

Beginnings Workshop



“Environments for Special Needs”



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Photograph by Nancy Leigh Davis

Getting to the Heart of the Matter

by
Rochelle Bunnett and
Nancy Leigh Davis



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"The purpose of teaching is to provide for your students an experience of their own greatness." — Eric Jensen

Imagine entering a classroom for young children where you immediately sense you are in a special place. There is a sense of wonder and excitement as you move about. The possibilities seem endless for making new discoveries, inventing, and creating. *It invites children to just be.*

The art center is well stocked with clay, paint, chalk, glue, "found" collage items, and tools. The large easel made from donated vinyl floor tile and handmade "gutter" paint trays is mounted on the wall and allows children to move their bodies in different ways, as well as share a picture painting experience with a friend. The art area has an "OPEN" sign on it, and is always a choice.

The home center enclosed by four walls (one formed by what can become a puppet theater at another time, another a storefront) is equipped with a doorbell, mailbox, and plexiglass windows that go up and down. The small lamp on the dresser inside the house allows

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children to brighten or quiet the space. The pots, pans, utensils, cloth napkins and pot holders are real, “found” treasures from the secondhand store. The “soup pot” is on the stove.

The cozy and comfortable feel of home extends throughout the classroom. The book area houses different sized baskets filled with not only a wide variety of books but also stuffed animals, fabric, and pillows. The live animals who take up residency here move about the classroom as they are invited to different centers. Artwork, photographs, and stories written by both the children and adults are artistically displayed throughout the classroom.

The block area feels and looks more like a construction site in progress than a daily play area. Children are encouraged to continue projects, it appears, from the “Children at Work” and “Construction in Process” signs in the area. There are loose parts such as blocks, tape, cardboard and plastic cylinders available in different kinds of containers, encouraging ongoing projects.

The outdoor play yard has as many interesting areas to explore as indoors. There are plenty of hoses, buckets, and tools to dig with and just mess about. There is a gas station (always open) to replenish fuel in vehicles and to offer a friendly stop for all.

The children who attend this school come from many cultural backgrounds and socioeconomic levels and portray a wide range of diverse abilities. Some children already have an IFSP (Individual Family Service Plan) or an IEP (Individualized Education Program) in place. For some families, the process of planning for and receiving special help is just beginning.

Before we could envision all the wonderful possibilities (many of which are now realities in our classrooms), we first had to ask ourselves these questions:

1. What did we want our environment to look like? To *feel* like? What would be the initial impression of those coming in for the first time? What were the qualities we valued the most?
2. Would we design our environment any differently knowing that the children we served had special needs? If so, why?
3. How does our environment support and nurture the development of friendships and enhance the building of a classroom community?

As we pondered these questions, we realized that much of our inspiration for the design of our class-

rooms comes from our fondest memories as children — our memories of soft places, high places, quiet places, and private places. These memories always seem to be reflected in some way in our classrooms.

Our premise is that our environments should be designed based on what we know children love, and what we loved as children. It should be a joyful place where the needs and desires of both the children and the adults are supported and realized. We believe that the environment should look no different for one group than for another. The difference will be found in how the different team members and families weave their “stories” together. The environment *must* be inviting, encouraging, participatory, and respectful for each person.

Our image of the child with special needs has changed over the years, from one of “needing to be fixed” (focusing on skill drill development, often in stark environments) to one of “competent” with potential for learning. The process of letting go of the “preconceived” image of the child with special needs (whether our images come from a poster child or a child described in a case study) takes time.

Getting to the heart of the matter . . . young children are young children. Our experience tells us that children with special needs vary as much in their abilities, interest, and skills as other children who are typically developing. It is more important to focus our attention on getting to know the child in front of us, to learn what his/her interests, passions, and strengths are, so that we may facilitate entrance into the classroom community of learners as a participating, contributing, and valued member.

In shifting from a “deficit model” to a “competent model,” we have been able to expand our roles as facilitators and observers, giving us a new perspective on the significant *role* of the environment. *The children have been our best teachers.* By posing interesting and challenging questions based on the needs and desires of the children, we design and arrange our classrooms so that learning can occur all the time. For example, we have enlarged the home center to accommodate more children. Embedded in the design of the house (as described earlier), we added different sized knobs and attachments to open and close doors, windows, and cupboards. In this way, a child’s fine motor skills, problem solving abilities, and creativity are all supported. We have utilized our walls by adding interactive plan panels (peek a boo for the infants and toddlers and memory panels for the older children). This not only added a new work place but allows more opportunities for those children



to work with their hands, standing or supported by a walker. It also allows them to play in close proximity to their friends in the dramatic play center.

We discovered that by enlarging the pathways throughout the room to accommodate a child using a wheelchair or walker we made it possible for the children to move small pieces of furniture and rearrange the space as needed for play. We discovered that it is not only important for children to be able to physically get into the space with equipment but to be able to move about freely and with easy access *within* each center.

We discovered that children need more than one “cozy nest,” and designed several soft and quiet places. Over the years, we have used mattresses, bean chairs, hammocks, and rag pillows, to name a few. We found that with additional quiet spaces children can do their work with fewer disruptions, feel less fatigued, and can retreat to a quiet place without negative connotations.

We most recently have learned how important it is to have flexible lighting. We rarely have the banks of overhead fluorescent lights on, and instead have specific areas “spotlighted” or warmed by lamps (table, floor, and clip on). If more light is needed, we turn one bank of lights on instead of all three.

Rich sensory experiences have always been present in our offerings, such as in the sand/water/texture table, but we also gave more attention to adding beauty to our space overall. We added more plants, fresh flowers, lunch table centerpieces, battery operated candles, and scented potpourri, to name just a few.

We have learned that even with a well designed space, if our daily schedule is too rigid or controlling, all the messages we want to convey are compromised. We have learned to follow the children’s lead and to examine our training and experience regarding schedules and transitions. Flexibility is a key to cooperative learning and working together, with the ultimate goal being one of ebb and flow, give and take, and getting into the rhythm of classroom life. Sometimes children need longer than the allotted time for an activity; sometimes they need less. Often transitions are not given enough time in the “schedule.” Waiting can be difficult.

If children seem to need more time to play and complete projects, we can honor that need by allowing a place to “save” a block vehicle or a partially completed puzzle. We can set aside the old notion of needing to have everything “cleaned up” during clean up time.

shared about their positive reactions to our classroom environments, and their visions of the possibilities for their children in the classroom.

In small but significant ways, the environment and the rich experiences that have emerged have restored a sense of “childhood,” often shortened and disrupted for children with special needs by long hospital stays, frequent visits to doctors and specialists, and the need for isolation because of their medical “at risk” status.

In other words, we design our environment not based on the needs of a few children but instead on a vision of what is “wonderful” and “possible” for all children. We modify, change, and adapt the environment (the fewer adaptations the better) as needed. Sometimes we have to reduce the quantity of the materials offered, but never at the expense of compromising quality.

It is our belief that our environments must support, nurture, connect, and sustain friendships. We cannot ask children to give us their best if they do not feel safe, secure, and loved in the place where they work and play. In turn, we cannot give our best as teachers if we do not feel at “home” in our workplace.

In summary, we believe that the process of envisioning and designing an environment that acknowledges competence and supports a community of learners is much more complex than following a list of “guidelines.” It requires us to look more deeply into our own beliefs and value systems, to draw from our childhood memories, and to collaborate with others. It also requires us to take insightful, educated looks at our learning goals for children, and to ask ourselves, “Does our environment support what we believe is *best* for children and families?” And, most importantly, we must trust that by listening, watching, and waiting, children will teach *us* what we need to know.

A special thanks to those who have inspired us in our work:

Edwards, C., L. Gandini, and G. Forman. *The Hundred Languages of Children*. Norwood, NJ: Ablex Publishing Corporation, 1995.

Jensen, Eric. *Super-Teaching: Master Strategies of Building Student Success*. Delmar, CA: Turning Point for Teachers, 1988.

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Time and time again we have been moved by the stories parents have





Photograph by Subjects & Predicates

When we plan and construct environments for young children, we think about the physical environment, about how the children know what to do in the space, how they will move through that space, and about what activities and materials they will use. The environment should say “YES” to each child. It should invite all children to touch, explore, climb, and get involved.

Children with disabilities need the same things in their classroom environment as other children. They need an environment that is safe, secure, and provides activities and materials for their development. When a child with disabilities has different developmental needs than other children of the same age, adaptations must be made. These may require either adding something to the environment that is not already there or using something in the environment in a different way.

Before you make any adaptations, talk to the parents. They are your best source of information about the child, the special need, and modifications or special

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Enhancing the Environment for ALL Children

by Victoria Youcha and Karren Wood



Karren Wood, Ed.S., OTR, is the project director of the Community Connections Project. This project supports the efforts of child care personnel to include children with disabilities in community programs. Background for this article was drawn from a personal interest in the Americans with Disabilities Act and her efforts on two federally funded projects, Bridging the GHap (HO2244B90032) and The Community Connections Project (HO29K20048).



equipment. Find out about techniques they use at home. If the child receives special education services, ask if you may observe in that setting.

As you begin to adapt the classroom for children with disabilities, remember three key concepts: **access**, **usability**, and **maximizing learning**.

- Can the child get where she needs to be in the classroom to learn something?
- Once the child is in that location, can she use the materials and participate in the activity as independently as possible to learn something?
- Are the learning activities arranged and scheduled to meet the individual learning needs of the children, including the child with disabilities?

Universal Access and the Americans with Disabilities Act (ADA)

The ADA requires that programs for young children be as physically accessible as possible to ensure that discrimination does not occur against people with disabilities. Programs are expected to make readily achievable physical changes to accommodate those with disabilities.

The law requires that people with disabilities be able to access entrances, restrooms, classrooms, play spaces, and playgrounds in order to receive full benefit from the services offered by the early childhood program.

The Architectural and Transportation Barriers Compliance Board (Access Board) has suggested accessibility guidelines for children's facilities. These guidelines can be obtained by calling (202) 272-5434 or (800) 872-2253; or, if using a TTY, (202) 272-5449 or (800) 993-2822. Request publication S25.

After reading through these guidelines, make a modified checklist for your own program, inserting the recommended measurements as they apply to children in your program. Organize your checklist by specific topics, such as doorways, entrances, and hallways; bathrooms; parking lots and sidewalks. This kind of checklist will make it easier for you to do a simple survey. Next, measure and mark commonly used distances with masking tape or an indelible marker on a tape measure. For example, you can mark and compare the required table heights, chair heights, sink heights, toilet heights, and doorway openings with what is in your program currently.

As you look at your environment, think about each area from the perspectives of a child with limited mobility, a child who is

deaf or hearing impaired, and a child who is blind or visually impaired.

For children with limited mobility, ask the following questions:

- Can the child enter the building, get to the classroom, use the bathroom and the water fountain, and enjoy outdoor activities?
- Are the doorways, walkways, and paths wide enough for a child using a wheelchair?
- Are sinks, water fountains, and table surfaces low enough to be within reach?

For children with sensory impairments, consider the following:

- If a child is deaf or has a hearing impairment, are there visual labels to indicate clearly activities and appropriate uses? In case of emergency is there a blinking light in addition to the auditory fire alarm?
- If a child has a visual impairment, are there tactile and auditory cues he can use to find his way around the classroom and the building? Could you add increased visual contrasts or larger signs to help him move through the environment?
- The simplest solutions may be the best. It may not be necessary to reconstruct a sidewalk if a small amount of asphalt can be added against the curb to create a slope up to the sidewalk.

If you cannot make all the necessary changes you have identified, make sure you document what changes are needed, how you plan to correct your deficiencies, and a target date for completion. You will then be prepared to implement your solutions should a child with a disability enter your program tomorrow.

Good Environments for Infants, Toddlers, and Preschoolers

Infants need safe, secure environments that encourage them to use their senses and explore. One of the most important factors in an infant environment is a consistent caregiver. Toddlers need a balance of security and independence. They still rely on their senses for most of their learning, but they are driven to move and the environment has to provide opportunities for them to use their bodies in a variety of ways. At the same time, caregivers need to be able to see all areas of the room at once because toddlers can move so quickly. Preschoolers need well organized, clearly defined spaces with areas that promote independence, foster decision making, and encourage initiative and involvement. These



areas should be attractive and inviting and should encourage small groups of children to play together.

Quiet Spaces

All children need a quiet comfortable space they can go to when they are become agitated or upset. This well-defined area is for use alone or with the adult of their choice to soothe, comfort, and regroup. It should “feel good.” It can be a lap, a rocking chair, a swing or a special place in the room. Children need this part of the environment to help calm themselves. They are not always developmentally able to tell the caregiver what they need or what is bothering them. A teacher might expect a three or four year old who is verbally adept to “talk” his problems out. However, a child who has language difficulties and cannot talk about being upset also needs a secure place in the classroom to be alone or with the person of his choice in order to calm down. Many preschool classrooms have quiet corners that usually house books or tape recorders with headphones. This space can be adapted by developing a “reservation system” that allows the area to be used for one child at a time if someone needs a quiet area to calm down and get over being upset.

When the Environment is NOT Working

You will know when the environment is not working by the behavior of the children. Infants become fussy and restless if they are in one place too long and away from toys or interesting things to watch and touch. Toddlers may fight over toys, run around the room aimlessly, and begin clamoring for the caregiver’s attention all at once. Preschoolers may seem bored and unengaged. They may wander around looking for something to do, or wait for adults to tell them what to do.

As children come into your room they will let you know by their actions and, sometimes their words, what equipment and materials should be added or changed. Toddlers don’t share toys well. If they always seem to be quarreling over a favorite toy, you need to add several more of the same toy. When older children begin to build more sophisticated constructions with the blocks and run out of blocks before they are finished, see if you can add another set. To act out a story that you have read, change the “dress up” clothes to match the story.

Choosing Equipment and Materials

Equipment and materials in the environment should be flexible enough to be used by children with a wide

range of abilities. For any age child, the equipment and materials should foster independence. Blocks and sand and water tables can suit children of many developmental levels. For toddlers, equipment also needs to support motor development. Preschoolers need materials invitingly displayed with visual cues about how and where to use them. For example, areas defined by tape on the floor and pictures of block constructions show where and how to build with the blocks. Of course all equipment and materials should support the development of new concepts and skills in children with diverse developmental levels.

Adaptations for children with physical disabilities

The addition of a child with physical disabilities to your group may require some special equipment. Such equipment might include:

- Chairs to help a child sit better (e.g., a corner chair or a bolster chair with head and back support);
- A standing apparatus for a child who cannot stand alone (e.g., a prone stander);
- Wheelchairs and walkers;
- Body, hand, or leg braces that keep the trunk, arms, and legs in good positions or help make the limbs more functional.

Often the largest items in the classroom are the furnishings. One of the most important things you can do for a child with physical disabilities is to make sure that he has enough room to maneuver around the furniture in the room.

Ask the child’s parents for an explanation of the equipment he needs. Learn when and how it is used. The parents can demonstrate what needs to be done and you can try it yourself while the parents are observing. Check to see if the child’s physical or occupational therapist can consult with you about use of the equipment. If you are uncomfortable using the equipment, keep working with the parents, ask for clarification, and try different alternatives until the best situation for you and the child is found. Write the procedures down if equipment and use are complicated.

Adaptations for children with hearing or language disabilities

Children with hearing or language impairments may also need special devices. Some children may need hearing aids or amplifiers. Language boards and augmentative communication devices can help other children communicate



about what they want and help them initiate and sustain conversations.

For children with hearing impairments, the environment needs to include additional clear and noticeable visual cues to help them function independently and understand what is happening in the classroom. For example, you can flick the lights to signal an activity change, rather than ringing a bell. Use manual signs as you sing the song for clean up time. Make sure you face the child and that the child can see you when you give instructions.

Again, ask the parents to explain and demonstrate the techniques they use. Also ask for guidance from the child's speech therapist or audiologist.

Adaptations for children with visual impairments

For a child who is visually impaired, you need to keep large furniture in the same place. Prepare all the children for room changes or include them in the planning of the changes. If the furniture or room arrangement is going to change, make sure that the child who is visually impaired gets to explore and learn the new arrangement.

Tactile cues help children who are visually impaired locate equipment and materials independently. The name on the child's cubby can be marked with a textured sign that the child can feel. Small objects or toys can be taped on the outside of bins to help the child identify where each piece of equipment belongs.

Modifying the schedule

As you adjust your routines to include children with disabilities, think about the events in your daily schedule in terms of the following characteristics: structure; grouping; activity level; time; purpose; and the role of the teacher. You can then make adjustments based on each child's needs and level of development.

As you begin to adapt your schedule for children with disabilities, ask yourself these general questions:

- Is there a schedule which is predictable for the children and reflects little "down" or waiting time?
- Is the classroom schedule flexible enough to accommodate programming changes?
- Are the blocks of time in the classroom schedule developmentally appropriate for the group?



- How and when do children move from one activity to the next? Is there a clear signal or do they have to wait any length of time to begin the next activity?

- How will you provide access to special program events, such as field trips?

For each child with a disability, consider whether she does well in child-initiated activities or could benefit from more teacher direction. Can the child work in large groups or does she need more individualized attention? What is the child's activity level tolerance? And, finally, what level of independence does the child show during transitions and waiting times? Does the child understand the cues for activity changes?

Sometimes adaptations require several adjustments. For example, Justin is a very active, visually impaired child who attends his neighborhood preschool. At first his teacher was concerned because she had never worked with a child like him before. She talked to his mother and did some reading. She set up the classroom and had his mother help introduce him to the areas of the room. She used very bright tape to mark different areas. She also added a fuzzy sticker to Justin's cubby, carpet square, and chair so he could find them. Yet, even after two weeks, Justin was having frequent outbursts during transitions between activities. The other children knew when it was time to change activities and what would happen next. Justin just didn't seem to understand.

What made the difference were a few simple adjustments. These included a schedule board with tactile cues so that Justin could make a plan for his one long play time and could refer back to it on his own, keeping Justin with the same small group of children for two weeks, and giving him his own timer so that he would have a few minutes of extra warning before it was time to change activities.

Well planned and balanced schedules give children the security and predictability to function independently.

Individualizing Activities for Each Child

The same activity may be used with a group of children and can be adapted if all of the children have similar learning needs or if some children have different learning needs. First determine the learning goal and purpose of the activity and then ask:

- Does the curriculum allow for individualized teaching with flexibility to meet a variety of learning needs?
- Do the materials need to be changed? Do you need right handed and left handed, squeeze scissors, blunt

or pointed? Do you need simple shapes or complex shapes? Stiff paper or thin paper?

- How much time will the activity take? Can some do it fast and some do it slowly?
- Does everyone have to do the activity? Does everyone have to do it at the same time?
- If the activity has many steps, how should it be broken down for teaching? Can the children do the whole activity independently? How much help will they need? How can it be simplified?
- For children with visual and auditory impairments, can the directions be both demonstrated and verbal?

Because the activities and the children are all different, you will have to be flexible. Some adaptations can be made on the spot. Others take careful planning and preparation. Enlist parents, your colleagues, and the children to help you with the task.

Before making activity adaptations for children with disabilities:

- Give yourself and the child time to adjust.
- Assume the child is able to participate in all activities.
- Watch the child during activities. See what she can do and what areas may need adaptation.
- Make adaptations after you have met and gotten to know the child. Ask for parents' suggestions for adaptations.
- During the first week or so, try to arrange some back-up support for activities that need a lot of teacher direction.

Well conceived activities are:

- flexible enough to meet a variety of developmental learning needs for individualization;
- can meet multiple learning objectives;
- are motivating and interesting to the children.

Environments for all children, including those with special needs, should provide many opportunities for them to be the best that they can be. Simple adaptations and sensitivity to individual needs can make all the difference.

Resources

Access Board, Office of Technical and Information Services
Architectural and Transportation Barriers Compliance Board
1331 F Street NW, Suite 1000
Washington, DC 20004-1111

(202) 272-5434, ext. 21
(800) 872-2253 or (800) 514-0383 (TTY)

Technical Assistance Centers

The National Institute for Disability and Rehabilitation Research (NIDRR) has funded ten regional centers for five years to provide information, training, and technical assistance related to implementation of the ADA. To be connected directly to the regional center serving your state, call (800) 949-4232 (voice and TDD).

Other Publications

Adaptive Environments Center. *The Americans with Disabilities Act Checklist for Readily Achievable Barrier Removal*. Boston, Massachusetts, 1995. (617) 695-1225 V/TDD.

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Using Your Senses to Adapt Environments: Checklist for an Accessible Environment

by Kirsten Haugen

Photo: Kirsten with friend Maman Faye in Senegal, West Africa.



Kirsten Haugen, MA, teams up with children with special needs, their families, and professionals to explore ways in which technology can support learning, cooperation, independence, and fun. She works at the

Center for Accessible Technology, Berkeley, California, and in schools around the Bay area.

Evaluating and Adapting the Environment

When we design an appropriate environment for children with diverse abilities and needs, two ground rules should apply:

- The environment needs to be *safe* for all children. Special accommodations will be needed to make it accessible and safe for some children.
- The environment impacts all children's abilities to participate, learn, and communicate. Special adaptations may be needed to help some children participate, learn, and communicate.

Since children use their bodies and their senses to explore, learn, and play, and since special needs often relate to differences in *how* children use their bodies or their senses, using *our* senses to evaluate the environment can help us organize, capitalize on, and adapt for diverse abilities and needs.

Physical Environment

Questions to think about:

- How do different children use their bodies or the space around them for learning?
- How can we enhance or adapt the physical environment for children who have difficulty moving (or who move too much)?
- How can we capitalize on the physical environment for children who learn by moving?

Accessing the environment safely:

- Are doorway widths in compliance with local building codes?
- Ramps in addition to or instead of stairs?
- Low, wide stairs where possible (including playground equipment)?
- Hand rails on *both* sides of stairs?
- Easy handles on doors, drawers, etc.
- At least some kids' chairs with armrests?
 - "Cube" chairs are great!
 - Often a footrest and/or seat strap will provide enough stability for a child to do fine motor activities
- When adapting seating, mobility, and/or gross motor activities for a specific child with physical disabilities, consult a physical therapist.

Learning through the environment:

- Does the environment and equipment reflect variety?
 - Surfaces, heights (textured, smooth, low, high, etc.).
 - Space for gross motor activity (open spaces, climbing structures, floor mats).
 - Quiet/comfort spaces (small spaces, carpet, pillows).
 - Social spaces (dramatic play area, groups of chairs or pillows, etc.).
- Are toys and equipment physically accessible?
 - Glue magnets to backs of puzzle pieces and attribute blocks and use on a steel cookie tray.
 - Attach large knobs or levers to toys with lids, movable parts.



- Attach tabs to book pages for easier turning.
- An occupational therapist can provide specific suggestions for adapting materials and activities so a child with physical disabilities can participate.

Visual Environment

Questions to think about:

- How do different children use their vision for learning?
- How can we enhance the visual environment for a child with low or no vision?
- How can we capitalize on the visual environment for children who learn by seeing?

Accessing the environment safely:

- Are contrasting colors used on edges and when surfaces change (e.g., tile to carpet, beginning of stairs, . . .)?
- Can windows be shaded to avoid high glare?
 - Also consider darker non-glossy floors and table tops.
 - Some children’s behavior and learning may improve dramatically once a strong glare is eliminated.
- Is visual clutter avoided on walls, shelves, etc.?
 • Visual clutter can interfere with learning, predictability, and safety.
- Is “spot lighting” (e.g., swing arm lamp) in a dimmer room available?
 • Spot lamps help some children pay attention and work better on table tasks.
- Orientation and mobility specialists help children with visual impairments learn to navigate the environment.

Learning through the environment:

- Are objects and places in the environment labeled (“door,” “chair,” etc.)?
- Are the size and contrast of pictures and letters adequate for the children with visual impairments in your program?
- Are visual displays at the children’s eye level?
- Are large print materials, textured materials, and auditory materials available (e.g., big books, sandpaper letters, books on tape)?
- Is the daily schedule represented in words and pictures?
 • A velcro schedule which allows children to post the schedule and then remove items as activities are complete can help children to stay focused and transition more easily from one activity to the next.
- Are children with low vision seated close to the center of activity and away from high glare?
- Teachers for the visually impaired assist in selecting and adapting materials for children with low vision.
- Children who are blind may need a “running commentary” of events, places, etc. Pictures in books and food on plates, for example, should be described.

Auditory Environment

Questions to think about:

- How do different children use their hearing for learning?
- How can we enhance the auditory environment for a child who is deaf, hearing impaired, or has poor auditory discrimination skills?
- How can we capitalize on the auditory environment for auditory learners?

Accessing the environment safely:

- Does background noise (from indoor or outdoor sources) filter into the area?
- Is there a way to eliminate or dampen background noise (using carpeting, closing windows and doors, . . .)?
 • Some kids are unable to do the automatic filtering out of background noises that we do so unconsciously.
- Is “auditory competition” avoided?
 • Raising one’s voice to compete with a roomful of noisy children is rarely as effective as “silent signals” such as holding up a peace sign and encouraging children who notice to do the same until the room is full of quiet children holding up peace signs!
- Are non-auditory signals needed to alert a child with a hearing impairment?
 • Turning the lights on and off is a common strategy.
 • Ask the child’s parents what strategies are used at home.



Learning through the environment:

- Are auditory messages paired with visual ones (e.g., simple sign language, flannel boards, picture schedules)?
- Are children with hearing impairments seated so they can see others' faces and actions?
- Teachers for the hearing impaired can provide strategies for modifying activities for children with hearing impairments.
- A child who is deaf will need a teacher or aide who uses sign language.

Social Environment

Questions to think about:

- How do different children use social cues for learning?
- How can we adapt the social environment for children with impulsive behavior, attention deficits, or behavior problems?
- How can we capitalize on the social environment for children who learn by relating to others?

Accessing the environment safely:

- Is the schedule predictable? Are children informed of schedule changes?
- Does the schedule provide a range of activity level (e.g., adequate opportunities for physical activity)?
- School psychologists and behavior specialists can help analyze misbehavior and modify the environment or schedule to minimize problems for children with attention deficits or behavior problems.

Learning through the environment:

- Does the environment have a positive impact on self-esteem?
 - Allows all children to feel safe?
 - Invites all children to participate?
 - Maximizes all children's opportunities for independence?
- Do learning materials and toys include representations of all kinds of people, including children and adults with disabilities?
 - People with disabilities should be represented in active and leadership roles, not just as passive observers.
- Does the schedule include opportunities for a variety of groupings (pairs, small groups, whole class) as well as quiet time or time alone?
 - Pairing or grouping children with complementary abilities eases the demands on the teacher and enables children to help one another.
 - When given a chance, peers often come up with the most creative ways for children with disabilities to participate.
 - Creative use of staffing may be needed to provide additional support for some children during some activities.
- Does the schedule provide both structured and open activity times?
 - Children who have difficulty with a particular type of activity may need extra support at those times.

Additional Strategies When Adapting the Environment for Individual Children:

- Make use of the diverse strengths of the various people on the child's team.
 - Early childhood educators are among the most sensitive and creative when it comes to developing multi-sensory, inclusive activities that take individual children's skills and needs into account!
 - Be on the lookout for how kids modify environments and activities for themselves and their peers. They often come up with the most creative solutions!
 - Include parents when making accommodations for children with special needs. Parents know their own children better than anyone else.
 - Some children qualify for special education services through state-wide infant or preschool intervention services. The specialists in these programs can assist in assessing a child's needs and providing suggestions and/or parameters for modifying the environment (and instructional strategies).
- Respect for each child's strengths and needs is the most important ingredient in creating appropriate environments for all children.

Clearly, there are many ways to break down how we view the environment in order to adapt and/or capitalize on the qualities of an early childhood environment. Different people will find different views more or less helpful, and often particular children will inspire us to see the world in new ways. The key is to open our eyes — and ears, hands, and feet — to new possibilities for participation and learning.





Photograph by author

Just before the Fourth of July 1993, the swing set on our 25 year-old playground collapsed. We were lucky! There were no injuries. The children immediately began asking, "When will the swings be fixed?" Our first thought was that we had to find the money to replace the swing set as quickly as possible. A review of safety factors and current licensing regulations indicated that we needed to look at all of our outdoor equipment. The staff began generating a wish list, playground equipment companies were contacted, and proposals were submitted. The board of directors emphasized the need to comply with current safety and licensing regulations as they launched a major fund raising effort to raise money for the new playground equipment.

Accessibility for Children with Special Needs

We were about eight months into our planning when we began to consider accessibility. Four members of our staff and a board member were involved with the Community Connections Project at The George

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More Than a Playground: Accessible Outdoor Learning Centers

by A. Phoebe Meyer



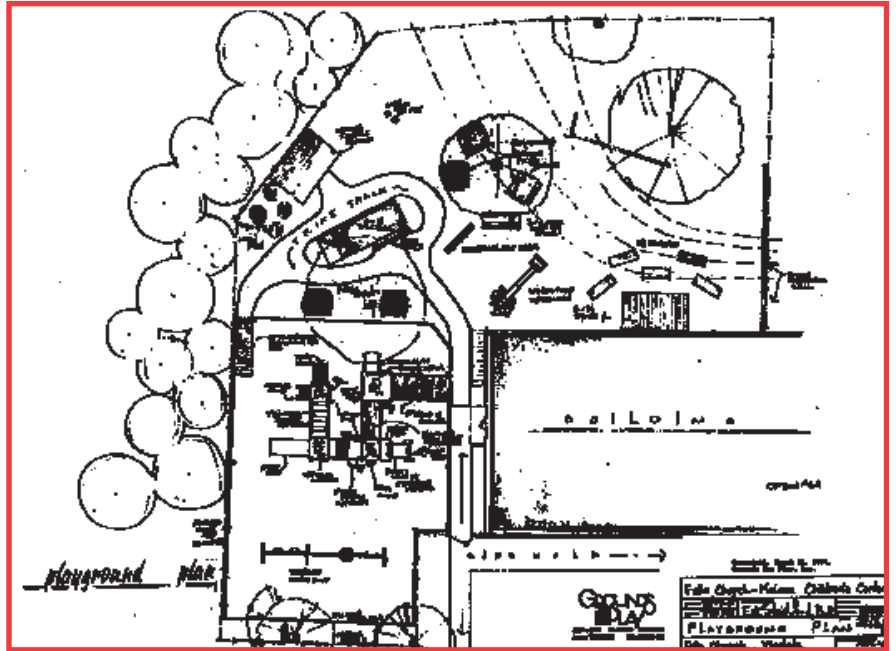
Washington University. This project was designed to help early childhood professionals include children with special needs in their programs. We quickly decided that our new outdoor learning center should be accessible to all children including those with physical or sensory disabilities.

Our Wish List for an Outdoor Learning Center

Our tree shaded playground is next to a wooded area with occasional deer and a rabbit family that makes regular visits to our garden. This 9,000 square feet of space provides a wonderful relaxing outdoor setting for the staff and our 57 children, ages three through five years, to work and play together for many months of the year. We were already engaged in the following activities outside on a daily basis, weather permitting: climbing, running, rolling on the hill; ball play; water and sand play; gardening; woodworking, hammering nails in tree stumps; table activities, art activities; riding tricycles; dress-up and music activities; using large wooden blocks, tires (loose parts); collecting and observing insects, and other nature activities; and snack time.

We wanted to be able to add the following activities: challenging age-appropriate climbing equipment to encourage various types of play; tricycle path inside the play yard; permanent art easel; stage with a removable shade cover for music and dramatic play activities; play house; new storage shed for convenient storage of all supplies and equipment for outdoor activities; large plastic blocks to replace the wooden building blocks; quiet area; and digging area in addition to the sand box and garden area.

A staff member said: "The children love to be outside and so do we. We want to be able to do everything outside that we do inside. We want to do more than just provide activities that will promote physical development. We want to be able to also provide activities that will foster the children's cognitive, social, and emotional development." Additionally, the staff stressed the importance of easy supervision, separating active play areas from quiet areas, and raising the height of the fence to keep balls inside the play yard. A professional analysis of our plans for physical accessibility resulted in the following adaptations to our plans:



Playground by Grounds For Play, 3501 Avenue E East, Arlington, Texas 76011 (800/552-PLAY).

- A wheelchair access ramp was added to the major climbing structure.
- A transfer point and another slide were added to the climber.

Safety/Accessibility Check List

- Access to outdoor area and equipment
- Height and spacing of equipment
- Width of doors and pathways
- Transfer platforms to use equipment
- Use of equipment in different positions
- Handholds and railings
- Surfacing
- Potential head entrapment areas
- Dangerous projections of hardware
- Provision for a variety of activities



- A wheelchair access ramp was added to provide access from the play area to the climbing and swinging area.

- The paved tricycle path was connected to the sidewalk at the front entrance, to the climbing area access, to the permanent art easel, to the play house entrance, and later, when funds permit, to the stage.

- A swing structure was chosen that would allow an adapted body swing to be added and used as needed.

We were surprised that these relatively few changes would allow **all** children to enjoy our new outdoor learning space. We learned that children with disabilities are more like other children than they are different.

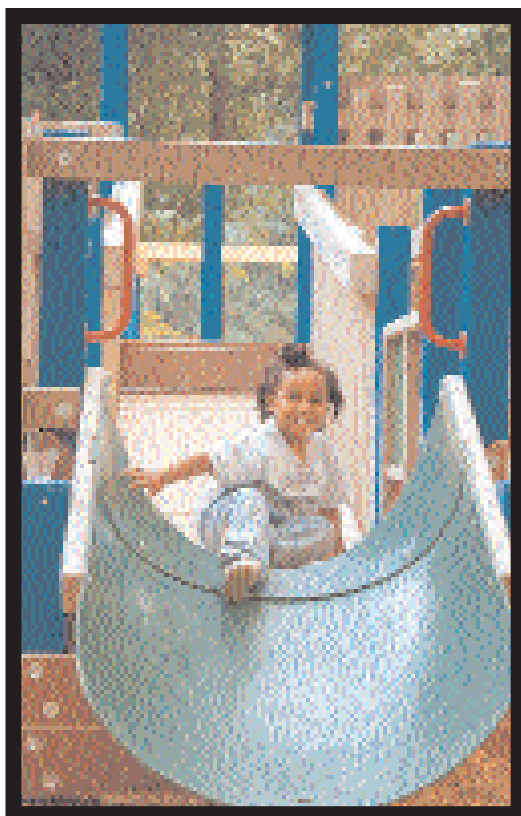


Photo by author. Children in wheelchairs are able to access this slide. There is a transfer platform behind the slide so children can move from a wheelchair and use the slide. The WOODCARPET™ used in the fall zone around the slide is wheelchair accessible.

occupational therapist advised that swinging provides opportunities for linear movement, increases alertness, soothes and calms some children, and satisfies other children’s need for rapid, intense movement. Our final decision was to include a tire swing and two strap swings. An adapted body swing can be added later.

Type of surface to use in the fall zone: Our old playground included a combination of grass and wood chips. WOODCARPET™, a natural looking wood fiber material, was chosen for use as a resilient surface in the fall zone surrounding the major climber and the swings and to provide accessibility for wheelchairs.

Cost: The decision to have an accessible playground increased our costs. The addition of the two access ramps, the extra slide and the transfer point increased the cost of the climbing structure by approximately one-third. We were elated when the funding source for the climber chose to fund the accessible version over the less-expensive non-accessible climbing structure.

Initially, we planned to cut costs by having volunteers do the installation under the supervision of a representative of the playground company. After evaluating the number and abilities of our volunteers and considering



Photo and plan by Grounds For Play, Inc. This photo and the plan give an overall view of the many activities available to the children.

Major Decisions

Several major decisions needed to be made.

Safety: We wanted a safe playground and debated the inclusion of swings. Many playgrounds were not including swings because of safety concerns. The first plan included a single tire swing. The children were still asking, “When will the swings be fixed?” Our

warranty and liability implications, we made the decision to have the company do the installation of the major pieces of equipment. We made our own arrangements for the



purchase of the shed and the installation of the tricycle track. Volunteers were used to remove the old equipment, to prepare the site, to install the 90 cubic yards of WOODCARPET™ in the fall zone, and to build the stage. Several pieces of additional equipment are located on the plan and can be added when funds become available.

We received funds from a federal Child Care and Development Block Grant **Quality Enhancement Incentive**, local civic organizations, a community foundation, and other individuals and religious groups who are part of the “caring community” that regularly supports our center. Even our parents, the majority of whom have limited incomes, contributed enough funds for the tire swing. Over 50 contributors and 58 volunteers contributed to this project. Some programs may be eligible for a tax credit or deduction under the American with Disabilities Act to make structural alterations to increase accessibility.

Accessible Outdoor Environments Benefit Everyone

Almost a year to the day after our old swing set collapsed, our new outdoor learning center was finished and waiting for the children and staff to return from the two-week June break. Staff, children, parents and visitors alike arrived with wide-eyed expressions of delight and excitement. Our year-long process of learning and planning had resulted in more than a playground. We had an outdoor learning center for everyone!

Annotated Resources

Dempsey, J. D. “Safety and Inclusion Go Hand in Hand: Creating Environments for Special Needs Children.” Unpublished Manuscript. Arlington, TX: Grounds for Play, Inc., 1994.

This article discusses the theory that the safety, developmental appropriateness, and inclusiveness of play environments are interrelated.

Frost, J. L. *Play and Playscapes*. Albany, NY: Delmar, 1992.

Child development theory, adult roles in play, safety, and practical issues are addressed in this comprehensive reference book.

Frost, J. L., Marcy Guddemi, Aase Eriksen, and Frances Wallach. “Outdoor Play and Play Environments.” *Dimensions of Early Childhood* 20(4), 5-40, Summer 1992.

This special issue includes a series of articles on current research, design of outdoor environments, and playground safety.

Greenman, Jim, Jim Dempsey, Eric Strickland, Joe Frost, et al. “Going Outdoors.” *Child Care Information Exchange* 91, May/June 1993.

The “Beginnings Workshop” in this issue includes ideas for planning outdoor environments and an evaluation tool for playgrounds.

Rivkin, M. S. *The Great Outdoors Restoring Children’s Right to Play Outside*. Washington, DC: NAEYC, 1995.

This book includes guidelines for playground accessibility and other references on accessibility in the appendix C.

U.S. Consumer Product Safety Commission (CPSC). *Handbook for Public Playground Safety*. Washington, DC: 1991.

This document includes standards for playground safety and a detailed discussion of playground surfaces.

Tips for Planning your Accessible Outdoor Learning Center

- Become familiar with all applicable regulations.
- Consider the interests and abilities of the children.
- Involve the staff in every step of the process.
- Involve the parents in the process, especially parents of children with special needs.
- Have representatives of a disability group review your plans.
- Consult with a pediatric physical or occupational therapist, if possible.
- Plan for active and quiet areas.
- Provide areas for different learning centers.
- Include open spaces to run, play ball, or to use a large parachute.
- Plan for convenient outdoor storage space.
- Use volunteers/parents to install the parts of the playground that can save money without affecting safety or warranty criteria.
- Consider all possible funding sources.
- Allow time to think about and revise your plans.



It's a Monday morning and the children in the pre-school class are actively involved in the interest areas around the room. It is a rich and stimulating environment but one that is clear and manageable for young children. The teacher, Ms. Johnson, has carefully planned for the week and has chosen activities and materials for the interest areas that reflect the broad range of needs and preferences of the children in her group.

Recently, Ms. Johnson has been particularly concerned about Cheryl, a four year old with limited language skills and some difficulties in her interactions with other children. Last week, Cheryl was particularly proud of some new shoes. Ms. Johnson decided to use that interest and this week has enriched the house corner with materials to play "shoe store." She has added more shoes, shoe boxes, a foot measurer, a cash register, and some play money. Ms. Johnson invites Cheryl to join her at the house corner and Cheryl enthusiastically follows.

At first, Cheryl just watches as the other children begin to create the dramatic play scene. Then Ms. Johnson turns to one of the other children and says, "I think Cheryl might like to buy some shoes. You could ask her to try some on." The child responds by offering Cheryl the customer's chair and she quickly sits down. Cheryl

Interest Areas Support Individual Learning

by Lisa Adams,
Whit Hayslip, and
Trudi Norman-Murch



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starts pointing to some shoes and Ms. Johnson says, "Cheryl, you need to tell the salesperson what kind of shoes you want." She responds, "Red shoes!" and with that the interaction between the two children begins.

In another part of the room, Raul is playing with two children at the sand table. Raul is fairly new to Ms. Johnson's room and this is the first time that she has seen him playing at this interest area. Raul has cerebral palsy and uses a wheelchair for mobility. Last week, as Ms. Johnson observed Raul, she could see that he spent most of his time playing alone at the table toy area with the Duplo blocks and that he moved around the room very little.

As she evaluates her environment, she can see that the arrangements of shelves and dividers have made the entrances to some of the interest areas quite narrow. On Friday afternoon, she spends time moving furniture to increase access. At breakfast on Monday morning, she tells the children about the change. She also tells them that this week the special toys for the sand table will be Duplos. After breakfast, Paul wheels his chair to the sand table and starts to build a tower. There are two other children at the sand table also building towers. The assistant teacher, Mr. Perez, asks them, "I wonder how you can connect your three towers?" and, with that, they begin to play together.

Cheryl and Raul are both children who have been identified with special needs. Some of Cheryl's learning objectives concern language and social interaction. Raul's parents are concerned about his mobility and increasing his play repertoire. Ms. Johnson and the staff are working on these objectives through the interest areas in their classroom. They have not created intrusive and artificial interventions but rather have observed the children and planned for materials and activities, teaching strategies and cues, and peer involvement that can help them use their regular classroom environment to meet individual needs. On this Monday morning, Ms. Johnson looks around her room and realizes that this approach to planning works not only for Cheryl and Raul but is helping her individualize her program to meet the needs of all of the children.

As these vignettes demonstrate, children with a wide range of interests, abilities, and needs can be fully included and successful within an early childhood program. However, when a child with an identified disability enters a program, staff may initially question whether they will be able to provide adequate and appropriate services. These concerns are often heightened when the child has a written plan indicating specific learning goals and objectives, called an Individualized Educational

Plan (IEP), and is receiving occupational, physical, or speech/language therapy. Staff may worry that they do not have the time or the expertise to work with these children. In fact, a developmentally appropriate early childhood classroom can be the ideal program if staff use careful observation and team planning to set the conditions for success.

It is important to realize that children with special needs, like all children, learn best when they are interested, actively engaged in concrete experiences, and partners in positive responsive interactions. That is, they learn through play and in the context of relationships. As Diane Dodge has demonstrated in *The Creative Curriculum*, classroom interest areas and daily routines can provide ample opportunities for all children to learn at their own rate. As long as the materials and activities provided are open-ended enough to accommodate a range of interests and abilities, expectations and teaching support can be individualized for each child.

When reading with a small group in the library area, one child may be interested in giving his opinion about what food the Very Hungry Caterpillar liked best, another may enjoy pointing out foods as they are named for him, and a third child may be eager to turn the pages one by one. During the snack routine, one child has the opportunity to practice pouring from a small pitcher while another child is encouraged to carry on a conversation with friends. Good teachers respond to these different developmental levels and interests, and are able to facilitate each child's learning.

When a child with a disability comes to a program with specific learning objectives on an IEP, it is important for the staff to come together to think about how those objectives could be addressed within the curriculum. Ideally, the specialists (for example, the speech/language pathologist) will participate in this planning to help analyze the child's needs and develop appropriate teaching strategies. In the opening vignette, Cheryl is described as being a child with limited language abilities. The speech/language pathologist might be able to clarify whether Cheryl has difficulty understanding language addressed to her or whether her main problem is with using language to express herself.

If one of Cheryl's most important learning objectives is to start using more language spontaneously, the whole team could brainstorm about ways of incorporating that objective into the daily routines and classroom interest areas (see Table 1). During outdoor time, she could play traffic cop and tell the other children to "stop" and "go"; when playing in the house corner, she



Table 1 — Learning Objectives Across the Curriculum

Objective	House Corner	Sand and Water	Snack Time	Transitions
Cheryl: To increase spontaneous use of two-word phrases	In dramatic play sequences, will use two word phrases to request play items (i.e., “red shoes”)	Will use two-word phrases to describe her actions (i.e., “pour water,” “fill cup”)	Will use two word phrases to make requests for food items (i.e., “more cooking,” “want juice”)	Will use two-word phrases to give directions during clean up (i.e., “trucks away,” “paints up”)

could ask for what she wanted to eat; and when looking at a book in the library area, she could pick out and label favorite pictures. It is most important to find natural, functional, and highly motivating opportunities to learn and practice these targeted skills.

Raul’s parents were interested in helping him increase his mobility and play repertoire. His teacher observed that he especially enjoyed playing with the Duplos, so she put them in the sand table. This is a place where children are likely to come together and have opportunities to socialize readily without needing elaborate play schemes. She also rearranged the room so that the sand table became more readily accessible to him.

As the team starts to do this kind of planning, it may be helpful to pick a few classroom routines and interest areas, and to brainstorm about the many learning objectives that could be addressed within that area or routine. For example, while playing shoe store in the house corner, children have the chance to practice and learn:

- Sorting and matching (matching pairs of shoes, putting the shoes on the shelves)
- Object-number correspondence (counting play money, labeling sizes and prices)
- Self-help skills (trying on shoes, cleaning up shoe store)
- Communication skills (carrying on a dialogue for role play, requesting items)
- Sequencing (acting out a play routine and telling about it later)
- Balance and motor planning (getting in and out of the chair, trying on shoes, walking in big shoes, using the foot measurer)
- Fine motor skills (putting shoes in box, putting lids on box, lacing and buckling)
- Social skills (taking turns, sharing materials, taking different roles)

- Emergent literacy (labeling size and price of shoes, writing receipts, making signs)

This is only a small sample; once the team starts to generate these lists, they will have no trouble finding ways of incorporating any meaningful objective into the interest area. A good rule of thumb is that if you are unable to find natural and frequent opportunities for practicing a particular skill, it may not be a functional skill for the child. The specialists should be consulted and asked to give examples of the use and application of the targeted skill so that the team can develop strategies for integrating it into the curriculum. For example, a traditional physical therapy goal might be for the child to be able to stand on one foot for three seconds; a natural occasion for mastering that skill might arise as the child learns to put his pants on independently. Making various kinds of pants (fire-fighter’s, clown’s, painter’s) available in the house corner is likely to encourage practice of this skill.

It is also helpful for the team to develop an implementation plan which indicates what materials, activities, and teaching strategies are most likely to facilitate the child’s mastery of a particular learning objective within the targeted interest area or routine (see Table 2). Teacher and parent observations about a child’s special interests, friends, and pattern of responses are invaluable for designing these plans.

In our opening scene, Ms. Johnson has observed that Cheryl is excited about her new shoes. Ms. Johnson has capitalized on that interest by introducing materials into the house corner which support and extend Cheryl’s interest and provide her with highly motivating opportunities to use her emerging language skills. By joining the children in their play, Ms. Johnson is able to suggest a possible role for Cheryl within the play and to offer a simple model for language she may wish to use. Ms. Johnson has noticed that Cheryl is responsive to these kinds of play suggestions and language modeling, whereas another child might need more direct cueing or prompting. These are the kinds of



Table 2 — Implementation of Learning Objectives

Objective	Materials and Activities	Teaching Strategies/Cues	Peer Involvement
Raul: To increase exploration of interest areas	Toys of special interest to Raul (i.e., Duplos)	Incorporate favorite toys into a variety of interest areas (i.e., move Duplos to sand table)	Teacher comments on and points out opportunities for interactive play (i.e., "I wonder how you could connect your three towers?")

issues that can be discussed and agreed upon by the team.

The implementation plan can also specify strategies for peer involvement, since building social competencies is a priority for children with disabilities, as it is for all young children. Mr. Perez helps facilitate cooperative play between Raul and his classmates by simply "wondering aloud" about how the children can connect their Duplo structures.

As Ms. Johnson looks around her classroom Monday morning, she sees all the children taking full advantage of the rich and stimulating environment provided for them. The planning she has done with her team has paid off; Raul is helping his friends with the towers,

and Cheryl is pointing out her red high heel shoes.

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