

***NC Foundations for Early Learning and Development:
Advanced Course on Emotional & Social Development
and Family Engagement***

Module 4: Classroom Design

Set of Handouts



Pre-learning Activity

Read the article titled *The Universal Design of Early Education: Moving Forward for All Children*. The article can be found in the handouts for this module and at this link:

<http://www.naeyc.org/files/yc/file/200609/ConnPowersBTJ.pdf>.

Consider these questions while thinking about your classroom or early care environment. You may want to print this handout and take notes on it so you can share your thinking with your co-teachers and supervisor.

- How is the physical space arranged to ensure that all children, including those with limited mobility (such as, using walker or wheelchair) can easily get to the classroom, move around within the classroom, and access/participate in outdoor play? How might access be improved?
- How does the environment provide easy, safe, and independent access to activities, spaces, equipment, and materials? What changes might be necessary to improve access for all students?
- How will children be seated to accommodate different motor abilities and activity levels so that everyone can move about or attend as needed?
- How is the environment arranged so children can 'rest' during the day and/or experience reduced noise levels (such as a reading area with pillows or use of headphones)?
- What sensory related environmental considerations are made (such as noise, lighting, over visual stimulation on walls and spaces)?
- What materials are provided to allow for the range of motor abilities and cognitive skills? What additions might be helpful?



The Universal Design of Early Education

Moving Forward for All Children

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Cluster illustrations throughout by Sandi Collins.



A French television commercial shows typically abled people trying to function and participate in a world designed for people with disabilities. Speaking persons approach receptionists, who respond only in sign language; walkers slip down wet inclines navigated by people in wheelchairs; a sighted individual looks for books in a library but finds them all printed in Braille. Graphic images communicate a strong message: the world is harder when it is not conceived with your abilities in mind.

This commercial reflects a French utility company's commitment to recognizing the diverse needs of its employees and customers—"May the world be made for you. Access for everyone" (EDF Group 2005). Images like this spur thoughtful reflection. How well have we conceived early education programs to support and respond to all young children? Do they welcome and include every child? Are activity areas and materials physically accessible to each child? Do all families have opportunities to be involved in their children's education? Is every child engaged and learning? Answering yes to these questions has become more challenging as the population of children in the United States has become increasingly diverse in ability levels, cultural and linguistic backgrounds, and economic status (West, Denton, & Germino-Hausken 2000).

Reaching all children

Specially designed programs, including Head Start, early childhood special education, Title III programs for English-language learners, and Title I compensatory education, identify successful strategies for educating children who may struggle to learn because of health or other medical needs, emotional or behavioral problems, and/or disabilities. Children facing language barriers or growing up in poverty may have additional learning challenges. But the goal for educators is to design early education programs that meet the needs of all learners within a common setting and begin to move away from specialized programs. Moreover, as educators we need to accomplish this goal while also focusing on standards and program accountability.

The goal for educators is to design early education programs that meet the needs of all learners within a common setting and begin to move away from specialized programs.

A framework for supporting all young learners is *universal design*. The universal design of early learning “suggests that instead of creating a curriculum and then adapting it to meet the needs of individual children in the program, it is better to start off with an instructional design which provides learners with a variety of ways to access and process information and demonstrate what they have learned” (Blagojevic, Twomey, & Labas 2002). This framework calls for early educators to value from the beginning the importance of planning learning environments and activities for a diverse population—creating universally designed settings in which all children and their families can participate and learn.

A design idea from architecture

Universal design principles were first introduced in the field of architecture to address the economic, functional, and aesthetic challenges associated with designing physical spaces for all people, including individuals with physical and cognitive disabilities. Originators defined the principle of universal design as the “design of products and environments to be usable to the greatest extent possible by people of all ages and abilities” without the need for adaptation or specialized design (Story, Mueller, & Mace 1998, 2).

The Center for Universal Design at North Carolina State University (1997) collaborated with a national consortium of universal design researchers and practitioners to develop seven core design principles—equitable use, flexibility in use, simple and intuitive, perceptible information, tolerance for error, low physical effort, and size and space for approach and use—for guiding the planning of buildings, physical spaces, and materials. The influence of these design principles is evident throughout our communities: curb cuts and entrance ramps, elevators with voice announcements, and automatic doors at store entrances.

At first these design applications may seem solely intended for people with disabilities. But developers of the universal design framework recognized that usability would increase as special needs features began to serve all. People who use wheelchairs benefit from curb cuts and ramps, but so do bicycle riders, parents pushing strollers, and travelers pulling wheeled luggage. Elevators that announce floor numbers assist individuals with impaired sight along with shorter people who may not be able to see the light indicators when the elevator is crowded with riders. Doors that open automatically aid those not strong enough to open them as well as individuals whose arms hold packages or young children.



Photo courtesy of the authors

Educational Applications of the Seven Principles of Universal Design for Learning

Physical principle	Educational application
1. Equitable use —The design allows all users equal access and avoids segregating or stigmatizing anyone.	Equitable curriculum —Instruction uses a single curriculum that is accessible to students with widely diverse abilities; curriculum does not unnecessarily segregate students or call undue attention to their “differences.” Curriculum is designed to engage all students.
2. Flexibility in use —The design accommodates a wide range of individual preferences and abilities.	Flexible curriculum —The curriculum is designed to be presented flexibly to accommodate a range of individual abilities and preferences; it considers physical and sensory-motor disabilities as well as varied learning preferences and paces.
3. Simple and intuitive —The design is easy to understand.	Simple and intuitive instruction —Instruction is straightforward, provided in the mode most accessible to students; language, learning levels, and complexity of presentation can be adjusted; student progress is monitored on an ongoing basis to reset goals and instructional methods as needed.
4. Perceptible information —The design communicates necessary information effectively to the user, through different modes (pictorial, verbal, tactile), regardless of the user’s sensory abilities.	Multiple means of presentation —Curriculum provides multiple means of presentation to teach students in ways that will most effectively reach them, regardless of sensory ability, level of understanding or attention; presentation can be altered to meet recognition patterns of individual students.
5. Tolerance for error —The design minimizes hazards and the adverse consequences of accidental or unintended actions.	Success-oriented curriculum —The teacher encourages engagement with curriculum by eliminating unnecessary barriers to engagement; the teacher provides a supportive learning environment through ongoing assistance, applying principles of effective curriculum design as needed: e.g., teaching Big Ideas, priming background knowledge, scaffolding instruction, and so on.
6. Low physical effort —The design can be used efficiently and comfortably and with a minimum of fatigue.	Appropriate level of student effort —The overall classroom environment provides ease of access to curricular materials, promotes comfort, addresses motivation, and encourages student engagement by accommodating varied means of student response; assessment is ongoing, measuring performance; instruction may change based on results of assessment.
7. Size and space for approach and use —Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of user’s body size, posture, or mobility.	Appropriate environment for learning —Classroom environment and the organization of curricular materials allow for variations in physical and cognitive access by students as well as for variations in instructional methods; classroom environment allows for varied student groupings; classroom space <i>encourages</i> learning.

Reproduced by permission, from C. Mason, R. Orkwis, and R. Scott, “Instructional Theories Supporting Universal Design for Learning—Teaching to Individual Learners,” *Universal Design for Learning: A Guide for Teachers and Education Professionals*, eds. Council for Exceptional Children and Merrill Education (Upper Saddle River, NJ: Prentice Hall, 2005), 23. Copyright © 2005 by Council for Exceptional Children.

Universal design in education

Children with disabilities fall along a continuum of learner differences rather than constituting a separate category.

The work of the Center for Universal Design inspired educators and authors working in the fields of special education and assistive technology. Many groups (including the National Center on Accessing the General Curriculum, the Council for Exceptional Children, and the Center for Applied Special Technology) are applying universal design principles to the design of general education. The result is “the design of instructional materials and activities that allows the learning goals to be achievable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember” (Orkwis & McLane 1998, 9).

Understanding of the principles and their role in education continues to evolve. Mason, Orkwis, and Scott (2005) apply the same seven principles put forth by the Center for Universal Design to illustrate their use in learning and curriculum design (see “Educational Applications of the Seven Principles of Universal Design for Learning”). The work of Rose and Meyer

at the Center for Applied Special Technology (CAST) furthers educators’ understanding. The CAST (n.d.) Web site states that the universal design for learning framework promotes access to learning through

- multiple means of representation to give learners various ways of acquiring information and knowledge,
- multiple means of expression to provide learners alternatives for demonstrating what they know, and
- multiple means of engagement to tap into learners’ interests, offer appropriate challenges, and increase motivation.

Much of the current literature on universal design for learning has focused on elementary and secondary education. However, these approaches to universal design open doors to increased educational possibilities for children of all ages.

Moving the idea to early education

The principles of universal design for learning are clearly applicable to early childhood education. They can guide professionals in designing programs in which all children and their families have full and equitable access to learning and social opportunities. One premise is that “UDL

What Is Universal Design of Early Learning?

It is designing early education settings so all children, as equal and valued members of the program, may access and engage in all learning opportunities, learn from a common curriculum according to their individual strengths and abilities, and demonstrate their learning in multiple ways.



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[universal design for learning] shifts old assumptions about teaching and learning in four fundamental ways” (CAST 2003). CAST suggests that

- children with disabilities fall along a continuum of learner differences rather than constituting a separate category;
- teachers adjust for learner differences for all children, not just those with disabilities;
- curriculum materials should be varied and diverse, including digital and online resources, not merely a single resource; and
- rather than following a set curriculum, teachers allow for flexibility to accommodate learner differences.

A universal design approach for learning follows principles of good practice in early education: (1) recognizing that a one-size-fits-all approach to education simply will not work; (2) understanding the need to design curricula to meet the needs of diverse classroom populations; and (3) declaring that *all* children who attend early education programs will be successful in their development and learning.

A universal design framework parallels what early educators plan for from the start in thinking about the physical, social-emotional, health, and teaching dimensions of their environments to assure that every child

- feels welcomed as a full and equal member;
- accesses and engages in all learning opportunities;
- learns according to his or her individual strengths and interests; and
- demonstrates his or her learning in ways that reflect the individual’s strengths.



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Principles guiding the universal design of early education

How can universal design in early learning help early childhood professionals to further assure that all children learn? As support, we offer the following framework for the universal design of effective early education programs.

The physical environment enables all children to have access and equitable opportunities for full participation in all program activities. This includes structures, permanent and movable equipment and furnishings, storage, and materials.

Health and safety components promote wellness and minimize risks and hazards for all children. All children, regardless of health status or conditions, have ongoing access to learning without interruptions due to illness and injury.

The social-emotional environment offers all children equitable access to and full membership in the social-emotional life of the group, and it supports their social-emotional development.

Programs offer children multiple avenues for receiving information, multiple ways for engaging in activities, and multiple means for demonstrating what they know.

The teaching environment gives all children equitable access to learning opportunities through information and activities in multiple formats and multiple means for engagement, expression, and learning. This includes the curriculum, teaching practices, materials, and activities.

Individual assessment and program evaluation practices provide multiple approaches to finding out what children know and can do in order to equitably assess individual learning, development, and educational progress.

Family involvement practices support the equitable access and engagement of all families in the full range of experiences. This includes ongoing communication, learning opportunities, and program involvement activities.

This framework strives to promote flexible settings and activities that respond to young children's diverse strengths and needs. Programs offer children multiple avenues for receiving information, multiple ways for engaging in activities, and multiple means for demonstrating what they know. The program incorporates the universal design of the physical, social-emotional, and teaching environment before children step into the setting, and it balances the needs of all children in delivering education for the whole class.

Universal design in action

To consider what universal design of early education activities might look like, teachers may start with a general classroom routine such as class meeting time. The following questions can help teachers reflect on how to implement universal design principles. (See examples of practice in "Applications of Universal Design Principles to Class Meetings.")

Physical environment

- How can the space be arranged to accommodate everyone?
- How will children be seated to accommodate different motor abilities and activity levels so that everyone can move about or attend as needed?
- What materials are needed to allow for the range of motor abilities?

Health and safety practices

- How should the physical space be arranged to ensure that all children can safely move around?
- Is the flooring safe for all children to move about and be seated?



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Applications of Universal Design Principles to Class Meetings

Physical environment

- Expand the group meeting area so that all children can be present and focus their attention on the activities.
- Provide varied seating options so each child may lie on the floor, sit on a mat or chair, or use specialized seating.
- Use other materials of different sizes, textures, and shapes to help each child actively manipulate the objects for learning.

Health and safety practices

- Provide clear, wide paths throughout the classroom so each child may safely and easily reach the meeting area.
- Ensure safe floor covering for safe passage for any child, including for example a child who is in a hurry, has visual impairments, or uses a wheeled stander.
- Consider each child's energy level and health conditions in planning activities.

Social-emotional environment

- Invite and encourage all children to join in, using multiple means of communication (e.g., speaking English and/or children's home language, signing, displaying symbols).
- Give simple directions using multiple means (e.g., verbally, signed, in print, modeled) so each child may see, hear, and understand any rules and expectations.
- Use books, songs, and communication that involve and represent all children, regardless of cultural predominance or linguistic and skill levels.

Teaching environment

- Vary your expectations for participation and performance. If children are listening to a story and are asked to recall events, some may attend to and repeat back key words; others may recall the names of characters by pointing to pictures or

using signs and gestures; and even others may predict what will happen next using complete sentences in English.

- Present content in multiple formats, including verbal, print, video, or concrete objects, repeating key words/phrases in children's home language and using simple sentences with gestures.
- Use physical cues to focus children's attention, such as pointing to the picture in the book, giving verbal prompts to help children begin a response, offering language models for children to imitate, and encouraging children to keep thinking and trying.

Individual assessment and program evaluation

- Request information or action in various ways including complex questions, simple phrases, and emphasis and repetition of key words or phrases.
- Identify the multiple ways children can show what they learn during activities. For example, the child who waits for another child to respond to a teacher's request, to handle a show-and-tell object being passed around, or to choose the song demonstrates turn taking. Some children, as in the example above, may respond to the request using complete and accurate sentences spoken in English, while others may need to point, sign, or use words in their home language. Others may point to the object or event in the book in response to simple questions.

Family involvement practices

- Share information with families through a newsletter written at an appropriate level. Have key phrases translated into families' home languages, and include photographs of children engaged in an activity.
- Provide multiple opportunities for families to be involved. Bilingual parents might be willing to translate the information for monolingual families. Families could support their child's involvement by asking specific questions about the activity and/or the book read to the group.

- Do the planned activities accommodate all individual energy levels and health conditions?

Social-emotional environment

- What strategies will ensure that all children are included, eliminating any barriers that might segregate or stigmatize a child?
- How will I communicate necessary rules and expectations for behavior so that all children can understand?
- How can I support children in interacting with, learning from, and helping one another?

Teaching environment

- What goals do I have for the activity so that all children are engaged and learning?
- What different ways do I need to present information so that everyone understands and is engaged?
- What kinds of support or encouragement will be needed to engage and ensure learning among all children?

Individual assessment and program evaluation

- What are some different ways to assess what all children are learning from the activity?
- What are some different ways children can demonstrate their engagement and learning?

Family involvement

- What information will I share with families about this activity, and what forms of communication will I use?
- What reading levels and languages should I keep in mind?
- What opportunities for involvement can I provide that accommodate varied work demands and time constraints?

What are some different ways to assess what all children are learning from the activity?

What are some different ways children can demonstrate their engagement and learning?



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Conclusion

The population of children in U.S. communities will continue to grow more diverse, not less. Thus, the challenges of educating a diverse population will not diminish. The universal design of early education is an appropriate framework for addressing these challenges. Without a doubt, high-quality early education benefits children (Peisner-Feinberg et al. 1999). Our work now is to conceive early education programs that engage and support learning for all children.



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Classroom Design to Create Supportive Environments - Furniture

Children come in all shapes and sizes. It is important to have furniture that ‘fits’ the children in your class. Everyone is more comfortable using furniture that is appropriately sized. For furniture to be truly ‘child sized,’ a majority of the children using it should be able to rest their feet flat on the floor and be able to comfortably access items on the table top. In addition, consider the 90/90/90/90 rule – hips, knees, ankles and elbows should all be at 90 degrees.

Children with disabilities may require adaptations to existing furniture or specialized equipment depending on their specific needs. A few furniture suggestions or adaptations include:

- Classroom chairs with arm rests for additional trunk stability and security (i.e. Rifton chairs etc.)
- Adjustable foot rests
- Non-skid material placed on the seat to prevent hips from moving forward
- Cube chairs with a lap tray for children who require support or have difficulty sitting on floor during group time
- Children in wheelchairs may need high tables or lap tables.

Shelving should be low for easy access and securely anchored to avoid a safety risk. To help children with visual impairment access materials, mark shelves with contrasted backgrounds or bright tape.

If your space was not designed with children in mind, many things might be too big for their little bodies. We can provide stools or steps to allow children to reach sinks, mirrors, and toilets. For children with physical disabilities, such as cerebral palsy, you may need to include steps with handrails. Consult with your school’s Occupational Therapist, Physical Therapist and/or Vision Specialist about selecting furniture or making adaptations.

All children benefit from a separate cubby area or shelving unit with bins or baskets to house personal belongings such as coats, hats, and lunches. Differentiate the area with a photo of the child and family photos. This creates autonomy while reminding the child that he or she is a part of a larger group. Placing items in this area on arrival and retrieving them at the end of the day becomes an important part of the child’s routine and gives the day structure with a clear beginning and end.

To support independence, design your classroom in a way that allows children to use furniture and access their environment without unnecessary adult assistance.

Reflection Questions

1. Does the furniture in your classroom accommodate your children of all shapes and sizes? If not, what changes can you make?
2. Does the furniture in your classroom ensure access and active participation for children with disabilities in your classroom? What adaptations and accommodations have you made? What other additional adaptations or accommodations might you consider?

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Classroom Design to Create Supportive Environments - Traffic Patterns

Think about traffic patterns when setting up your classroom environment: Minimize large open spaces in which children can run, etc., minimize obstacles, and consider the environmental arrangement as it applies to children with physical or sensory (e.g. visual impairment) disabilities.

Minimize large open spaces

Provide opportunities for children to move around safely: streamline furniture to provide movement paths, provide visual supports along the floor where children line up or mark the way to the door with footprints, and ensure that there is a quiet, cozy area where children can go to be calm. When energy levels are high, push shelves aside and set up an obstacle course or play music for an organized gross motor activity.

Minimize obstacles

Locate furniture and shelving away from pathways leading to doors and restrooms to ensure the safety of your children and to allow for ease of movement around the classroom. Children may need to be reminded that materials and toys remain in the centers in which they found them. Labeling on shelves helps remind children where toys are stored. Consider the specific needs of children with disabilities and differentiate accordingly when designing your physical environment. Ask yourself:

- Are pathways large enough to accommodate wheelchairs and walkers?
- Are pathways clear of rugs that might trip children using specialized equipment or make it difficult for them to access the area?
- Have you accommodated the needs of visually impaired children by providing contrasting backgrounds to visual supports that mark your pathways?

Reflection Questions

1. What opportunities do you provide for children to move around your classroom safely? How does your environment allow those opportunities?
2. What other opportunities might you provide? How would you adapt your classroom environment to provide additional opportunities?
3. How have you differentiated your environment to meet the needs of all children?
4. What other accommodations or adaptations might you make?

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Critical Dimensions of Materials and Space

Children learn best when they can actually touch, see, smell, taste, hear, and manipulate the materials in their world. Keeping this in mind, select materials and arrange your classroom environment to vary across these critical dimensions (Gestwicki, 2007).

- Softness and hardness
- Open and closed
- Simple and complex
- Intrusion and seclusion
- High mobility and low mobility
- Risk and safety

Soft and Hard Materials

When setting up your classroom with regard to this dimension, be in tune with the sensory needs of your children. Sensory processing reflects the ability to use senses to take in information, interpret it, and act on it. Children may demonstrate an 'over responsiveness' to sensory input and others may demonstrate an 'under responsiveness' to it. By incorporating a variety of tactile items and activities, with both hard and soft components, you support the needs of all of the children in your class.

Select soft items that provide a various kinds of tactile sensory stimulation. Items such as pillows, rugs, carpets, beanbags, draped fabrics, and lamps with soft lighting make the classroom feel cozy and responsive to children. Sand, water, play dough, and finger paints also provide a sense of softness as children feel, touch, and mold them. Animals, such as guinea pigs, hamsters, rabbits and gerbils, provide soft sensory experiences.

To contrast with soft materials, hard items provide an unyielding stimulation. Hard items include tiled floors, wooden furniture, building blocks, hammers, and other tools.

Open and Closed Materials

Open-ended materials have multiple uses with no obvious 'end' point. Closed materials have a clear sequence and a definite 'end.'

Open materials can be used in a variety of ways --with no one correct way of using them-- and no arbitrary stopping point. Some examples include sand, blocks, drama props, and art materials. Activities can also be 'open,' such as when children choose from a selection of activities planned and prepared by the teacher.

Closed materials are those that can be used in only one way. Examples include puzzles and games. Activities that are totally teacher directed are closed as well.

Simple and Complex Materials

Preschoolers vary widely. Provide materials that vary in their complexity to accommodate children's varied levels of development.

Simple materials allow only one aspect of play with one obvious use – and no room for improvisation. Examples include a swing or tricycle.

Complex materials combine two different aspects of play. A sand pile with shovels, or rolling pins with play dough, are examples of complex materials.

Super Complex materials combine more than two different aspects of play. A dramatic play area set with cookbooks, paper for grocery lists, shopping cart, food container, boxes, shopping bags, and cooking utensils is an example of this.

Intrusion and Seclusion Areas

Intrusion areas in the classroom are those where children can enjoy working and playing with a group of children. The teacher plans these areas to promote interaction that develops cooperation and negotiating skills.

Seclusion areas are well-defined areas that allow children to work without becoming easily distracted. They allow children to withdraw and be alone apart from the group. When conflict occurs, children can go to seclusive areas to regroup and gather their thoughts before rejoining others.

Small quiet areas allow children to play with just one other child, rather than in a large group. For a child with vision impairment, spending time in a secluded area is critical. The quiet time helps them pick out and identify sounds in their environment and make sense of them. For example, by discovering the different sounds of people's footsteps children with visual impairment learn to anticipate which friend or teacher is approaching. By associating the sound of the food cart with lunch, they begin to organize the events in their lives.

Talk with parents of children with visual impairment about how creating quiet spaces for their child in the home helps children organize daily events. Provide them with examples, such as how hearing the different footsteps of family members will enable their child to anticipate who is approaching and the honk of the school bus horn will become associated with his or her brother's departure.

High and Low Mobility Areas

High mobility areas include space and equipment that encourage gross motor movement such as running, climbing, and tricycle riding. It is essential that traffic patterns allow all children to move comfortably. Low mobility areas and activities require children to sit still. Some examples include areas for story time, working puzzles, and other fine motor experiences.

Learning to make the transition between high mobility and low mobility activities helps children develop self-regulation skills. For example, shifting from outdoor play to classroom circle time can challenge young children who are vigorously engaged in playground activities and are suddenly asked to come indoors, sit quietly and attend to a story.

Ritchie & Gutmann (2014) discuss how young boys can be challenged by the requirement to remain still and quiet for 30 minutes during whole-group time. Rather than repeatedly asking them to sit still, or sending them to time out, teachers need to teach what to do. For example, teachers can help children sit longer by offering them a chair or small object to hold. Teachers may also decide to send children to a designated place in the room where they can calm themselves and

return when they decide they are ready. This not only shows respect but allows children an opportunity to learn to self-regulate (Ritchie, 2014).

Risk and Safe Areas

Allowing children to take some risks lets them explore their environment and physical skills. Risk activities teach children how to do interesting and challenging things with care. Examples include swinging, climbing, jumping, and rough-and-tumble play.

Safety activities protect children from obvious dangers and teach safe practices. These may include learning how to use school tools such as scissors correctly, how to use playground equipment safely, such as sitting and not standing on the slide, and staying with the class when on a field trip.

If a parent has shared a specific safety concern occurring in the home (such as running into the street, taking seat belt off in the car, etc.), take the time to talk or role play with children to reinforce safe behaviors both at home and school.

Specialized equipment, such as electric wheelchairs used for children with physical disabilities, can create unsafe situations. Young children are naturally curious and may stand or climb on the equipment in an attempt to explore how it works. Have a family member come to visit and, together with the child, explain and demonstrate why he/she needs the equipment and demonstrate its use.

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Strategies for Supporting All Dual Language Learners



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Strategies for Supporting All Dual Language Learners

- **Create** a welcoming classroom environment which reflects children's backgrounds. Include pictures, posters, toys and books which portray children's languages and cultures in a respectful and authentic way.
- **Ask** families to continuously share information over time about their children's interests and infuse the information into classroom activities and curriculum.
- **Provide** opportunities for families and community members to share stories and information in their home language with teachers, staff and children.
- **Carry** out your program's language policy to support children's continued development of the home language and facilitate English language learning.
- **Provide** opportunities for teachers and staff to develop knowledge of first and second language development as well as culturally and linguistically responsive practices.
- **Remember** that dual language learners are individuals; there is no one size fits all strategy. Use information from families and observations of children in the classroom to individualize services. Strategies should be used on a long term basis and in line with the program's language policy.

Supporting Dual Language Learners

Develop a picture of each child's language learning background and experiences. Learn about every child's culture, family, and characteristics.

Work with families and caregivers to develop a plan to support children's home language. Make it an ongoing and continuous process in collaboration with families.

-
- **What is the child's language background? Do they speak one language, two languages or more?**

 - **What exposure to English have they had? In what environments?**

 - **Are they learning both languages at the same time? Or are they learning a home language first followed by a second language?**

 - **Which language is dominant?**

 - **What are their experiences and exposure to the home language?**

 - **What is the family's culture?**

 - **What are the child's individual characteristics, interests and experiences?**

For more detail see *Young Dual Language Learners: Gathering Background Information* (on the ECLKC) for additional questions to ask and considerations when working with families.

Supporting Jean:

Jean is a 5 year old Haitian-Creole/English dual language learner. Jean spoke no English when he entered Head Start two years ago, but has learned a lot over the past couple of years. Jean feels comfortable speaking English in the classroom and with his peers during outside time and classroom activities. He's building vocabulary and his grasp of the English language is steadily improving.



- Involve Jean in all areas of the classroom and curricular activities.
- Meet with Jean's family on an ongoing basis and support his home language development.
- Create learning experiences which allow Jean to use vocabulary and make meaningful connections across instructional activities.
- Teach Jean to recognize and use words that are similar in Haitian-Creole and English (words that are similar across languages are known as cognates).
- Use pictures or real objects when introducing new vocabulary words or concepts to help Jean make connections.
- Pre-teach Jean new vocabulary words before a lesson using those words. Introduce the new words before a learning experience or reading a book and provide developmentally appropriate definitions. Children's dictionaries can be great resources for developing definitions.
- Provide Jean opportunities to creatively express the meanings of words and ask him to think deeply about the definitions of new words. Jean's father shared that he loves dramatic play; use his interests to support his language development.

Supporting Nissa:

Nissa is a 4 year-old Hebrew/ English dual language learner. The center staff has learned from her family that Nissa speaks only Hebrew at home. During the first few days, Nissa tried to speak Hebrew to her new teachers, but has fallen silent after they were not able to respond to her. Her frustration with the new language environment is growing and the teachers often observe her to be somewhat upset and withdrawn.



- Ask Nissa’s family to share and/or tape-record some key words in Hebrew.
- Set aside a quiet space in the classroom where Nissa can seek refuge when she needs a break. Use Nissa’s love of books to create a perfect quiet space.
- Create classroom routines which allow Nissa to anticipate upcoming activities without understanding the language; for example, make the classroom schedule with pictures and use it to help Nissa visualize the day.
- Nissa loves music; play music as a way to help her feel welcome and introduce language through songs and games.
- Use gestures and pointing to help Nissa understand new content and try to match gesture to vocabulary (eating, drinking).
- Model language by narrating actions using self-talk strategies, “I am using this red crayon to color in this big circle,” and explicitly use parallel talk to narrate Nissa’s actions, “Nissa, you are using the paintbrush to paint your circle green.”
- Repeat new vocabulary, ideas, and instruction by re-using words with their definitions and repeating instructions in shorter, simpler sentences.
- Create ways for Nissa to participate in activities in a non-verbal way (clapping, playing instruments).

Supporting Aniese:

Aniese is a 4 year old Spanish/ English dual language learners. She has been in the Head Start program for almost five months. Her teacher has noticed that Aniese has begun to develop many words in English and seems to show basic comprehension by following directions and responding to simple questions with basic answers. She has also been heard repeating simple phrases such as “gonna go”.



- Create interesting centers with creative materials (art supplies, musical instruments, etc.) which give Aniese opportunities to practice her oral language skills and express herself creatively.
- Meet with Aniese’s family to learn her language background and develop ways to support her home language.
- Use pictures and real world objects to teach Aniese basic words like “paintbrush,” “marker” and “book”. Ask her family to share the same words in their home language.
- Help Aniese make meaningful connections to new vocabulary and content being taught by helping her find way to connect her personal experience to new content.
- Ask Aniese’s mother to share information about her experiences, background and interests.
- Observe Aniese to learn about her interests and language use in the classroom.
- Try to pair Aniese with peers who speak Spanish.
- Label objects and areas of the room with Spanish words.

Supporting Yelia:

Yelia is an 7 month old Mandarin/ English Dual Language learner. She is learning both English and Mandarin simultaneously. She babbles happily, giggles and seems to enjoy listening to music.

Yelia's teachers are concerned because no one in the Head Start program speaks Mandarin and they do not have a great amount of experience supporting simultaneous bilinguals.



- Have staff engage in sustained, language rich activities with Yelia like putting together a puzzle or playing with blocks. This provides opportunities to model language use and introduce vocabulary.
- Read out loud and often to Yelia. Choose developmentally appropriate and visually stimulating books that match her interests. Yelia's mother shared a love of animals; find books with animals to engage Yelia.
- Create an open and respectful dialogue with Yelia's family about first and second language development and ways to support her home language development.
- Imitate Yelia's babbling and vocalization, creating a back and forth dialogue. Remember to leave space for Yelia's responses and to observe and make use of non-verbal communication. For example, if she reaches toward the blocks ask, "Yelia, would you like to play with the blocks?"
- Play music to engage Yelia and teach her language.
- Educate staff about language development, dual language development and milestones as well as signs of language delay.
- Make connections with community leaders and members who speak Mandarin.

References/ Suggested Readings:

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Tabors, P. (1998). What early childhood educators need to know: Developing effective programs for linguistically and culturally diverse children and families. *Young Children*, 53(6), 20–26.

Exploring Cultural Concepts: *Funds of Knowledge*



Keywords

Funds of Knowledge, family engagement

Some Research Highlights

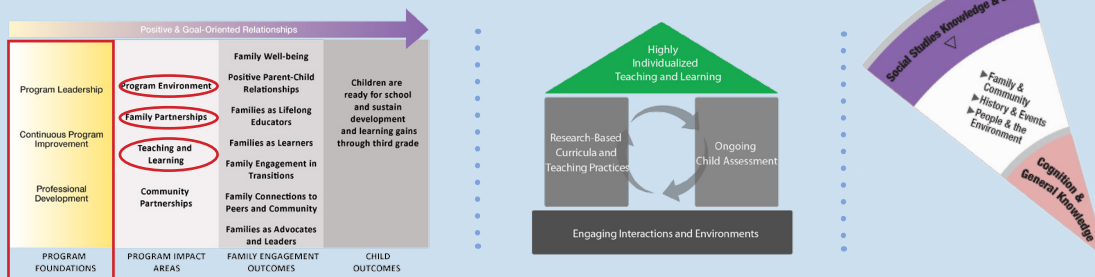
- Families have abundant knowledge that programs can learn and use in their family engagement efforts.
- Students bring with them funds of knowledge from their homes and communities that can be used for concept and skill development.
- Classroom practices sometimes underestimate and constrain what children are able to display intellectually.
- Teachers should focus on helping students find meaning in activities, rather than learn rules and facts
- Group discussions around race and class should promote trust and encourage dialogue.

Relevant Publications

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). *Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms.* Theory Into Practice, 31(2), 132-141.

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Head Start Frameworks



This resource highlights only select aspects of each framework and is not an exhaustive review of the frameworks or the research.

Instructions for Completing *Funds of Knowledge*

- 1 Form small groups to review the 10 categories of *Funds of Knowledge*.
- 2 Think about *Funds of Knowledge* for you and your family.
- 3 Fill in your *Funds of Knowledge* on the lines provided. Skip the categories that don't pertain to you or your family. Add a new category based on your culture.
- 4 Within your small group, share the aspects of your *Funds of Knowledge* that you feel comfortable discussing.
- 5 Consider the following questions:
 - What similarities did you notice among the *Funds of Knowledge* shared in your small group? What differences did you notice?
 - How might you gather the *Funds of Knowledge* of children and families in your classroom or program?
 - How are *Funds of Knowledge* reflected in the various Office of Head Start frameworks?
 - What are some of the ways you might apply the *Funds of Knowledge* of children and families to inform culturally relevant programming (e.g. approaches to family engagement, curriculum development, instructional practices, etc.)






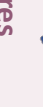





Note: When working with families, it is important that you have a mutually trusting relationship before you ask them direct questions about their *Funds of Knowledge*. This is especially necessary if you plan to fill out the form together.



Name: _____

Date: _____

Funds of Knowledge

Home Language	 E.g., Arabic; Spanish; Navajo; Italian
Family Values and Traditions	 E.g., holiday celebrations; religious beliefs; work ethic
Caregiving	 E.g., swaddling baby; giving baby pacifier; co-sleeping
Friends and Family	 E.g., visiting grandma; barbecues; sports outings
Family Outings	 E.g., shopping; beach; library; picnic
Household Chores	 E.g., sweeping; dusting; doing dishes
Educational Activities	 E.g., going to the museum; taking a walk in the neighborhood
Favorite TV Shows	 E.g., watching Dora; Sesame Street; Sid the Science Kid
Family Occupations	 E.g., fishing; office; construction; policeman
Scientific Knowledge	 E.g., recycling; exercising; health
	 Additional Funds of Knowledge

González, N., Moll, L., & Amanti, C. (Eds). (2005). Funds of knowledge: Theorizing practices in households, communities and classrooms. Mahwah, NJ: Erlbaum.



Instructional Practices for Classroom Design to Create Supportive Environments

Observer Checklist

To what extent does the teacher/staff person:	Almost always	Occasionally	Not yet	Not observed
1. Arrange the classroom so that all children can move easily around the room (traffic patterns are clear of obstacles, the needs of children with sensory and physical disabilities are addressed)				
2. Arrange the classroom so there are no wide open spaces where children can run (i.e. classroom space will need to accommodate wheelchairs or other special equipment if needed)?				
3. Incorporate critical dimensions when arranging the environment (i.e. hard/soft, intrusion/seclusion, open/closed, risk/safety, simple/complex, high mobility/low mobility)?				
4. Design learning centers that have clear physical boundaries (i.e. chairs, shelving, tables, rugs etc. create boundaries)?				
5. Include an adequate number and variety of centers to promote interest and support the number of children allowed in each center (i.e. new materials associated with current themes and children's interests are added to centers)?				
6. Ensure that the classroom environment, resources, and materials are representative of diverse children and families (i.e. children's families are represented in the classroom in photos, books and bulletin boards and images of successful individuals who fully represent the school community are included in the classroom environment)?				
7. Prepare activity materials and centers before children arrive at the center or activity (i.e. materials are adequate for the number of children in centers, teacher is familiar with the activity script or sequence)?				
8. Communicate at eye level with the children almost all of the time (i.e. teacher is in close proximity to students and actively engages in activities with them)?				

Instructional Practices for Classroom Design to Create Supportive Environments Teacher/Staff Self-Assessment Checklist

To what extent do I:	Almost always	Occasionally	Not yet
1. Arrange the classroom so that all children can move easily around the room (i.e. traffic patterns are clear of obstacles, needs of children with physical and sensory disabilities are addressed)?			
2. Arrange the classroom so there are no wide open spaces where children can run (i.e. classroom space can accommodate wheelchairs and other special equipment if needed)?			
3. Incorporate critical dimensions when arranging the environment (i.e. hard/soft, intrusion/seclusion, open/closed, risk/safety, simple/complex, high mobility/low mobility)?			
4. Design learning centers that have clear (physical) boundaries (i.e. chairs, shelving, tables, rugs etc. create boundaries)?			
5. Include an adequate number and variety of centers to promote interest and support the number of children allowed in each center (i.e. new materials connected with current themes and children's interest are added to centers)?			
6. Ensure that the classroom environment, resources and materials are representative of diverse children and families (i.e. children's families are represented in the classroom in photos, books, bulletin boards and images of successful individuals who fully represent the school community are included in the classroom environment)?			
7. Prepare activity materials and centers before children arrive at the center or activity (materials are adequate for number of children in centers, teacher is familiar with activity script or sequence)?			
8. Communicate at eye level with the children almost all of the time (i.e. in close proximity to children and actively engaging in activities with them)?			



*'Instructional Practices Observed IN Teaching Standards'
for Administrators*

Classroom Design to Create Supportive Environments
<p>Practice 1: When I observe a teacher arrange the classroom so that all children can move easily around the room...</p> <p>What early learning and development standard is he/she addressing?</p> <ul style="list-style-type: none"> • Children express positive feelings about themselves and confidence in what they can do (ESD-2) <p>What teaching standards is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard I: Teachers demonstrate leadership • Standard IV: Teachers facilitate learning for their students
<p>Practice 2: When I observe a teacher arrange the classroom so there are no wide open spaces where children can run...</p> <p>What early learning and development standards is he/she addressing?</p> <ul style="list-style-type: none"> • Children express positive feelings about themselves and confidence in what they can do (ESD-2) • Children develop awareness of basic safety rules and begin to follow them (HPD-8) <p>What teaching standards is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard I: Teachers demonstrate leadership • Standard IV: Teachers facilitate learning for their students
<p>Practice 3: When I observe a teacher incorporate critical dimensions when arranging the environment (i.e. hardness/softness, simple/complex, high mobility/low mobility etc.)...</p> <p>What early learning and development standards is he/she addressing?</p> <ul style="list-style-type: none"> • Children demonstrate the social and behavioral skills needed to successfully participate in groups (ESD-5) • Children explore the world by observing, manipulating objects, asking questions, making predictions, and developing generalizations (CD-15) • Children actively seek to understand the world around them (APL-2) <p>What teaching standards is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard IV: Teachers facilitate learning for their students
<p>Practice 4: When I observe a teacher design learning centers that have clear physical boundaries...</p> <p>What early learning and development standards is he/she addressing?</p> <ul style="list-style-type: none"> • Children form relationships and interact positively with other children (ESD-4) • Children develop awareness of basic safety rules and begin to follow them (HPD-8) <p>What teaching standards is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard I: Teachers demonstrate leadership

Classroom Design to Create Supportive Environments
<p>Practice 5: When I observe a teacher Include an adequate number and variety of centers to promote interest and support the number of children allowed in each center...</p> <p>What early learning and development standards is he/she addressing?</p> <ul style="list-style-type: none"> • Children demonstrate a positive sense of self-identity and self-awareness (ESD-1) • Children demonstrate initiative (APL-7) • Children actively seek to understand the world around them (APL-2) • Children engage in increasingly complex play (APL-3) <p>What teaching standards is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard I: Teachers demonstrate leadership • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard IV: Teachers facilitate learning for their students
<p>Practice 6: When I observe a teacher ensure that the classroom environment, resources, and materials are representative of the classroom's children and families...</p> <p>What early learning and development standards is he/she addressing?</p> <ul style="list-style-type: none"> • Children demonstrate a positive sense of self-identity and self-awareness (ESD-1) • Children demonstrate the social and behavioral skills needed to successfully participate in groups (ESD-5) • Children recognize that they are members of different groups (family, preschool class, cultural group) (CD-7) • Children identify and demonstrate acceptance of similarities and differences between themselves and others (CD-8) <p>What teaching standards is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard IV: Teacher facilitate learning for their students
<p>Practice 7: When I observe a teacher prepare activity materials and centers before children arrive at the center or activity...</p> <p>What early learning and development standards is he/she addressing?</p> <ul style="list-style-type: none"> • Children demonstrate a positive sense of self-identity and self-awareness (ESD-1) • Children demonstrate initiative (APL-7) • Children actively seek to understand the world around them (APL-2) • Children engage in increasingly complex play (APL-3) <p>What teaching standards is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard I: Teachers demonstrate leadership • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard IV: Teachers facilitate learning for their students
<p>Practice 8: When I observe a teacher communicate at eye level with the children almost all of the time...</p> <p>What early learning and development standard is he/she addressing?</p> <ul style="list-style-type: none"> ○ Children form relationships and interact positively with familiar adults who are consistent and responsive to their needs (ESD-3) <p>What teaching standard is he/she demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students

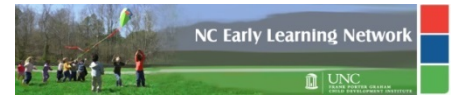


*'Instructional Practices Observed IN Teaching Standards'
for Teachers*

Classroom Design to Create Supportive Environments
<p>Practice 1: When I arrange the classroom so that all children can move easily around the room...</p> <p>What early learning and development standard am I addressing?</p> <ul style="list-style-type: none"> • Children express positive feelings about themselves and confidence in what they can do (ESD-2) <p>What teaching standards am I demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard I: Teachers demonstrate leadership • Standard IV: Teachers facilitate learning for their students
<p>Practice 2: When I arrange the classroom so there are no wide open spaces where children can run...</p> <p>What early learning and development standards am I addressing?</p> <ul style="list-style-type: none"> • Children express positive feelings about themselves and confidence in what they can do (ESD-2) • Children develop awareness of basic safety rules and begin to follow them (HPD-8) <p>What teaching standards am I demonstrating?</p> <ul style="list-style-type: none"> • Standard I: Teachers demonstrate leadership • Standard IV: Teachers facilitate learning for their students
<p>Practice 3: When I incorporate critical dimensions when arranging the environment (i.e. hardness/softness, simple/complex, high mobility/low mobility etc.)...</p> <p>What early learning and development standards am I addressing?</p> <ul style="list-style-type: none"> • Children demonstrate the social and behavioral skills needed to successfully participate in groups (ESD-5) • Children explore the world by observing, manipulating objects, asking questions, making predictions, and developing generalizations (CD-15) • Children actively seek to understand the world around them (APL-2) <p>What teaching standards am I demonstrating?</p> <ul style="list-style-type: none"> • Standard IV: Teachers facilitate learning for their students
<p>Practice 4: When I design learning centers that have clear physical boundaries...</p> <p>What early learning and development standards am I addressing?</p> <ul style="list-style-type: none"> • Children form relationships and interact positively with other children (ESD-4) • Children develop awareness of basic safety rules and begin to follow them (HPD-8) <p>What teaching standards am I demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard I: Teachers demonstrate leadership

Classroom Design to Create Supportive Environments
<p>Practice 5: When I include an adequate number and variety of centers to promote interest and support the number of children allowed in each center...</p> <p>What early learning and development standards am I addressing?</p> <ul style="list-style-type: none"> • Children demonstrate a positive sense of self-identity and self-awareness (ESD-1) • Children demonstrate initiative (APL-7) • Children actively seek to understand the world around them (APL-2) • Children engage in increasingly complex play (APL-3) <p>What teaching standards am I demonstrating?</p> <ul style="list-style-type: none"> • Standard I: Teachers demonstrate leadership • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard IV: Teachers facilitate learning for their students
<p>Practice 6: When I ensure that the classroom environment, resources, and materials are representative of the classroom's children and families...</p> <p>What early learning and development standards am I addressing?</p> <ul style="list-style-type: none"> • Children demonstrate a positive sense of self-identity and self-awareness (ESD-1) • Children demonstrate the social and behavioral skills needed to successfully participate in groups (ESD-5) • Children recognize that they are members of different groups (family, preschool class, cultural group) (CD-7) • Children identify and demonstrate acceptance of similarities and differences between themselves and others (CD-8) <p>What teaching standards am I demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard IV: Teacher facilitate learning for their students
<p>Practice 7: When I prepare activity materials and centers before children arrive at the center or activity...</p> <p>What early learning and development standards am I addressing?</p> <ul style="list-style-type: none"> • Children demonstrate a positive sense of self-identity and self-awareness (ESD-1) • Children demonstrate initiative (APL-7) • Children actively seek to understand the world around them (APL-2) • Children engage in increasingly complex play (APL-3) <p>What teaching standards am I demonstrating?</p> <ul style="list-style-type: none"> • Standard I: Teachers demonstrate leadership • Standard II: Teachers establish a respectful environment for a diverse population of students • Standard IV: Teachers facilitate learning for their students
<p>Practice 8: When I communicate at eye level with the children almost all of the time...</p> <p>What early learning and development standard am I addressing?</p> <ul style="list-style-type: none"> ○ Children form relationships and interact positively with familiar adults who are consistent and responsive to their needs (ESD-3) <p>What teaching standard am I demonstrating?</p> <ul style="list-style-type: none"> • Standard II: Teachers establish a respectful environment for a diverse population of students

Classroom Design to Create Supportive Environments – Large and Small Group Areas



Module 4: Classroom Design

Create balance in the social structure of the classroom by providing a mix of large group, small group, and individual activities throughout the daily routine (Gestwicki, 2007). Group times encourage a sense of belonging and contribute to the development of mutual respect among children. Working in groups helps young children learn social skills and enhances their ability to communicate ideas and experiences with others.

The **large group** area is where Circle/Story Time or snacks and lunch take place. Help children know where to position themselves in the large group area by indicating space with tape on the area rug or using a small rug for each child. Position children in a way that maximizes the teacher's ability to manage the group and maintain the group's attention. Children with visual, hearing, or motor challenges may need a designated space in order to participate fully in large group activities. It is essential that seating expectations do not result in children using challenging behaviors. If seating expectations are a challenge for some children, reconsider expectations so that group time is successful for everyone.

Small group areas are places where children can work with a few other children to refine and extend skills and concept development. Working with children in small groups affords teachers the opportunity to observe and assess individual growth and development for the purpose of informing instruction. Small, teacher-led groups may occur when other children are at centers or in activities where they can be successful without teacher engagement.

Include classroom space for **individual time** spent with the teacher, teacher assistant, or adult volunteer. This may include reading or conversing one to one.

All children need opportunities to be **alone**. Whether to sit quietly read or listen to music, the classroom needs a quiet, comfortable area for children to spend time alone especially as needed to calm themselves. The quiet area should be visible to the teacher at all times.

Reflection Questions

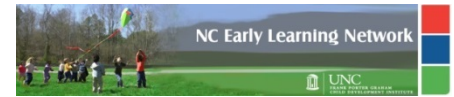
1. Describe the areas in your room that are used for:
 - Large group activities
 - Small group activities
 - Individual activities
2. What occurs in each of these areas?
3. How much time each day do children have access to these different activity settings?
4. What is the balance between these areas/activities?
5. How might you change these areas to create a better balance?

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Gestwicki, C. (2007). *Developmentally appropriate practice: Curriculum and development in early education* (3rd ed.). Boston, MA: Cengage Learning.

Iowa State University Department of Human Development & Family Studies. (2013). Train-Coach-Train. Retrieved from <https://iastate.app.box.com/s/9rg5sxh5mfh43da7e05k>

Classroom Design to Create Supportive Environments - Learning Centers



Module 4: Classroom Design

High quality learning centers have clear boundaries, are adequate in terms of number and variety, are designed to support the number of children allowed in each center and have well-selected materials. They promote interest and represent the classroom's children and their families.

Learning centers have clear (physical) boundaries

Clear, physical, visible boundaries for learning centers provide children with a clear message for the use of materials and expectations in a particular area. Once children are taught expected behaviors for each space in the classroom, the distinct areas become powerful cues for appropriate behavior. To establish expectations specific to learning centers, point out boundaries and visual cues and practice how to respond to the cues through support in play and modeling. When centers are arranged appropriately and expectations taught adequately, adults need not provide constant reminders.

Clear physical boundaries help communicate where each area begins and ends, reinforcing where children are supposed to be during specific activities. Boundaries are not intended to 'contain' children, as most of them can be easily climbed over or walked around. They give cues about classroom spaces and expectations.

Boundaries can be created with the furniture found in the classroom, such as desks, shelves, filing cabinets, or tables, as well as with teacher-created materials using fabric or masking tape. Children with visual impairments can be supported by the use of visual cues like colored rugs, labels, color coding or highlighting with boldly colored masking tape.

Low shelves allow children to see between centers and facilitate play by making connections between materials in different centers around the room. Be flexible in allowing children to move materials they need from one center to another to enhance their play.

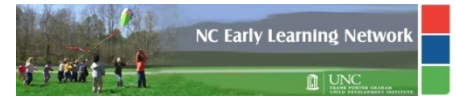
Visual supports, such as center signs, stop signs, photos and material markers on shelves help children know their way around the classroom, access materials, move easily from place to place, and know when learning centers are closed. Point out center closures to children during morning circle and indicate with a visual cue on the daily schedule. Place visual prompts, such as sheets or blankets or circles with a slash through them, in centers to serve as a reminder. For children with visual impairments teachers may need to adapt visuals to include a tactile cue. For example, place a puffy paint 'X' on a center closure sign to provide a tactile reminder that a center is closed.

Use visuals that indicate a work is 'Under Construction' or 'In Progress' to support children's creative development and assist in classroom transitions. Avoid challenging behaviors by posting signs by incomplete building structures or art projects so that children can return and finish the task. These visuals serve as a reminder for other children to respect their friend's work.

There is an adequate number and variety of learning centers

Based on the number of children in the classroom, determine the appropriate balance between having enough centers and too many centers open. Make sure centers are not too crowded so that children have access to materials and have room to work, thereby decreasing the likelihood of challenging behavior. Having too many open centers may decrease children's opportunities for social interaction. For example, if a classroom has 10 open centers and 14 children, only one or two children will be in a center at a time. This limits the opportunities for team work and problem solving among peers. In general, to maximize choice and minimize conflict over possessions, have one-third more work spaces than the

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number of children in your classroom. For example, if you have 18 children you will need $(18 \times 1/3) + 18$ or 24 spaces for working. This might mean including three spaces at the sensory table, two at the easel, four at the art table, four in blocks/construction, four in dramatic play, four at the manipulative center, two in the listening/library area, and one quiet or private area.

Avoid having a center of high activity (such as block center or dramatic play) located close to a center where children need to focus attention or engage in a quiet activity (such as listening centers, computer, and book center).

Learning centers are designed to support the number of children allowed in each center

Use developmentally appropriate and creative ways to limit the number of children in centers. Cards containing children's names can be moved into pockets at the center. Children can wear necklaces to show the center they have chosen. An entry and exit system helps children self-regulate. Prevent challenging behaviors by allowing a child to choose an area and activity of preference. As the year progresses, introduce a 'waiting' box allowing children to place their name on a list to show they are waiting to join the center when someone leaves. Consider using such a system to ensure access to socially competent peers. Think about how to group children with strong social skills with those who are learning social skills. For example, pair a shy child with an outgoing child or a child with disability with a child who is developing according to age expectations.

Learning center materials and activities are thoughtfully prepared before children arrive at centers

Plan, arrange, and display materials to help children become independent, self-regulated learners. Arrange materials neatly in baskets and display them on child-sized shelves that allow children to select the materials they need for their work and clean up before they leave the learning center. Color code or use universal symbols for containers in learning centers to help children see continuity and to encourage sorting (such as a turtle picture for materials in the quiet area). Label materials in languages used by the children in your classroom.

Label containers by hot gluing objects to the outside of the container for children with visual impairments. They can scan the bins tactilely to determine where materials belong. Encourage literacy by pairing the objects with print or braille labels.

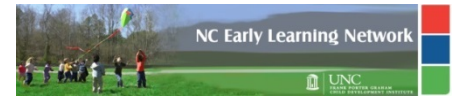
Avoid challenging behaviors by ensuring that children need not wait long for an activity to begin and that sufficient materials are available in centers. Have centers organized and ready to go when children arrive. Start the year with duplicates of materials and toys and pare these down as children learn to request and share.

Learning centers promote interest; resources and materials are representative of the classroom's children and families

Reflect diversity

Materials that are meaningful and relevant to children's needs, interests, and lives promote engagement. Make sure that pictures in the classroom and pictures in books and on puzzles reflect the diversity within your classroom community. Include in your classroom displays pictures of diverse children and adults participating in work and

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recreational activities. Include dolls wearing eyeglasses, hearing aids, leg braces, or seated in wheelchairs as part of your dramatic play center. Incorporate children’s abilities, cultures, and traditions into learning experiences. Assist children in recognizing differences, as well as similarities, among all people by allowing them to ask questions of others who have different backgrounds from their own. Engage families in your classroom by inviting them to share culturally relevant activities with the whole class.

Have children and their families make a family book together with photos and special comments about each family member. Once completed, place the books in the reading center and other locations where children can talk about their families together.

Provide special tools such as extra wide paintbrushes, thick pencils, small crayons, double-holed scissors, and utensils that can be attached to a child’s hand for children who need them. Allow all children to try out these special tools and explain why some children might need to use these during activities.

Consider lighting for children with visual and hearing impairments. Rearrange centers to access lighting and to create an area with a high contrast, dark background. Ensure that children with visual impairments are not facing a window. Keep noise to a minimum with carpeted floors and sound absorbent material, such as carpet tiles or corkboard on walls. Discuss any adaptations for children’s special needs with parents and your program’s specialists.

For children using sign language, label centers and materials with words in sign or finger-spelling. Include in the reading center books with signs in them and a poster with the finger-spelled alphabet (Bednarczyk, Alexander-Whiting, & Solit, 1994).

Pretend play

Pretend play helps children develop social and language skills. Although pretend play may be delayed in children with communication disorders, developmental delays, and Autism Spectrum Disorders (ASD), children with diverse abilities can and do develop play skills with targeted instruction.

Support the development of pretend play by breaking the sequence into steps. Use written or picture instructions to help a child understand what to do. Encourage role-playing by taking a child’s favorite story or character and turning it into story sequence for children to act out. Provide costumes. Model and suggest changes to the characters’ voices and gestures. Guide a child towards independent creative dramatic play by introducing new themes and gradually changing parts of the play.

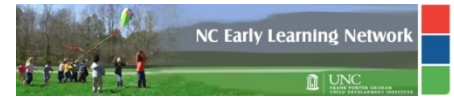
Create engaging centers

When children tend to stay in one or two learning centers, and avoid other centers, it suggests that the other centers are not engaging or interesting. Listen to what children and their families talk about to learn their interests. Change materials or themes in centers on a regular basis.

Build on children’s interests

When designing content and activities for learning centers, build on children’s interests by including materials that they enjoy. If children are excited and motivated they will be more likely to engage in the activity.

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Provide a variety of materials in each center that promote interactions and team work among peers, such as board games in the manipulatives center and wagons during outdoor time.

New or novel items in the environment can increase social interaction. Hang a framed print of Monet's sunflowers on the wall near the easel to spark the interest of children in the art center. Adult support within centers can help children consider new ways of engaging with materials and interacting with peers. Visual supports can also be posted within centers to provide ideas for how to use materials (such as a picture board with different ways to play with doctor kit).

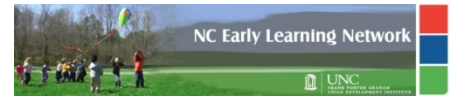
Reflection Questions

1. When setting up boundaries in your learning centers, what might you consider for a child who has physical disabilities (i.e. limited mobility, uses wheelchair or other equipment, etc.)?
2. Think about the number and variety of centers in your classroom. Work out the formula provided above under '**Learning centers are designed to support the number of children allowed in each center**' (one-third more work spaces than the number of children in your classroom. For example, if you have 18 children, you will need $(18 \times 1/3) + 18$ or 24 spaces for working.). Based on this, how many centers would you have and how many children would be allowed at each center?
3. Materials within centers need to be meaningful and relevant to children's needs, interests, and lives. How do you learn about your children's needs, interests, and lives before school starts and throughout the school year?
4. How have you included materials and resources in your centers that reflect your students' cultures, needs, interests, and lives?
5. How have you have used visual supports in your learning centers to promote engagement with materials and interactions with peers?

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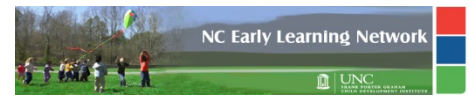
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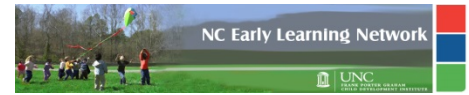
Critical Dimensions of Materials and Space



Module 4: Classroom Design

Dimension	Examples of Materials	Examples of Spaces
Softness		
Hardness		
Open		
Closed		
Simple		
Complex		
Intrusion		
Seclusion		

Critical Dimensions of Materials and Space



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Dimension	Examples of Materials	Examples of Spaces
High Mobility		
Low Mobility		
Risk		
Safety		

Post-learning Activity: Extension into the Classroom

Refer back to the sketch of the classroom design you created during the beginning of the module and the notes you took on the sketch regarding effective instructional practices and strategies. Based on this information, sketch out a new classroom design that would meet the needs of all the children in your classroom. Discuss your new plans with coworkers and make plans to implement the changes.

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