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An Online Resource for Ohio Educators

Early Childhood Building Blocks

Universal Design for Learning in Early Childhood Inclusive Classrooms

Julie Bertling, Merrie Darrah, Diana Lyon, and Sarah Jackson

INTRODUCTION

Picture This: Universal Design for Learning in an Inclusive Preschool

Today Teresa Parker is planning to talk with the children in her class about different types of vehicles and their uses as a way to introduce new vocabulary and help the children make observations about and comparisons between objects.

It is circle time, and the preschool children in Ms. Teresa's classroom are excited. Children begin to gather on the rug, pull out a pillow to sit on, or sit on their chairs to sing familiar songs together. During "Wheels on the Bus," they use their homemade plastic egg shakers. They shake down low, up high, side to side, and around in a circle, responding to Ms. Teresa's instructions and following her cues (moving her shaker in a circle and saying "wheels go round and round" before the verse begins). They read the story *Away We Go!* by Rebecca Kai Dotlich about different kinds of transportation vehicles.

Two children—Jason and Mylee—are seated on inflatable disc cushions. They use these cushions to help with stabilization, muscle control, and balance. The extra support helps them participate successfully in the group activity.

Once the story is over, Ms. Teresa brings out a big brown "magic" bag and asks the children to guess what is inside. She shows a picture on the Smart Board of a firefighter driving a fire truck. "What does a firefighter drive?" she asks. Sari says, "Fire truck," and Ms. Teresa takes a fire truck out of the magic bag and hands it to Sari to hold.

After each child is given a vehicle from the magic bag, Ms. Teresa and her assistant have the children take their vehicles to an area where they can race them down a variety of ramps and chutes that have been set up at different levels to allow the children to reach them if they are standing or seated. During this time, the children can also work in the writing area and the art area to write stories and make pictures of their cars and trucks. They can use markers, finger paints, glitter glue, or a computer program to make their picture.

Later in the day, the children will have an opportunity to dictate, draw, or use a computer program to share stories of trips in cars, buses, and airplanes. The computer program will prompt the children to choose items from a picture library and create a story about them that can be printed out. The children can click on each picture, and it will say the name of the object in the picture out loud.

The program, which can be used to record children's speech and even a song they may want to sing or hum to accompany their drawings, accommodates the needs of Jamal, who has a speech delay; Asaam, who is learning English as a second language; and Hanna, who is visually impaired.

RATIONALE

Why Universal Design for Learning?

Young children have many different physical and learning needs. A growing number of these children are spending their days in programs similar to the one in the opening classroom scenario. Jason and Mylee have muscle development problems, Jamal has a speech delay, Asaam is just learning English, and Hanna is visually impaired. These five children are only a few of the children in the classroom. Each child has strengths and challenges; all children do.

How can the teachers hope to meet the needs of all these children? Many early childhood teachers have adopted the principles of universal design for learning (UDL), but others are feeling lost and overwhelmed. They need information and support. This brief Building Blocks article will outline some UDL basics in an attempt to address those feelings and provide access to tools that teachers can use to meet children's needs in the classroom so that they can learn successfully.

The Building Inclusive Child Care website states that "the concept of Universal Design for Learning (UDL) facilitates an inclusive early childhood environment by ensuring equitable access and meaningful participation through flexible and creative approaches within a developmentally appropriate setting" (BICC, p. 1). The phrase *universal design for learning* was adopted by the Center for Applied Special Technology, CAST, to differentiate between universal access, which makes materials available to children, and the actual gain in knowledge and skills involved in learning. The focus moves from the right of children to be physically in the room to the right of all children to be in the room and also be included and engaged in the general curriculum. Isn't that what teachers want—an environment where all the children learn?

ORIGIN OF UDL

UDL has its origins in the field of architecture. After the Americans with Disabilities Act and similar legislation were adopted, buildings began to be retrofitted with ramps, elevators, etc., to accommodate individuals with disabilities so that they could gain access to the facility. Later findings showed that many others, such as mothers with strollers and the elderly, also benefitted from the changes. Architects soon realized that it was much more economical to build accessibility into the designs of new buildings rather than to retrofit the changes at a later date.

In the early 1990s, educators began to realize that there are similarities between individuals accessing buildings and children accessing learning through books (e.g., altering font size, increasing page contrast, and using audio, read-aloud, or video). And similar to designing accessible components in new buildings, they found that it was more cost effective to apply UDL strategies in creating environments, curriculum, activities, and an assessment system that meets the needs of the greatest number of children during their design than waiting to make changes later.

Inclusion/UDF Observation Questions and Checklist

The Building Inclusive Child Care website provides a checklist and a list of questions regarding a general program, curriculum, physical environment, and relationships for teachers and others to consider as they prepare an inclusive classroom using UDL strategies.

Along the way, legislators and educators acted to support this realization. The Early Childhood Building Blocks brief "Helping Children with Disabilities Access the Early Childhood Curriculum" provides links to and explains much of the legislation. In April 2009 the Division for Early Childhood (DEC) of the Council for Exceptional Children and the National Association for the Education of Young Children (NAEYC) developed a Joint Position Statement on Early Childhood Inclusion. The joint statement suggests that the essence of early childhood inclusion is to enhance every child's sense of belonging and support the child's ability to reach his or her full potential. The defining features of those inclusive environments include programs and services that are grounded in three components: access, participation, and support.

Defining Features of Inclusive Environments

▶ **Access**: All children have access to the general education curriculum and learning environment.

▶ **Participation**: All children can participate in all activities and routines through scaffolding and intervention.

▶ **Support**: All teachers have the tools they need to help all young children, who have unique strengths and needs.

UDL BASICS

What is UDL? UDL is an approach used in many classrooms that allows children to create, explore, and manipulate materials that will foster learning commensurate with their development and comfort levels, which can be dictated by their strengths and needs.

The goal of UDL in education as described by CAST is to provide "(1) multiple means of representation (the 'what' of learning), (2) multiple means of action and expression (the 'how' of learning), and (3) multiple means of engagement (the 'why' of learning)." To provide these multiple avenues of learning, the early childhood team needs to consider the learning differences of all children—including children with disabilities or different learning styles and children who are English language learners.

In a program following UDL guidelines, children should be able to access and engage in all learning opportunities provided in the classroom and in other early childhood environments (e.g., outdoor playgrounds, gyms, art studios). To make this happen, teachers need to reevaluate the curriculum, physical environment, and relationships among teachers, children, families, and the community.

HOW DO WE GET THERE? APPLY UDL ELEMENTS

How can we support our children regardless of their ability so that each child can have the opportunity to "participate in a broad range of activities and contexts"? There are some key components that teachers need to look for when choosing a strategy to help them utilize UDL.

The strategy should:

- Foster collaboration with community partners
- Utilize high-quality, evidence-based practices
- Make use of a range of service delivery options (large group, small group, and individual; in the classroom, at home)
- Support differentiation of instruction

In addition, the following three elements allow teachers to frame learning experiences and classroom environments so that they are accessible to all children. These elements also rely on the children's strengths, preferences, and interests to encourage optimum engagement in the learning experience.

1 "Multiple Means of Representation"

In order to support the many ways children learn, teachers need to introduce and share concepts in formats that make sense to the children. You might begin a discussion with your team by asking how everyone is currently relaying information to the children. It gives you a starting point from which you can move out in many directions. You might think in terms of the five senses to reach learners in different ways. Be aware that multiple formats are most effective when they are presented simultaneously; still, not all formats are needed every time or in every activity. The learning goals may be embedded across activities and daily routines, but it is important that somewhere, somehow, sometime, children can experience what they are supposed to be learning in different formats.

Representation in Ms. Teresa's Classroom

To present the concept of vehicles, Ms. Teresa gave children the opportunity to see, hear, touch, move, create, use technology, and verbalize.

- **See and Hear**: Hear others singing "The Wheels on the Bus" song along with seeing the teacher's visuals, listen to teacher reading *Away We Go!* while looking at illustrations in book or on Smart Board

- **Touch**: Play with vehicles they got from the magic bag

- **Move**: Race vehicles

- **Create**: Draw and paint vehicle pictures; write and dictate labels and stories

- **Use Technology**: Create personal vehicle stories

- **Verbalize**: Sing "The Wheels on the Bus"; tell personal vehicle stories to other children

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2 "Multiple Means of Action and Expression"

The second element of UDL refers to the opportunities that we give to children that allow them to show us what they know and what they are able to do in different ways. We want an accurate picture of children's understanding of concepts, right? Then we need to allow children to show us what they know in ways that work for them but also allow us to get a more accurate assessment of their knowledge and skills.

Giving children multiple means of expression is not just about having many ways for children to share what they have learned. It's also important to give them options as they begin to organize and evaluate for themselves by setting goals and monitoring their progress. On the National Center on Universal Design for Learning (NCUDL) website you can read more about these executive functions.

Multiple Means of Expression in Ms. Teresa's Classroom

Ms. Teresa gave her children many different opportunities to share what they had learned. She and the other staff collected the evidence of those expressions as they:

- **Observed varied participatory behaviors**: Singing and moving to the music, listening to the story, guessing vehicles during the magic bag game, racing vehicles on ramps

- **Collected varied types of work**: Personal vehicle stories, vehicle drawings, computer printouts

- **Listened to or recorded children's voices:** Personal vehicle stories shared with other children

3 "Multiple Means of Engagement"

This element of UDL focuses on building children's motivation and interest in a concept by providing the children with choices on how they want to engage in the concept and at what level and by helping them engage for a sustained period of time and be persistent in their learning efforts.

Just as children have preferred learning styles, they also have preferred ways to engage with activities. And these "rules of engagement" change with the type of concepts involved and as the children's interest in the activity changes. Teachers need to be prepared to support all different kinds of learning preferences.

It is important to remember, however, that one of the most powerful interest motivators is the relevance the concept has to the child's personal life. A child who lives in an Ohio city is likely to be interested in cars, buses, and trucks, because he or she sees them every day and rides in them to go to and from home on a daily basis. A child living on a farm in Ohio might also be interested in cars and trucks, but also tractors and other farm vehicles because they are used by adults nearby and the child sees them often.

You can use that interest to motivate children to learn multiple concepts that are connected to transportation and vehicles—for example, mathematics, language, and science.

It is not only important to be relevant and interesting. It is also important that all learning activities and areas connect with the concepts you are trying to teach—for example, people use different kinds of vehicles and transportation—so that the concept persists across time and place. And activities need to vary on levels of challenge and support so that some self-regulation is being encouraged. The longer a child is able to engage with a concept, the more connections and deeper the learning can occur.

Engagement in Ms. Teresa's Classroom

Ms. Teresa gave children the opportunity to engage with an interesting and relevant topic.

Interest and relevance

Cars and trucks, racing cars, guessing game, and technology

Persistence across times and places

- *Time*: Early morning. *Place*: Class meeting area, where children sing "Wheels on the Bus" and use shakers; listen to story during circle time; play magic bag game with vehicles

- *Time*: Later morning. *Place*: Large open area used for vehicle races and individual exploration, various learning and activity centers around the room

- *Time*: Afternoon. *Place*: Various learning and activity centers around the room, where children compose, illustrate, and share personal vehicle stories, draw vehicles

Levels of challenge and support needed

- *Low support and challenge*: Explore ramps and vehicles

- *Medium support and challenge:* Sing, draw, play magic bag game

- *High support and challenge:* Compose personal stories
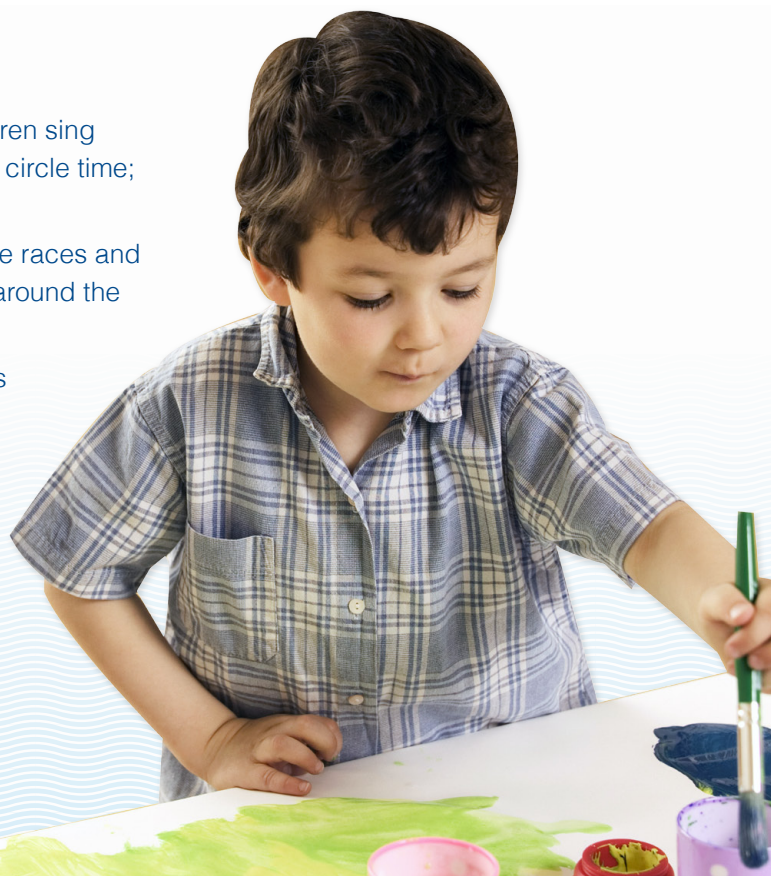
CHALLENGING BUT DOABLE!

There are many challenges that must be met in implementing UDL in an early childhood setting. Teachers need to provide a range of flexible learning materials and activities incorporated through visual, auditory, kinesthetic, and tactile opportunities. Teachers and other early childhood staff need to offer multiple methods for their students to process information. They need to also provide a range of ways for students to demonstrate their knowledge and learning. Does it sound like a daunting task? Perhaps, but take a step back. Look at the whole picture. Don't try to do it alone. Engage others on the staff in the process. Get parents involved. Begin to ask yourself: How else can I present this? How else could the children do this?

To help you provide a successful inclusive classroom, Resources for Early Childhood has developed a section devoted to the Inclusive Classroom on the REC website. In this section, you will find links to additional online resources, articles, video examples of inclusion strategies at work in the classroom, planning resources, and more. And you are invited to participate in the REC Community of Practice, which brings teachers together online to discuss and learn in the company of others interested in early childhood education.

When you are ready to seek out face-to-face professional development experiences that will enrich your understanding of UDL and better prepare you to meet the challenges associated with it, you may want to contact the Early Childhood Quality Network (EC Qnet) and the Ohio Professional Development Network. Both offer valuable sessions for early childhood teachers on this topic.

TOOLS AND RESOURCES

- In the April 22, 2009, archived post on the blog Art and UDL—VSA Arts of Massachusetts Blog, you will find a link to Steps for Adapting Materials for Use by All Children, a chart that provides examples for adapting toys to make them more accessible and overcome barriers.
- The Northampton Community College Early Childhood Education website offers a variety of resources for teachers which include Questions to Consider in UDL Observations of Early Childhood Environments. There is also a UDL introductory video in the Related Links section on the right side of the Building Inclusive Child Care page.
- The Center for Applied Special Technology (CAST) provides an exceptional website that has developed resources for educators that answer their questions and promote their adoption of universal design for learning.
- The Center for Community Inclusion and Disability Studies (University of Maine) offers numerous resources. Be sure to see the Growing Ideas Tipsheets home page and the Learning Ideas Tipsheet: Universal Design in Pre-K and Early Elementary Classrooms.
- The Division of Early Childhood (DEC), one of the seventeen divisions of the Council for Exceptional Children, provides a wealth of information and resources for teachers, families, students, and others in the early childhood community. There are links to position statements, journals, and information on recommended practices. One of the especially interesting articles on the website is "The Project Approach: A Strategy for Inclusive Classrooms" by Helene Arbouet Harte, which discusses how UDL and the Project Approach go hand in hand in an inclusive classroom.

- Helping Children with Disabilities Access the Curriculum by Victoria Carr is an Early Childhood Building Blocks article that also addresses inclusion and UDL.
- The Let's Play: Projects website from the University of Buffalo features a variety of play and toy information, including an article entitled "Universal Design Means Toys for Everyone." There are also PowerPoint presentations and charts that explain barriers to play and how to address them and some universal design for play guidelines. Also be sure to see the Universal Design for Play Tool, a rubric that will help you make good toy choices for your inclusive classroom.
- Making Connections with Technology, an early childhood technology wiki, is packed with information, links, video, and PowerPoints and is still growing. Users can add content to the website. Be sure to mine the site to find all the UDL jewels that are hidden there. For example, listen to the Kindergarten Storybook Voice Thread from Leanne Windsor from the documentation page of the wiki.
- The National Center for Learning Disabilities (NCLD) includes a Parent's Guide to UDL—it's very useful for both parents and teachers.
- The National Center on Universal Design for Learning offers a myriad of resources including a video introducing UDL.
- SandboxSeries: UDL in Preschool Wiki is ever changing and growing. The participants in the wiki can add and change things on the wiki to improve the information on the site. Both video and text-based resources are available to the user through the Training Resources link.

OHIO EARLY LEARNING PROGRAM GUIDELINES

Section 2: Environments Matter

Outcome 1: The learning environment is organized to support and facilitate young children's thinking abilities, learning processes, social competencies and general well-being.

Goal 2: A comprehensive early childhood curriculum is used to address child development objectives and Ohio's Early Learning Content Standards.

Performance Indicator 2.4: Educators intentionally plan educational experiences and deliver instruction using a variety of teaching strategies to meet the diverse learning abilities of all children.

Outcome 2: Educators have the knowledge and skills necessary to support children's learning and development.

Goal 1: Early childhood educators demonstrate the competencies necessary to provide high quality instruction.

Performance Indicator 1.1: Educators demonstrate their understanding of child development by:

- Planning experiences that reflect knowledge of the universal stages of development and developmental milestones;
- Adjusting experiences to meet the uniqueness of all children (i.e., stage of development, temperament, ways of engaging);
- Carefully crafting a daily schedule that addresses all developmental domains (i.e., time for gross motor play; opportunities for oral language and social interaction – peer to peer, adult to child and child to adult; and exploration, investigation and creative expression);
- Acknowledging the social and emotional feelings of children; and
- Incorporating knowledge of each child's social and cultural influences and how they influence development and learning.

Goal 2: Educators demonstrate nurturing and supportive relationships with children to promote self assurance and competence.

Performance Indicator 2.2: Educators evaluate and adjust their actions to respond to differing abilities, temperaments, activity levels and developmental abilities.

Goal 3: Educators demonstrate reflective teaching practices.

Performance Indicator 3.1: Educators meet regularly to reflect on children's experiences and to share curriculum ideas and teaching strategies.

ABOUT THE AUTHORS

Julie Bertling is an early childhood consultant for the State Support Team for Region 6 of Ohio's Educational Regional Service System. She has been teaching and supervising work with children with disabilities for over 25 years in many age ranges and at many ability levels. Julie provides technical support and professional development to programs serving young children within her region.

Merrie Darrah is the Early Learning Coordinator with State Support Team Region 4 . Merrie has been in the field of early childhood education for over 20 years. She has degrees in clinical psychology and educational administration. Merrie has broad experience working with individuals with disabilities from birth through age 21 including extensive work in the areas of early childhood assessment, curriculum and instruction, and response to intervention.

Diana Lyon is an early childhood consultant with the State Support Team for Region 5 of Ohio's Educational Regional Service System. She has a master's degree in early childhood education and educational leadership and has spent the majority of her career teaching and supervising Head Start programs in Ohio. She has also taught kindergarten and even spent time teaching science and mathematics with seventh and eighth graders.

Sarah Jackson is the early learning/school readiness coordinator for the State Support Team for Region 8 of Ohio's Educational Regional Service System. She provides services to school districts, Head Starts, County Boards of Mental Retardation and Developmental Disabilities, parents, Help Me Grow/Early Intervention Collaborative Groups, and other agencies and programs that serve children ages birth through eight, both regular and special education.

FOR MORE INFORMATION

Contact Nancy Brannon at nbrannon@ohiorc.org or Nicole Luthy at nluthy@ohiorc.org.

Visit http://rec.ohiorc.org to see the REC website and other Early Childhood Building Blocks.

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