focused.
- Clear boundaries keep materials in one area from interfering with other areas. For example, shelves are placed between the art and block areas, which prevents trucks from running under the easels.
- Fighting over limited resources is prevented by having a sufficient number of materials (for very young children, exact duplicates are often necessary).
- Interesting, enticing materials keep children from being bored.
- Making sure each center is well-stocked with enticing materials keeps children from all congregating in one place.
- Organized and labeled shelves allow children to keep materials orderly and to locate the materials that they need.
- Materials and books are in good condition and beautifully displayed, creating the desire in children to want to care for them.
- The floor plan is developed to prevent children from seeing it as a racecourse. For example, when an obvious circular path is available it invites children to run (see Chapter 5 for sample floor plans).



Julie Bullard

After a family who is Chinese introduced the children to a tea ceremony, the teacher extended their learning with these dramatic play materials.



Julie Bullard

This retreat space was developed by children and their teacher at Spirit at Play when they were completing a project on birds.