



Selecting Toys, Equipment, and Educational Materials

- After studying this chapter, you will be able to
- explain guidelines for selecting developmentally appropriate toys, equipment, and educational materials.
 - describe safety factors to consider when purchasing toys and playground equipment.
 - explain how to report unsafe toys and equipment to the appropriate agencies.
 - list sources and methods for purchasing toys and equipment.
 - identify toys and educational materials that teach children appreciation for people of all cultures.

Terms to Know

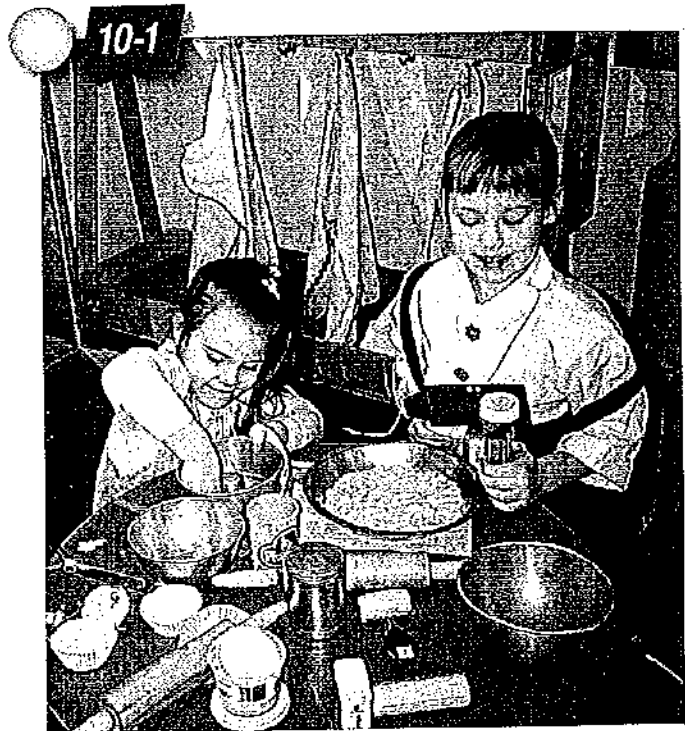
spectator toys
 physical age
 chronological age
 developmental age
 multicultural
 co-op (cooperative)
 consumable supplies

Children learn about their world by playing with toys, exploring materials, and interacting with other people. They learn best when provided with a wide range of toys and educational materials that match their abilities and interests. This allows them to make choices. Toys play an important role in facilitating the learning process. For instance, children can learn speech and dressing skills while playing with toys. Children can learn about other people and cultures through the use of toys. When playing with toys, children often interact with others. They make choices, solve problems, and apply some control over their environment, 10-1.

Developmentally appropriate toys motivate and engage children as active learners. Simple toys like building blocks can promote cognitive growth. For example, if children do not build a strong foundation under their block building, the building will topple. Thus, they learn physics concepts. If they join two semicircular pieces, they make a circle. In this way, they learn math concepts.

Selection Criteria

In early childhood programs, selecting toys and equipment for children is often the teacher's responsibility. In preparation, you



Toys help children build many skills. By playing together, these children learn important social skills.

will need to determine what the children's needs, interests, and abilities are. You will then need to choose the materials that would best meet those needs. As you can see, this is an important job. Careful planning is required.

Safety is a concern when selecting toys. Choking and improper use cause the majority of injuries in childhood. Developmentally appropriate toys can help reduce the number of injuries. Age warnings on packaged products are not always reliable.

The program goals, budget, and curriculum will influence which materials you buy for the classroom. The number of children in the program and the available space and storage should also be considered. You will want to choose toys that are safe, appropriate, and interesting for the children. Guidelines for choosing educational toys are described in the sections that follow.

Health and Safety

Shopping for Safe Toys

Although your daily routine at a child care center may involve checking toys for broken parts and other hazards, you also need to think about these factors when you buy toys. The *Consumer Product Safety Commission (CPSC)* offers tips on toy-shopping safety as well as information on toy recalls. Before you shop, check out their Web site at www.cpsc.gov.

Program Goals

Classroom toys and equipment should reflect program goals. If a program goal is to have the children develop language skills, then language materials should be placed in the classroom. Books, pictures, cassettes, CDs, alphabet cards, puppets, pencils, and paper can all be used to promote language skills.

Write your program goals on paper, 10-2. Then make a list of items that promote each goal. Review the goals and lists. Take count of items you already have in the classroom. Then decide in which areas more toys and equipment are required. You may find a planning sheet helpful for this task, 10-3.

Budget

When purchasing items for your class, you will need to stay within your budget. To do this, first purchase the basics, such as

10-2

Program Goals

- To develop a positive self-concept and view self as worthwhile
- To develop a curiosity about the world
- To develop sensory exploration skills
- To develop prosocial behavior skills
- To value own rights as well as those of others
- To develop language skills, both listening and speaking
- To develop fine-motor skills
- To develop gross-motor skills
- To develop problem-solving skills

Listing your program goals can help clarify the program areas you need to develop.

tables, chairs, and shelving units. You can continue adding items as your funds permit.

Teachers are often surprised at the cost of toys, equipment, and materials. The major portion of the budget for a new program will go toward furniture.

Balance

Examining program goals helps you decide what toys and equipment might be purchased. Before buying, however, review each item to decide if it will add balance to the items already available. Ask yourself the following questions: Can the item be used with other toys? Will it help children reach program goals that are not being met sufficiently with current toys? Will it promote interaction with peers? Will it help balance toys for all areas of development—physical, cognitive, emotional, and social?

Space

Keep in mind the space and storage needed for any new items you are thinking

10-3

Toy Selection Planning Sheet

Program Goals	Available Toys	Toys Needed
<i>To encourage sensory exploration To promote gross-motor skills</i>	<i>water table, shovel, cups, pitchers, scoops, clay, egg beaters, feely box, harmonica, kazoo, guitar low climber, wagon cart, large rubber balls, planks, boxes, jungle gym</i>	<i>bells, drum, texture matching games, pumps, funnels } low slide, balance boards, bicycle</i>

Committing program goals to paper can make the selection of proper toys an easier task.

about buying or building. This is especially true for large pieces of equipment. For instance, an indoor jungle gym is a useful item in many centers. However, if the space for storing it is not available, it is a poor investment. It may end up being stored in another part of the building. If the location is inconvenient, the jungle gym will not be used very often.

Supervision

Quality supervision is vital to safety. Consider the number of staff available for supervision when selecting toys and equipment. Think about how each item will affect your ability to properly watch over children. You will have to consider each item individually, balancing safety and developmental needs. Safety is a primary concern. For example, you may want to buy swings for the playground. The state may require one adult supervisor for every 10 children. You can comply with state guidelines for ratios, but you might feel that more supervision is needed for safety. You may decide, in this case, that the swings would be an unwise purchase.

The developmental stages of children also need to be considered when choosing toys and equipment. This will affect the amount

of supervision required. For instance, many five-year-old children can use blunt-nosed scissors with some guidance. However, four-year-old children require much more supervision for the same task.

Maintenance

All toys and equipment require maintenance. The care required varies with the type of toy or equipment and the amount of use. For example, a plastic jungle gym needs less upkeep than a wooden or metal one. Upkeep of equipment can become costly.

Durability

Children's toys need to be durable. Children bang, drop, stand on, sit on, and lie on toys. When angry, they may even throw toys. Broken toys can pose a danger to children. For instance, a broken toy can have sharp edges that cut. It is usually best to buy toys and equipment that are well built.

✱ You want to buy quality toys that will last through much use.

Wood and cloth are two materials that are durable, warm, and pleasurable to touch, 10-4. Wood toys can withstand many years of use by many children. When buying wood toys, look for those made of hardwoods

10-4



Wooden equipment is durable and can withstand rough play from children.

such as maple. The toys should also be split-resistant. The corners of the toy should be rounded.

Quantity

The quantity of toys can be as important when purchasing materials as the quality. In most classrooms, it is common to find two or more children playing with the same toys. To promote this type of cooperation, supply

an ample amount of toys and materials for children. If there is a shortage of play materials, undesirable behavior can result. Therefore, be certain that any toys you wish to add to the classroom can be purchased in the needed amounts.

Variety should also be considered along with quantity. Is the item you wish to add to the classroom similar to existing items? Studies show that children who have been exposed to a wide variety of toys are more imaginative and creative. In order to provide variety, rotate toys and equipment regularly.

When choosing toys, keep them simple. Children do not have freedom to express themselves if there is too much detail. Unstructured toys, such as blocks and paints, encourage the children to use their imagination.

The chart in 10-5 lists suggested toys and equipment for a class of 15 children. These items represent a varied group of toys and equipment.

Child Involvement

Choose toys that will actively involve children. Toys should move children to explore, manipulate, invent, and problem solve. In this way, children learn for themselves. They learn to use their imaginations.

10-5

Suggested Equipment and Supplies for a Class Unit of 15 Preschoolers

Type of Materials and Equipment	Select
Indoor blockbuilding	<ul style="list-style-type: none"> 400 hardwood unit blocks, including such shapes as units, half units, double units, quadruple units, pillars, large and small cylinders, curves, triangles, ramps, Y switches, X switches, floorboards, roof boards

The toys and equipment in this list comprise a well-stocked classroom. You may have ideas for further additions.

(continued)

Suggested Equipment and Supplies for a Class Unit of 15 Preschoolers

Floor play materials	<ul style="list-style-type: none"> • 24 cars, airplanes, boats, fire engines, wagons, tractors, trains of assorted sizes • 30 rubber, plastic, or wooden figures of farm and zoo animals; community workers: police officers, firefighters, and doctors; family members: mother, father, boy, girl, baby, grandparents • 1 rocking boat
Family living and dramatic play	<ul style="list-style-type: none"> • 8-10 rubber dolls representing all cultures and both genders; doll clothes; chest for doll clothes; baby bottles • 2 doll carriages • 1 doll bed, big and sturdy enough for a child to crawl into • 1 smaller doll bed or crib • Blankets, mattresses, pillows for doll beds • Furniture for household play: wooden stove, cupboard for dishes, sink, small table and chairs • Kitchenware: plastic dishes, tea set, small cooking utensils, silverware • Housekeeping equipment: broom, mop, dustpan, brush, iron, ironing board, clothesline, clothespins • Full-length mirror • Dress-up clothes: men's and women's shoes, handbags, jewelry, hats, belts • Supplies for other dramatic play: office equipment, telephones, cash registers, firefighters' hats, badges, play money, stethoscope, doctors' bags and white coats, nurses' hats
Table and perceptual activities	<ul style="list-style-type: none"> • Bingo and lotto games • 12 wooden inlay puzzles of varying degrees of difficulty • 1 puzzle rack • Pegs and Pegboards • Matching games • Sets of small blocks (cubes, parquetry, interlocking, snap-in, number) • Large table dominoes: picture sets, number sets • Nested blocks • Color cone • Pounding peg board • Cuisenaire rods, counting frames; abacus • Cards: geometric shapes
Art activities	<ul style="list-style-type: none"> • 2 easels • Drying rack for art materials • 24 easel paintbrushes with 1/2 in. and 3/4 in. handles • 75-100 quarts liquid tempera paint of various colors* • 8000 sheets white manila paper, 4000 sheets newsprint 24 in. by 36 in. • Paste and paste brushes • 20 packages finger paint paper or glazed shelf paper • 24 packages construction paper of various colors* • 4 clay boards, 2 plastic covered pails for storing clay, and clay • 100 lb. flour and 40 lb. salt for dough • 18 blunt scissors, including some left-handed and training • 5 aprons or smocks • Miscellaneous supplies: orange juice cans, baby food jars, drying rack, florist wire, pipe cleaners, armature wire, colored toothpicks, macaroni pieces, transparent colored paper • 5 dozen crayons* • Rolling pins • Transparent tape • Stapler and staples

Suggested Equipment and Supplies for a Class Unit of 15 Preschoolers

Music	<ul style="list-style-type: none"> • CD/cassette player, CDs, cassette tapes • Autoharp® • Xylophone • Scarves, streamers • Rhythm instruments: kazoos, shakers, maracas, sticks • Drums, triangles, tambourines, cymbals, tom-toms • Sleighbells for hands and feet • Balls, hoops
Woodworking	<ul style="list-style-type: none"> • 1 sturdy, low workbench with 2 vises • Tools: four 7 oz. claw hammers, two 12 in. crosscut saws, 1 hand drill, 1 rasp, 1 file, 2 screwdrivers, assorted nails with large heads, screws, 2 large C clamps • Soft wood scraps, doweling • Sandpaper • Miscellaneous: buttons, washers, corks, wire, nuts, hooks and eyes, spools, bottle caps
Furniture	<ul style="list-style-type: none"> • 15 chairs, 8 in. to 12 in. in height • 3 tables, 18 in. to 22 in. in height, for snacks, meals, and tablework activities • 2 room dividers • 15 cots for resting • 15 lockers for hanging coats, hats, boots, extra change of clothes
Science and special projects	<ul style="list-style-type: none"> • Bar and horseshoe magnets • Children's cookbook • Magnifying glass • Large indoor and outdoor thermometers • Tubes • Seeds • Animals: hamsters, mice, rabbits, fish, ducks, and gerbils (where permitted by law) • Magnets • Picture collection: machines, animals, plants, and geography • Books with science concepts • Tape measure, yardstick, rulers • Scales • Measuring cups and spoons • Dry cell batteries, flashlight bulbs, electric wire • Pulleys and gears • Hand mirrors • Hot plate and electric frying pan • Aquarium and terrarium • Cages for pets
Water play (indoor and outdoor)	<ul style="list-style-type: none"> • Small pitchers, watering cans, measuring cups, bowls of various sizes, plastic bottles, medicine droppers • Funnels, strainers, egg beaters, ladles, straws, lengths of hose, brushes • Soap and soap flakes • Sponges

Suggested Equipment and Supplies for a Class Unit of 15 Preschoolers

Outdoor equipment	<ul style="list-style-type: none"> • Sandbox, cans, buckets, spades, spoons, small dishes, colander • Jungle gym • Ladder box • Horizontal ladder • 5 tricycles • 3 scooters • 3 small wagons • 2 wheelbarrows • 6 10-in. and 12-in. rubber balls • 3 four-wheeled cars or "horses" manipulated by a child's feet • 2 sturdy doll carriages • 2 sturdy wooden packing cases (42 in. by 30 in. by 30 in.) • 2 sturdy wooden packing cases (35 in. by 23 in. by 16 in.) • 24 hollow wooden blocks (5½ in. by 11 in. by 11 in.) • 12 hollow wooden blocks (5½ in. by 11 in. by 22 in.) • 12 low sawhorses • 8 small wooden kegs • Wooden ladders • Walking boards (balance beam) and flexible jumping boards • Lengths of sturdy rope and garden hose • Automobile and airplane tires and rubber inner tubes • Rubber balls of different sizes; beanbags • Plastic balls and bats
Language arts	<ul style="list-style-type: none"> • 50 picture storybooks appropriate to the age, culture, and special interests of the children; books should include a range of poetry and prose, humor, fiction, and nonfiction • Alphabet books • Hand puppets
Audiovisual aids	<ul style="list-style-type: none"> • Chalkboard, erasers, chart paper • Lotto and picture games • Tape recorder or CD player • Slide projector • Video cassette recorder (VCR) • Computer • Video camera • Television • Felt board and felt figures

10-5 Continued

Spectator toys such as battery-powered cars and talking dolls require little action on the child's part. Avoid purchasing these types of toys. Besides being costly, their appeal with children is quite often brief. Children will leave these toys for others that involve more imagination.

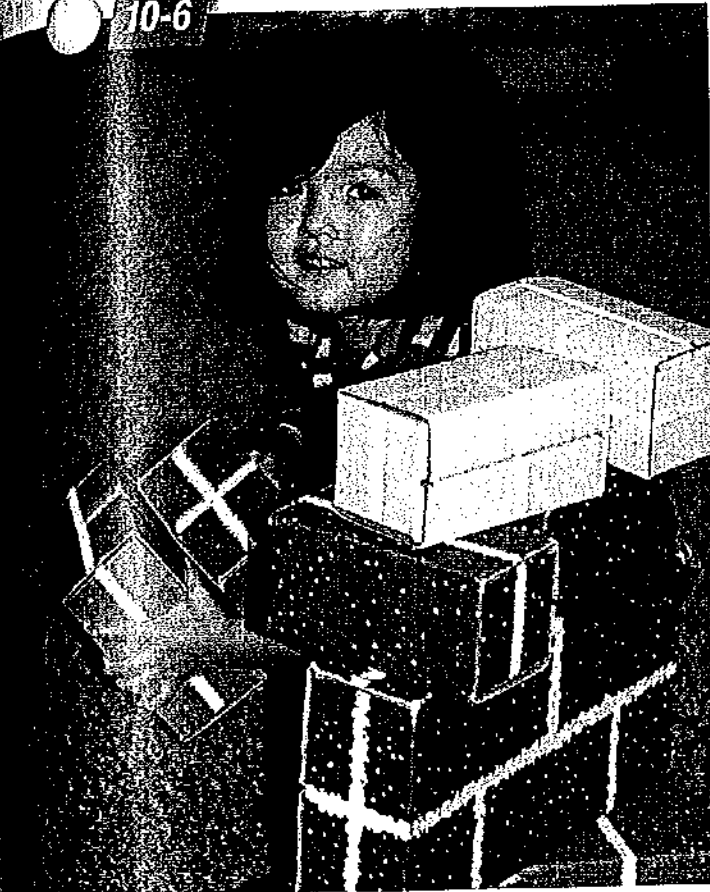
Choose simple toys, 10-6. Too much detail limits imagination. Open-ended materials

free children to use their minds and express their creativity.

Blocks, play dough, paint, sand, and construction sets are open-ended toys. Using these items, children build structures, make designs, and play games. Children find endless ways to use such toys.

Use the checklist in 10-7 to define what skills can be learned from a specific toy. This

10-6



Cardboard blocks can be the source for a variety of unstructured play. What is built with them is limited only by a child's imagination.

task will help you see in what ways a toy will affect children. This knowledge can then be used when deciding on a purchase.

Developmentally Appropriate Toys

Children's physical age and developmental age are often quite different. Physical age is an age determined by a birth date. It is also known as **chronological age**. **Developmental age** refers to a child's skill and growth level compared to typical skills for that physical age group. For example, Kathy may be four years old physically, but only functions as an eighteen-month-old child. A child who functions as a four-year-old would be able to string beads. However, Kathy would only be able to do those tasks

10-7

Checklist for Skills Learned from Toys

Will the children learn or improve:	Yes	No
auditory discrimination?		
balance?		
color concepts?		
counting?		
fine-motor skills?		
gross-motor skills?		
hand-eye coordination?		
hearing-doing skills?		
language concepts?		
matching?		
number concepts?		
patterning?		
seeing-doing skills?		
self-esteem?		
sensory discrimination?		
sequencing?		
social skills?		
space perception?		
strength?		
throwing-catching skills?		
visual discrimination?		

What other skills might you add to this list?

that an eighteen-month-old child can do. She lacks the hand-eye coordination needed to string beads. As you choose toys, remember the difference between physical and developmental age, 10-8.

Toys are teaching tools. Those that suit children's developmental ages help them build self-esteem. For instance, Leon will feel powerful as he learns to ride a scooter, or as he pushes a wagon up a hill. As he masters this skill, he gains a sense of control and builds an "I can do it" feeling.

10-8



Toys that are appropriate for children's developmental ages are challenging for those children.

Toys that do not match the child's development can cause frustration. This does little for a child's self-esteem. Lack of success with a toy can have a negative effect on a child. For instance, it is not likely that a two-year-old child would be able to put together an 18-piece puzzle. The child may make a number of attempts at the puzzle. Soon the child will become frustrated and move on to a toy that is more rewarding.

Chart 10-9 lists a number of toys and equipment pieces that are appropriate for various age groups. The ages on the chart refer to developmental ages.

Violence and Toys

Children should not be taught to handle conflict with aggression or violence. Instead, they need to find positive ways to vent their

feelings. One way to prevent aggressive behavior is to avoid giving children superhero or monster toys, toy guns, and war games. Children learn very little from these toys. The play that revolves around such toys is most often aggressive and destructive. For instance, when a child plays with a toy gun, he or she does little more than pull the trigger. Research shows that violent behavior increases when children play with action toys and replicas of weapons. Children who played with toy guns were more likely to destroy other children's work.

Many parents and teachers are opposed to the presence of these toys in the classroom. Therefore, it is best to simply avoid buying these toys.

Nonsexist Toys and Materials

Nonsexist toys and materials provide children with the opportunity to explore nontraditional roles. Children are not locked into play that is common of their sex. For instance, boys can be nurses, preschool teachers, and stay-at-home fathers. Girls can be airplane pilots, truck drivers, and plumbers. This type of play will also help children form early ideas about careers.

As a teacher, it is important to set up an environment that is free of gender bias. Your attitude about toys will affect what children learn about sex roles. Make a conscious effort to use or suggest a variety of toys to all children. At the same time, however, be matter-of-fact. For instance, you might suggest for Omar to try playing in the kitchen. You can explain to him that there are many fun things to do in the kitchen.

Multicultural Toys and Materials

Toys and materials that are multicultural represent a variety of cultural and ethnic groups. These items are an essential part of a multicultural curriculum that teaches respect

10-9

Developmentally Appropriate Toys and Equipment (Ages 6 months to 5 years)

Age Group	Block and Dramatic Play	Gross-Motor Equipment	Housekeeping	Sensory and Science	Creative Art and Books	Classroom Furnishings	Miscellaneous
Six months to one year	grasping toys foam blocks soft animals bucket and blocks	beach balls push/pull toys activity gym	soft dolls stuffed animals puppets acrylic plastic mirrors	tub tub toys sensory mat	wall hangings mobiles	infant seat crib changing counter adult rocking chair cubble high chair	soft balls stroller standard crib and mattress music boxes mirrors rattles
One-year-old	Add: large trucks interlocking blocks	Add: toddler stairs driving bench large foam blocks toddler barrel tire swing	Add: doll bed doll blankets doll mattress unbreakable doll wooden telephone	Add: sponges buckets funnels pitchers measuring cups scoops	Add: large crayons hard books cloth books tapes or CDs tape or CD player	Add: clothing lockers storage shelves book display cots	Add: stacking and nesting toys pull toys simple puzzles pop beads stacking cones Pegboards
Two-year-old	Add: unit blocks wooden figures people zoo animals farm animals	Add: doll wagon hollow blocks rocking boat small jungle gym simple climber and slide tricycle	Add: simple doll clothes doll carriage child-sized sink, stove, pots, pans, aprons	Add: sand table water table	Add: picture books blunt scissors paste finger paints play dough	Add: bookcase block cart play table and chairs	Add: more complex puzzles large wooden threading beads small cots rest mat and cover sheet
Three-year-old	Add: dollhouse small dolls furniture	Add: walking board large wooden nesting boxes scooter wheelbarrow	Add: ironing board iron rocking chair broom, dustpan	Add: balance scales magnets ant farm prisms water pumps spray bottles sand molds	Add: easels paints brushes glue scissors	Add: work and library tables and chairs	Add: increasingly complex puzzles portable screens (room dividers) cots plants
Four-year-old	Add: puppets puppet theater more unit blocks	Add: planks swings slide shovel, pail, and rake triangle set coaster wagon large climber and slide	Add: chest of drawers washbasin clothesline and pins basket child-sized bed/cradle, carriage, wardrobe	Add: thermometer Incubator plastic tubing	Add: clay modeling wax	Add: storage cart chalk/peg and bulletin boards	Add: aquarium pets
Five-year-old	Add: derrick	Add: balls roller skates	Add: teepee balance scale microphone	Add: microscopes tape measures motors	Add: sewing machine camera video camera	Add: woodworking bench tool cabinet tools	Add: giant dominoes construction sets

Plan toy selection well. In this case, the toys from one age group blend into the next age group.

for people of all cultures. Multicultural toys and materials encourage children to explore the world's diversity, 10-10. This helps them learn to appreciate others.

In addition, the early childhood environment needs to help each child develop a sense of identity. The child needs help to understand and appreciate his or her cultural and ethnic heritage. Each child needs to feel welcome and supported in the classroom. Thus, children need to see their heritage reflected among the program's toys and materials.

By choosing multicultural toys and materials, you communicate respect and appreciation for all cultures. A checklist for evaluating a classroom for multicultural toys and materials is given in Figure 10-11.

Puppets, dolls, and people figures should reflect cultural diversity. Puzzles, books, and other toys should also be chosen with multiculturalism in mind. Pick items that

10-10



Include multicultural toys and materials in all areas of the classroom.

10-11

Multicultural Checklist

Does your classroom provide the following multicultural items?	Yes	No
• A variety of books containing accurate information about many cultures		
• A culturally diverse collection of puppets, dolls, and people figures		
• Puzzles and small manipulatives representing people from around the world		
• Musical instruments from various cultures, such as maracas, drums, and flutes		
• Musical recordings in various cultural styles and languages		
• Art materials and supplies that reflect various skin tones		
• Multicultural posters, pictures, and decorations		
• Culturally relevant dress-up clothes, food, kitchen items, and furnishings for the dramatic play area		

Use this checklist to choose multicultural toys that reflect diversity.

show people of various cultures in positive and accurate ways. Art supplies should reflect a range of skin tones. Classroom decorations and bulletin boards should show people of all cultural and ethnic groups. Recorded music and musical instruments should represent various cultures, too.

Using Technology in the Classroom

A critical issue teachers face is the use of technology in the early childhood classroom. Computer use should foster the children's learning, imagination, and creativity. It should complement other activities and social interaction. Computer use cannot replace physical activity or play with puzzles, blocks, and other materials.

For the most part, computers are considered inappropriate for children younger than three years. Very young children need to focus on learning fine- and gross-motor skills through body movements. They also need one-to-one interaction to develop language and cognitive skills. Most software programs require cognitive skills these children have not yet developed.

Studies have shown benefits for children older than three years who use the computer, however. These benefits are greatest when developmentally appropriate software is used with supporting activities. In studies, children who used the computer had gains in nonverbal, verbal, problem-solving, and conceptual skills as compared to other children.

Adults should use discretion in choosing children's software. Many programs exist, but not all are equal in terms of benefits for children. For instance, programs that model aggression are not appropriate for early childhood programs. Software that promotes learning is often preferred over programs that merely entertain. Two factors are vital—the program must be age-appropriate and easy to operate. Other qualities to look for include

- clear, user-friendly directions that children can follow without adult help
- colorful, animated, realistic graphics to hold children's attention
- logical sequences

- interactions with the child, including feedback
- promotion of problem-solving skills by offering choices
- investigation of concepts, such as numbers, colors, shapes, letters, or counting

By six years of age, most children can operate simple programs and follow instructions from a picture menu. They like showing others how to use the computer.

Selecting Safe Toys

To promote safety, choose toys carefully. Serious injuries can result from poor toy selection. Many hazards cannot be seen at a glance or with normal use. For this reason, you must study each toy thoroughly before buying it. The safest toys are not always those that appeal most to adults. Rather, the safest toys are those that meet the standards outlined in this chapter.

There are thousands of toys to choose from, and hundreds of new ones are available each year. Toys are supposed to be safe. However, over 200,000 children were treated in hospital emergency rooms in one year for playground-related injuries. Brain injury is one of the top diagnoses for playground-related injuries. There are over 190,000 reported toy-related injuries each year. The National SAFE-KIDS Campaign has reported the following:

- Falls and choking cause most toy-related deaths and injuries in children. Choking alone causes one third of all toy-related deaths—most often from balloons.
- Children 4 years old and younger account for almost half of all toy-related injuries and almost all deaths.
- Children under 3 years of age are at the greatest risk of choking because they tend to put objects—especially toys—in their mouths.

- Riding toys—including bicycles and scooters—cause many injuries in children.

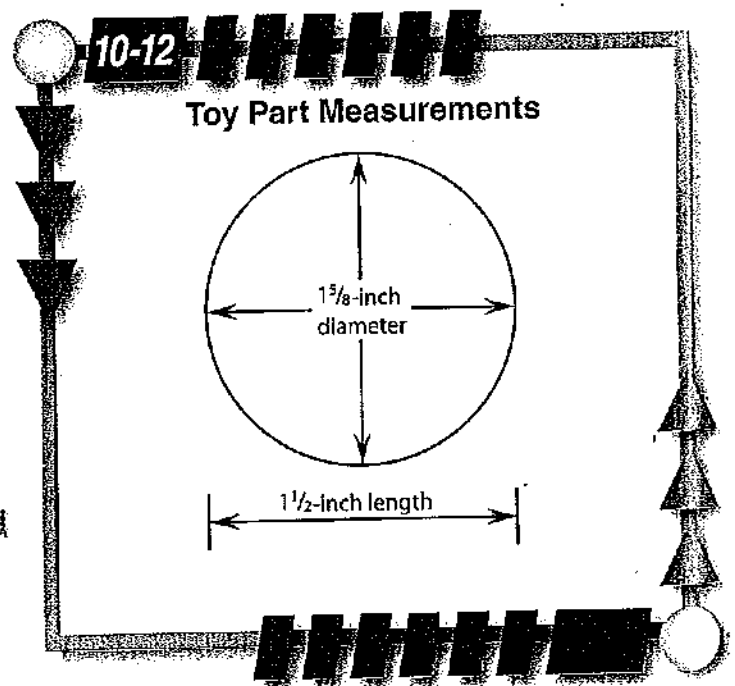
Several federal laws regulate the manufacture and labeling of children's toys. Two of these laws are the Child Protection and Toy Safety Act and the U.S. Child Safety Protection Act. The Child Protection and Toy Safety Act sets basic standards for toy manufacturers. The U.S. Child Safety Protection Act mandates warning labels on toys that indicate whether the toy poses choking hazards to children younger than three years. Manufacturers must make sure toys and other children's products comply with all federal laws. Always check these labels carefully for warning recommendations.

The government agency that issues and enforces these laws is the U.S. Consumer Product Safety Commission (CPSC). Its mission is to reduce the risk of injuries and deaths associated with consumer products. The CPSC is heavily involved in the safety of children's products. The CPSC also recalls or bans unsafe products, conducts product research, and informs and educates consumers about product safety.

As a result of laws and standards, most new toys are developed with safety in mind. When used by children of an appropriate developmental age, these toys are generally safe. For example, small stringing beads are safe and useful for many four-year-old children. In the hands of a two-year-old, however, they present a risk of choking. Keeping inappropriate toys away from younger children is important.

Older toys are much more likely than newer toys to present safety hazards. This is because the toys were made prior to the most recent standards. They may contain the hazards addressed by these standards. Check older toys (or toys of an unknown age) very carefully for potential risks. Discard any items you find that contain any of the following safety hazards:

- *Breakable pieces.* For children under three years of age, toys must be unbreakable and able to withstand use and abuse.
- *Sharp edges or points.* Toys made with sharp edges or points are dangerous. Also hazardous are older toys that break and expose internal sharp edges or points. An example is a stuffed toy with sharp wires inside to stiffen its ears, legs, paws, and tail. Dolls that have hair or clothing held in place by straight pins are also dangerous.
- *Small parts.* For children under three years of age, toys and all parts of toys smaller than $1\frac{5}{8}$ inches in diameter or $1\frac{1}{2}$ inches long present a choking hazard, 10-12. Check product labeling to verify whether a toy is appropriate for children under three years of age. For toys with no label attached, use a plastic form or empty cardboard tube (from a roll of toilet tissue) to test the size. Any toy that fits inside the form or tube presents a choking risk for children under three years of age. Of particular risk are balls



The safest toys for children under age three years have small parts that meet these size standards.

with a diameter or 1¼ inches or less and rattles that are small enough to be lodged in the throat or with pieces that can separate.

- **Toxic materials in or on toys.** For example, older toys may be painted with lead paint, which can be poisonous if ingested. Older art materials may contain toxic materials.
- **Electrically operated toys with heating elements.** These toys can cause burns, fires, or electrocution. Any electrical equipment should have a seal from a safety testing organization, such as Underwriters Laboratories, Inc. (UL).
- **Battery covers with no locking mechanism.** Children can remove these covers, which exposes the batteries. Batteries present a choking risk and are poisonous if placed in the mouth or swallowed. Also dangerous are battery covers with removable screws. If these tiny screws are lost during battery changes, a child might later find and swallow them. Instead, look for covers that incorporate the screws or other locking mechanisms as part of a single-piece. Even safer is a single-piece cover that is attached to the toy. An attached battery cover eliminates the risk of choking on the cover itself.
- **Fabric products or toys that are not flame retardant or flame resistant.** The label will indicate whether a product is made to resist or slow the rate of burning.
- **Balloons.** Many children each year die from choking on uninflated balloons or balloon pieces. Inflated balloons can also be hazardous if they pop and are swallowed.
- **Toys with small beadlike objects inside them.** If these toys are broken, the objects can fall out and pose a choking risk.

- **Pull toys with long cords or strings.** Cords and strings on toys should be too short to wrap around a child's neck, preventing the chance of strangulation. Strings should be no longer than 12 inches.
- **Plastic climbing equipment used indoors without proper surfacing.** Carpeting does not provide adequate protection from falls from indoor climbing equipment. The CPSC reports these falls are the leading cause for significant injuries in child care settings. For indoor climbing equipment, approved rubber flooring or tile is needed.

If you have a safety problem with a product, you have an ethical obligation to report it. Your report can help protect other children from the same danger. Call the CPSC or visit the CPSC Web site to report an unsafe product. The CPSC investigates the reports it receives from consumers. If the CPSC finds the product to be unsafe, it may issue a product recall or ban. The CPSC can also set new standards in response to reports of consumer safety problems.

Safe Playgrounds

The National Program for Playground Safety (NPPS) has identified four components that contribute to safe playgrounds.

Supervision

Supervision is the first component. This begins with designing the playground into zones to promote safety. Each zone should reflect the type of activity occurring in the area. Zones may include gross-motor, quiet undisturbed play, sand-water, planting and digging, and wheeled-toy.

Health and Safety

Playgrounds for Children with Special Needs

Children with special needs may require a variety of playground modifications for accessibility and safety. For example, children with mobility problems may need wheelchair ramps or transfer systems. Consult the *Americans with Disabilities Act* (ADA) Web site at ada.gov for more information on accessibility for play areas.

Proper Developmental Design

Proper developmental design is the second component. Playgrounds should be age-appropriate. Preschool children need equipment designed closer to the ground. Ramps on this equipment should have railings for grasping. Platforms should be low with only a few access points. When over 3 feet high, decks need a railing to prevent falls. The sand table or area should have a cover to protect the children from sun.

Protective Surfacing

Protective surfacing or shock absorbers are the third component. All equipment other

than sandboxes and playhouses that have no elevated space needs *protective surfacing*. Suitable shock-absorbing surfacing materials are energy absorbing and resilient. Concrete and asphalt are unsuitable under or around equipment of any height. They have poor shock-absorbing properties.

Hard-packed dirt and earth surfaces are poor shock absorbers, so they are not recommended. Likewise, grass and turf are not on the recommended list. Wear and tear can reduce their effectiveness in absorbing a shock.

There are two types of acceptable playground surfacing materials: unitary or loose fill. *Unitary surfacing materials* are rubber mats or a blend of rubber-like materials. A shock-absorbing surface is formed when the loose fill materials are poured in place at the playground site and cured.

Loose fill impact absorbing materials should be soft and resilient. Examples include gravel, wood chips or mulch, rubber mats or tile systems, and sand. Ten or more inches are required under and around equipment on preschool playgrounds. This should reduce the chances of serious injury for falls up to eight or ten feet. See Chart 10-13 for a comparison of surfacing materials.

Equipment Maintenance

Equipment maintenance is the fourth component of safe playgrounds. Well-maintained playgrounds provide greater protection and help minimize risk. Conduct general inspections and look for loose screws or bolts, sharp edges, and broken and missing parts. Cap open pipes and remove tripping hazards. When using loose fill under equipment, monitor the depth. If needed, add more fill. Inspections should also include checks for rotten lumber.

10-13

Surfacing Materials: Advantages and Disadvantages

Material	Advantages	Disadvantages
Gravel	<ul style="list-style-type: none"> • Readily available • Inexpensive • Drains easily • Easy to install 	<ul style="list-style-type: none"> • Needs barriers to contain • Pea gravel not recommended for children under five years of age • Medium-sized gravel causes more superficial scrapes • Occasionally needs replacement • Becomes compact when wet
Bark Mulch	<ul style="list-style-type: none"> • Readily available • Inexpensive • Drains easily • Easy to install 	<ul style="list-style-type: none"> • Needs barriers to contain • Compacts easily • Decomposes quickly so needs replacement periodically
Shredded tires	<ul style="list-style-type: none"> • Inexpensive • More wheelchair accessible than loose fill 	<ul style="list-style-type: none"> • Requires a good drainage system • May stain clothing if not treated • Is flammable
Mat systems or rubber matting	<ul style="list-style-type: none"> • Easy to clean and maintain • Accessible for wheelchairs • Does not absorb water • Prohibits mold and fungus growth • Foreign objects are easy to see • Annual replacement requirements are lower 	<ul style="list-style-type: none"> • The most expensive to install • Needs to be installed on a flat surface
Sand	<ul style="list-style-type: none"> • Inexpensive • Does not deteriorate • Easy to install 	<ul style="list-style-type: none"> • Attractive to cats • Must be raked • Undesirable or harmful objects may become embedded

When choosing a playground surfacing material, weigh the advantages and disadvantages carefully.

Selecting Playground Equipment

In Chapter 9, you learned about planning for an outdoor playground. In this chapter, you will learn about selecting the equipment that will be used on the playground.

This equipment may consist of stationary equipment, wheeled toys, wading pools or sprinklers, a shaded resting area, and animal shelters. Stationary equipment is the most costly and difficult to choose.

Selecting playground equipment may be the job of the director. Teachers are often asked for suggestions to help in this process. In other programs, a committee of parents, teachers, and directors choose the playground equipment. Everyone involved in the decision needs to know key points to consider.

Safety

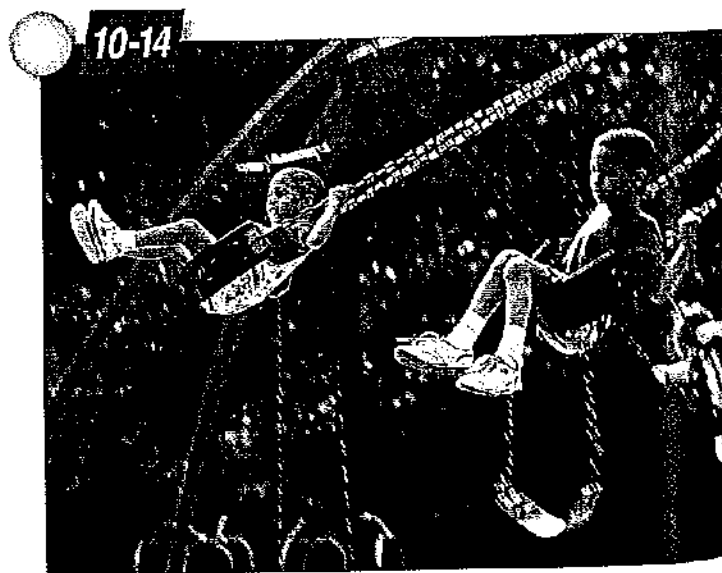
When it comes to playground equipment, safety should always be the main concern. Many children are injured each year on outdoor playgrounds. Choosing equipment with safety in mind can reduce the number of serious injuries. Visit the CPSC Web site for detailed information about specific kinds of equipment.

Avoid choosing new equipment that is unsafe and check existing equipment for dangers. Repair or remove any dangerous equipment at once. General hazards to avoid include the following:

- **Exposed pinch-crush parts on seesaws or gliders.** Children's skin or clothing can be caught in these areas. In addition, a child might lose a finger or toe if pinched here. Remove equipment with exposed pinch-crush parts from the playground at once.
- **Head entrapment openings.** Measure the exercise rings or space between parts of equipment, such as rungs in a ladder. Openings should be smaller than 3.5 inches or larger than 10 inches.

Children can get their heads caught in openings between these sizes. Remove any rings or close in any risers on ladders of unsafe sizes.

- **Open-end S-rings on swing sets.** These rings can pinch skin or catch clothing. You can close the S-ring by pinching the ring shut with a pair of pliers.
- **Hard swing seats.** Children can be injured if hit by a hard swing seat, such as those made of wood, metal, or hard plastic. Replace any hard swing seats with those made of rubber or canvas, 10-14.
- **Exposed screws, bolts, or sharp edges.** Cuts and scrapes can result from these hazards. Use your hands to feel all the equipment. Cover bolts, screws, or sharp edges with layers of duct tape. Recheck the area often and reapply tape as needed. In addition, exposed screws and bolts are a danger because a child's hair or clothes can catch on them.
- **Hot metal playground equipment.** The U.S. Consumer Product Safety Commission (CPSC) advises adults to check for hot metal surfaces before allowing children to play on them. Solid steel slides, decks, steps, and railings in



The safest swings have closed S-rings, rubber or canvas seats, steady anchoring, and adequate surfacing.

direct sunlight may reach temperatures high enough to cause serious burns. Unlike adults or older children, young children are at major risk since they do not react quickly. They may remain in place when in contact with a hot surface. The result could be second or third degree burns to the buttocks, hands, and legs.

Even if a piece of equipment is free from safety hazards, it still may not be safe for use by children in a particular program. Adults should consider each piece of equipment in terms of the following:

- Is the equipment safe for the children's ages and level of development? Some pieces of stationary equipment are designed for older children. Others are made for younger children. Programs with children of mixed ages need separate equipment for each age group.
- Is there enough room for the equipment on the existing playground? This includes room required around the equipment for safety. Pieces of play equipment should be spaced at least 6 feet apart. Equipment should not be placed too close to sandboxes, wheeled toy paths, fences, or sidewalks.
- Can the equipment be anchored properly? Equipment must be stable to avoid overturning, tipping, sliding, or moving in any way. The equipment needs to be anchored in concrete below ground level before it is used. The anchoring process needs to comply with manufacturer's specifications.

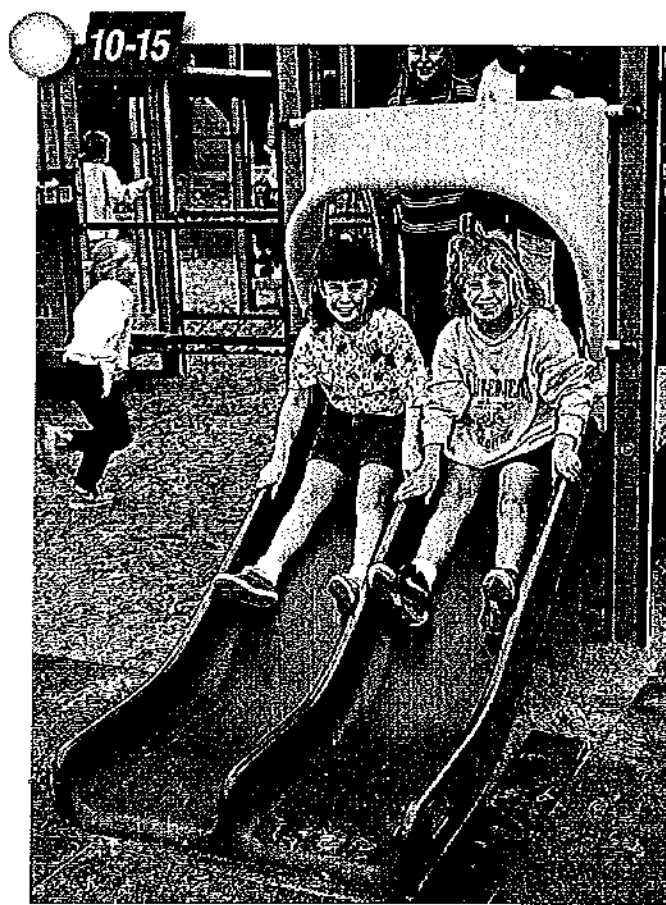
Appeal

If the equipment does not appeal to children, they will not use it. Before choosing equipment, teachers might ask children what they want to do on the playground (such as climb, swing, run). Then equipment can be chosen to allow children to meet their goals.

Equipment needs to be able to accommodate several children at once, 10-15. It should also be accessible for children with special needs. Colorful and interesting design attracts children's interest. Children prefer having a variety of equipment. They enjoy being able to push, pull, balance, swing, and slide. Children also like equipment on which they can climb or crawl in, out, under, and around. What they seem to like least is equipment with just one use.

Maintenance

When shopping for playground equipment, keep maintenance in mind. The program's staff will be responsible for repairing or replacing broken equipment. For safety reasons, children must not use or play near broken equipment.



Playing together on the equipment enhances children's social skills and enjoyment of active play.

Choose equipment that is durable. This equipment will withstand many years of heavy use. It will be less likely to break and need repair, which lowers maintenance costs.

For durability and safety, many of the newer playgrounds are constructed from plastic with metal and wood supports. This type of equipment combines the best features of each type of material. All-metal equipment is too hot in summer and too cold in winter. Over time, this equipment will also rust. All-wood equipment will weaken, splinter, and rot.

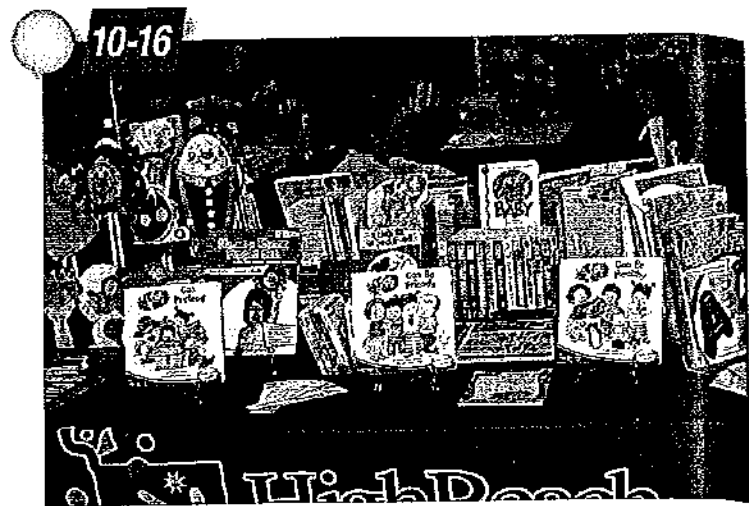
Cost

Of course, programs must follow their budget when making playground purchases. Some programs plan a fundraiser to help meet the cost of expensive items. Staff should search catalogs and Web sites of several companies to learn what is available. Programs should receive cost estimates from each company. They should ask about costs for delivery, assembly, and installation. Knowing the final cost helps the program set goals for obtaining the money needed.

Sources for Toys and Equipment

Before you begin selecting new toys and equipment, take an inventory of materials that are on hand. After this is done, compare the inventory with program goals. For example, you may note that there are too few manipulative toys. These then should be at the top of the list for purchase. See 10-16.

Using your list, browse through catalogs to find items you need. Take time to look through all the catalogs at the center. Catalog prices can vary a great deal. Consider all costs before ordering. For instance, does the shipping cost for an item make the purchase price too high? Some companies will not charge a shipping fee if the order is large.



The exhibit area at an early childhood conference is a good source for toys and equipment.

Equipment can also be bought through a co-op. A **co-op** (cooperative) is a group of people or organizations who join together for the mutual benefit of more buying power. Co-ops are sometimes formed by directors of several small centers. One of the goals of the co-op is to purchase toys and equipment at the lowest cost. Companies will often give a discount on large orders. The directors share the savings with all those who are making purchases.

If time is available, you may wish to visit flea markets, garage sales, and discount stores. Materials can often be purchased at reduced prices. When buying used items be extra cautious regarding safety. Check for product recalls and know the safety standards for the objects you seek.

Toys can also be designed and built at the center. Senior citizens, Girl Scout and Boy Scout troops, and others may volunteer to help. Many of these people are skilled in making puppets, doll clothes, dramatic play clothes, and wooden toys.

Buying Consumable Supplies

Clay, paper, paint, paste, glue, and other art materials are called **consumable supplies**. Once a consumable supply is used, it cannot be used again. In order to save money, some

centers order these materials only once or twice a year. There are many ways to purchase these supplies.

If the order is large, the center may ask vendors to make bids on the sale. *Vendors* are the people who sell the supplies. Their bid is the price at which they will sell the items.

The center might also contact a vendor when placing a large order and ask for a 10 percent discount, plus free shipping. Many directors are surprised to learn that this can

be done. This is very useful for stretching the center budget.

Another approach is to make a list of the supplies needed. Mark those items that could be donated, 10-17. Note who is in charge of securing what items. For example, the head teacher may be in charge of getting newsprint. Another teacher would be in charge of getting wallpaper. In some centers, the director is solely responsible for securing all donations.

10-17

Consumable Supplies

Quantity	Item	Purchase	Solicit Donation	Source	Person Responsible
1 roll	Newsprint		X	Dunn County News	Anna
10 cans	Red tempera paint	X		ABC School Supply	Jodi
10 cans	Yellow tempera paint	X		ABC School Supply	Jodi
5 rolls	Wallpaper		X	Menomonie Paint Store	Anna
2 buckets	Sawdust		X	Peterson Lumber Co.	Anna
4 gallons	Dried corn		X	Hardy's Elevator	Jodi
4 yards	Fabric scraps		X	Northwest Fabrics	Anna
2 gallons	Paste	X		ABC School Supply	Jodi
1 box	Foam packing pieces		X	James Jewelers	Anna
24 boxes	Crayons	X		ABC School Supply	Jodi

Many groups are often eager to donate materials to worthy programs such as child care centers.