

9. BLOCKS

Children at Play: The Block Activity Center

In the block center, children play either alone or in groups using blocks of different sizes and shapes. Children are naturally drawn to this area of the classroom because it is active, creative, and fun. Teachers should encourage children to explore the blocks, build structures, and engage in dramatic play.

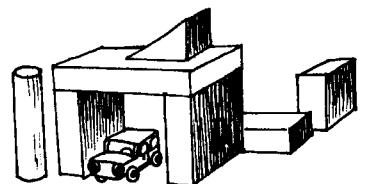
Blocks are critical to children's development in many areas, including language, social skills, science, mathematics, motor skills, and skills in social studies.

The block center allows children to construct buildings, learn about heights and weights, recognize shapes, cooperate, improve eye-hand coordination, and learn how to clean up and put things away.

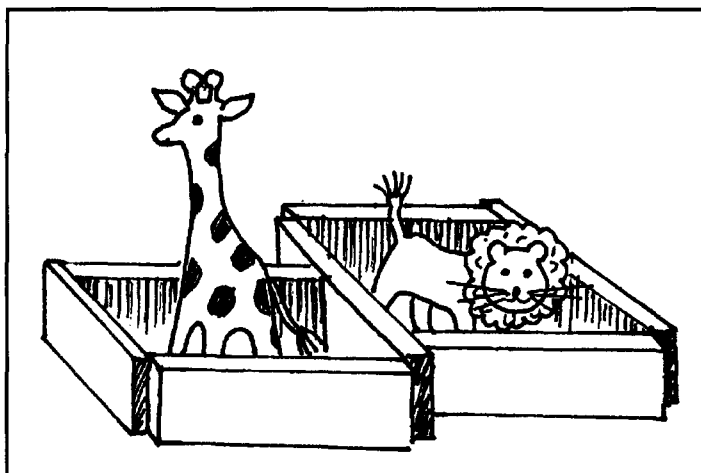
As described below, children go through developmental stages with block building, as with other learning activities. The teacher's expectations will depend upon the age of the child. Young children carry and hold blocks. At the next stage of development, they line them up and stack them. The nature of blocks is such that children can create, develop, repeat, or change what they are doing in any way they wish. There is no right or wrong way to build with blocks. They use blocks to develop simple structures and, later, more complex ones.

Stages in Block Building

- **Carrying** Blocks are carried around, not used for construction. This is the activity of the very young child.
- **Rows** Children make horizontal rows across the floor or vertical stacks.
- **Bridging** Children connect two blocks with a space between by adding a third block.



- **Enclosures** Children place blocks in such a way that they enclose a space. Bridging and enclosures are among the earliest “technical” building problems that children solve. These building skills develop shortly after a child begins to use blocks regularly.



- **Decorative Patterns** When children have acquired a more facile ability with blocks, decorative patterns appear in their block play. These patterns are usually very symmetrical. Buildings are generally not named at this point.
- **Naming for Play** Naming structures in relation to their function for dramatic play begins. Before this, children may have named their structures but now the names are related to the function of the building.
- **Naming and Use for Play** Children’s buildings now symbolize actual structures. The structures may be reproductions of known buildings or creations of their own design. There is a strong impulse toward dramatic play around the block structures.

Impact on Developmental Areas

Language Development

Language can be expanded through playing with blocks. This can be done by building a structure, naming it, talking about what has been built, describing the sizes and shapes of the blocks, discussing and planning a block construction with another child, dictating a story about the construction, listening to books pertinent to activities with the blocks, and acquiring comparative vocabulary such as “same” and “different” and “long” and “short.” Children label and make signs for their constructions in early attempts at functional writing.

Social Skills Development

Children develop social skills while playing with blocks. This happens when they use the blocks alongside another child, observe what another child has done and copy it, build with several other children, agree and disagree with another child, share the planning and building, use the structure together, let others use what has been built, and participate in dramatic play centered on the structure. They learn to respect the efforts of others. They develop a sense of competence as they reach their self-set goals. They feel a sense of satisfaction as they play together.

Development of Science and Math Skills

Blocks can be used to explore the following concepts:

- Size, shape, weight, height, volume, space, direction, patterns, mapping
- Observation, classifying, sequencing, predicting
- Different uses for the same object (for example, placing a block horizontally or vertically)
- Equilibrium, balance, and stability
- Measurement and counting
- Similarity and difference
- Equivalency (two unit blocks equal one double unit)
- Ordering on the basis of size or shape
- Problem solving
- Creative and imaginative thinking
- Stability, gravity, interaction of forces, properties of matter
- Trial and error

Motor Development

Playing with blocks develops small and large muscles. Children learn to control blocks of different sizes and weights, balance objects, and use their fine- and large-motor abilities. They also learn to work within a designated physical area. They develop eye-hand coordination and precision. Manual dexterity is refined as they grasp, lift and fit pieces. Visual perception is strengthened as they judge for delicate balance.

Development of Social Studies Skills

Children can learn about their environment by building a model of their community. Finding out more about the blocks themselves is a reasonable way to learn about wood, how blocks are made, and why standard measurements are important. The interdependence of people can be explored, as well as people and their work. Questions about how people have made their buildings over time can be explored.

Setting Up the Block Activity Center

Select an area away from highly active, busy areas of the classroom. Blocks should be in a protected place, where they will not be knocked down by children moving from one part of the room to another. The block center should not have to be used for other activities, so that block structures can remain standing from one part of the day to another, or from one day to the next.

Because much of the work is done on the floor, some sort of floor covering is desirable. A carpet reduces the noise in the area and provides a comfortable place for children to build.

Activities in the block center frequently involve dramatic play and may focus on acting out family/home situations. For this reason, and also because of the activity levels of each of these centers, it is suggested that the block center and the dramatic play center be placed next to, or close to, each other.

The number of blocks, the variety of shapes of blocks, and the amount of space needed for blocks will vary, depending on the age of children in the class. Large, hollow blocks, cylinders, long boards, half circles, triangles, and ramps are all used to build large structures. Cardboard blocks may also be available;

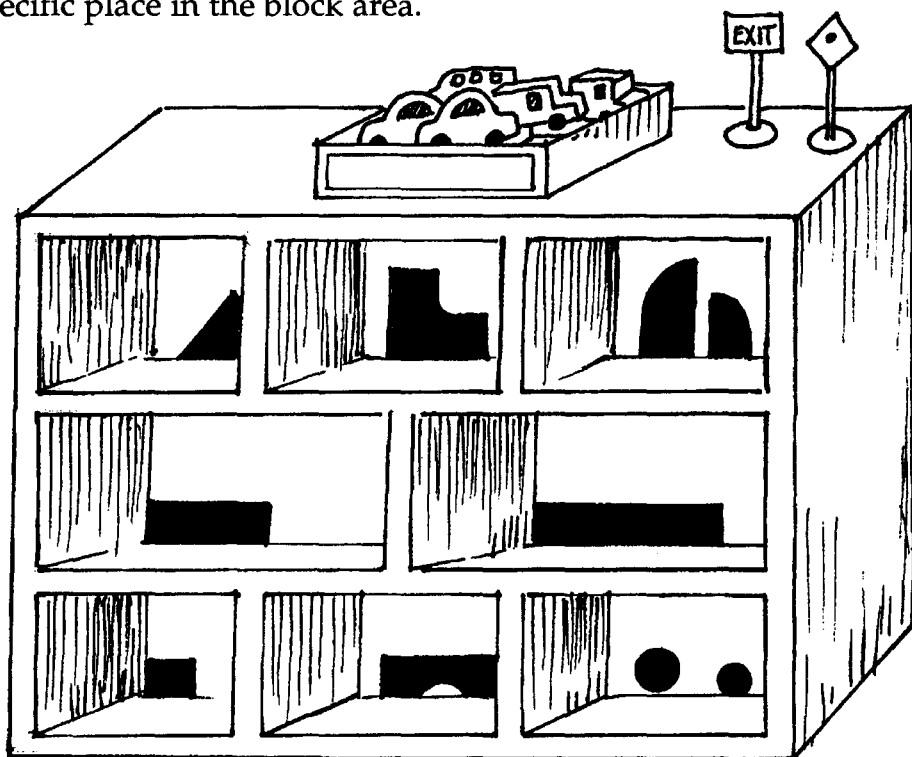
they are lighter and easier for some children to use. Wooden blocks can be mixed with cardboard blocks for interesting effects.

Unit blocks are usually available in the classroom. They are small and can be used on the floor or on a table. They can also be used in conjunction with the large blocks. For example, a group of children may build a castle with the large blocks and create intricate decorations with the small blocks.

Blocks are displayed on open shelves at an appropriate height so that children can remove and replace them easily. Blocks of similar shapes and sizes should be grouped together. The blocks must be placed on the shelf so that the entire length of the block is visible; they are not to be placed with just the short end showing.

The block shelves should be marked so that children will know where to find and replace blocks. To do this, a sign exactly the size and shape of the block can be cut out and attached to the back of the shelf, or a picture of the size/shape block can be placed on the front edge of the shelf. The first method is preferable.

Containers with block accessories (for example, toy people, animals, small cars, planes, boats, pieces of fabric) should be placed on the shelf with the blocks. Many additional items should be available (for example, hats used by work people, tickets for the train conductor to give out, play money, pulleys and ropes) to complement block play. Large cars, trucks, planes, and boats also need a specific place in the block area.



As with all classroom equipment, blocks should be properly cared for. They may need to be washed with soap and water from time to time. Rough edges should be smoothed with sandpaper.

The Teaching Team's Role

The first responsibility of the teaching team is to set up the block center so that it is accessible and appealing to children. The amount and complexity of blocks and accompanying materials will depend on the ages of the children. Regardless of the children's age, however, not all materials should be displayed at the beginning of a program year. Materials should be added, put away, exchanged, and created as the children's interests emerge and change.

The teacher's role in supervising and assisting in the block center is to:

- Observe the level of the children's involvement, the kind of structures they make, and whether they work alone or with other children.
- Encourage all children to spend time in the block center. (Are the blocks are used by both boys and girls?)
- Comment constructively on children's work. ("I see you have three blocks of the same shape," or "You put your blocks on top of each other to make a tall building," or "How did you get that bridge to stay up?")
- Ask questions that help children solve their own problems rather than supplying the answers.
- Add materials as needed.
- Find and read books that pertain to the subject of the children's building.
- Plan field trips to supplement information on a particular building or topic and to follow up on children's suggestions.
- Write signs for buildings.
- Allow children to keep buildings up overnight when desired and possible.

Learning about balance, height, and weight involves experimentation and trial and error. Structures fall down; that is part of block building and part of the learning process. Children learn from what they do: this is part of problem solving. Therefore, each situation needs to be handled individually. Rules should not limit the height of a building, but if a child or group of children repeatedly builds and knocks down structures in a way that is disruptive or dangerous to others, they must be redirected.

Another aspect of supervising the children's work in the block area is monitoring the number of children who can work there at one time. This depends on the size of the area, the particular children who are working there, and the kinds of structures they are making. There should not be a strict rule about the number of children working at one time; however, if it does become necessary to limit the number of children in the block center, this should be treated as a problem-solving situation and decided with the children.

When appropriate and possible, a block structure should remain standing overnight. This will not be necessary every day, only if a child or group of children has put a great deal of effort into the structure and is still elaborating upon it or using it for dramatic play. Moreover, always having to put away the blocks minimizes the value of children's work. Therefore, in those situations in which play and learning will be supported and encouraged, it is recommended that a structure be allowed to remain standing.

Clean-up can be an enjoyable learning experience, if you say:

"Who is going to take the unit blocks?"

"Can you find all the squares?"

"Everybody take two blocks."

"Today let's take four blocks at a time."

"You can make a train with the blocks."

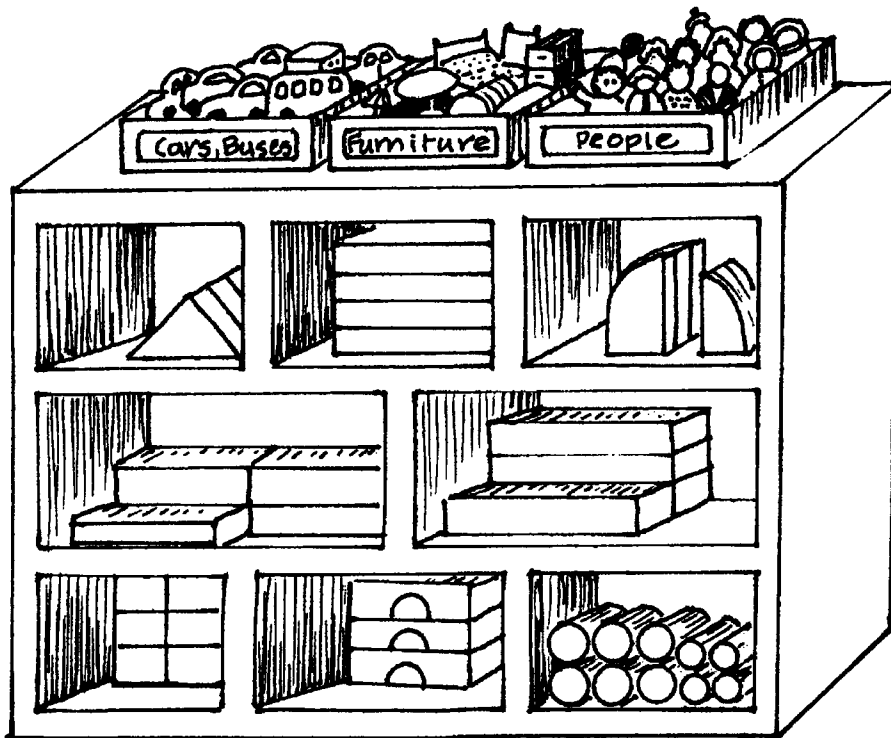
"Carry one big block and one small block."

Two children can be the "block store workers" who receive the blocks and put them on the shelves, while the other children are "delivery people" who bring the blocks over to the shelves.

Activities and Projects

At times it may be appropriate for the teacher to initiate a project in the block center. For example, after a field trip to the local fish store, there may be several follow-up activities in the classroom such as writing a story about the trip, drawing pictures, cooking fish, and building a fish store. The teacher might enhance the building project by asking the children what other stores or buildings they saw on the trip.

Block play can involve other activity centers. A block house structure may need some furniture, which could be made at a workbench; house play may expand into the dramatic play center for dress-up clothes or it may use pots and pans from the cooking area.



Materials created in the art activity center will also add to the play of the children in the block center. Children can make traffic signs, store signs, and other signs to identify their work. Using construction paper and sticks to make "stop" signs will help guide car and truck traffic in a block city, and children will learn about community helpers, rules, and the symbolic use of colors. If a building project centers on bridges and boats, children may decide to paint a river on paper and make that part of the project.

Children may also want to use art materials to draw pictures of their structures before they are taken down. They can make graphs of the sizes and shapes of buildings and individual blocks. They can use blocks to compare weights of different classroom objects.

Children also enjoy building a classroom obstacle course with the large blocks. This activity can take up a lot of space, so other activity areas may need to be moved. Balancing, climbing, crawling under tables, and walking on boards on the floor are all fun activities for the children.