

## Introduction: How to Use This Book

This is a “how to” book. You do not have to read it through from beginning to end. The idea is to find the chapter that fits the child or children you are interested in, and then use the information in the chapter for working with them. The first three chapters lay a theoretical foundation for the rest of the book, with brief discussions of why blocks are used in the classroom (chapter 1), some rules on how children learn (chapter 2), and specifically how children learn language (chapter 3).

Chapters 4 through 10 each look at a different stage in block building. Here are some suggestions for using these chapters, which make up the heart of this book.

1. Start by looking at the “**Watch and Listen**” section. See if what you have seen and heard the child (or a group of children) doing fits the things listed. If so, that is the chapter for you to use.  
If not, try another chapter. The chapters cover stages from simplest to most advanced. If the child is two, look toward the beginning and move forward. If she is older, you may have to look at several chapters to find where she fits. The chapter titles may help you because they are descriptive of what you may be seeing the child do.
2. Next, look at the chart of things children learn at this level. This will help you know what to expect a child to learn through what he does and what you do with him.
3. After that, look at the list of materials to put in the block center to support that stage of learning. Start with a few things and add more as the child seems to lose interest in what is out.
4. Now look at the “**What to Do**” section. You will find that it usually tells you first to sit quietly by the child and watch and listen to what she is doing. This is a calming and personal way to introduce yourself to a child. Children usually love to have an adult sit down near them on the floor or on a small chair and just be there. It helps to build their self-image by implying “You are important. I want to be with you. You are worth my time.” It also gives you time to see what the child is doing. What problem or question is the child trying to solve? You need to know this before you step in to take part in what is happening. You may see that the child needs something you can help her find. You may want to get something for her. For example, the child may be struggling with how to put one block across two

others to make a doorway shape. She is using a unit block and it keeps falling through, so you might quietly hand her a double unit and see what she does with it. Don't be surprised if she ignores your gift. She might be trying to figure out that she has to move the two uprights closer together. Your double unit doesn't solve the problem, but it was an idea. Sometimes it is better just to be there as moral support.

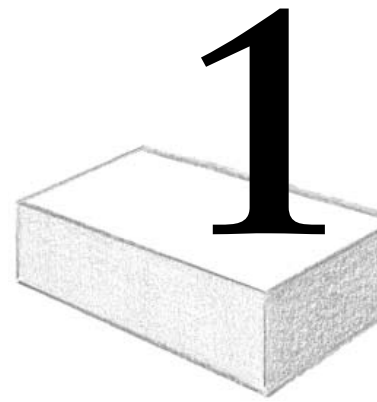
5. The next step is to look at the “**What to Say**” section. Try what it says. It suggests different ways to talk with the child. How you talk with the child depends on the child's language skills, which is also addressed in this section. Other examples of what to say are included in “What you might say to children in the block area” on page 33, which can be copied and posted in the block area as a reminder of the kinds of things to say to children as they are working with blocks.
6. Try to find time to make quick notes. Note how what you have done has worked for you and the children. Also note things you have learned about the child or the group. Occasionally take photos of the children playing in the block area. Then analyze the photos as we have done in the book. It is fun to see how many things you can discover about a child from a photo. You will get better and better at it. It will help you when making observational notes.
7. Read the “**What to Add**” part of the chapter. Decide what things you may want to add to the block corner. Decide how and when you will add them so they will help children grow.
8. Review the “**Watch and Listen**” section of the chapter and the chapter that follows it. When the child starts doing things that appear in the chapter that follows, move to that chapter and do the “What to” sections there.

Finally, chapter 11 covers some important safety issues concerning the use of blocks, and chapter 12 presents practical information on the care, selection, and types of blocks.

Now you are more than ready to get started. Have a wonderful time learning about all that children can get from blocks. It is a fresh and exciting way to inspire the joyous excitement of young, curious minds.







# Why Blocks?

Why do we have blocks in the classroom? They are expensive. They take up lots of space. They have to be stored. It might seem as if they are more trouble than they are worth! But blocks are essential for children two to eight years old and beyond. Playing with blocks helps children develop important academic skills. Yes, blocks are worth the trouble! Here are some of the reasons:

- ◆ Children love to play with blocks.
- ◆ Children learn math, language, and science through playing with blocks.
- ◆ Children reach academic standards with the help of blocks.
- ◆ Children develop physically by using blocks.
- ◆ Children develop social skills in the block area.
- ◆ Children develop their creativity through block play.

## Children love to play with blocks.

This has been true through the ages. If pieces of wood, cement, plastic, or even cake are available, children will build with them. Children can do whatever they want with blocks, and no one needs to tell them how to use them. The possibilities of blocks are open-ended. Children can play with blocks by themselves or with others. Blocks meet a special need that no other toy or learning material does.

## Children learn math, language, and science through playing with blocks.

What children learn depends on their stage of development. For example, they learn about the complex concept of balance gradually, as they gain more experience with balance. They learn about it physically when they try to balance a long block (quadruple unit) on top of a tall unit (double unit). This also helps them to understand the scientific aspect of balance. Why and how does that quadruple unit stay on top of the double unit? They learn the mathematical aspect of balance when they make a symmetrical building. One side is equal to the other or the same as the other. This is basic algebra. They learn words connected with balance like *weight*, *size*, *same*, *lighter*, *heavier*, and so on. Because young children learn best by working with real materials, they can understand concepts like *half as much* or *twice as much* by seeing them demonstrated with blocks. The wooden blocks you see in most classrooms are designed to show this. They are based on a block called a *unit block*. All other blocks in the set have a math connection to the unit block. The half unit is a unit cut in half. It is also a square. The official names for the blocks teach words for math concepts—*double unit*, *quadruple unit*, *half unit*. They also help children see relationships. For example, two large triangles put together will make a rectangle. Children learn to estimate in their thinking—for example, they learn to figure out how many blocks will fit in a certain space.

## Children reach academic standards with the help of blocks.

Blocks help children develop many skills that will help them to read and write when they get older. Many states have standards that tell us what preschool children should be able to do to succeed in grade school. Head Start also has national outcomes for what children should learn. The standards are often written in words that are hard to understand. They make you think that the only way to teach children is to sit them at tables and give them worksheets and tests. Some programs have to test children by law. Others have a choice. Even if you have to test them, remember that children learn by doing. Materials like blocks help them understand difficult information so they can take tests better.

Whether you have to test children or not, you can tell when they meet the standard by watching them play. You can also help children learn what

is required by the standards through playing with them. Here are some examples:

1. You might see a standard that says something like this: “Sorts objects by one attribute.” An *attribute* is a quality that an object has—for example, color, shape, and size are all *attributes* of materials. Children naturally see attributes like color, shape, and size. As they play with blocks, they naturally sort blocks by shape. When they build a tower, they want blocks that are the same shape. When they take part in cleanup, they learn to sort blocks onto matching outlines on the storage shelves (see chapter 12 for further details), and are thus learning to sort and match shapes. When they do any of these things, they are meeting the standard. They are sorting objects by one attribute: shape. If you keep track of which children are sorting blocks by shape, you know which children are meeting the standard. As you watch the children, you talk with them about how they are sorting units and half units. This way, you help them understand what they are doing. You help them have words to talk about what they are doing, and you help them to meet the standards.
2. Here’s another example of a standard and how it can be taught through blocks. The standard says, “Begins to use language to compare numbers of objects with terms such as *more*, *less*, *greater than*, *fewer*, *equal to*.” As children build buildings, you talk with them about what they are doing. You can ask if they think John’s tower has more blocks than Mary’s. They wonder how to tell. You suggest a chart. Together, you count the blocks in John’s tower. Then you mark off a square in the chart for each block. Next, you and the children do the same thing with Mary’s tower, marking the blocks in the column next to John’s. Now you all can see from the chart which one has more blocks. You have helped the children to use the language of counting to tell which is more. As you talk about the chart, the words *less than*, *greater than*, *fewer*, and *equal to* may also be used. When children begin to compare their towers to other children’s buildings, they are meeting this standard.

The blocks can be a perfect way to help children think and learn. Often, a standard can give you a jumping-off place to help you teach what children need through play. This is better than sitting them down at tables because it is the way children learn best and most easily. You will find many examples of standards and how to use them playfully with your students in this book.

## **Children develop physically by using blocks.**

Many classrooms do not have an indoor large-motor area. The block area becomes the place where children can develop coordination, strength, and flexibility. They are constantly using their legs and arms and bodies as they crawl, sit, jump up, walk, and lift. They carry heavy blocks from their shelves or bins and later put them back. They fill wooden trucks. They push them. They put blocks in buckets or boxes. They drag or carry them around. They fill their arms with them. They crawl from one end of a road to another with little cars. They add blocks here and there. They reach and stretch to place blocks where they want them. Their small bodies are in constant motion as they play with blocks. All of this builds and strengthens the muscles, bones, and ligaments of the children. In addition, children learn where their bodies are in space. They learn to judge where the blocks are in relation to other people and things so they don't hit or knock down other people or their buildings.

Children's small muscles are also busy with the blocks as they grasp the various shapes and sizes with their hands. Their fingers get better and better at controlling exactly where they want to put each block. They improve the way their eyes and hands work together as they carefully line up a tower of half-unit blocks. Children need this hand-eye coordination to read and to write.

## **Children develop social skills in the block area.**

When playing with blocks, children have to work with challenging materials and other people. When they work together on building projects, children naturally develop social roles, like leaders and followers, workers and designers. They make up social rules that tell who will do what. A child who takes the leadership role tells others what to do: "Susie, get the double units and put them over there. José, you help her. Denota, you work on building the tower." When a child is a skilled leader, the others do what she says. They are agreeing to follow a social rule set up by the leader. There will be arguments among the children sometimes. When they work out the disagreements in a friendly way, they are growing socially.

Some young children may just be starting to be social. Even if they are not building with other children, they will learn social skills in the block area. They can stand and watch others play. They are learning from what they see and hear. A child can build alone. He can sit near another child. He can copy what the other child does. These are all ways that children learn.



A great deal of dramatic play takes place in the block center. Sometimes there is sharing between the dramatic play center and the block area. Children might make cars or planes for travel. They might make grocery stores, movie theaters, and furniture. In fact, putting the two centers side by side to encourage this pretend play is usually a good idea. This process opens all kinds of doors for the children's social growth.

Some children have trouble in the block area. They bump into people's towers. They step on and fall over people. They break what others are making. They refuse to follow the social rules set by the group. There are many reasons these issues arise. It is important to be aware of the children who are having difficulty moving carefully through the space, and to work to help these children develop their motor skills so they can better control their movements. It is also important to emphasize to others in the block area that these children are not doing these things on purpose; they are not intentionally being mean or hurtful.

When a child is purposefully destructive, she needs to be handled differently. This child may have chosen not to be part of the group. Your job will be to help her, in the best way possible, to learn how to be part of the group. It is important for you and others you work with to look for clues from children's behaviors that can help you understand why they are creating problems in the block area. The more you observe children, the more you will be able to see the subtle differences. Then you will think of ways to help them. When you can see the little clues, you will have a better idea of how to deal with the problem. You and other staff will have to plan carefully what you put out in the block center at different times and with different children.

## **Children develop their creativity through block play.**

The block area is a wonderful place for children to create. At first, they explore the materials. In this book, the chapter on the Discovering period shows this. In the Towers and Roads period, the children continue to explore, but with more purpose. They decide to pile blocks on top of each other or lay them end-to-end. When they reach the Doorways and Bridges stage, we see a developing sense of beauty in the repeated arches they build. The Fences and Walls period brings out the drama in children. They start to use small figures in the enclosures. In the Patterns stage, the children's emerging sense of design and order flowers into magnificent structures built with care and great detail. Here they show an understanding of symmetry

and visual balance. In the periods talked about in chapters 9 and 10, the children demonstrate that they have a very good understanding of blocks. They can now use them representationally to make whatever their imaginations desire. The Pretending period inspires the children's dramatic sense, and acting takes over. They plan, develop, and create all kinds of complex projects. The final period of Making Known Things extends what the children have done previously. In this period, the children visualize something they know. Then they plan and explore what is available to help them create what they have visualized. If they have a wide variety of blocks, older children and adults will create wonderful and beautiful things with blocks. Consider the continued popularity of Lego building blocks.

Because blocks are a high-interest play material and promote all areas of development and academic standards, they are an ideal material for use in the early childhood classroom. The purpose of this book is to show teachers of young children how this learning can be supported through observation and interaction in the block area. The focus on accountability and student achievement has pressured many teachers to use approaches that are inappropriate and ineffective with young children. We hope that by using this book, you will become more aware of the value of block play and recognize how your interactions with children support their learning.