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ABSTRACT

This technical assistance paper examines the importance of planning the physical preschool environment and its impact on the child's total development. The two main aspects of the physical environment which are discussed in detail are creating areas of interest in the classroom, and planning the outdoor environment. Issues explored in creating interest areas are: (1) what kind of materials need to be used to promote learning, (2) how should materials be organized, and (3) what safety guidelines need to be followed. In addition to providing experiences through interest areas, the significance of planning for everyday tasks is also stressed. The outdoor environment is seen as an extension of the classroom, and ways to plan the space and the kinds of equipment needed are considered. Special mention is made of how the physical environment can be adapted to promote the integration of children with special needs. Included in this paper are six figures that provide: (1) suggestions on how to determine the location of learning areas; (2) a sample floor plan for children's indoor space; (3) a checklist for room arrangement, materials and supplies of interest areas; (4) suggestions for a variety of active learning areas; (5) a sample sketch of a playground area; and (6) a list of modifications that can be made to accommodate special needs children. Contains 7 additional resources and 10 references. (BAC)

KENTUCKY PRESCHOOL PROGRAMS

Physical Environment: Planning A Supportive Environment

Children feel more comfortable if tables and chairs, space to work, and materials are appropriate for their developmental level.

"A society which places such great value on education and schooling that it requires the individual to attend school for long periods of time must find the means to make education attractive and meaningful for the individual learner" (Bloom, 1982, p. 17).

Introduction

The classroom teacher is the key to creating a developmentally appropriate environment. An early childhood teacher possesses a day-to-day knowledge of interactions among children and is in a position to influence those interactions in an ongoing way (Kaiswer, 1980). Not only is the environmental setting a context for children's behavior and interactions, it also sets the stage for program planning through thoughtful arrangement of materials and space. By planning and designing the environment for the child's total development, early childhood teachers have an opportunity to magnify the program's impact.

The environment is a powerful tool for teachers that can serve to support and free them to concentrate on developing positive relationships with children. Often teachers focus on "teaching" rather than facilitating learning in children by overly focusing on skills and deficits with the idea that they are "getting the children ready for 'next' year". The end result is often inattentive, frustrated children, and joyless teachers whose own creativity is stifled. As teachers plan the physical environment, they must once again review the basic educational goals that are considered essential and plan the environment so that it embodies these goals and reflects the philosophy about how young children learn. For example, will children feel good about themselves in the environment?

Few early childhood educators have an ideal room or have had a choice in the indoor or outdoor space made available to them. What one does with the space he or she has is what is truly important. Careful planning and management of resources can ensure maximum benefits for a quality program. Through thoughtful planning, an environment can support growing and developing children. Many successful teachers have found that by arranging the environment in subenvironments (often referred to as areas of interest or learning centers) this support can become a reality.

Areas of Interest—Vehicles For Learning

Creating areas of interest in the classroom is a means of organizing space that will enable teachers to provide diverse activities for individualization. Interest areas can be set up in a designated space in the room, a table, a shelf, a tray, or any place where a child can explore an activity. The following is a review of advantages for organizing the environment in areas of interest.

Creates an inviting environment. Organized areas invite all children into the mainstream of learning in a nonthreatening way. The child actively seeking companionship may join a group painting a refrigerator box (future spaceship!), while another child, rather quiet and withdrawn may retreat to a cozy corner to look at the school's scrapbook. Children have opportunities to develop a sense of control over their environment by making choices.

Allows problem solving and decision making. Zoning areas of learning provides opportunities to develop problem-solving and decision making skills, as well as to discover and learn through concrete experiences. Zoning implies grouping areas according to level of noise (e.g., placing the book nook area near the puzzle area, both quiet types of activities) or interest and skill (e.g. situating the block and dramatic play near each other can encourage imaginative play). How will the child use the blocks? Perhaps the blocks will become a spoon or a salt and pepper shaker. Children need time to initiate, to explore.

Fosters competence and independence. As a result of these skill-building experiences, children can develop a greater sense of competence and independent skills. Putting the puzzle back in its proper place on the shelf and the chair under the table are examples of using and caring for the equipment that can make a child feel, "I can do it. . .I am helpful."

Individualizes. Staff persons have a greater opportunity to tailor the program to the child's needs because of the individual and small group involvements. Opportunities abound to relate to others, become involved in small group projects, and grow in being responsible to others in the group.

Promotes predictable atmosphere. Children work best in predictable environments. Keeping areas organized with materials repeatedly placed in the same location is helpful. Organizing the materials for easy retrieval can help children develop a sense of independence and respect for the environment.

Storage space for children and staff persons should be tailored to the program needs. Low and open shelving is placed by the area to be used by the children. Some materials that are not used on a daily basis can be stored away from the areas, while other materials will have to be safety-locked. Vary the storage designs, for example, slanted shelves are good for book displays and water resistant shelving is helpful in water play areas.

How the space for learning is designated will be influenced by the number of children in the room, the developmental needs and interests, the length of day, size of space and the availability of extended classroom space (such as playgrounds or hallways). See Figure 1 for additional considerations when determining the location of learning areas.

Setting Up Areas of Interest

Serious thought should be given in planning the environment, for it extends or limits the experiences of children (Read, 1987). It may be helpful to empty the room and pre-think the arrangement using grid paper to experiment with setting up the areas instead of physically moving and removing equipment.

Organize environment to be least restrictive. A well-organized classroom is an essential component to planning a quality program. All materials selected should accommodate different ages, abilities, and interests. A basic premise is that without this accommodation the child will experience a "restrictive" environment. The goal is to enable all children to interact with an environment that is conducive to maximizing potential. Thus, consider elements that will make the room least restrictive.

Promote active learning. Remember, CHILDREN LEARN BY DOING. Provide materials that can be manipulated and promote active learning. Use real objects (real plants, animals, spoons).

Provide variety of materials. A variety of materials should be provided to stimulate curiosity and creativity. Select materials that are

— safe
— simple in design
— durable
— versatile.

Sometimes what adults think is "adorable" has very little contribution to the child's growth.

Prepare tactile environment. Because children are very sensory oriented, they need richly tactile environments. Environments with soft materials (carpeting, cushions, curtains) are good for low-activity areas; hard surfaces (tile, asphalt, wood)

Labeled shelves encourage independent clean-up. Blockbuilding offers children opportunities for concept development of size, space, and matching.

Figure 1

LOCATION OF LEARNING AREAS to Support Children's Development

PERMANENT FIXTURES will often dictate where an area should be established. Try emptying the classroom and surveying the location of permanent fixtures such as doors, windows, permanent shelving, water sources, and electrical outlets. Logically place interest areas near needed resources. For example, electrical outlets are needed in music, science, cooking, with computers and often art. Water access is needed for water table, art, cooking, and science.

TRAFFIC PATTERNS should permit children to work without getting in each other's way and without constant interruption. Teachers should ideally see all areas without obstruction. Consider movement to and from:

Entrance
Exit
Storage of clothes, personal belongings
Bathrooms

LIGHT SOURCES are known to affect the behavior of children. Study the selected activities and decide which ones need the greatest sources of light. Examine the natural light. Pleasant views of the outdoors can be calming. Be resourceful. . . bring the feeling of outdoors in the room with plants and greenery.

VENTILATION AND HEATING conditions can be scrutinized by getting down at the child's level for a realistic assessment.

FLOORING aspects can influence how sound travels. Carpeting is important for block play and other floor work. Tile is important when working with liquids (science, art).

NOISE LEVELS need to be examined. Separate the noisy areas from the quieter ones. Satisfactory acoustics increases effective communication. Draperies and carpet can reduce noise and add beauty.

BOUNDARY MATERIALS such as stable low-screens, tables, tape, and low shelving are excellent sources for defining the space. Shelves are neat and uncluttered so that children can easily select and return materials.

COLOR is a powerful visual cue. Some basic color principles to consider:

- Neutral colors (white, cream, gray) make good backgrounds.
- Warm colors (red, orange, yellow) can be stimulating and may be more appropriate where high activity and interaction is encouraged.
- Cool colors (green, blue) tend to calm and are appropriate for quiet areas for concentrating, resting, and reading.

Use bright colors selectively.

LOCKER SPACES are ideally placed where children enter the room and placed low so children can use them independently and develop self-help skills. Clearly print names in capital and small letters. Individual spaces for storage (shoe boxes, dish tubs or baskets) and coat hooks are provided for each child's personal belongings—their completed projects and prized possessions. Symbols can be helpful. For example, children's photographs can give the children a greater sense of belonging.

NUMBER OF STAFF, both permanent and volunteer, will influence what areas and materials can be made available to children. During transition times or arrival and departure, some areas may need to be "off limits" or "closed".

encourage louder, active participation. Matching the activities to the environment and vice versa appropriately helps with managing the space over-all (Jorde, 1982).

Establish an orderly classroom. Activity areas should be neatly and simply displayed. Label materials, drawers, and shelves with a sample of the object on a container, photograph, symbol or outline of contents. Color-coding can be helpful. Keep displays and pictures attractively arranged at child height. Include children's art work for decoration. Work at de-cluttering the room.

Check Safety Features. The rooms should be large enough to provide sufficient space for all who participate with safety foremost in planning. First-aid kits should be in all classrooms. Other safety guidelines are included in the following brief safety checklist:

Yes	No	
____	____	1. Dangerous and toxic items are removed.
____	____	2. All fire, sanitation and safety regulations are complied with.
____	____	3. Windows are secure.
____	____	4. Electrical outlets capped.
____	____	5. Floors free from heavy polish or splinters.
____	____	6. Equipment and toys are checked for safety features.
____	____	7. All poisonous plants are removed from the classroom.
____	____	8. All indoor and outdoor areas of play are well-supervised.
____	____	9. Emergency numbers are conspicuously located in strategic places.
____	____	10. Practice drills are executed for fires and tornadoes.

Figure 2, a floor plan for children's indoor space illustrates some of the principles previously discussed. The plans are intended for illustration purposes only, not as ideal arrangements.

Areas of interest commonly used indoors are unit blocks, a space for creative art and self-expressive experiences, one or more spaces for dramatic play and role-playing such as a housekeeping area, a quiet area where children can be read to and look at books, and an area for manipulatives and

activity-exploration experiences to take place. Also, many of the areas may serve dual purposes during the day: the carpeted block area, for instance, readily converts to a comfortable group time spot for conversation, storytelling, and fingerplays (Hendrick, 1980).

Figure 3 has a sample checklist that can be used informally to survey the room arrangement, selection of materials, and equipment. Once a decision has been made where everything should go, then it is time to sit back and OBSERVE the results as children and staff work together. Listen to children's ideas and suggestions—the results can be interesting.

The areas described in Figure 3 are considered a basic foundation for the young child making the transition from home to school. New centers can be added in keeping with the program's goals and philosophy. Note in Figure 4 the variety of other possible areas that could be added to or incorporated in the existing areas. The areas are divided to give the teacher a wide scope of program offerings; however, learning for a child is not compartmentalized. Concept and skill development overlap in areas and unfold in naturalistic, incidental occurrences.

There is another aspect of the environment that warrants comment. The overall general feeling that a child and the child's family has as first impression of the room should be one of warmth. Closely examine the entrance. Is it a bright, welcoming area that says "This is a nice place to be!"? Maintaining the environment, keeping it clean and orderly conveys to the children that there is respect for the environment and a sense of caring.

Everyday Tasks

In addition to providing these kinds of experiences through areas of interest, teachers must remember that children take great pleasure in everyday tasks. Montessori was one of the first educators to point out this pleasure and to devise areas of learning in practical life (Montessori, 1965). Preprimary children are not too young to develop a wholesome conviction that "work" can be meaningful, rewarding, and satisfying. The following list constitutes some of the many practical experiences that can provide experiences in skill development and enjoyment.

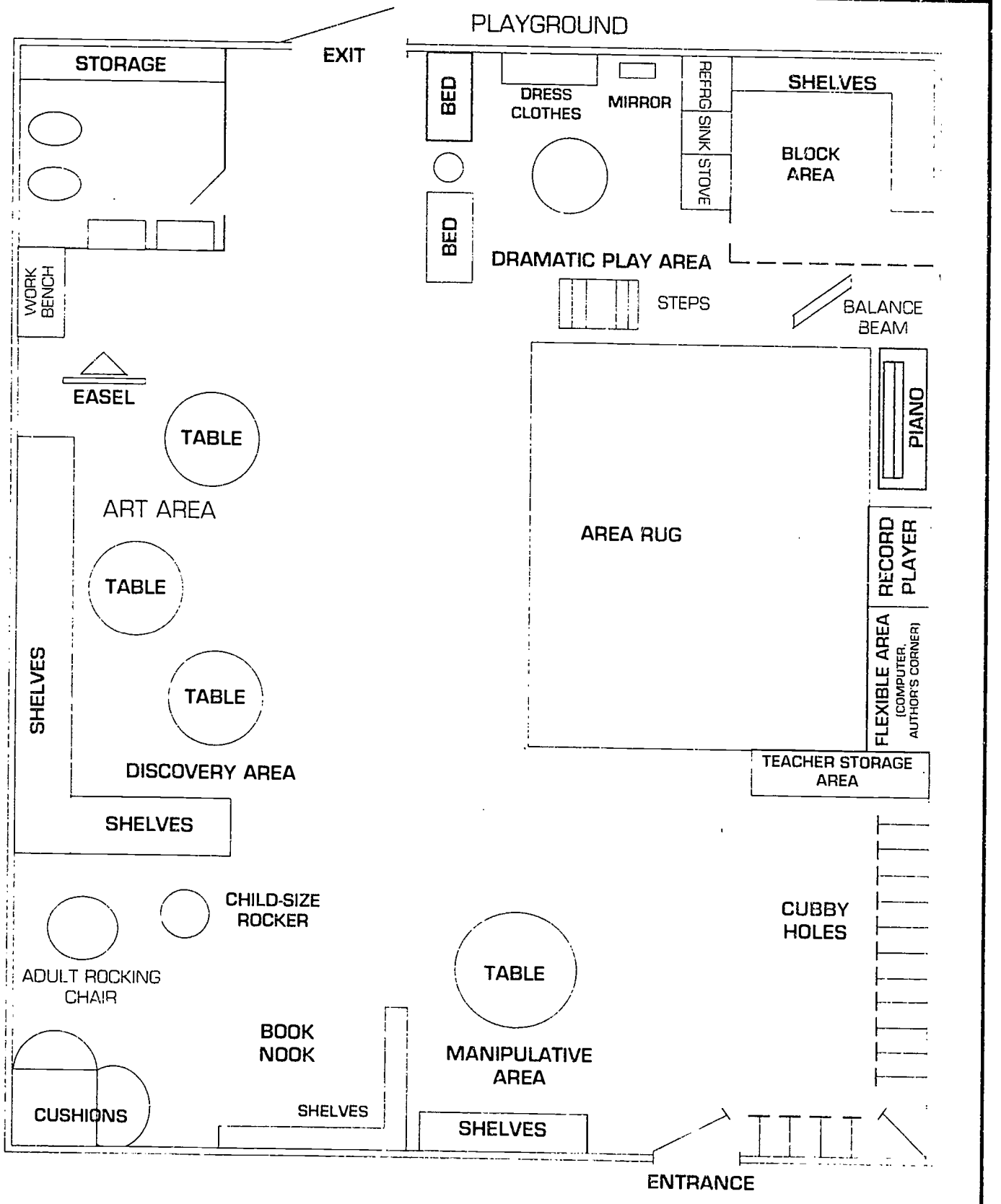
- Washing tables
- Watering plants
- Fertilizing plants (using mortar and pestle, child crushes egg shells and sprinkles shells on top of soil)
- Arranging flowers
- Cleaning the aquarium, rabbit cage
- Feeding and cleaning animals
- Mixing paint
- Washing paintbrushes and easel
- Sweeping
- Dusting
- Arranging setting for snack
- Making homemade paste, playdough
- Disassembling bulletin boards and helping to put up new ones

Remember, it is the process, not the product that needs to be emphasized. "Work" should not be overly emphasized or minimize the significance of play, but should be seen as an additional valuable vehicle for learning.

Notice the smock used to protect the clothing and the proper table height which enables a relaxed fingerpainting experience.

In many preschool environments, computers have taken their place alongside art materials, blocks and storybooks as a possible creative experience.

Figure 2



Room Arrangement Sample

Figure 3

CHECKLIST FOR ROOM ARRANGEMENT, MATERIALS AND SUPPLIES OF INTEREST AREAS*

Most classrooms do not have or need all of the areas listed below. The list is to be used as a springboard for ideas and to spark possibilities within your own classroom. For the rationale for selecting various materials, see curriculum guides. For further guidelines on developing curricula, consult **Technical Assistance Paper No. 3, "Program Planning".**

ART AREA includes:

- — Materials for fastening things together (paste, glue, tape, staple).
- — Varying sizes, textures, colors of paper (newsprint, newspaper, wallpaper samples, magazines, construction paper, cardboard, sandpaper, wrapping, and computer paper).
- — Three-dimensional materials (pottery clay, playdough, fingerpainting paper, objects and tools to make impressions such as plastic knives, cookie cutters, and brayers).
- — Scraps for collages (cloth, ribbon, buttons, glitter, yarn, wood)
- — Painting tools (free-standing or wall easel, paint rollers, flat-bristle and round brushes of varying sizes, tempera paint, finger paint, shaving cream, watercolors).
- — Drawing tools (large quality crayons, colored and white chalk, charcoal, fat pencils—lead and colored, water-based markers).
- — Materials for weaving, stitchery (ribbon, yarn, looms, buttons, embroidery hoops, fabrics—burlap, canvas, lace, felt).
- — Printing tools (stamp pads, thread spools, potato mashers, rolling pins, cookie cutters, marbles).
- — Cutting tools (training scissors, loop-handled scissors, right and left-handed scissors).
- — Construction tools (boxes, wood scraps, rubber cement, wood glue).
- — Supplemental kitchen materials (toothpicks, string, paper towels, macaroni, wax paper and foil, flour, salt, cornstarch, liquid starch, food coloring).
- — Supplemental natural material (acorns, feathers, pine cones, seeds, rocks).
- — Storage materials (containers with lids, boxes for storage, drying rack, space allotted for storing materials in progress, system for storing smocks, old shirts or aprons).
- — Usable space that will allow for easy selection and return by children with minimal adult direction.
- — Work surfaces (tabletops, floors, easels, trays, walls and sidewalks outdoors!).
- — Clean-up materials (buckets, sponges, broom, towels, smocks).

BLOCK AREA includes:

- — Table blocks such as cube blocks, Legos, Lincoln Logs.
- — Solid wooden unit blocks (unit, double unit, quadruple unit, ramps, curves.).
- — Hollow blocks.
- — Homemade blocks, such as milk carton blocks.
- — Materials/props for pretending (small vehicles, rubber or plastic zoo and farm animals, people and signs).
- — Props as interest, occasion, or theme suggests.
- — Carpeted area to cushion noise.
- — Space for children to create without being disturbed. Consider traffic flow! Situating the block center near the dramatic/house play area can enhance imaginative play—and both are in the active, noisy range.
- — Shelves for easy storage (beware of storage bins that invite throwing and destroying blocks which can promote a "free-for-all" clean-up).

DRAMATIC PLAY/HOUSE AREA includes:

- — Appropriate child-sized sturdy furniture (table, chairs, rocking chair, doll bed).
- — Kitchen furniture (sink, stove, refrigerator).
- — Kitchen equipment (broom, mop, dust pan, dish pan, dishes, silverware, cooking utensils for pouring, sorting, filling, manipulating; artificial food).
- — Dress-up clothes (shoes, hats, coats, ties, dresses, other men and women's clothing).
- — Full-length, nonbreakable mirror. . .perhaps the most important piece of equipment.
- — Accessories (suitcase, briefcase, wallet, purse, jewelry, clocks, two (2) telephones).
- — Additional undefined space that promotes role playing (i.e., props for shoe store shop, beauty shop, playing fire station).

Figure 3 Continued*. Checklist For Room Arrangement, Materials and Supplies Of Interest Areas

BOOKNOOK/QUIET AREA includes:

- — Comfortable seating arrangement (perhaps a mattress on floor, pillows or floor cushions, rocking chair); some children prefer to look at books at a table.
- — Assortment of books stored in forward-facing rack or low shelves. Books should be multi-ethnic and non-sexist; arrange attractively and change periodically.
- — Flannelboard and flannel story characters.
- — Puppets.
- — Tape recorder for children to tape themselves "reading".
- — Filmstrips, quiet toys and manipulatives can be added to this area.

DISCOVERY AREA includes:

BIOLOGICAL SCIENCE

- — Child-friendly creatures (such as tadpoles, fish, caterpillars, ants, earthworms, rabbits).
- — Appropriate housing materials for creatures (large aquarium, cages, bird-feeding station).
- — Sturdy, easily cared for plants (various kinds of soil, pots, seeds, water cans; carrot, pineapple, and sweet potato toppings).

PHYSICAL SCIENCE

- — Thermometers (outdoor, indoor).
- — Pulleys, levers, inclined planes and simple machines.
- — Sand/Water table or tubs (located near water source—great if mobile for outdoor use).
- — Sand/Water tools and accessories for filling, emptying, scooping, and measuring (cups, bowls, spoons, scoops, sieves, colander, tubes, funnels, ladle, shovels, rakes, whisk broom, siphons, water wheels, egg beaters, eyedroppers, corks, sponges, towels, small trucks, and cars).
- — Additional materials for sensory variety (sawdust, beans, etc.).
- — Accessories for exploration (hand and tripod magnifying glasses, flash-lights, magnets, objects that float/sink, multisensory objects for smelling, tasting, hearing, touching and seeing; compass; color paddles, scales, objects for classifying shells, rocks, etc.).
- — Space allotted for washable floor surface.

SOCIAL SCIENCE

- — Maps, globes.
- — Pictures, magazines, resource children's encyclopedias, appropriate picture books.
- — Family, school scrapbooks.
- — Paper doll or puppet community helpers.

CONCEPT/MATHEMATICAL UNDERSTANDINGS

- — Unstructured materials to be used in a variety of ways (weighing, classifying, counting, and matching, objects such as blocks, beads, poker chips, buttons, straws, clothespins, teddy bear counters).
- — Measuring devices (spoons, cups, pint, quart; thermometers, clocks, tape measure; ruler, yardstick, scales).
- — Manipulatives such as stringing beads, skill frames (zipping, buttoning, fastening).
- — Pegboard and pegs, geoboards, puzzles (wooden, rubber, cardboard—knobbed, knobless) dominoes, Legos, cuisenaire rods, lotto games, nesting boxes, parquetry, interlocking toys.
- — Variety of teacher-made and commercial manipulatives that are open- ended with multi-uses and develop:
  - spatial relationships
  - problem-solving skills
  - fine motor and eye hand coordination
  - concept understanding in number, one-to-one correspondence balance, shape, color.

MUSIC AREA includes:

- — Record player and/or tape player with earphones.
- — Variety of labeled records and tapes.
- — Teacher-made and commercial musical instruments (triangle, bells, drums, sandblocks, tambourines, autoharp).
- — Movement and dance accessories (scarves, paper plates, crepe paper attached to tongue depressors).
- — Large space for creative movement.

**Adapted from Day, B. (1983). Early childhood education. New York: Macmillian.*

Figure 4

EXPANDING ACTIVE LEARNING AREA

COOKING AREA may rarely be a permanent interest area in public schools: however. most programs are able to provide an occasional cooking experience The cooking area includes.

- Hot plate. skillet
- Popcorn popper.
- Utensils (spatula. spoons. tongs paring knife. silverware).
- Measuring cups and spoons.
- Mixing bowls.
- Saucepans.
- Baking pans (muffin tins. cookie sheets. cake pans)
- Recipes illustrated for young children

WRITING/LISTENING AREA includes.

- Writing paper (unlined and lined paper construction paper. stationery. index cards. computer printout paper).
- Writing tools (large pencils. crayons. colored pencils. chalk and chalkboard)
- Printing tools (letter and design stencils. alphabet-letter stamps and pad. magnetic letters. sandpaper letters)
- Typewriter.
- Additional tools (stapler. paper clips. scissors. tape. pencil sharpener).
- Big books. flannelboards. puppets. picture-card stories. teacher- made movie stories. picture books

LARGE MUSCLE ACTIVITIES AREA includes

- Balance beams. walking boards
- Balloons to catch.
- Balls (nylon. sponge. rubber)
- Bean bags.
- Boxes (to jump off of. climb through)
- Bubbles.
- Climbing gyms or ladder box
- Ladders
- Mattresses (innerspring)
- Pedal toys
- Sawhorses.
- Slide
- Tumbling mats
- Tunnels/barrels to crawl through (fabric. plastic. cardboard)
- Movement opportunities need to be provided indoors as well as outdoors Days of inclement weather will increase the need to have indoor opportunities.

CONSTRUCTION/WOODWORKING AREA includes:

- Sturdy surface (workbench or table). child size for two children
- 7 to 10 oz. claw hammers (one per child)
- Assorted sizes of screwdrivers.
- Crosscut and coping saws (16 inch)
- Other basic tools: 6" pliers. brace and bits. hand drill and several bits "C"-clamps vises planes
- Assorted sizes and types of nails. hooks and screws. washers. bolts. varying grades of sandpaper.
- Measuring tools. ruler. tape. yardstick.
- Variety of wood types. sizes and shapes (soft pine. plywood).
- Accessory wood supply: popsicle sticks. toothpicks. tongue depressors.
- Supplemental materials to enhance creative construction: heavy cardboard. construction paper. wallpaper scraps. bottle caps small wheels string. rope. wood glue. paint brushes. hole puncher. rubber bands. pipe cleaners.
- Safety tools. goggles/safety glasses. work gloves. Adult supervision is necessary
- Storage area that makes access easy for children.
- Safety limits to protect children.

COMPUTER AREA includes

- One computer with internal memory. a disk drive. color monitor. and printer. if possible.
- Appropriate open-ended software program (examine programs closely. . .does it allow for discovery? problem-solving?)
- Table that permits monitors to be at children's level and keyboards at comfortable elbow height of children
- Safety features examined (such as wires and cords out of traffic pattern).

**Evaluate computer strength and drawbacks periodically in relationship to your goals .what are the needs of the child? Can the concept in question best be learned in a different way? Weigh values of all the various areas and make adjustments when necessary*

Outdoor Environment

The outdoor environment is an extension of the classroom. The same kinds of learning that occur indoors can also take place outdoors. Outdoor space allows children to breathe fresh air and stretch their muscles. . .opportunities abound for discovery, exploration, and sheer fun. Think about what children may enjoy doing outdoors. Digging, running, climbing, jumping, crawling, pouring, spraying, gardening, riding, and playing with pets is a partial list of interests. The outdoors can extend an invitation to all children regardless of their size, physical ability, or interests.

Creating developmentally appropriate outdoor space can be an exciting, creative venture or. . .a frustrating one. Many schools are limited in the available outdoor space and funds for playground areas. Consider the following questions in examining specific restraints in the classroom:

1. Can scheduling playground use at different intervals of the day, taking smaller groups of children at one time be an alternative?
2. Is there alternative space by use of adjacent parks, gyms, or other possible play areas?
3. Can indoor centers be taken to the outdoors? Many art projects and creative experiences are easier to undertake outside and can be fun in a different setting.
4. Have a variety of experiences been provided outdoors, such as waterplay, bubble blowing, science projects, eating snacks, excursions, field trips, and obstacle courses?

Planning Outdoor Space

As with planning the indoor arrangement, begin the outdoor design by examining the goals for children. Analyze the objectives for socio-emotional growth, cognitive development, and physical growth. Listed below are sample questions to guide thinking when planning the outdoor space:

- Is the playground area safe? The arrangement and quality of equipment? The supervision offered?
- Does the area encourage children's creative thinking and involvement or does the area simply invite children to watch how something operates?
- Is the outdoor experience teacher-or child-centered?
- Can children make choices to play alone or in groups, or to play actively or quietly?
- Is the space promoting the development of large muscles and gross motor skills?
- Is the area located near bathroom facilities for that "rapid entry"?

Safety feature consideration is critical when making selections for equipment. For more comprehensive safety guidelines, teachers should review the Handbook for Public Playground Safety from the Consumer Product Safety Commission (see RESOURCES).

Outdoor Equipment and Materials

When planning the outdoor area, many of the same considerations for indoors will apply to this plan (traffic flow, teacher-child ratio, amount of space, boundaries, etc.). Evaluate the space and plan wisely. The following is a list of basic outdoor equipment and materials:

- Climbing structure (may include sliding apparatus, tunnels, ramps, logs, tire structures)
- Wheeled toys (tricycles, scooters, wagons, wheelbarrows)
- Sandbox with cover (pails, shovels, sieves)
- Packing boxes (large and small
- Swings (knotted-ropes, tires)
- Balls (varying sizes)
- Retreat area (blanket, books, music)
- If space is premium, consider expanding with:
  - woodworking area
  - pet area
  - garden area

See Figure 5 for a sample sketch of a playground area. Some modifications are necessary depending on the abilities of children with special needs in the program

Children who are born with, or acquire disabilities often face greater challenges in maximizing their potential than other children. To maximize the use of the outdoor space as a tool for learning, children with special needs must have equal access to those facilities which promote the development of the whole child. The universal playground, a concept designed by the Canadian Ministry of Education, provides equipment and materials for the full spectrum of developmental abilities, benefits all children, and works to the advantage of children with special needs (Schleifer, 1991).

A Final Note

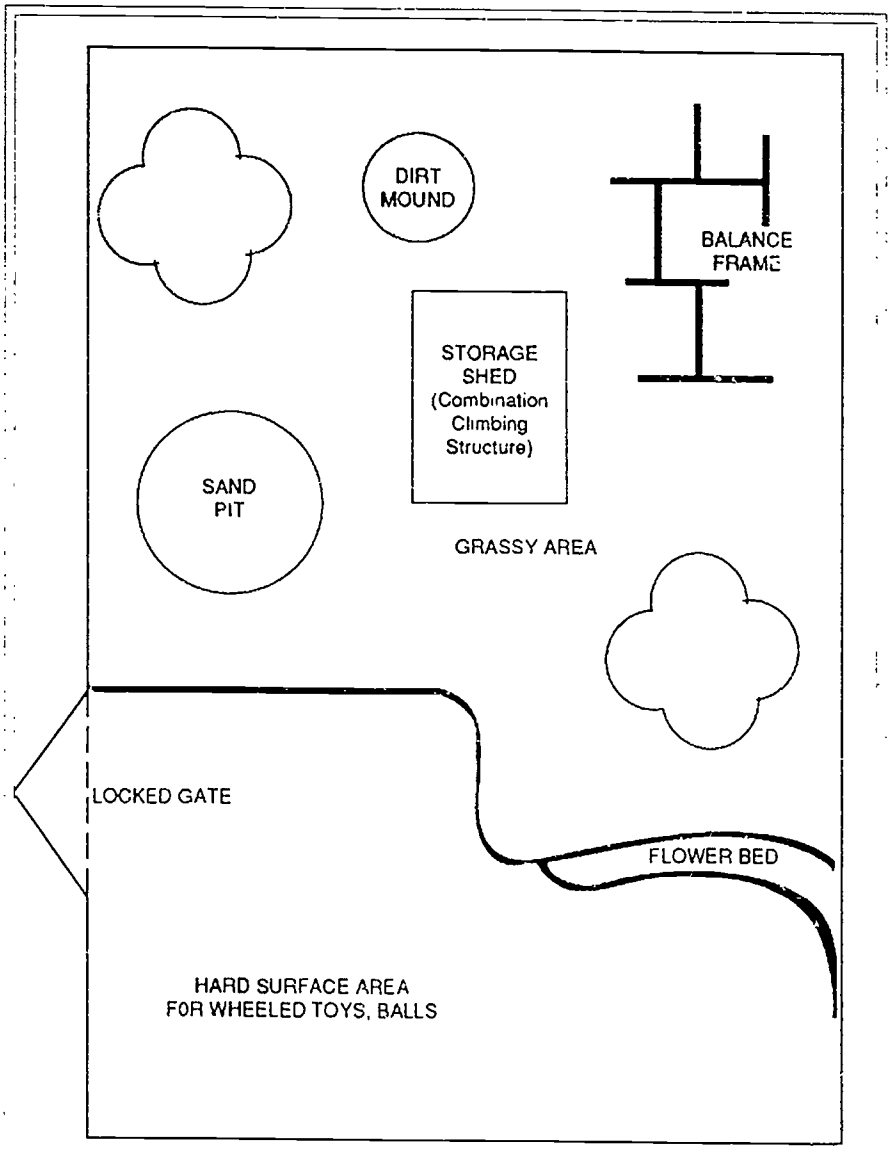
Most regular early childhood equipment and materials are suitable for children being integrated into the classroom. However, occasionally, children with special needs will need additional equipment and materials required for their safety and therapy. These can be chosen with support staff when Individual Education Plans (IEP) are developed. Refer to Figure 6 for a sample of accommodations that can be made.

In general, the physical environment can be adapted and designed to promote the integration of children with special needs by:

1. Keeping safety the primary concern;
2. Providing multi-activity centers which permit variety, and;
3. Matching the child's developmental needs, abilities and interests with the environment.

Room arrangement, materials and equipment, staff and concepts to be learned will all influence the organization of the physical environment for young children (Hamilton, et al., 1990). All young children need a nurturing environment.

Figure 5



Adapted from Decker and Decker, 1988.

Outdoor group play should provide a safe challenge for children's cognitive, social, and physical abilities.

ENVIRONMENTAL ACCOMMODATION FOR CHILDREN WITH SPECIAL NEEDS

The following list is a sample of modifications that can be made for the indoor and outdoor environment.

Arrange the environment for physically impaired children by checking with occupational and physical therapists and:

_____ assessing each child's needs. Modify needs or adapt room to ensure safety and eliminate barriers.
_____ checking necessary specifications for ramps and slopes; a thirty-six inch minimum width for wheel chairs (Decker & Decker, 1988).
_____ checking heights of chairs and tables to suit children's needs. A variety of sizes and heights are needed in a classroom.
_____ examining the existing playground
*Can grab bars/handrails be added to areas to assist children who have difficulty in balance and mobility?
*Can backless benches be provided to allow children to straddle?
*Are there resilient surfaces to cushion falls (bark chips, for example)?
*Are there areas of shade for children who are sun-sensitive?
*Can any equipment/space be modified to increase accessibility (e.g., installing ramps, building up one end of sand/water table to increase wheel-chair accessibility, or increasing width of pathways to accommodate crutches or walkers)?

Arrange the environment for the hearing impaired children by consulting with a speech/language pathologist and/or hearing impairment specialist and:

_____increasing use of visual and tactile information (sandpaper labels, brightly colored).
_____providing cues that are self-explanatory.
_____planning activities and equipment that will provide opportunities for perceptual and balancing growth.
_____supervising areas of water play closely to prevent damage to hearing aids.

Arrange the environment for the visually impaired children by consulting with a visually impairment specialist and:

_____being consistent in room arrangement patterns and location of materials, supplies, and activities. Major equipment and furniture should stay in predictable locations.
_____forewarning and phasing children gradually into new areas or areas that have been changed.
_____providing many multi-sensory experiences/areas (water and sand play, music area, tactile maps, signs).
_____demonstrating and rehearsing the use of equipment and materials.

Arrange the environment for the developmentally delayed child by:

_____enriching the environment with language experiences, using a whole language approach. Expand children's expressive and receptive language.
_____providing a variety of first-hand, concrete experiences (e.g., child should "experience" the color red by painting at the easel with red paint, and eating red apples instead of being drilled on what is "red").
_____locating materials in each area that will meet the needs of the child with developmental delays (e.g., having 4-piece puzzles available in addition to having 10-piece puzzles).
_____increasing or decreasing the level of difficulty for individual children.

Refer to **Guiding Children's Behavior, Technical Assistance Paper #5** for specific information related to planning the environment and tailoring teacher response to behavioral challenges that occur in the classroom.

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Children need space and opportunities for privacy and solitude. Book time affords an opportunity for quiet, concentration time.

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