



DIMENSIONS

of Early Childhood

Integrating Principles of Universal Design

2013 Exemplary Outdoor Classroom

Volume 41, Number 1, 2013

Print-Referencing

Professional Growth with Technology Tools



Creating a Nature-Inspired Outdoor Learning Environment on a Shoestring Budget

Year 2 of Our *Exemplary Outdoor Learning Classroom Contest*

The first year of our contest was so successful that the SECA Board of Directors has instituted a 4 year contest series. We realize that not all programs have resources, time or space to create the ultimate classroom but we know that there are many “exemplary” outdoor spaces (sometimes within larger spaces) that have been created through innovation and ingenuity.

With that in mind, we’re going to recognize those special outdoor spaces in several categories:

2014 — Creating a Nature-Inspired Outdoor Learning Environment on a Shoestring

2015 — Providing Nature-Inspired Outdoor Spaces for the Very Little Ones (Infants & Toddlers)

2016 — Creating an Oasis in a Concrete Jungle (Urban Spaces)

SECA is committed to recognizing those innovative programs that have managed to provide an outdoor environment that maximizes learning opportunities for children.

For more information about how to submit an application and show us what you have been able to do, please go to

http://www.southernearlychildhood.org/seca_conference.php.

**Deadline to submit
an application is
June 15, 2013.**



Photo courtesy of the Neighborhood Center



*A willow tunnel!
Photo courtesy of Starting Points Childcare*



Photo courtesy of Lakeshore Learning

Southern Early Childhood Association

Editor - Stephen Graves

Cover photo courtesy of Highland Plaza
United Methodist Preschool

Dimensions of Early Childhood

Copyright ©2013, Southern Early Childhood Association (SECA). Permission is not required to excerpt or make copies of articles in *Dimensions of Early Childhood* if they are distributed at no cost. Contact the Copyright Clearance Center at (978) 750-8400 or www.copyright.com for permission for academic photocopying (coursepackets, studyguides, etc.). Indexes for *Dimensions of Early Childhood* are posted on the SECA web site at www.SouthernEarlyChildhood.org. Additional copies of *Dimensions of Early Childhood* may be purchased from the SECA office by calling (800) 305-SECA. *Dimensions of Early Childhood* (ISSN1068-6177) is SECA's journal. Third Class postage is paid at Little Rock, Arkansas. SECA does not accept responsibility for statements of facts or opinion which appear in *Dimensions of Early Childhood*.

Authors are encouraged to download a copy of SECA's manuscript guidelines at http://www.southernearlychildhood.org/become_member_get_involved.php. Submit manuscripts that are typed and double spaced with references in APA style. E-mail manuscripts for review to the editor at editor@southernearlychildhood.org.

SECA serves the interests of early childhood educators concerned with child development, including university researchers and teacher educators; early childhood, kindergarten, and primary-grade teachers; and early childhood program administrators and proprietors. The association has affiliates in 13 Southern states. Non-affiliate memberships are available to anyone living outside the 13 affiliate states. For information about joining SECA, contact the executive offices at P.O. Box 55930, Little Rock, AR 72215-5930, (800) 305-7322. Members receive a one-year subscription to *Dimensions of Early Childhood* and discounts on SECA publications and conference registration fees.

Southern Early Childhood Association
P.O. Box 55930
Little Rock, AR 72215-5930
(800) 305-7322
editor@southernearlychildhood.org
www.southernearlychildhood.org

DIMENSIONS

of Early Childhood

Volume 41, Number 1, 2013

Refereed Articles

3
**Integrating Principles of Universal Design
Into the Early Childhood Curriculum**
Laurie A. Dinnebeil, Mary Boat, and Youlmi Bae

25
Print-Referencing: A Key to Interactive Shared Reading
Christin Baker

36
**Providing a System that Supports
Teachers' Potential Growth with Technology Tools**
Bridget A. Walsh, Leah Sanders, and Theresa Randolph

Non-Refereed Articles

14
Connect Universal Learning With a Professional Book
Lynne Weinick

15
The 2013 SECA Exemplary Outdoor Classroom

34
**Connect Print-Referencing
During Read-Alouds With a Children's Book**
Anita McLeod

Departments

2
President's Message
Nancy Cheshire

BOARD OF DIRECTORS

Nancy Cheshire
President
West Virginia
ncheshire@ma.rr.com

Kathy Attaway
President-elect
Kentucky
kathatt1@hotmail.com

AFFILIATE REPRESENTATIVES

Alabama	Richard Hardison richard@certraining.org
Arkansas	Dr. Joanna Grymes grymesj@astate.edu
Florida	Sister Roberta Bailey roberta.bailey@saintleo.edu
Georgia	Anita Dailey adailey@centralgatech.edu
Kentucky	Maureen O'Brien maureenob2002@yahoo.com
Louisiana	Cindy Ramagos cynthia.ramagos@la.gov
Mississippi	Beverly Peden bpden@comcast.net
Oklahoma	Marti Nicholson mnicholson@oklahomachildcare.org
South Carolina	Crystal Campbell sugarmama77@gmail.com
Tennessee	Lisa Maddox-Vinson gotastorylisa@hotmail.com
Texas	Mary Jamssek mjamssek@me.com
Virginia	Dr. Susan Barnes barnesks@jmu.edu
West Virginia	Melissa D. Smith melissa.d.smith@wv.gov

MEMBERS-AT-LARGE

Florida	South Carolina
Carol Monteleagre carmonte@bellsouth.net	Dr. Floyd Creech fcreech@fsd1.org

EDITORIAL COMMITTEE

Dr. Jaesook Gilbert, Chair Kentucky
Dr. Wilma Robles-Melendez Florida
Dr. Catheryn Weitman Texas
Jeff Leffler Mississippi
Dr. Christine J. Ferguson South Carolina
Charlotte Hendricks Alabama
Martha Garner Louisiana
Dr. Stephen Graves Interim Editor
Karen Leffler Copy Editor
Dr. Joanna Grymes SECA Board Liaison
Dr. Bobbie Warash Book Review Editor

STAFF

Glenda Bean Executive Director
Maurena Farr Administrative Assistant



President's Message

Nancy Cheshire

January brought the start of 2013 and many made resolutions and set new goals for the coming year. February brought travel to Mobile, Alabama and the 2013 SECA Conference. Both the start of the New Year and our annual conference provided us opportunities to *reflect, dream* and *move forward*.

As *I reflect* on my goals for the new year, I remember my personal early childhood education, when there were no public kindergartens, first grade was in a community school that provided first through sixth grades, all students walked to and from school and we all walked home for lunch. At recess we listened to the music of John Phillip Sousa played on a Victrola as we moved down the hallways. Our day started with roll call, collection of milk money and "hankie check" to be sure everyone had their cloth handkerchief. At morning break, half-pint glass bottles of white milk were brought to our classroom. The teacher punched a hole in the lid so a paper straw would fit into the bottle.

The days when students walked to and from school as well as home for lunch are reflections of times past as are glass milk bottles, Victrolas and hankie checks. Years ago homes had no television sets or video games. Children played outdoors. Indeed, childhood is very different today. However, the one constant from times past to the present is the need for safe, healthy environments in which children can learn, grow and reach their potential.

I dream that one day our society will truly appreciate that children are precious and make high quality care and education a priority. The important question, however, is "What is your dream?" I once opened a Dove Candy wrapper which read "There's no excuse not to dream." Our dreams help determine our resolutions and goals not only for this year but for our future.

Reflecting and *dreaming* are good, but not without a plan to *move forward* so dreams can become reality. SECA allows us to unite and work together toward common goals. SECA provides an outstanding journal and on-line materials that educate members, families we serve and coworkers because we know education leads to fulfillment of dreams. SECA provides networking opportunities so we can learn from each other. SECA keeps members informed on the latest developments in our profession and helps us move forward.

SECA is committed to bringing our members current information on quality outdoor environments for young children and based the 2013 conference on the theme *Hand in Hand: Children and Nature*. The *Exemplary Outdoor Classroom Contest* allowed us to recognize programs that provide safe, high quality, child appropriate outdoor learning spaces. The conference inspired and motivated our members and they will move forward as they implement more nature based learning experiences. Many people across our Southern states will benefit from what was shared at the 2013 SECA Conference because we dream that all children can have high quality learning environments in which to play, explore, discover and learn.

Indeed, SECA is on the move to improve the lives of children and families in the South. It is a pleasure to be your president and to reflect, dream and help move SECA forward. Together we can make dreams come true.

Integrating Principles of Universal Design Into the Early Childhood Curriculum

How can teachers of young children ensure that ALL children have meaningful opportunities to learn? Implement these recommendations that have shown to be effective in today's diverse learning settings.

**Laurie A. Dinnebeil,
Mary Boat, and
Youlmi Bae**

Automobile manufacturers understand how important it is to plan for the different sizes and shapes of car drivers. New vehicles come with electronic devices that enable the seat to move forward or back, and up or down, because designers understand that some people have long legs and others have short legs. Imagine manufacturing a car with an immovable seat that is built to the “average” driver. While it might be easier to manufacture a car like that, it certainly would be difficult to sell! Incorporating devices that allow drivers to easily change the position of the driver’s seat is a great example of universal design.

Universal design is a concept that was originally used by architects and product designers to ensure that buildings and products can be used by people with a range of characteristics, interests, and abilities (CAST, 2004). The addition of sidewalk curb cuts is one example, because curb cuts help stroller pushers, wheelchair users, skateboarders, rollerbladers, and bike riders.

Principles of universal design are most useful in the creation and development of buildings or products, rather than making modifications or accommodations after the fact. Curb cuts are easy to plan into the design of a curb, but much more difficult to incorporate after the curb is installed. It is much easier to design wider hallways to accommodate wheelchairs than to widen building hallways after the building is completed.

***Design curriculum
that is versatile
and flexible.***

Teachers are similar to architects or designers because they have responsibilities for building or designing settings and curriculum that help children learn and grow into productive citizens. It is possible to modify or adapt curriculum afterwards to meet the needs of diverse learners. However, it is much easier to initially design curriculum that is versatile and flexible so that learners with a wide range of interests, needs, and abilities can benefit from it.

Savvy early childhood teachers have always used principles of universal design to create curriculum designed for a wide variety of users because even *typical* young learners vary so much in terms of their interests and abilities. Given the wide range of developmental abilities in any group, early childhood teachers are wise to build in ways to make sure that all children benefit from a rich learning environment.

As more and more children with special needs and multiple languages are included in early childhood classrooms, the principles of universal design become even more important. All children, regardless of their abilities, needs, or cultural heritage should have access to a rich learning environment designed to help them acquire the skills they need to be successful in school and life. The purpose of this article is to identify ways that preschool teachers can apply Pisha and Coyne’s (2001) major principles of universal design to their classrooms.

Children Learn in More Than One Way

Learning occurs in many different ways and through many different senses (Pashler, McDaniel, Rohrer, & Bjork, 2008). Some children learn better by listening, others learn better by seeing, still others learn better by doing. Rarely is someone *only* an auditory or visual learner. Most

people, including children, learn best from a combination of all these approaches. The concept that learning is multisensory is built into every appropriate early childhood curriculum, so teachers provide young learners with many different ways of learning (Shams & Seitz, 2008).

Just as learners use many different approaches to explore and discover their world, it is also true that learners differ in the degree of structure and direction they need to learn a concept or skill. Some children are eager learners and need only the right setting to satisfy their curiosity about the world around them. Other learners find it more difficult to engage with people, toys, or materials, and might need more adult help or structure in order to learn (McWilliam & Casey, 2008). This is not true just for children with disabilities; it is true for all learners at some point. Not all children have the same internal motivation for learning.

In addition to motivation, some children might lack the ability to attend to important learning opportunities. They may need more explicit instructions or physical supports to help them focus. In many ways, *typical* children who are distractible by nature might need the same kinds of learning support that children with diagnosed disabilities need.

Wise teachers recognize that in addition to thinking about the sensory experiences that children need, they also must think about the kinds of learning supports and structures that children need to be successful (Milbourne & Campbell, 2007). It is important to incorporate this principle into the curriculum planning process. Planning for a multisensory approach to learning is easier than trying to modify a narrowly constructed lesson or activity after the

fact. While incorporating different ways of learning during the design phase of the curriculum might take more time initially, it will definitely pay off with more efficient and effective learning.

Think Broadly About Learning

Children are learning all the time...not just during organized lessons or school activities. Young children, especially, have a curiosity about their world and are natural explorers. A quick analysis of state-mandated content standards makes it clear that young children have a lot to learn, far more than just letters and numbers. Thinking about learning in broad terms rather than restricted ones can help early childhood teachers appreciate their role as a guide to the world around them.

Young children are natural explorers.

In many cases, life's important lessons occur when no one is paying attention. A critical developmental task during the early childhood years is to acquire and use prosocial skills—skills that enable children to function effectively and productively in groups, such as how to show respect and get along with others, and how to share and take turns (National Research Council, 2001). Learning these skills is just as important, if not more important, than learning traditional academic skills, yet some adults view these skills as unimportant because children aren't tested on them.

The concept of learning as broadly defined is especially important when

teachers consider meeting the needs of young children who speak languages other than English or who have identified delays and disabilities. Given the educational challenges these children face, the foundational skills for learning, skills that support children's access to the general curriculum, are often lacking.

For example, some young children with disabilities find communication difficult or challenging. Others might have difficulty maintaining relationships with their peers, while still others might have difficulty staying engaged in meaningful learning activities. IEP (Individualized Education Plan) or IFSP (Individualized Family Service Plan) teams might identify these foundational skills as important learning outcomes, skills that children need to use proficiently if they are to become academically successful.

Thinking about learning broadly is also consistent with principles of universal design. When teachers create learning activities that take a broad approach to learning, they help ensure that all children, regardless of their abilities, interests, or needs will be able to benefit from the curriculum (Division of Early Childhood, 2007).

The concept of open-ended explorations, rich experiences designed to address multiple developmental and academic skills, is important to include when determining outcomes for all children. Children's access to these experiences should never be sacrificed for the sake of higher scores on high-stakes accountability measures. Instead, teachers are urged to continue to appreciate the value that such in-depth learning experiences have for the developmental and academic success of all young children.



Subjects & Predicates

Some children learn better by listening, others learn better by seeing, still others learn better by doing. Most people, including children, learn best from a combination of all these approaches. The concept that learning is multisensory is built into every appropriate early childhood curriculum.

Children Show What They've Learned in More Than One Way

Just as there is more than one way to learn, there are also many different ways to demonstrate knowledge and skills. Some learners can talk about what they have learned, while others are better at representing (such as writing or drawing about) their learning. The most important way, however, to demonstrate learning is to use this new information and skills in daily life.

Again, savvy early childhood teachers understand that because knowledge can be demonstrated in so many different ways, documentation of children's learning can be accomplished in different formats.

Restricting assessment methods to one format restricts the ways children can demonstrate their learning.

Performance assessment describes the way teachers assess how children use information in their daily routines (McAfee & Leong, 2002). Performance assessment can take many different forms, but most often involves observations of student behaviors. Young children can easily demonstrate whether they know the names of colors by playing a board game. They show that they understand the concept of one-to-one correspondence by setting a table for snack correctly and independently.

Assessment of learning can and should take many different formats for all learners. While there are many purposes for assessment, teachers are most concerned with identifying

children's knowledge and skills in order to plan curriculum, help children learn, and monitor their progress (McLean, Wolery, & Bailey, 2004).

Providing *all* children with rich and varied opportunities to demonstrate their learning is an important way in which principles of universal design can be incorporated into the curriculum (Neisworth & Bagnato, 2005). With that in mind, teachers can incorporate methods to assess children's learning that are contextual in nature—that is, methods that focus on understanding how children use the knowledge and skills they are learning within the context of everyday routines and activities.

Curriculum Standards Can Be Appropriate for All Children

States' early learning content standards were designed with *all* children in mind—not just children identified as typically developing. All children, regardless of their abilities or disabilities, deserve access to a rich educational experience, one that prepares them to be academically successful and productive later in life (Nolet & McLaughlin, 2000).

Curriculum standards such as those outlined in a state's early learning content standards provide a framework for planning, organizing, and implementing curriculum appropriate for all young children (Scott-Little, Kagan, & Frelow, 2006). They represent one tool that teachers can use to ensure that the classroom curriculum promotes academic success in later grades.

Early childhood teachers are challenged to create meaningful curriculum experiences that are accessible to children of different developmental stages, curriculum that allows them to become proficient and effective

learners throughout their educational careers. Indeed, federal legislation requires special education teams to ensure that learners with disabilities have access to the general education curriculum that is reflected by states' early learning content standards (Beckman, 2001).

Early childhood teachers are also mindful of key developmental tasks

and foundational skills that children must acquire in order to be academically successful. Fortunately, curriculum content standards and a developmental approach to learning are not polar opposites. Teachers and other curriculum designers can create rich learning opportunities for young children that not only address important content standards, but at

the same time encourage children's developmental progression in the areas of cognition, language, motor, and social/emotional development.

There Is So Much to Learn

Early childhood teachers understand that rich learning experiences are best for young children. Consider the kinds of learnings that take place when children play with modeling compound. They learn how to manipulate the material with their hands, see how it can change shape, and perhaps discover something about different kinds of shapes and spatial concepts. What happens when different colors of modeling compound are available? How about different kinds of modeling tools? Small toys or objects? Different scents? Friends with whom to work? With the addition of these common items, the modeling compound activity becomes a rich learning experience that provides multiple opportunities to learn about a variety of skills or concepts.

- If different colors of modeling compound are available, children can learn about and use color names.
- Adding plastic knives and shaped cutters provides opportunities to integrate geometry.
- Including small objects such as toy cars or dolls enables children to explore spatial concepts.
- Providing inspiration with works of fine art enhances children's creativity and aesthetic development. One Head Start group decorated a wooden African elephant sculpture with modeling compound.
- When small groups explore dough together, children can use their prosocial skills.



Subjects & Predicates

Provide all children with rich and varied opportunities to demonstrate their learning. Find methods that focus on understanding how children use the knowledge and skills they are learning within the context of everyday routines and activities.

- Academic skills are apparent, such as when children count the number of modeling compound eggs they made for a bird's nest.

As every early childhood teacher knows, the learning opportunities with this medium are endless.

In contrast to the modeling compound experience, think about other lessons and curriculum activities that some children encounter—completing worksheets, repeating words, or teacher-directed craft projects. In most instances, there really is only one right way to complete the activity, and many times completion of these activities is difficult for many children—children with disabilities to be sure, but many typically-developing children as well.

Closed-ended activities like this are limited in their learning potential for children. In order for many children to complete the activity, modifications must be made, such as adult help, limiting the scope of the activity, or even restricting the child from participating. Clearly, learning experiences like these many times result in children who learn little or nothing that was intended.

Plan open-ended, meaningful curricular experiences.

Therefore, effective teachers strive to plan open-ended curricular experiences that support learning of different skills or concepts that are relevant to all of the children in the classroom. Doing so helps to increase the probability that ALL

children have opportunities to learn and grow developmentally.

Capitalize on Naturally Occurring Learning Opportunities

The most important learning experiences often occur beyond the context of teacher-planned and directed activities (Sandall et al., 2002). The daily routines and activities that comprise a child's typical day should be rich with opportunities to explore their environment, acquire, and practice fundamental learning skills. While this is particularly true for infants, toddlers, and preschoolers, it also applies to the daily routines of primary-aged children. Children in the primary grades should have multiple times during the day to **use** the foundational academic skills that they learn in the classroom, skills such as reading, writing, adding, and subtracting.

Incorporating these universal learning experiences into the day benefits all children, regardless of their ability levels. Children with limited abilities can practice important skills while children with specific gifts and talents can refine and enhance their skills in a particular area.

This is not to say that teacher-planned or -directed activities should be absent from the early childhood classroom. Well-planned, focused, explicit instruction is critical to helping children achieve important educational and developmental outcomes (National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education, 2003).

Teachers and others interested in children's education, however, understand the educational value of child-directed activities as well as daily

tasks or routines such as watering plants, signing in for lunch count, or eating a meal with others (Mistrett, 2004; Wolery, 2005).

As curriculum architects, early childhood teachers use principles of universal design to make sure that children's days are filled with productive learning. In order for teachers to make the most of these naturally occurring learning opportunities they

- are familiar with the potential learning outcomes of a routine or daily activity,
- know the learning needs and goals of children in their classrooms, and
- plan for ways to embed focused instruction or learning experiences into these routines.

Capitalizing on learning opportunities means that teachers systematically look for ways to embed learning opportunities into routines and activities that interest and motivate children (Wolery, 2005).

Teacher Sam knows that Peter, who has difficulty communicating with others, is very interested in trucks. Sam wants to give Peter many chances to learn and practice the skills he needs to communicate his wants and needs. One day Sam puts Peter's favorite truck on the top shelf, just out of his reach, so that Peter will have to ask someone for help—an opportunity to communicate his wants and needs!

Sam is taking advantage of a naturally occurring learning situation to help Peter use an important skill. When Peter points to the truck on the top shelf, Sam capitalizes on the request to ask Peter what he wants. There are other toys on the top shelf, so just pointing to the shelf won't work. Sam

works with Peter to verbally ask for the truck. When the message is clear, Peter receives the truck.

Implement Differentiated Instruction Early

The term *differentiated instruction* has been used for decades. It gained popularity in the field of education for children identified as gifted, and has been explored for teaching middle, secondary, and to a lesser degree early elementary education.

In differentiated instruction, teachers actively address the diverse learning needs of children in their classrooms. Teachers are responsive to individual children and try to create a “goodness of fit” for all children. The differentiated instruction model provides for children across the spectrum of learning needs, including children identified as gifted and children with identified disabilities (Tomlinson, 1995; 2001). Differentiating instruction requires that teachers be familiar with each learner’s knowledge base, language, learning preferences or styles, and interests—and utilize this knowledge to provide appropriate experiences for all children (DEC, 2007).

What is differentiated instruction?

In this teaching method, teachers actively address the diverse learning needs of children. They are responsive to individual children and try to create a “goodness of fit” for all children. Differentiating instruction requires that teachers be familiar with each learner’s knowledge base, language, learning preferences or styles, and interests—and utilize this knowledge to provide appropriate experiences for all children.



Elaine Ward

In differentiated instruction, teachers are responsive to individual children and try to create a “goodness of fit” for children across the spectrum of learning needs, including children identified as gifted and children with identified disabilities. Teachers are familiar with each learner’s knowledge base, language, learning preferences or styles, and interests—and utilize this knowledge to provide appropriate experiences for all children.

Teachers who successfully differentiate instruction understand and can implement diverse approaches that provide learners with multiple ways to explore curriculum content, process information, and create products that document learning outcomes (Tomlinson, 1995). This process is proactive and planned to be appropriate. Effective differentiation of instruction:

- is proactive rather than reactive,
- uses flexible grouping,
- varies materials and activities according to individual and small-group needs,
- employs variable pacing,
- is knowledge based, and
- is learner centered.

While effective differentiation of instruction requires intentional planning, unplanned differentiation plays an important role in effective learning

as well (Owocki, 2005), especially in early childhood. Responding to and building on children’s interests, a critical component of learner-centered experiences, requires the capacity to attend to child-initiated ideas and activities.

“Teachable moments” qualify as intentional teaching strategies for which wise teachers plan by knowing the interests, preferences, and curriculum needs of each child. This knowledge must come from on-going assessment of children and relationship building with them and their families. Thus, effectively capitalizing on children’s interests, preferences, and initiation is a teacher-learned skill that is continuously refined, just like any other teaching skill.

Differentiated instruction can be applied across the early childhood years. However, the approaches

utilized may differ with children's ages to reflect specific goals and standards for learning at those levels. There are many ways a differentiated learning environment can vary. Tomlinson (1995) suggests considering the following progression:

- Concrete to abstract
- Simple to complex
- Basic to transformational (e.g., more manipulation of information)
- Fewer facets to more facets (e.g., more steps or directions)
- Smaller leaps to greater leaps
- More structured to more open
- Interdependence to independence
- Quicker to slower (e.g., more intense focus on a topic or activity)

To create varied learning opportunities for learners, a teacher must pay careful attention to how the environment is designed, enlist a range of teaching strategies, and provide learners with multiple ways to demonstrate their knowledge and skills. To identify appropriate strategies for a specific classroom, a teacher considers individual needs and preferences in the context of content, process, and products. Tomlinson (2001) suggests the following guidelines to differentiate instruction.

Content

- Learners must be able to access information and materials in multiple ways.
- Objectives and tasks align with learning goals.
- Instruction is concept focused and principle driven.

Process

- Flexible grouping is consistently used.
- Classroom management is key.

Products

- Initial and on-going assessments are required.
- Learners are actively engaged in their learning.
- Requirements for learner responses vary.

While there is no single approach for differentiated instruction, there are many examples of what a differentiated early learning environment might look like (see Figure 1). The process of differentiating will occur through both structured and unstructured planning (Owocki, 2005). Teachers build ways to differentiate into

- setup of the physical environment,
- choice of explorations and materials,
- planned instructional strategies,
- support for daily learning, and
- determining the logistics of the learning environment.

Effective differentiation involves planning. Differentiation is likely to

Figure 1. Ms. Jackson's Classroom:

A Universally Designed Preschool Curriculum in Action

Ms. Jackson chose to pursue in depth a topic that interested her children and led them to learn more about science and nature. The class visited the Natural History Museum to see dinosaur bones and habitats. In the related classroom experiences, Ms. Jackson facilitated the development of skills related to early learning standards in math and literacy. The content in all three areas was explored through multiple avenues including direct instruction, reading books and other visuals, using a variety of play materials, engaging in sensory activities, and writing.

To facilitate the learning process, Ms. Jackson identified specific goals for the children's learning experiences. She set up the environment and structured learning to support these goals. Thus, Ms. Jackson offered children differentiated learning experiences.

For example, Ms. Jackson identified specific math and literacy skills to promote at the sensory table. Ms. Jackson paid attention to the many ways in which children demonstrated learning in this area (e.g., language development, social skills, fine motor skills).

Children used multiple senses to take in information and also experienced different levels of reinforcement and practice, as appropriate. Some children learned information by hearing Ms. Jackson talk or by reading a book. Other children were more engaged with manipulatives or dramatic play. Some children learned information by talking about it with a peer or an adult. The information and skills children were expected to acquire were available to them in multiple ways.

fail if there is too much reliance on impromptu differentiation (Tomlinson, 1995).

Offer Multiple Ways for Children to Demonstrate Learning

In addition to varying the content and process variables of learning, differentiating instruction requires providing children with multiple ways to demonstrate their learning (see Figure 2 for examples). Some young children may demonstrate knowledge verbally; others physically; and still others may construct, write, or draw. Acknowledging skill acquisition through only one or two modes (e.g., "verbally states numbers 1 to 10 in sequence") significantly limits the understanding of children's skills, as well as their opportunities for future growth.

Table 1 (p.11) depicts one way to think about a differentiated curriculum related to a popular early childhood topic—dinosaurs and their habitats. This table shows the many

different ways in which both academic and developmental content can be addressed. Thinking about curriculum broadly allows teachers to incorporate many meaningful learning experiences for every young child.

Practice Universal Curriculum Design

Meeting the developmental and academic learning needs of all the children in a classroom is no easy task. Given the wide developmental variations among typically developing children as well as the specialized intervention that children who speak other languages or who have identified delays and disabilities, many early childhood teachers wonder how to make sure that everyone benefits from a high-quality early childhood curriculum.

Three major principles of universal design for learning have been adapted by Pisha and Coyne (2001) to reflect an early childhood focus:

1. Learning differences occur at all levels so it is better to represent them as a continuum instead of in categories (e.g., children with disabilities, gifts, English as a Second Language, and typical development).
2. Anticipate learning differences and design curriculum to meet all learners' needs—rather than modifying a curriculum for some children.
3. Choose diverse and varied curriculum materials. Implement an open-ended curriculum—there should be more than one way to learn something, more than one way to show what has been learned, and more than one thing to learn.

Figure 2. Ms. Jackson's Classroom: Children Demonstrate Learning in Multiple Ways

Ms. Jackson encouraged math skills such as counting, making quantity comparisons, classification, and adding sets by setting up a variety of learning experiences with concrete materials. The children worked on math skills at different levels of difficulty.

Both Kendra and Zoe practiced skills consistent with the learning goals for sensory table activities. Ms. Jackson observed, supported, and extended the children's learning as appropriate. She encouraged child-initiated learning and child interests while consistently addressing the planned learning goals.

Ms. Jackson also identified and supported unplanned learning. Zoe was working on counting from 1 to 10. She asked Zoe to tell her how many dinosaurs she found, prompting Zoe to count the dinosaurs she lined up. If necessary, Ms. Jackson would have modeled counting for Zoe. She encouraged Zoe to write down or draw pictures of the number of dinosaurs she found, and could have helped Zoe write a story the dinosaurs.

Kendra, who is a proficient counter and has a good understanding of one-to-one correspondence, sorted dinosaurs by color. While sorting and classifying are important math skills and intended goals of the sensory table activities, Kendra's actions also provided an opportunity for Ms. Jackson to scaffold Kendra's learning beyond the stated goals by asking questions that encourage combining sets (addition skills).

For example, Kendra told Ms. Jackson that she found three blue, two green, and five yellow dinosaurs. Ms. Jackson followed up by asking Kendra how many blue and green dinosaurs she had all together. She encouraged Kendra to make comparisons by asking which set had the most dinosaurs and which set had fewer.

Regardless of the direction in which Ms. Jackson took her interactions with the children, she was always aware of the goals of the activity; the individual learning needs, styles, and preferences of the children; the children's current skill levels; and ways in which she could capitalize on child-initiated learning opportunities.

Principles of universal design for learning help all educators to construct learning experiences that are meaningful for all young children, including those with diverse abilities. Using these principles, early childhood educators can design learning environments that are responsive to all young children's abilities, needs, and interests.

By creating learning experiences that reflect a belief in multiple styles of learning, early childhood educators can effectively differentiate instruction and offer a variety of ways for children to represent their learning. This student-centered approach to learning promotes the inclusion of all young children in the early childhood classroom.

References

- Beckman, P. (2001). *Access to the general education curriculum for students with disabilities*. ERIC Document Reproduction Service No. ED458735
- Center for Applied Special Technology (CAST). (2004, March 12). *Universal design for learning*. Retrieved from <http://www.cast.org/udl/>.
- Division of Early Childhood (DEC). (2007). *Promoting positive outcomes for children with disabilities: Recommendations for curriculum, assessment, and program evaluation*. Missoula, MT: Author.
- McAfee, R., & Leong, D. (2002). *Assessing and guiding young children's development and learning* (3rd ed.). Boston: Allyn & Bacon.
- McLean, M., Wolery, M., & Bailey, D.B. (2004). *Assessing infants and preschoolers with special needs* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- McWilliam, R.A., & Casey, A.M. (2008). *Engagement of every child in the preschool classroom*. Baltimore, MD: Brookes.
- Milbourne, S.A., & Campbell, P.H. (2007). *CARA's Kit: Creating adaptations for routines and activities*. Philadelphia, PA: Child and Family Studies Research Programs, Thomas Jefferson University.
- Mistrett, S.G. (2004). *Universal design for play rationale* (Universal Design for Play Project Monograph No. 1). Buffalo, NY: University of Buffalo, Center for Assistive Technology.

Table 1. Differentiated Learning Environments for Diverse Multi-Age Preschool Classrooms
Topic: Dinosaurs and Their Habitats

Content Areas: Science, Social Studies, Math, Literacy

Skill Domains: Language, Cognitive, Social, Fine Motor, Gross Motor

Learning Areas	Learning Materials	Differentiated Instruction Examples	Skill Demonstration Examples
Early Literacy	<ul style="list-style-type: none"> Fiction and nonfiction books about dinosaurs and habitats at varying levels of difficulty for independent and shared reading activities Story boards Posters that identify various dinosaurs and their attributes Use of technology that promotes emergent literacy 	Literacy skill development through: <ul style="list-style-type: none"> Individual use of reading materials Group interactive reading with questions to promote skills such as predict, retell, summarize, and basic comprehension Target questioning to scaffold learning at individual skill levels Use storyboards to retell and create stories 	<ul style="list-style-type: none"> Attend to activity Participate with others Take turns Communicate (verbal and non-verbal) Basic book knowledge skills Emergent literacy skills Early reading skills Reading skills
Writing	<ul style="list-style-type: none"> Writing materials (markers, crayons, pencils, paper with and without lines, adaptive writing devices to aid in gripping writing utensils and securing paper in place) Access to technology for practice and exploration 	<ul style="list-style-type: none"> Fine motor development related to writing (e.g., grip, manipulate writing utensils) Early writing skill development (e.g., scribble, letter approximation, letter formation) Writing skill development (e.g., trace, copy, write independently) Use verbal prompts, modeling, physical prompts to individualize Target questions to scaffold for individual skill levels 	<ul style="list-style-type: none"> Attend to activity Participate with others Take turns Communicate (verbal and non-verbal) Early writing skills (e.g., scribble, letter formation) More advanced writing skills (word formation, sequencing, spacing)
Sensory Play/ Manipulatives	<ul style="list-style-type: none"> Sensory table with sand, rocks Dinosaur and plant replicas Digging/sifting materials and tools such as brushes and goggles Measuring tools 	<ul style="list-style-type: none"> Individual and small-group engagement with materials for skill development across domains Partner and small-groups to engage in social interactions Use verbal prompts, modeling, physical prompts to individualize Target questioning to scaffold for individual skill levels 	<ul style="list-style-type: none"> Attend to activity Participate with others Take turns Communicate (verbal and non-verbal) Fine-motor skills (e.g., grip, dig, scoop, fill, pour) Early numeracy skill development (count, cardinality, 1:1 correspondence, classify) Basic numeracy skills (e.g., compare sets, add, subtract, basic facts) Measurement skills (e.g., conservation, weight, volume)

Table 1. Differentiated Learning Environments for Diverse Multi-Age Preschool Classrooms (continued)

Dramatic Play	<ul style="list-style-type: none"> • Large fabric pieces (to create a cave or lake) • Boxes and boards that children can design as trees • Rocks, logs • Dinosaur figures/stuffed animals 	<ul style="list-style-type: none"> • Individual and small group engagement with a variety of props for skill development across domains • Partner and small groups to engage in social interactions • Target questioning to scaffold for individual skills levels 	<ul style="list-style-type: none"> • Attend to activity • Participate with others • Take turns • Communicate (verbal and non-verbal) • Fine motor skill development (manipulate materials) • Gross motor skill development (e.g., movement) • Demonstrate knowledge and understanding of concepts through conservation and use of materials
Creative Art	<ul style="list-style-type: none"> • Paper, markers, crayons • Paints • Modeling compound • Diorama construction items (boxes, paper, glue, rocks, leaves, recycled items such as fabric textures) • Papier maché, wood, wire to create a life-size dinosaur 	<ul style="list-style-type: none"> • Individual and small-group engagement for skill development across domains • Partner and small-groups engage in social interactions • Target questions and encouraging responses to scaffold for individual skill levels 	<ul style="list-style-type: none"> • Attend to activity • Participate with others • Take turns • Communicate (verbal and non-verbal) • Fine-motor skill development (manipulate materials) • Demonstrate knowledge and understanding of concepts with materials • Demonstrate basic literacy, math, science, and social studies concepts
Field Experience—Natural History Museum	<ul style="list-style-type: none"> • Students see and record (draw, take photos) of real/replica dinosaur bones and mock habitats • Natural history museums can also be accessed on-line • Go outside! 	<ul style="list-style-type: none"> • Connect information and concepts to real-life daily experiences with animals, foods, and the environment 	<ul style="list-style-type: none"> • Attend to activity • Participate with others • Take turns • Communicate (verbal and non-verbal) • Demonstrate basic literacy, math, science, and social studies concepts

National Association for the Education of Young Children & National Association of Early Childhood Coordinators at State Departments of Education. (2003). *Early childhood curriculum, assessment, and program evaluation: Building an effective, accountable system for children birth through age 8*. Retrieved from http://www.naeyc.org/resources/position_statements/CAPExpand.pdf

National Research Council. (2001). *Eager to learn: Educating our preschoolers*. Committee on Early Childhood Pedagogy. B.T. Bowman, M.S. Donovan, & M.S. Burns (Eds.), Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Neisworth, J.T., & Bagnato, S.J. (2005). DEC recommended practices: Assessment. In S. Sandall, M.L. Hemmeter, B.J. Smith, & M.E. McLean (Eds.), *DEC recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education* (pp. 45-70). Longmont, CO: Sopris West.

Nolet, V., & McLaughlin, M.J. (2000). *Accessing the general curriculum: Including students with disabilities in standards-based reform*. Thousand Oaks, CA: Corwin.

Owocki, G. (2005). *Time for literacy centers: How to organize and differentiate instruction*. Portsmouth, NH: Heinemann.

Pashler, H., McDaniell, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9(3), 105-119.

Pisha, B., & Coyne, P. (2001). Smart from the start: The promise of universal design for learning. *Remedial and Special Education*, 22(4), 197-203.

Sandall, S.R., Schwartz, I.S., Joseph, G., Chou, H., Horn, E., Lieber, J., Odom, S.L., & Wolery, R. (2002). *Building blocks for successful early childhood programs: Strategies for including all children*. Balti-

more, MD: Brookes.

Scott-Little, C., Kagan, S.L., & Frelow, V.S. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research? *Early Childhood Research Quarterly*, 21(2), 153-173.

Shams, L., & Seitz, A.R. (2008). Benefits of multisensory learning. *Trends in Cognitive Sciences*, 12(11), 411-417.

Tomlinson, C. (1995). *How to differentiate instruction in mixed ability classrooms*. Alexandria, VA: ASCD.

Tomlinson, C.A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd Ed.). Alexandria, VA: ASCD.

Wolery, M. (2005). DEC recommended practices: Child-focused practices. In S. Sandall, M.L. Hemmeter, B.J. Smith, & M.E. McLean (Eds.), *DEC recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education* (pp. 71-106). Longmont, CO: Sopris West

Mary Boat, Ph.D., is Associate Professor of Early Childhood Education and Director of Graduate Studies, School of Education, University of Cincinnati, Cincinnati, Ohio. She teaches undergraduate and graduate courses on inclusive environments in early childhood and early intervention/early childhood special education. Boat's research includes studies of effective teacher instruction in inclusive preschool classrooms.

Youlmi Bae, Ph.D., is a lecturer of Childcare Education, Dongnam Health College, Suwon, South Korea. She worked with preschool children in South Korea and young Korean American children in the Korean Academy in Toledo. Bae's research focus is on professional developmental programs for teachers who work with children with and without disabilities and early screening and assessment tools and programs for young children with special needs.

Find more resources on topics related to this article in the current issue of Dimensions Extra!

About the Authors

Laurie A. Dinnebeil, Ph.D., is Professor and Dasbo Herb Chair, Inclusive Early Childhood Education, University of Toledo, Toledo, Ohio. She teaches graduate courses in early intervention and early childhood special education. Dinnebeil is a strong advocate for designing high-quality inclusive environments for ALL young children.

Share Your Ideas at SECA 2014!

Join SECA in Williamsburg for:

SECA's 3 C's: Coffee, Conversation and Content Children Engaged in Learning

Something new for SECA 2014 — an opportunity for programs and/or individuals to informally showcase a developmentally appropriate instructional activity/project. These projects can relate to curriculum, assessment, outdoor learning, or any other developmentally appropriate practice involved in children's engaged learning.

We'll utilize technology to allow the maximum opportunity to share and we're asking you to develop a Power Point presentation that showcases your activity or project. SECA will provide a "showcase" opportunity for you if your proposal is selected.

For more information about the project and how to submit a proposal, go to http://www.southernearlychildhood.org/seca_conference.php.

Deadline to submit proposals is June 15, 2013.

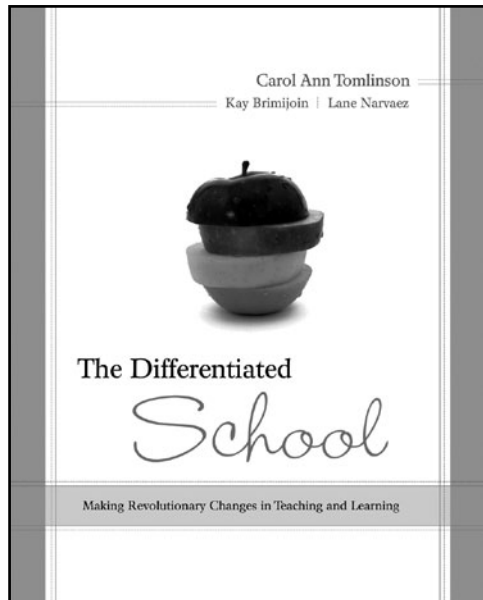
We hope you'll join in this newest SECA opportunity to share your great ideas!

Extend

These Ideas With a Professional Book

Connect Universal Learning With a Professional Book

Lynne Weinick



The Differentiated School: Making Revolutionary Changes in Teaching and Learning

By Carol Ann Tomlinson, Kay Brimijoin, Lane Narvaez.
(2008). 204 pp. \$22.95 ASCD members; \$29.95.
Alexandria, VA: ASCD.

All three authors of this book have extensive classroom experience. Carol Ann Tomlinson is on the faculty at the University of Virginia and Kay Brimijoin is at Sweet Briar College. Lane Narvaez is an elementary principal in St. Louis, Missouri.

The Differentiated School focuses on two schools, one an elementary school (Conway) and the other a high school (Colchester) in completely different locales, and describes each school journey's through change. The authors describe the complex process and time frames to complete the transformation of the schools into differentiation. The book gives a comprehensive account of Conway, with a reputation as a very good school, and Colchester, identified as a school in trouble.

Both schools faced the challenging task to become differentiated schools in unique ways. To be successful, each school first sought to get buy-ins from faculty, families, students, and administration. The authors describe in scrupulous detail all of the challenges and successes

encountered in the process: the years of commitment, hours of professional development, engagement of experienced coaches, monitoring and evaluating of each step of the way, and the small steps of success as well as disappointments.

The detail offered requires readers to delve into several chapters to determine what differentiation means and how it can bring positive change to a school. Chapters 6, 7, and 8 detail the change process at both schools, so readers may wish to start there. The remaining chapters and appendices describe how to engage in the process and what lies ahead.

The most appropriate early childhood audiences for this comprehensive book are teachers and administrators in elementary schools, as well as college faculty who teach child development, early childhood education, and related majors. An awareness of second-order change (differentiation) is imperative in the process.

The process of change in curriculum and meaningful learning experiences affects all ages of children, so *The Differentiated School* contains much food for thought for all early childhood educators.

Lynne Weinick, Post Graduate, Quality Improvement Manager, Atlanta, Georgia.

The 2013 SECA EXEMPLARY OUTDOOR CLASSROOM



To honor our theme for the 2013 SECA Conference, Hand-in-Hand: Children and Nature, SECA launched a search for exemplary outdoor classrooms in the Southern region. One overall winner was selected and winners at the state level also were designated.

Applications were reviewed based on the following criteria and, upon designation as a potential winner, on-site visits were made by members of the SECA Board of Directors to verify the application components.

Criteria 1: Natural modifications and innovations in at least five of the following areas: large motor, climbing/crawling space, building area, art area, music and movement area, garden area, storage, water, dirt digging, sand and wheeled toy area.

Criteria 2: Effective and appropriate monitoring of children in these areas by caregivers/teachers.

Criteria 3: The use of natural materials in the outdoor classroom.

Criteria 4: The use of materials specific to the region/community.

Criteria 5: Ease of maintenance of the outdoor classroom.

Criteria 6: Compliance with local/licensing regulations.



Let's Tour the 2013 Exemplary Classroom!

SECA is pleased to introduce you to our **2013 Exemplary Outdoor Classroom**. Located in Chattanooga, Tennessee at Highland Plaza United Methodist Preschool, it's truly an example of the best of outdoor spaces for young children. Through innovation, vision and just plain hard work, the staff and parents at Highland Plaza have created a magical and educational space for young children to explore and learn.

As we move through the classroom, we'll pull information from their application and share the wonderful photos of the space that were provided. We hope that you'll gain some ideas and get creative with your outdoor space!

An Introduction to Highland Plaza United Methodist Preschool

The preschool was started in 1965 as a ministry outreach program. It is a part-time, morning preschool, serving 59 children per day (a total of 100 children throughout the week). The program serves children ages 2-5 years with eight classroom teachers, two studio teachers, one music teacher, a director and an office assistant.

In 2010, Highland Plaza United Methodist Church and Hixson United Methodist Church merged, leaving the preschool as the only program currently on the Highland Plaza campus. The preschool building sits on a five acre property with over a third of the property undeveloped.

More than three years ago, the program set out to expand the playground up onto the hill. The hill was wooded and steep, and staff members weren't sure that they could make the area safe for children without losing the untamed beauty of the property.

The development started with some visionary thinking and a fund raising campaign. In 2010, an initial clearing of the land was completed and, in 2011, a new fence that encompassed the area was erected. In April, the re-circulating river was installed, only to be damaged by a tornado that struck the area. Down went a third of the new fence, many trees and some of the existing equipment.

Not to be deterred, the program cleaned up from the damage and in May 2011 laid the patio extension. With the help of many parents (PLAYSCAPE WARRIORS!), the summer was spent installing many

The River Bend Amphitheater



A place for groups to gather, a performance spot, an audience spot.

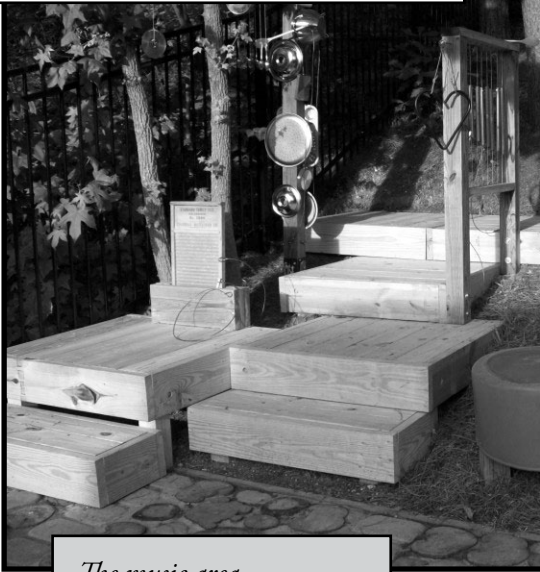
of the elements you'll see as we continue the tour. It took a year to get to the result we see today, with the trail and sand area completed in June 2012.

The playscape is unique because of its focus on and celebration of many Chattanooga-area landmarks. These landmarks served as the inspiration for the creative interpretations that you'll see depicted in both descriptions and photos. The children were consulted to find out what elements they wanted in the playscape, constructing some of the art installations and voting on which animals, native to Tennessee, would be carved on the tree totem.

Parent meetings were held to help them remember the connections with nature that were taken for granted as children. Parents, teachers and children all contributed to the development of this wonderful outdoor space.

Don't know much about Chattanooga? Go to this website to find all the natural wonders that have been re-created in this playscape.
<http://www.chattanoogaafun.com/>

The Chattanooga Symphony



The music area.



A budding musician!

stumps. The children may view performances from here or stand on the stumps as if they are a stage and put on their own shows.

The Chattanooga Symphony

This area is still being developed and currently includes a washboard strummer, metal chimes, a banging post, barrel drum and fence xylophone. The staff brings out bins with hand-held instruments and costumes for performances each day.

The Ruby Falls Cave

This famous Chattanooga landmark inspired the outdoor reading area. The cave is an animal watering trough turned on its side and embedded in the hill. It is covered with a netted form over which ivy is growing. Complete with a bear rug, teddy bears and books, it's the perfect place to curl up and read. The ivy has almost covered the trough and makes it disappear into the hill.

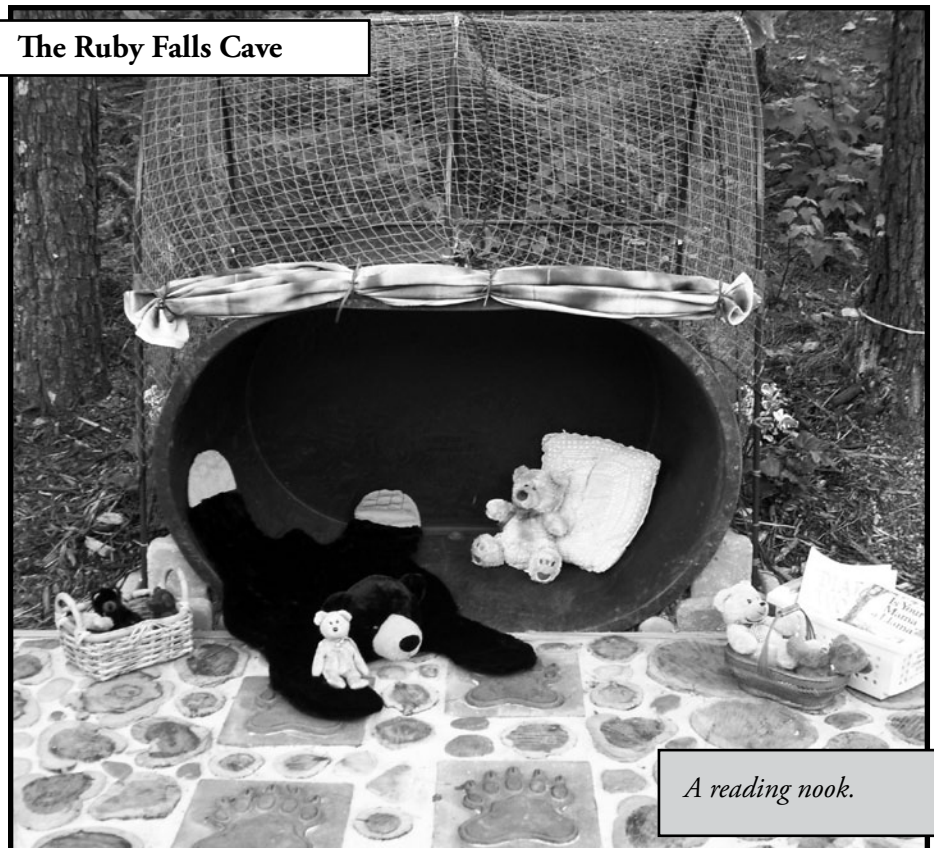
**Touring the Playscape—
Connecting the Children
and Community**

Many of the elements contained in the playscape reflect the community and surrounding areas. We'll highlight a few to give you some ideas of how to make your community and surrounding area come alive for the children in your program. These ideas don't take a lot of money... just creativity, innovation and lots of elbow grease!

River Bend Amphitheater

The River Bend Music Festival has been held in Chattanooga each June for over 20 years. A stepped cement amphitheater downtown is one preferred viewing area and the inspiration for the tiered grouping of giant

The Ruby Falls Cave



A reading nook.

Lake Chickamauga and the Waterfront Cannons

This is a natural looking rock-like water play table with hand pumps incorporated to add to the fun quotient.

Twigs Atelier

Inspired by Chattanooga's love of art and artists and the downtown Arts District, Twigs Atelier is the outdoor art studio. Integral to the Reggio Emilia approach to early childhood education, the atelier provides a place for our children to research and construct knowledge as they learn the many languages of materials—in this case Mother Nature's bounty and palette. It includes a plumbed sink for easy clean up.

The Aquarium

Inspired not so much by the water but the sandy riverbed, this is the name of the sand digging area. Over 20 fossils form the floor of the sand pit and await the arrival of archaeologists to make their discoveries. The entrance to the sand pit is a cave, inspired by the area's many caves. The Tennessee Aquarium in Chattanooga is celebrating its 20th anniversary this year.

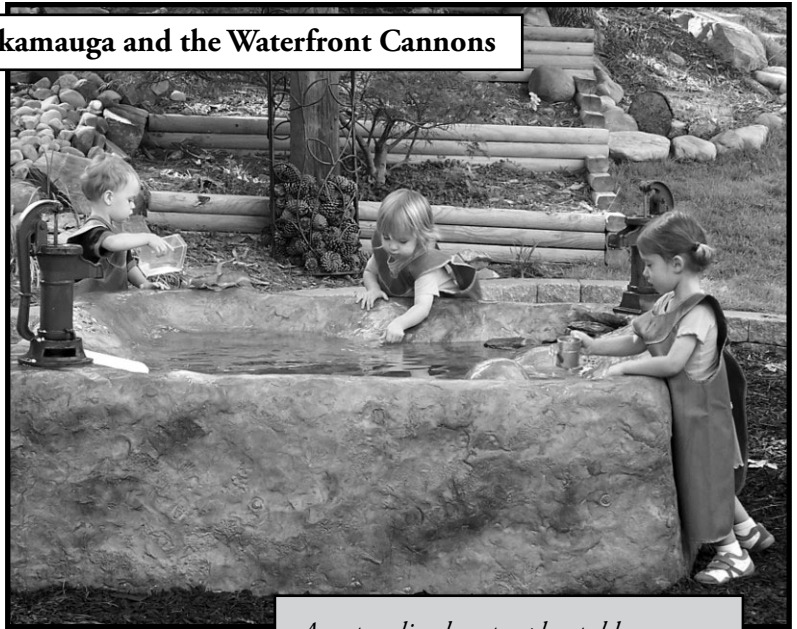
Lookout Mountain

A major attraction in the Chattanooga area and site of the "Battle Above the Clouds" in the Civil War, Lookout Mountain is one of the famous attractions of Chattanooga. A tire climbing wall composed of 54 tires (saved from the landfill) recreates the Mountain.

The Chattanooga Nature Center

Mother Nature designed this feature when the tornado struck the property in 2011. A tree was blown over and took the whole length of

Lake Chickamauga and the Waterfront Cannons



A naturalized water play table.



A hand pump for water play that's part of the "Lake".

fence with it. When the tree was topped for removal, it reset itself and the program decided to utilize this resource to create a new area. The root ball was maintained for erosion control and the ground around it boxed in with tree stumps and a retaining wall. The tree trunk

itself was carved by a local chainsaw artist, Steve Pearson. The animals carved into the trunk were selected by the children...a catfish, groundhog, raccoon, bear, skunk, woodpecker, chipmunk and coyote, all native to Tennessee.

Twigs Atelier*The outdoor art studio.*

materials were purchased, others were brought from teacher and family homes, and some were harvested and re-planted on the property. The plants (such as azaleas, hydrangea, ivy, loropetalum) provide an array of colors and textures, with blooms at varied times during the year.

Several truckloads of wood mulch (free from the city supply) were used to cover beds and other areas. The rubber mulch that was already in place on the lower area was maintained as a resilient surface for the tire climbing wall, stump steppers, and tire pony swings.

Volunteers and donors also came to the rescue. One friend of the preschool was re-landscaping her yard and contributed many truckloads of slate, river rock and sandstone. Stumps from trees that were cut down in the aftermath of the tornado found homes throughout the playscape.

Branches from the property were harvested, along with a stand of bamboo, and this material now decorates the Twigs Atelier. The giant stumps that make up the River Bend Amphitheater came from a huge tree that blew down a mile up the road from the preschool.

Some of the plants form boundaries and divisions among play areas, along pathways, to attract butterflies and to enhance feelings of well-being, just being among the green!

Monitoring Activities on the Playscape

The program's schedule is arranged so that two classes are outside on the playscape at the same time. This arrangement places two adults on the upper playscape and two adults on the lower layscape. Teachers

The Highland Plaza Nature Path Container Gardening Area

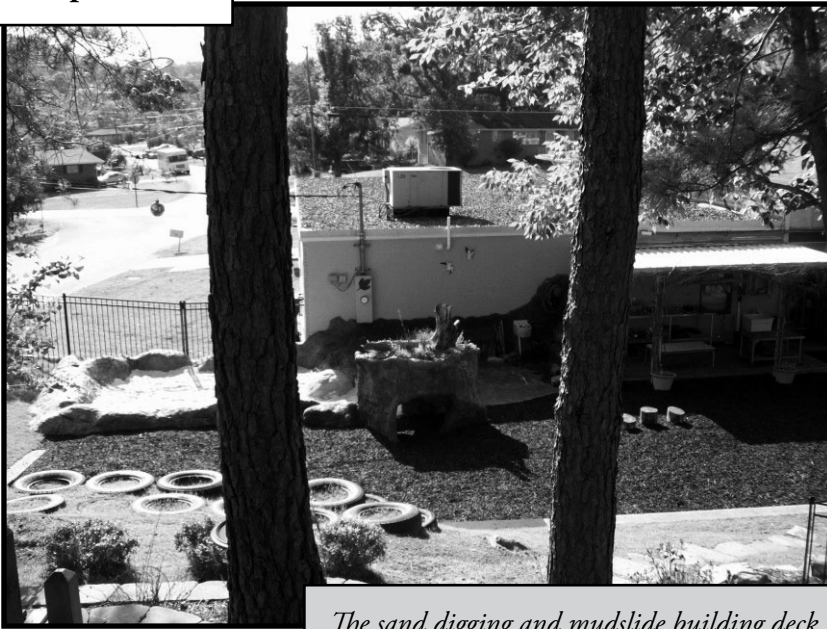
The newest part of a comprehensive plan to be a nature-based preschool, this hiking trail is 400' in total length. One of the program's former preschoolers, Gage Taylor (now 15-years-old), completed the trail as his Eagle Scout project. The path includes split rail fences along two portions of the trail and has a campfire area. There is a natural arbor area, a branch hut, and a mushroom arbor containing concrete mushroom stools for seating.

Two gardening areas exist around the building. The Container Gardening Area is managed by the 3 and 4-year-old classes. It is located behind their classrooms and there is a rain barrel close at hand for watering the plants.

Adding Natural Elements

Once the the hardscape and major elements were in place, the program began to add the "understory" or natural plants and materials so critical to this playscape. Some of the plant

The Aquarium



The sand digging and mudslide building deck.

can space themselves loosely into four quadrants that allow for visible coverage of the whole area. Walkie-talkies keep everyone in close communication.

Should the situation arise that only one class is outside, the teachers restrict the children to either the upper or lower areas for group management by the two adults. This is easy to do since a low retaining wall divides the two areas and makes a visible boundary between them.

Maintaining the Playscape

Low maintenance and long term maintenance were both major

Lookout Mountain

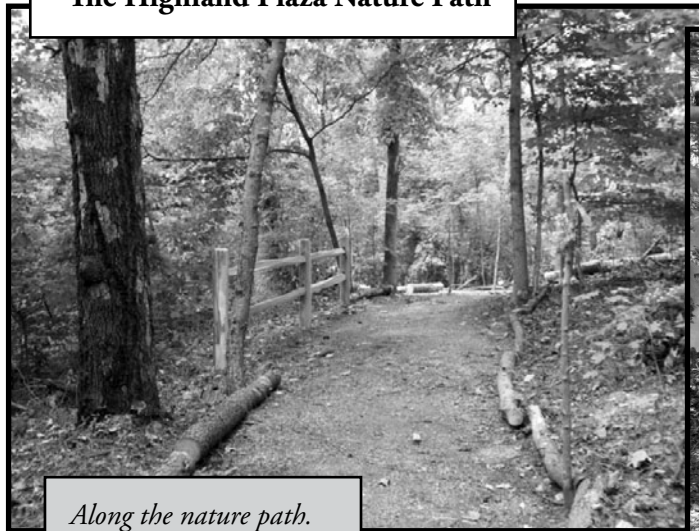


Tire climbing wall.

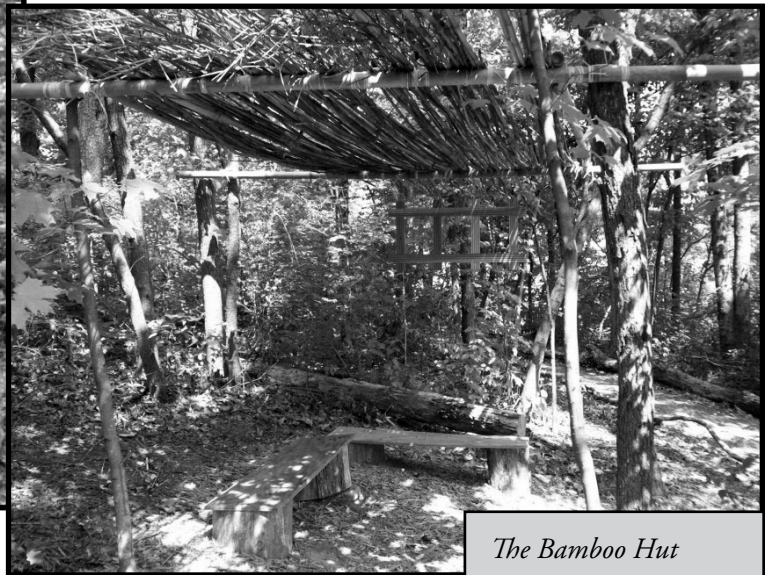
The Chattanooga Nature Center



The Highland Plaza Nature Path



Along the nature path.



The Bamboo Hut

Container Gardening Area



The rain barrel.

considerations in the planning of the playscape. In this case, the sponsoring church provides lawn mowing and trimming services for the property but all other maintenance issues fall to the Director and staff.

The equipment was installed with durable and heavy duty materials to minimize maintenance and replacement. Drainage holes were drilled in the tires that make up Lookout Mountain. The bridge was cemented in place. All the decorative fencing was installed with rebar inside the posts for safety and longevity. One structure, The Station House, was built with hurricane anchors.

The Tree Totem and naturalized water table require professional

maintenance, but both jobs are inexpensive and a local contractor is available.

The most labor intensive part of maintenance is related to the plant material. Weeding, trimming grass in the tire mountain, and blowing leaves from the playscape are all part of maintaining a pristine environment.

The program also pays special attention to maintaining the sand pit, ensuring that it will drain properly so that bacteria will naturally wash through the sand with rain. French drains were added under the cement fossil bed with drainage crevices created to join them. (This will also allow the sand to be periodically sanitized with a bleach and water so-

lution and then rinsed through with hose water.) A unique sand cover was created out of two shade sails sewn together with the edges customized to follow the free form edge of the area. Elastic loops pulled over eye hooks keep it anchored.

Meeting Standards

Many of Tennessee's experts regarding natural playscapes and other early childhood regulatory personnel were consulted during the design phase. The CPSC Playground Guidelines were consulted frequently to guide the program on the installation of particular elements like the embankment slides.

The playscape has now gone through a complete licensing cycle and received a 7 for both content and safety on the Early Childhood Environmental Rating Scale-Revised. Additionally, the program was recognized in June 2012 as the first school in Tennessee to be certified as a Nature Explore Classroom through the Arbor Day Foundation and Dimensions in Educational Research Foundation.

RECOGNIZING EXCELLENCE



At the 2013 SECA Conference, the Highland Plaza United Methodist Church Preschool was recognized for its achievements in creating a wonderful outdoor classroom and awarded the grand prize of a \$3,000 gift certificate to be utilized with Nature Explore. Director Vicki Flessner received the award on behalf of the Preschool.

As expressed in Highland Plaza's application, The Chattanooga Symphony (music area) was "not yet complete.....Our dream is to enhance this area with authentic instruments." We hope that, with Nature Explore's help and the financial award from SECA, those dreams will come true for Highland Plaza. Congratulations to the children, parents and staff of Highland Plaza!



Tiered planting beds.



The shade sail sand cover.

If you're interested in learning more about this program and playscape, contact:

Vicky Flessner, Director

Highland Plaza United Methodist Church Preschool

4226 Norcross Road

Hixson, Tennessee

(423) 877-1544

Hpump1@bellsouth.net

COMING UP!

More Information About Our Other 2013 Award Winners

- In the summer 2013 issue of *Dimensions of Early Childhood*, you'll find articles on the state winners of the Exemplary Outdoor Contest:
 - Virginia: The Dora L. Lewis Family & Child Development Center/Richmond
 - Florida: The BB International Preschool and Kindergarten/Pompano Beach
 - Texas: The Westlake United Methodist Preschool/Austin
- In the fall 2013 issue of *Dimensions of Early Childhood*, you'll find articles on the programs that were placed in the honorable mention and recognition categories.

Honorable Mention

- Tennessee: Starting Points Child Care/Knoxville
- Tennessee: Westminster School for Young Children/Nashville
- Florida: Hillsborough Community College Dale Mary Child Development Center/Tampa

Recognition

- Alabama: Gunter Child Development/*parent involvement*
- Virginia: Canterbury Community Nursery School/*innovative budgeting*
- Virginia: Our Neighborhood Child Development Center/*infant/toddler spaces*

The material contained in this article was submitted by Vicky Flessner, Director, on behalf of Highland Plaza United Methodist Church Preschool, and the article prepared by Glenda Bean, SECA Executive Director. If you'd like to see more photos of the Highland Plaza outdoor space, go to www.southernearlychildhood.org. You'll find a link to the photos on the homepage of the website.

In Memory of

Samuel "Bo" Prince (father of Cindy Galloway)
By Dr. Pam Schiller and Dr. Janie Humphries

Maurine Hogan
By Dr. Pam Schiller

Print-Referencing: A Key to Interactive Shared Reading

How can teachers and families work together to build young children's emergent literacy skills? One important strategy is to intentionally focus on various aspects of print knowledge while reading children's books together.

Christin Baker

Reading books aloud to children is a delightful experience that has long been practiced by both families and early childhood teachers. Read-alouds can serve a variety of purposes, such as:

- provide entertainment,
- help children understand the purpose of reading,
- foster a love and value for reading, and
- teach children new concepts and skills (Heilman, Blair, & Rupley, 2002).

If the purpose of reading is to build emergent literacy skills, such as print knowledge, simply reading the story aloud is just the beginning. The manner in which books are shared with children plays a role in their development of important emergent literacy skills (Justice, Kaderavek, Fan, Sofka, & Hunt, 2009; Lovelace & Stewart, 2007; Phillips, Norris, & Anderson, 2008). See Table 1 for an example on interactive shared reading.

The children in Mrs. Miller's class are building emergent literacy skills during interactive shared reading. Emergent literacy is defined as "the reading and writing behaviors of children that occur before and develop into conventional literacy" (Heilman, et al., 2002, p. 93). Children who are familiar with a variety of print such as signs, labels, logos, newspapers, magazines, and books (Heilman, et al., 2002) are engaged in emergent literacy learning.

What is emergent literacy?

"The reading and writing behaviors of children that occur before and develop into conventional literacy" (Heilman, et al., 2002, p. 93).

Table 1. Interactive Shared Reading

A big book copy of *Commotion in the Ocean*, written by Giles Andreae and illustrated by David Wojtowycz, is on display on an easel in Mrs. Miller's kindergarten classroom. The children eagerly help her read each page as she points to the words with her magic wand pointer.

Mrs. Miller stops on a page showing turtles crawling across the beach. She says, "Look, the illustrator put the words *pitter patter* around the turtles on this page. I wonder why he did that? I think that *pitter patter* might be the sound of turtle flippers as they crawl through the sand."

As she continues with the story, the children begin to notice more sound words included with the illustrations and point them out to her. Mrs. Miller pauses on another page and says, "The author chose more sound words to show with the lobsters on this page. The words are *snippety snap*, *clippety clap*. What do you think is making those sounds? Turn and tell your buzz partner."

Mrs. Miller stops to listen as the children excitedly respond to their partners about the text. Sophia says, "I think the sounds are coming from the lobster's claws. They open and close like this (child demonstrates with her hands)."

Her partner, Aiden, responds with, "Yeah...the claws make a snapping sound."

One important emergent literacy skill is *print knowledge*. Print knowledge includes

- awareness of how print is organized,
- functions of print,
- the names and features of alphabet letters, and
- understanding that writing conveys meaning.

Young children who understand these basic concepts of print will be far more successful when more traditional, formal reading instruction begins. Adults can help young children build print knowledge through interactive shared reading sessions (Justice, et al., 2009).

Teachers and families both can make the most out of reading with children. This article explains how to transform traditional read-alouds into interactive shared reading sessions. These topics will be addressed—new findings from research and how they enhance literacy practices, procedures for scaffolding interactive shared reading, scaffolding for English language learners, recommended books for print-referencing, and ways to engage families in interactive shared reading—so teachers can balance early literacy strategies.

Reading a story aloud is just the beginning.

Why Enhance Literacy Practices?

A review of recent research makes it clear that children do not master emergent literacy skills simply by having an adult read to them. The quality of **interactions** that occur during reading influence the acquisition of such skills (Justice, et al., 2009; Lovelace & Stewart, 2007; Phillips, et al., 2008). While read-alouds facilitate oral language development, they do not promote print knowledge, which is an important emergent literacy skill (Phillips, et al., 2008).

Read-alouds that are supplemented with specific print-referencing provide a strong literacy foundation for emergent readers by exposing children to the forms and functions of print (Justice, et al., 2009; Lovelace & Stewart, 2007; Phillips, et al., 2008).

Children's print knowledge has been associated with later achievement in word recognition and spelling, both of which directly correlate with reading success (Justice, et al., 2009). Traditional read-aloud practices that embed print-referencing will maximize the development of emergent literacy skills.

With new advancements in technology, researchers are able to track children's rapid eye movements and determine the amount of time children spend focused on print. In one study, children ages 4 and 5 watched as an adult read a *picture-salient* or *print-salient* book to them (Justice, Skibbe, Canning, & Lankford 2005).

- During the reading of a picture-salient book, the preschoolers spent only 2.7% of their eye fixations on the print and 2.5% in regions near the print.
- These percentages increased slightly with a print-salient book: 7% of the time on print and 6% in regions near the print.

While print-salient books seem to increase the likelihood that children will focus more of their time on print, this research suggests that pre-literate children are unlikely to focus on print on their own. As a result, informed adults make a conscious effort to direct children's attention to print while reading to them.

Two types of storybooks

Picture-salient—illustrations are so bold that they focus children's attention on the pictures. Examples are touch-and-feel books, books with flaps, pop-up books, books with pictures that move, shiny or sparkly books, and "I spy" books.

Print-salient—illustration and design focus children's attention on the print.

In a similar study of children ages 3 to 5, while the percentage of time spent looking at print increased as children got older, all age groups spent more time looking at illustrations than print (Evans, Williamson, & Pursoo, 2008). This also suggests that young children focus little attention to print without the help of an adult.

Build early literacy skills by focusing on the print and pointing to text.

The researchers also found that the percentage of time looking at print was significantly higher when an adult pointed to the text as it was read: 25% with print-referencing compared to less than 6% without. Research supports the need for adults to specifically point to text as they read books to young children (Evans, et al., 2008; Justice, et al., 2005).

Print-referencing also makes an impact on children's emergent literacy skills. The use of print referencing by preschool teachers was compared to traditional storybook reading (Justice, et al., 2009). The children in both groups participated in reading sessions with their teacher four times a week throughout the school year. The two groups were then compared on their progress in alphabetic knowledge, print concepts, and name writing. While the children from the print-referencing group scored only slightly higher on alphabetic knowledge and name writing, their scores were significantly higher on their knowledge of print concepts. This research shows that print referencing can have positive effects on building early literacy skills, especially print concepts.



Subjects & Predicates

Young children who understand basic concepts of print knowledge will be far more successful when more traditional, formal reading instruction begins.

Explicitly referencing print has also been shown to increase print awareness in preschool children with language impairments. Two researchers studied the effects of explicitly referencing print concepts during shared book reading among 4- and 5- year old children with language impairments (Lovelace & Stewart, 2007). While the children increased their knowledge somewhat with shared reading alone, their scores dramatically increased when adults specifically referenced print concepts, such as identifying

- the front and back of the book,
- top and bottom of a page,
- where to begin reading,
- the title/author/illustrator,

- how to distinguish a letter from a word, and
- the difference between pictures/text.

Knowledge of these print concepts, among many others, dramatically increased with direct teaching during 10-minute shared reading sessions twice a week. Such results suggest that print-referencing by adults is beneficial to all learners, including those with special needs.

Preschool children can grasp concepts about print, along with the many forms and functions of print. As a result of engaging in print-referencing strategies, children become aware of letter shapes, names, sounds, and words. These skills serve as foundational literacy

knowledge when they begin formal reading instruction (International Reading Association & National Association for the Education of Young Children, 1998).

When children's eye fixations are focused on print during read-alouds, they develop necessary early literacy skills (Evans, et al., 2008; Justice, et al., 2005). In order to build the literacy skills young children need, it is important for adults to focus children's attention on print in appropriate ways (Evans, et al., 2008; Justice, et al., 2009; Justice, et al., 2005; Lovelace & Stewart, 2007). This goal can be accomplished through interactive shared book reading.

Ways to Scaffold Interactive Shared Reading

When explicit teaching about print is implemented during shared book reading, there are research-based benefits for children's future reading ability (Phillips, et al., 2008). While read-aloud sessions typically consist of an adult reading text to children, interactive shared reading involves purposeful talk among the adult and children. Children are engaged in the text through a variety of interactive techniques that often involve adult modeling (What Works Clearinghouse, 2007). These strategies include point to print, highlight text, model reading skills, ask questions about print, comment about print, and track print when reading (Justice, et al., 2005).

Use Pointers

During shared book reading, adults can scaffold understanding about concepts of print by asking children to point to

- the title of the book or author,
- where to begin reading,
- where to go when finished reading a page,
- the first and last word on a page, and
- various punctuation marks.

Many common items can be used as pointers. For example, stuff a garden glove and tie it off at the bottom with string. Glue down all of the fingers except for the index finger, which children can use as a pointer. Glue the glove to the end of a wooden rod or stick. Other alternatives for pointers include pretend witch fingers, the end of an artificial flower, craft stick, wooden spoon, stir stick, baton, or bubble wand. Using pointers to refer to print gives children the opportunity to identify important features of the print.

Children can also be asked to “finger frame” specific parts of text. Children put their index fingers around a specified letter, word, or phrase. For example, children can finger frame one word or letter (versus two), one sentence, or the first and last letters of a word. This helps children to focus on one part of the text.

Highlight Text

In addition to using pointers, adults can help children build alphabetic knowledge by highlighting specific text. Ask children to find items such as

- a capital/lowercase letter,
- the letter a child’s name begins with,
- the letter with the “b” sound,
- the letter before “g” in the alphabet, and
- a one-, two-, or three-letter word.



Subjects & Predicates

As a result of engaging in print-referencing strategies, children become aware of letter shapes, names, sounds, and words. These skills are foundational literacy knowledge.

Materials that can be used to identify text include highlighting tape that can easily be removed, bendable wax strips, a new plastic fly swatter with a small rectangle cut in the middle, and colored plastic dividers cut into different sizes of rectangles to highlight letters or words. Each of these materials help focus children’s attention to print.

Model Reading Skills

Modeling is an important part of teaching children to read. Adults can model what reading looks like by pointing to the words in the text as the book is read. After watching an adult, children can practice doing the same. This type of modeling helps children understand the directionality of print and that each word has meaning.

One way to check for the understanding of print concepts is to have children play the Stop Sign game. In this game, the adult intentionally reads a familiar story incorrectly, either starting in the wrong spot, reading and pointing in the wrong

direction, or misreading a word. When a child notices this, he or she holds out a hand or a stop sign and calls “Stop!” When playing this game, choose a skill that the children are fairly confident about.

**Learn about
punctuation.**

Identify punctuation and use character voices

Another strategy consists of modeling and discussing the purpose of quotation marks. Explain the meaning of a quotation mark, point it out in text, decide which character is talking, and read the words inside the quotation marks with an appropriate character voice. The child repeats the sentence using the same voice.

An appropriate introduction to quotation marks might sound something like the teacher’s rendition

of *Goldilocks and the Three Bears* in Table 2.

Table 2. One Way to Introduce Quotation Marks

“Something on this page is very important. They’re called quotation marks (point to them). See them? They are at the beginning of this sentence and the end of this sentence” (point to the beginning and end).

“Who can find the quotation marks at the beginning and end of the sentence?” (a child uses pointer).

“Quotation marks tell us that someone is talking in the story. Hmm...I wonder who might be talking on this page? Let’s see if we can figure it out. Let’s look at the picture first. Is there anyone in the picture who might be talking?” (Children look and respond.)

“Yes, it could be mama bear, papa bear, or baby bear. Let’s read the sentence and see if we can figure out who is talking. ‘Who’s been eating all my porridge?’ cried Baby Bear.”

Listen! The words tell us. At the end of the sentence, it says Baby Bear is talking. The author put quotations around that sentence so we could read it like Baby Bear was talking. Let me see if I can do that. Do you think Baby Bear might have a high, squeaky voice like this?” (mimic sentence using Baby Bear’s voice).

“Now, it’s your turn to read that sentence in your best Baby Bear voices (children repeat the sentence). Next time we see quotation marks, we will know to read that part in the voice of who is talking. As I read the rest of the story, let’s look for quotation marks. Point to them if you see them.”

Learning about punctuation is an emergent literacy skill. Even if children are too young to read words, they can easily repeat a phrase modeled by an adult. The purpose of this activity is not mastery but introduction to basic print concepts.

Children can also learn punctuation using a simple matching game. They can make their own cards

showing various types of punctuation, based on the ages and skill levels of the children, such as period, question mark, exclamation point, and quotation marks. Ask them to write one form of punctuation on each card.

As the book is read, point to the words. Stop at various punctuation in the text. Ask children to hold up the card that matches the punctuation in the book. Children can be introduced to the names of punctuation marks, and depending on the child, the function they have in text.

Each of these strategies is a way to intentionally engage children in interactive shared reading. While these strategies can be used with all young children, there are several additional things to consider when teaching English language learners.

Transform story time into interactive shared reading sessions.

Scaffold Experiences for English Language Learners

Many strategies that are used for shared book reading are also effective with English language learners (ELLs). Additional support can be offered in several ways.

- Read the text slowly and clearly to give children time to process what is being read.
- Limit shared reading sessions to approximately 10 minutes to ensure that children are able to effectively listen and absorb the information.

- Screen for books that stretch children’s language, content, or developmental levels. Edit or rephrase the story, so children can better comprehend it. Or retell the story with the pictures or puppets.
- Ask children to repeat phrases of text to build their awareness of speech sounds.
- Read the text repeatedly. Children might take the book home, read with peers, or listen to the story on tape (Smallwood, 2002).

There are many different strategies to direct children’s attention to print and help build emergent literacy skills. Some types of books are better for print-referencing than others.

Recommended Books for Print-Referencing

When choosing children’s books for interactive shared book reading, choose those that best support print-referencing.

- **Consider the size of the text and the amount of text per page** (What Works Clearinghouse, 2007). For preschool and kindergarten children, make sure the size of the text is large enough for them to see from the reading area, and that there are no more than five sentences on each page (Justice, et al., 2005).
- **Choose print-salient books.** The illustration and design of the print are presented in such a way that they focus children’s attention to print. These types of books are best for interactive shared reading (Justice, et al., 2005).

There are several features to look for when determining if a book is

print-salient. See Table 3 for a list of a few recommended print-salient books by feature.

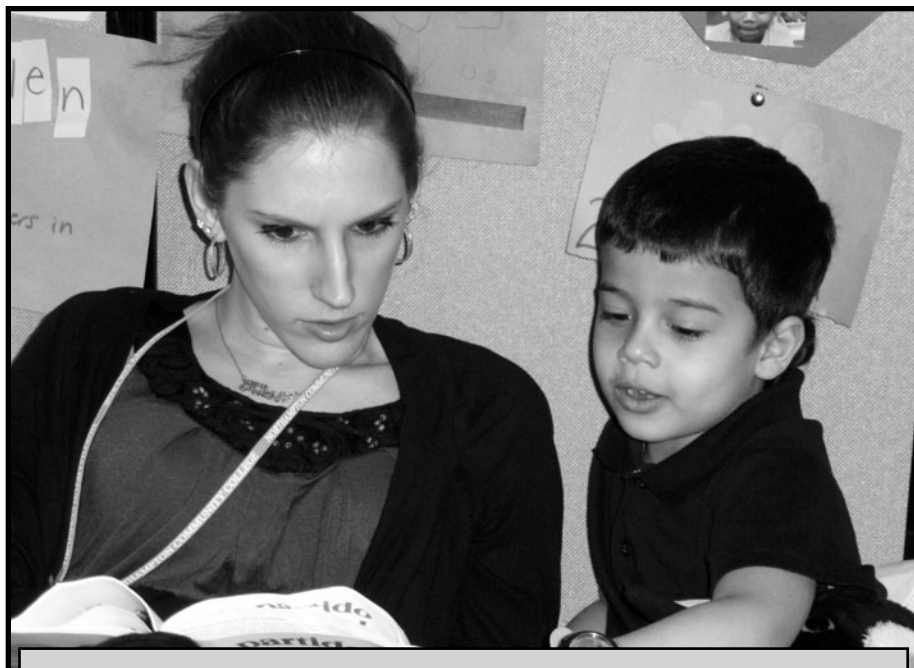
Print-salient books often have print included with the illustrations. One example is pictures that are **labeled** with letters or words, as in an alphabet book (Zucker, Justice, & Piasta, 2009).

- In *Eating the Alphabet: Fruits and Vegetables From A to Z* (Ehlert, 1993), each page has a picture of fruits and vegetables that begin with that letter and are labeled with the name of the item. Labels can also be in the form of illustrations with headings and captions, as often seen in nonfiction books.
- Another example is visible sound written in the illustrations, such as “oink” beside a pig (Zucker, et al., 2009). In *The Pout-Pout Fish* (Diesen, 2008), the fish makes a blub sound throughout the book to express his unhappiness.
- A third example is visible speech, such as speech bubbles, to show that a character is talking (Zucker, et al., 2009). In *Don't Let the Pigeon Drive the Bus* (Willems, 2003), speech bubbles are used to express the characters' conversations.

Each of these features draw children's attention to the print and provide opportunities for discussion.

Print-salient books also commonly have changes of font in the body of the text. These are a few examples:

- A change in font style so that the words stand out (Zucker, et al., 2009). Font style might go from Times New Roman to Comic Sans. This change is clearly visible to children and focuses their attention on the text.



Subjects & Predicates

Screen for books that stretch English learners' language, content, or developmental level. Edit or rephrase the story, so children can better comprehend it. Or retell the story with puppets or pictures.

- Change of formatting of words, so that some are **bold**, in *italics*, underlined, or in ALL CAPITAL LETTERS (Zucker, et al., 2009).
- Changing from standard black to red for the word *red* (Zucker, et al., 2009).

Changes in the body of text not only direct children's attention to the print, but also provide opportunities for discussion. In *Bear Wants More* (Wilson, 2003) the text “Bear wants more” is written various ways, including bold and larger text, to express the bear's lingering hunger.

When reading this book to children, a teacher might say, “Who can see that the style of these words is different from the rest of the words. How are they different? (Children respond.) I wonder why the author changed these words? What do you think?” Inviting children to discuss changes in text further extends their knowledge of the functions of print.

Choosing books with one or more of these features can help focus children's attention on print. Teachers who know how to choose books and how to conduct an interactive shared book reading can ensure that children are learning the emergent literacy skills they need to become successful readers. This information is not only valuable to teachers, but also families and other caregivers (Hiatt-Michael, 2001).

Ways to Engage Families

Parents' knowledge and skills about how to help their child learn

Features of print-salient books

- labels
- visible sound
- visible speech
- change of font style
- change of formatting
- change of font size
- change of font color

have direct effects on their children’s academic achievement (Hiatt-Michael, 2001).

“Studies of individual families show that what the family does is more important to student success than family income or education. This is true whether the family is rich or poor, whether the parents finished high school or not, or whether the child is in preschool or in the upper grades.” (U.S. Department of Education, 1994, p. 6)

Teachers of young children are urged to communicate with families about how early literacy skills can be supported at home (Martin & Emfinger, 2008). With each of these strategies, it is critical to exchange information using children’s home languages, so that communication is clear.

Family Workshops

In parent education workshops, families learn from teachers or other experts in the field (Hiatt-Michael, 2001). During these workshops, teachers usually model specific ways that families can help their children at home. Ways to scaffold read-alouds can be modeled with pointers, highlighting text, and using character voices. Teachers can also show video clips of an interactive shared reading experience in the classroom.

During workshops, it is helpful to provide families with handouts describing each of the strategies discussed. Workshops can be held several times a year so that families can stay updated with new skills for children.

Family Literacy Night

Hosting a Family Literacy Night is another way to involve families in early childhood literacy. After

Table 3. Selected Print-Salient Books by Feature

Print-Salient Feature	Books
Labels	<i>Eating the Alphabet: Fruits & Vegetables From A to Z</i> by Lois Ehlert <i>Mouse Mess</i> by Linnea Riley
Visible sound	<i>Commotion in the Ocean</i> by Giles Andreae <i>Dinosaurumpus!</i> by Tony Mitton <i>Dooby Dooby Moo</i> by Doreen Cronin <i>Red Sled</i> by Lita Judge <i>Rumble in the Jungle</i> by Giles Andreae <i>The Pout-Pout Fish</i> by Deborah Diesen
Visible speech	<i>Can I Play Too?</i> by Mo Willems <i>Don't Let the Pigeon Drive the Bus</i> by Mo Willems <i>The Pigeon Wants a Puppy</i> by Mo Willems <i>There Is a Bird on Your Head!</i> by Mo Willems <i>We Are in a Book</i> by Mo Willems
Change of font style	<i>Click, Clack, Moo: Cows That Type</i> by Doreen Cronin <i>Mommy Mine</i> by Tim Warnes <i>No, David!</i> by David Shannon <i>The Way I Feel</i> by Janan Cain
Change of formatting	<i>Aaron's Hair</i> by Robert Munsch <i>Don't Eat the Babysitter</i> by Nick Ward <i>Down by the Pond</i> by Margrit Cruickshank <i>Mmm, Cookies!</i> by Robert Munsch <i>Stephanie's Ponytail</i> by Robert Munsch
Change of font size	<i>Bear Snores On</i> by Karma Wilson <i>Bear Wants More</i> by Karma Wilson <i>I Ain't Gonna Paint No More!</i> by Karen Beaumont <i>The Pout-Pout Fish in the Big-Big Dark</i> by Deborah Diesen
Change of font color	<i>Llama Llama Mad at Mama</i> by Anna Dewdney <i>Rain</i> by Robert Kalan

families learn about specific literacy activities they can do at home, the adults and children practice them together (Hiatt-Michael, 2001). Providing time to practice helps the adults become more comfortable with the activities.

At Family Literacy Night, families use materials such as books and pointers to complete the suggested activities. This is especially beneficial to families who may not have the resources at home to complete some

activities. By hosting a Family Literacy Night several times throughout the year, families have numerous opportunities to get involved in their children’s educations and have access to a variety of resources.

Online Videos and Discussion

Families can also be reached through on-line videos, discussion, and Websites (Hiatt-Michael, 2001). Moodle is a free Web application that can be used by teachers to design

online courses for families (Moodle, n.d.). Teachers can record themselves modeling literacy activities for families to try at home with their children. Teachers can also post PowerPoint® slideshows of information to share with families. With Moodle, teachers can create discussion boards in which families can post comments or questions.

Teacher-created Websites are also a great tool for disseminating information to families. There are many free Website builders for teachers, such as EducatorPages.com (2012), EZ Class Sites (Randall, 2005), and TeacherWebsite.com (Merlino, Merlino, Merlino, & Merlino, 2000). Through these Web applications, teachers can build a class site to post weekly ideas for families to use at home with their children. Like Moodle, teachers can upload PowerPoint® slideshows and videos to demonstrate specific teaching practices.

These interactive environments, in which families and teachers engage in e-learning, are beneficial because families can access the information on their own time. Encourage families to use computers in public libraries or at home.

Family Literacy Bags

Family Literacy Bags are another method to build early literacy skills. Children can choose high-quality books (fiction and nonfiction), read the books at home with an adult, and complete related literacy activities (Dever & Burts, 2002).

In order to encourage scaffolding of children's skills, Family Literacy Bags often include a guide that explains how to use the contents. The guide suggests interactive questions for the adult to ask the child during the shared reading session.

The bags may also contain other materials to support literacy skills development, such as puppets or highlighting tape. Family Literacy Bags provide families with all of the materials they need to conduct an interactive read-aloud with their children.

Families support early literacy skills at home.

Teachers are urged to create numerous Family Literacy Bags with different types of books so several families can benefit at any one time. Devise an easy system to keep track of the bags and their contents, and update the materials often.

Handouts and Newsletters

Some families prefer to be informed about how to help their children with handouts and newsletters, either in print or electronically (Hiatt-Michael, 2001, Sanchez, Walsh, & Rose, 2011). These educational tips can be shared at the beginning of the year, when teachers explain the recommended activities and demonstrate if necessary. As teachers observe specific skills that children are developing during the year, suggest ways for families to practice them at home. Weekly or monthly newsletters can offer tips specific to the skills children are currently learning. Suggest only one or two activities per newsletter.

* * *

Interactive shared book reading provides opportunities for adults to explicitly reference print to help young children build emergent

literacy skills. When children enjoy their early literature experiences, they are learning to love reading. Families and teachers are encouraged to find a balance between teaching children important literacy skills and simply sharing good books with them. Together, families and teachers can establish an early literacy partnership.

References

- Dever, M.T., & Burts, D.C. (2002). An evaluation of family literacy bags as a vehicle for parent involvement. *Early Child Development and Care, 172*(4), 359-370.
- Diesen, D. (2008). *The pout-pout fish*. New York: Farrar, Straus, & Giroux.
- EducatorPages.com. (2012). *Create a teacher Website*. Retrieved from <http://educatorpages.com>.
- Ehlert, L. (1993). *Eating the alphabet: Fruits & vegetables From A to Z*. Orlando, FL: Houghton Mifflin Harcourt.
- Evans, M.A., Williamson, K., & Pursoo, T. (2008). Preschoolers' attention to print during shared book reading. *Scientific Studies of Reading, 12*(1), 106-129.
- Heilman, A.W., Blair, T.R., & Rupley, W.H. (2002). *Principles and practices of teaching reading* (10th ed.). Upper Saddle River, NJ: Pearson.
- Hiatt-Michael, D.B. (2001). *Promising practices for family involvement in schools*. Greenwich, CT: Information Age Publishing.
- International Reading Association & National Association for the Education of Young Children. (1998). Learning to read and write: Developmentally appropriate practices for young children. A joint position statement of the International Reading Association and the National Association for the Education of Young Children. *Young Children, 53*(4), 30-46.
- Justice, L.M., Kaderavek, J.N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher-child storybook reading and explicit print referencing. *Language, Speech, and Hearing in Schools, 40*, 67-85.
- Justice, L.M., Skibbe, L., Canning, A., & Lankford, C. (2005). Pre-schoolers, print and storybooks: An observational study using eye movement analysis. *Journal of Research in Reading, 28*(3), 229-243.
- Lovelace, S., & Stewart, S.R. (2007). Increasing print awareness in preschools with language impairment using non-evocative print referencing. *Language, Speech, and Hearing Services in Schools, 38*, 16-30.
- Martin, K.A., & Emfinger, L.K. (2008). *Sharing books together: Promoting emergent literacy through reading aloud and home-school partnerships*. Little Rock, AR: Southern Early Childhood Association.
- Moodle. (n.d.). *About Moodle*. Retrieved from <http://moodle.org>
- Phillips, L.M., Norris, S.P., & Anderson, J. (2008). Unlocking the door: Is parents' reading to children the key to early literacy development? *Canadian*

Psychology: Canadian Psychological Association.
Randall, C. (2005). EZ class sites. Retrieved from <http://ezclasssites.com>
Sanchez, C., Walsh, B.A., & Rose, K.K. (2011). DVD newsletters: New ways to encourage communication with families, *Dimensions of Early Childhood*, 39(2), 20-26.
Smallwood, B.A. (2002). *Thematic literature and curriculum for English language learners in early childhood education*. ED 470980. Washington, DC: ERIC Clearinghouse on Languages and Linguistics.
U.S. Department of Education. (1994). *Strong families, strong schools: Building community partnerships for learning. A research base for family involvement in learning from the U.S. Department of Education*. Washington, DC: Author.
What Works Clearinghouse. (2007). *Interactive shared book reading*. Washington, DC: U.S. Department of Education.

Willems, M. (2003). *Don't let the pigeon drive the bus*. New York: Hyperion.
Wilson, K. (2003). *Bear wants more*. New York: McElderry.
Zucker, T.A., Justice, L.M., & Piasta, S.B. (2009). Prekindergarten teachers' verbal references to print during classroom-based, large-group shared reading. *Language, Speech, and Hearing Services in Schools*, 40, 376-392.

undergraduate and graduate courses at several Houston area universities focusing on research-based literacy and teaching strategies.

Find more resources on topics related to this article in the current issue of Dimensions Extra!

About the Author

Christin Baker, Ed.D., is a first grade teacher in the Cypress Fairbanks Independent School District in Cypress, Texas. She has taught in early childhood education for 8 years and has taught

We're Looking for the Next SECA Editor

SECA is seeking an editor with a vision and desire to help maintain the quality of current SECA publications and position SECA to move into the e-Publications arena. Editorial job responsibilities include:

- Editorial content management of SECA's journal, *Dimensions of Early Childhood*
- Attendance at the annual SECA conference and co-facilitation of the annual meeting of the SECA Editorial Committee
- Technical assistance and collaboration with the SECA Executive Director in developing e-Publication outlets for SECA publications.

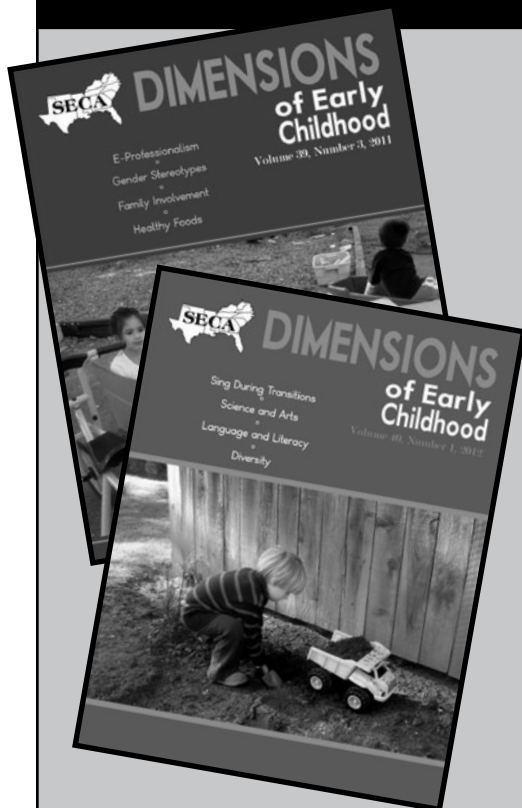
Qualifications:

- SECA membership
- Knowledge of and experience in the early care and education field
- Evidence of publication in peer-reviewed outlets
- A minimum of a bachelor's degree, with an advanced degree preferred
- Prior editorial experience and familiarity with digital publishing

An application for the position can be found at <http://www.southernearlychildhood.org/publications.php>. Incomplete applications will not be considered. **Deadline to submit an application is May 1, 2013.**

This position is a contract position and a modest stipend for the SECA Editor is available. Required travel will be compensated. The initial contract will be for a period of 1 year with the possibility of extending the contract yearly for a period of 4 years.

For more information, contact Glenda Bean, Executive Director, at gbean@southernearlychildhood.org or 1-800-305-SECA.

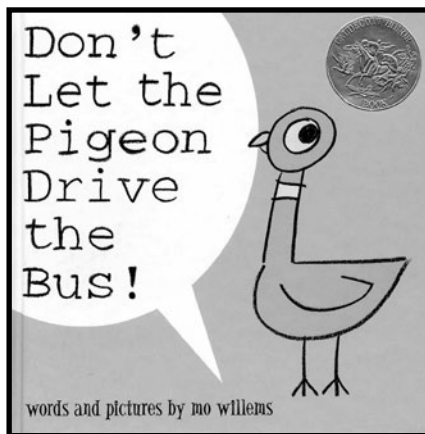


Extend

These Ideas With Books

Connect Print-Referencing During Read-Alouds With a Children's Book

Anita McLeod



Don't Let the Pigeon Drive the Bus!

Written and illustrated by Mo Willems.

2003. New York: Hyperion

When a bus driver takes a break and leaves his bus, he gives readers one warning, "Don't let the pigeon drive the bus." However, the pigeon is convinced he should be allowed to do the very thing he isn't supposed to do. So, he begs, pleads, and throws a huge temper tantrum, scattering feathers everywhere. He **MUST** drive the bus. When the driver returns, the pigeon leaves the bus in a huff. The pigeon spots a tractor-trailer and suddenly he has a new opportunity. He'll drive the truck!

Classroom Ideas!

Teachers can easily adapt the features of this book to read-aloud experiences. The author's use of "bubbles," in which the pigeon speaks to readers, draws young learners into the text. Children are excited to answer the pigeon as he begs to drive.



LITERACY (Large or Small Group):

During a second or third reading of the book, draw children's attention to book elements (title, author, front & back of book). Point to the pigeon's speech bubbles. Children can "frame" bubbles with their fingers, practice reading the pigeon's speech, locate words that are repeated, and reply to the pigeon. The teacher can use a separate chart to write each child's reply. **Materials:** chart paper, marker, or white board.



LITERACY: Children dictate words as adults write what they say (or children use their own inventive spelling) in speech bubbles. "Publish" and display books for all children to read. **Materials:** Cut-out speech bubbles, child-made

books, glue sticks, markers, pencils, crayons.



MOVEMENT & MUSIC: Children sing "Wheels on the Bus" using hand motions or drama to act out the words. Children create new verses to this old favorite. **Materials:** CD player, recording.



ART: Children construct a bus or other vehicle with a variety of boxes. This project can progress over time. Children first plan their construction by sketching the vehicle they plan to make and then create their own vehicle. **Materials:** boxes, tape, paint, markers, other creative materials.



PRETEND PLAY: Add transportation props such as chairs, recycled seat buckles, and a steering wheel. Children act out the story, taking the role of the bus driver, pigeon, and riders on the bus. **Materials:** Transportation props donated by children's families or found at garage sales.



FIELD RESEARCH: Children visit a nearby bus, equipped with sketchpads and their prepared questions to ask a bus driver. If possible, they get on a bus, put on seat belts, and even sit in the driver's seat. After children return to the classroom, they draw what they sketched and recall answers to their questions. Children go from "what they remember" to "what we have learned." **Materials:** field trip requirements, sketch pads, pencils, chart paper, markers.

Anita McLeod, Ph.D., retired early childhood teacher educator, former president of the South Carolina Early Childhood Association.

SOUTHERN EARLY CHILDHOOD ASSOCIATION

CALL FOR PROPOSALS

65th Annual Conference – Williamsburg, VA
January 16-18, 2014

Theme: CHILDREN'S PLAY: PAST, PRESENT & FUTURE

Background:

In light of President Obama's call for universal preschool, the long term value of early education is again the topic of debate. As a result, the ongoing discussion (often contentious) over the "right" approach and/or type of curriculum for preschoolers has been fueled while practitioners continue to struggle with the adoption of state and national education standards. In the midst of these deliberations, a reasonable assumption can be made that the value of play as a vehicle for preschoolers' learning will also come under question. In an attempt to be proactive rather than reactive, SECA has chosen "play" as the theme for the 2014 conference, our contribution to the debate that will likely occur as specifics of the plan are disseminated.

Our focus for the 2014 conference is on how teachers intentionally plan, implement and evaluate play based learning experiences. These experiences can be indoors or out, include play from the past or consider what play in the future might be. Our focus is on providing examples of how play facilitates learning and development, which requires documentation to provide evidence of that learning and development.

The 2014 SECA Conference will provide a variety of speakers and workshops centered around the theme of play. Workshop proposals may include ideas for incorporating the math, literacy, science or music activities of a program into a play based curriculum. We also encourage proposals that are directed to infants and toddlers, special needs children, and out-of-school time programs. Proposals based on research centered around play and its impact on child development will be considered.

Workshop topics may include, but are not restricted to the following:

- **Outdoor and Nature-Based Learning:** the benefits of outdoor learning and play, creating quality outdoor learning spaces, incorporating nature into indoor and outdoor learning experiences, balancing safety and risk in learning environments.
- **Infant and Toddlers:** building relationships with children and families, preparing environments, innovative toddler curriculum, outdoor experiences, social/emotional development, sign language, theory into practice, state initiatives.
- **Preschool, Kindergarten, School-Age:** innovative curriculum, exploring nature, language and literacy, creative art, behavior guidance, play, social and emotional development, partnerships with parents, innovative projects and programs, problem solving, faith based programs, assessment, diversity, state mandates, bi-lingual classrooms, health, safety and nutrition.
- **Program Administration:** management of infant/toddler programs, policies, management/budgeting, legal issues, accreditation, safety/health issues, leadership, out-of-school time programs, summer camps, family partnerships, quality standards (QRIS).
- **Professional Growth and Teacher Preparation:** higher education issues, state training initiatives, train the trainer topics, community college innovations, EC college groups, accreditation, articulation, EC collaboratives, ethics, leadership, current research, laboratory schools, advocacy, and infant/toddler courses /training successes.

Go to http://www.southernearlychildhood.org/seca_conference.php to access the 2014 Call for Proposals.

Deadline to submit a proposal is June 15, 2013.

Providing a System that Supports Teachers' Potential Growth with Technology Tools

Can technology be successfully and appropriately utilized by early childhood teachers to promote learning? Learn how to help teachers embrace and utilize technology to enhance classroom experiences.

**Bridget A. Walsh,
Leah Sanders,
and Theresa Randolph**

As daily observers of growth in young children, early childhood teachers and professionals know that growth takes time. Teachers have a right to professional growth (Gandini, 2004). Technology is one area in which teachers need support to gain the knowledge and skills necessary to integrate it effectively into early childhood settings.

Technology tools have a place in early childhood settings when the use of them is based on developmentally appropriate practice (see the joint position statement of the National Association for the Education of Young Children, or NAEYC, and the Fred Rogers Center's, 2012a). A wide variety of technology tools are available for caregivers and teachers to support active learning and meaningful interactions (NAEYC & the Fred Rogers Center, 2012a). Some newer technology tools presently integrated into early childhood settings include:

- Smartphones (Parnell & Bartlett, 2012)
- Tablet computers (Shifflet, Toledo, & Mattoon, 2012)
- Interactive whiteboards (Linder, 2012)
- Internet access to such programs as VoiceThread (Fantozzi, 2012)
- Assistive technologies in inclusive classrooms, including adaptive keyboards (Judge, Floyd, & Jeffs, 2008)

Access to technology tools among early childhood professionals varies. A national survey by Wartella, Schomburg, Lauricella, Robb, and Flynn (2010) examined the use of some technology tools by classroom teachers and

family child care providers. Results showed that most teachers and caregivers have access to technology tools in their classroom or childcare settings. Use varies by teachers and caregivers, as the following findings reveal:

- Ninety-six percent of teachers and caregivers reported having Internet connections.
- Interactive whiteboards are more available to teachers (9%) than to family child care providers (0%), whereas electronic toys are more available to family child care providers (48%) than to teachers (21%).
- Family child care providers, more so than classroom teachers, reported having television technologies available, such as TVs (34% difference), DVDs (34% difference), and VCRs (22% difference).

Results of another national survey suggest that early childhood teachers tend to value technology tools but are typically not as excited about them as K-12 teachers (Public Broadcasting Service & Grumwald Associates, 2011). Early childhood teachers report such barriers as cost and time constraints, the use of non-technology resources, and varying beliefs about technology tools (Public Broadcasting Service & Grumwald Associates, 2011).

Nonetheless, the development of new technologies and their presence in early childhood settings is rapidly increasing (McManis & Gunnewig, 2012). A system that includes relationships, teachers, and others can prompt, support, and encourage early childhood professionals to accept technological changes and the need to be active in their own potential proficiency with technology tools.



Photos courtesy of the authors

Technology fascinates children and can provide opportunities for active, engaged learning.

What Relationships Can Do

Vygotsky's (1978) socio-cultural perspective suggests that a more experienced other could help one with less experience beyond what he or she can do independently. This can apply to relationships between teachers or teachers and others. Below we suggest ways that a teacher can acquire knowledge and skills about technology tools with the help of a guide encouraging them to reach higher levels.

Support. One key to teachers' and caregivers' growth with technology tools is support. There are many forms of formal and informal support that can be available to teachers and caregivers:

- The support of a Professional Learning Community that is inquiry based and values collaboration is a respectful way to help teachers reach their classroom goals (Enfield & Rogers, 2009). Regular or monthly meetings after school, or as part of a set planning time are important.

Whether technology tools are a partial focus or the entire focus, Chen and Chang (2006b) suggest that in-service early childhood teachers need learning opportunities with technology over time or at least longer than one week.

- Family child care providers are often not included in professional development opportunities (Barron et al., 2011). The uniform resource locator (URL) of the Better Kid Care Program (<http://www.betterkidcare.psu.edu/>) provides home-based caregivers with professional development opportunities (Barron et al., 2011). For example, it includes "on demand distance education" and podcasts as "TV, Video Games, and Computers." Talking face-to-face or in a virtual chat setting about what was learned and how it applies to their settings can enhance online learning experiences.
- Teachers' formal and informal meetings with other teachers, with University researchers, coaches, and with school personnel as part of a collaborative group or a learning community are important. Email is an informal way to communicate about technology tools and share support.
- Positive attitudes about technology, e.g., willingness to try new tools and confidence about learning new skills, are important (Chen & Chang, 2006a). Attitudes about technology tools, such as computers, may be influenced by the degree of support from others, including administrators (Chen & Chang, 2006a).
- Two online support communities are the Diigo Group, <http://groups.diigo.com/group/ecetech>,

and NAEYC's Technology and Young Children Interest Forum, <http://www.techandyoungchildren.org/index.html>. Using online support communities is a valuable way to share resources and insights, spark ideas about appropriate practice with technology, and find out about upcoming meetings and conferences focused on technology.

- Teachers frequently look to other teachers for support (Barron et al., 2011). The expert could be another teacher but there are others—school support staff, a high school or college student, University faculty or staff, or a parent—who may provide support in gaining knowledge or exploring technology tools.

Assessment of in-service teachers.

Teachers and caregivers should be encouraged to use their professional judgment about using or not using technology tools (NAEYC & the Fred Rogers Center, 2012b). Many self-assessments surrounding technology have been developed with K-12 teachers (Christensen & Knezek, 2001). Pre-kindergarten teachers can conduct their own assessment of technology tools used in their own classroom. Additionally, they can investigate how other teachers and caregivers use technology tools in activities, visit their settings, ask questions, and reflect about activities that were meaningful and why. Five ways to assess the use of technology tools by pre-kindergarten teachers are:

- Incorporate a section about technology in a daily journal that demonstrates the children's experience in the classroom.
- Keep a classroom technology log and record children's interactions with technology tools.

- Create a teacher self-assessment to track growth and progress with technology tools, perhaps start by asking questions that explore how technology tool use could be integrated in a developmentally appropriate manner (see Copple & Bredekamp, 2009).
- Use an existing assessment, such as Bewick and Kostelnick's (2004) "Teacher Technology Assessment" for computers and software technology tools.
- Invite teachers, caregivers, and families to give feedback on technology use on an ongoing basis: to observe uses of technology tools in the early childhood setting, to share and discuss their notes, or to use video to capture the use of other technology tools in their classroom (e.g., video of children creating a graph on an interactive white board).

Pre-kindergarten teachers' self-assessment methods, such as keeping a classroom technology log, coupled with gathering others' perspectives may promote growth with technology tools. Teachers might report back or share the completed assessments as described with others, all of whom can take an outside perspective, such as teacher coaches, directors, school principals, or researchers.

Accountability of in-service teachers. These outside figures, those who encourage accountability, can approach the review of the assessments from an inquiry-oriented standpoint to provide constructive, objective feedback. This is a respectful approach to valuing the co-construction of knowledge with teachers in order to build upon their experience and expertise (Enfield & Rogers, 2009).

What Teachers Can Do

Teachers can change and expand their thinking and practice. One way to change is to believe that change is possible and that effectively reaching goals depends upon personal actions (Bandura, 2001). New actions can be uncomfortable but positive attitudes can lead to new and meaningful behaviors (Grenny, Maxfield, & Shimber, 2008).

Consider what motivates your use of technology tools. In Wood and Bennett's (2000) study of early childhood teachers' learning, one teacher stated "I know I learn from other people, from teachers or whatever, but I also learn very much when I have a go myself" (p. 642). Teachers are encouraged to figure out what makes them want to learn about technology tools and in what settings. Reflection that includes observation, discussion, and analysis about in-service training, personal values and beliefs, ideals, and practice can be helpful to exploring early childhood teachers' learning (Wood & Bennett, 2000). Technological change is fast and professionals need to take charge of their development with it (Bandura, 2001).

Technological change is fast and teachers must stay current with those changes.

Let families know. As teachers learn and grow with technology tools, they should involve families in opportunities to continue to be educated, e.g., developmentally appropriate uses of technology tools

(Copple & Bredekamp, 2009) or review guidelines about screen time made by professional organizations (Vittrup, 2010). Families may have expertise to share with technological innovations, and/or may have enthusiasm about the use of technology tools in early childhood settings.

Teachers recognize that families often appreciate thoughtful communication between classroom and home. For instance, sending parents daily or weekly emails that include anecdotal observations and reflections of classroom activities with digital pictures of children's writing and art is an example of using technology tools to share information about children's learning.

Develop a sense of control over work with technology tools. Teachers will be more willing to work with technology tools if they volunteer. The process has to fit within their personal agendas (Enfield & Rogers, 2009) and be guided by the benefits to them as well as children and families. Teachers will not experience technological proficiency if they get the sense that using technology tools is something dictated to them, or if these tools are introduced in a one-stop professional development day without sufficient support or follow-up. Teachers need time to play with and create with technology tools and to become informed about them (Parikh, 2012). Teachers should consider comparing the effectiveness of new methods against more traditional tools and decide for themselves whether to use them (NAEYC & the Fred Rogers Center, 2012a).

What Others Can Do

A network of helpers can be valuable to teachers. Different types of professionals can be part of this network, and there are ways that

they can support teachers' technological growth.

Researchers are “critical friends” with teachers and caregivers.

Important to the collaborative work of teachers and researchers is the ability to work together and engage in dialogue as “critical friends” (Enfield & Rogers, 2009, p. 566). Researchers can give teachers access to knowledge and time through emails, phone calls, and meetings. Some examples of elements of critical friendships between teachers and researchers include:

- Sharing resources to help and advance growth with technology tools
- Providing materials and supplies
- Sharing models
- Creating a framework for organization

Pre-service teacher training programs. Professional development for using technology tools also needs to occur for pre-service teachers and teacher education faculty (Barron et al., 2011). Pre-service programs should provide teachers with in-depth and hands on experiences concerning using new tools (NAEYC & the Fred Rogers Center, 2012b). Practices that are consistent with developmentally appropriate practice (see Cople & Bredekamp, 2009) include encouraging children to talk about the technology they use and documenting children's learning with technology. For example, observations should be done in early childhood settings where there are efforts to promote digital literacy, e.g., a photo editing center in a classroom. Practicum or student teaching experiences could allow pre-service teachers to work with children to take photos or record video of classroom



Discussions among teachers about their observations of children's use of technology can inform how technology tools are utilized.

Photo courtesy of the authors

activities. Through these experiences pre-service teachers may observe and discover how children can learn to respect or handle technology tools to develop an awareness of space. Interactions may promote digital literacy through such vocabulary as “tripod,” “cropping,” and “memory cards.”

Pre-service programs that promote small and large group discussions about observations of, the uses of, and implications of technology tools in early childhood settings are important. Pre-service teachers should also discover themes within the joint position statement of NAEYC, and the Fred Rogers Center (2012a) such as, the use of technology is about what works individually for teachers and children, not a one-size-fits-all approach.

Assistance from director, principal, teacher coach, and other leaders. The support of influential stakeholders is important to the success of the work with technology tools. They may not have the technology skills that teachers do but can be supportive in other ways.

Leaders can be intentional in offering support of uses of technology tools in their classrooms (NAEYC & the Fred Rogers Center, 2012b). For example, they can provide formal en-

couragement to teachers in the form of observing the technology tool uses and providing real feedback by summarizing the work, pointing out a specific aspect they liked, and identifying an area that they think can be further developed. Leaders can also regularly check in with teachers to determine if they have the necessary support for their current or upcoming work with technology tools. Leaders can also encourage teachers to become experts with a technology tool and recognize their proficiency by sharing their knowledge with others (Barron et al., 2011). Leaders can provide professional development opportunities, planning time, readily available technology tools, and a structure to allow teachers to learn about technology tools and their interactive uses.

Leaders can develop program or center technology policies based on state licensing requirements, recommendations from professional organizations such as NAEYC (NAEYC & the Fred Rogers Center, 2012a) and the American Academy of Pediatrics (Council on Communications & Media, 2011), and criteria about technology uses in the revised Early Childhood Environment Rating Scale (ECERS-R; Harms, Clifford, & Cryer, 2005). The program or

center technology policies should consider information found in these documents and allow technology to be integrated into the curriculum in a flexible way.

What's Next?

Teachers starting to explore multifaceted technology tools, or continuing their exploration thereof, should acknowledge and accept the need to be active in their own growth. Acknowledging that positive attitudes (Chen & Chang, 2006a) and personal actions (Bandura, 2001) are essential is perhaps the easiest step. Much more difficult are the questions of:

- How to promote early childhood teachers' positive attitudes toward technology? (Chen & Chang, 2006b)
- Teachers' choice of whether to use technology tools for activities? (NAEYC & the Fred Rogers Center, 2012b)
- How to learn about appropriate uses of technology tools in educational settings? (Council on Communications & Media, 2011; NAEYC & the Fred Rogers Center, 2012a) and,
- How to use technology tools in interactive and meaningful ways? (e.g., Linder, 2012; Shifflet et al., 2012)

Three essential areas are the following: what relationships can do, what teachers can do, and what others or a helping network can do. When the strategies within these areas are considered, the answers to the questions above can be explored and teachers' potential growth with technology tools can be prompted, supported, and encouraged.

References

- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26. doi: 10.1146/annurev.psych.52.1.1
- Barron, B., Cayton-Hodges, G., Bofferding, L., Copple, C., Darling-Hammond, L., & Levine, M. (2011). *Take a giant step: A blueprint for teaching children in a digital age*. New York: The Joan Ganz Cooney Center at Sesame Workshop.
- Bewick, C. J., & Kostelnick, M. (2004). Teacher technology assessment. *Beyond the Journal: Young Children on the Web*. Retrieved from <http://www.naeyc.org/yc/pastissues/2004/may>
- Chen, J., & Chang, C. (2006a). A comprehensive approach to technology training for early childhood teachers. *Early Education and Development*, 17, 443-465. doi: 10.1207/s15566935eed1703_6
- Chen, J., & Chang, C. (2006b). Using computers in early childhood classrooms: Teachers' attitudes, skills, and practices. *Journal of Early Childhood Research*, 4, 169-188. doi: 10.1177/1476718X06063535
- Christensen, R., & Knezek, G. (2001). Instruments for assessing the impact of technology in education. *Computers in the Schools*, 18, 5-25. doi: 10.1300/J025v18n02_02
- Council on Communications & Media (2011). Media use by children younger than 2 years. *Pediatrics*, 128, 1040-1045. doi: 10.1542/peds.2011-1753
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3rd ed.). Washington, DC: National Association for the Education of Young Children.
- Enfield, M., & Rogers, D. (2009). Improving science teaching for young children. In O. A. Barbarin & B. H. Wasik (Eds.), *Handbook of child development and early education* (pp. 558-576). New York, NY: Guilford Press.
- Fantozzi, V. B. (2012). Exploring elephant seals in New Jersey: Preschoolers use collaborative multimedia albums. *Young Children*, 67(3), 42-49.
- Gandini, L. (2004). Foundations of the Reggio Emilia approach. In J. Hendrick (Ed.), *Next steps toward teaching the Reggio way: Accepting the challenge to change* (pp. 13-26). New Jersey: Pearson Education.
- Grenny, J., Maxfield, D., & Shimer, A. (2008). How to have influence. *MIT Sloan Management Review*, 50, 47-53.
- Harms, T., Clifford, R. M., & Cryer, D. *Early Childhood Environment Rating Scale-Revised Edition (ECERS-R)*. New York: Teachers College Press.
- Judge, S., Floyd, K., & Jeffs, T. (2008). Using an assistive technology toolkit to promote inclusion. *Early Childhood Education Journal*, 36, 121-126. doi: 10.1007/s10643-008-0257-0
- Linder, S.M. (2012). Interactive whiteboards in early childhood mathematics: Strategies for effective implementation in Pre-K-Grade 3. *Young Children*, 67(3), 26-35.
- McManis, L. D., & Gunnewig, S. B. (2012). Finding the education in educational technology with early learners. *Young Children*, 67(3), 14-24.
- National Association for the Education of Young Children & the Fred Rogers Center for Early Learning and Children's Media (2012a). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. Retrieved from http://www.naeyc.org/files/naeyc/file/positions/PS_technology_WEB2
- National Association for the Education of Young Children & the Fred Rogers Center for Early Learning and Children's Media (2012b). *Technology and interactive media as tools in early childhood programs serving children birth through age 8* [Web-cast presentation]. Retrieved from <http://www.techandyoungchildren.org/index.html>
- Parikh, M. (2012). Technology and young children: New tools and strategies for teachers and learners. *Young Children*, 67(3), 10-11.
- Parnell, W., & Bartlett, J. (2012). iDocument: How smartphones and tablets are changing documentation in preschool and primary classrooms. *Young Children*, 67(3), 50-57.
- Public Broadcasting Service & Grunwald Associates. (2011). *Deepening connections: Teachers increasingly rely on media and technology*. Report of the Public Broadcasting Service. Arlington, VA: Public Broadcasting Service. Retrieved from <http://www.pbs.org/teachers/grunwald/pbs-grunwald-2010.pdf>
- Shifflet, R., Toledo, C., & Mattoon, C. (2012). Touch tablet surprises: A preschool teacher's story. *Young Children*, 67(3), 36-41.
- Vittrup, B. (2010). Television in early care programs: Cautions and guidelines. *Texas Child Care Quarterly: The Quarterly Journal for Caregivers Everywhere*, 34(3), 24-29.
- Vygotsky, L. S. (1978). Interaction between learning and development. In M. Cole, V. John-Steiner, S. Scribner, & E. Soubberman (Eds.), *Mind in society: The development of higher psychological processes* (pp.79-91). Cambridge, MA: Harvard University Press.
- Wood, E., & Bennett, N. (2000). Changing theories, changing practice: Exploring early childhood teachers' professional learning. *Teaching and Teacher Education*, 16, 635-647.
- Wartella, E., Schomburg, R. L., Lauricella, A. R., Robb, M., & Flynn, R. (2010). *Technology in the lives of teachers and classrooms: Survey of classroom teachers and family child care providers*. Latrobe, PA: The Fred Rogers Center for Early Learning and Children Media. Retrieved from <http://www.fredrogerscenter.org/media/resources/TechInTheLivesofTeachers.pdf>

About the Authors

Bridget A. Walsh, Ph.D., is an Assistant Professor, Human Development and Family Studies, University of Nevada, Reno.

Leah Sanders, M.A., is an Administrative Faculty, Child & Family Research Center/Human Development and Family Studies, University of Nevada, Reno.

Theresa Randolph, B.S., is the Program Coordinator of Classroom on Wheels, Child and Family Services, Washoe County School District, Reno, NV.

SAVE THE DATE!



Join us in historic Williamsburg Virginia for the

65th Annual Conference

of the

Southern Early Childhood Association!

Theme: *Children's Play: Past, Present and Future*

January 16 - 18, 2014

The Williamsburg Lodge
Williamsburg, VA

Southern Early Childhood Association

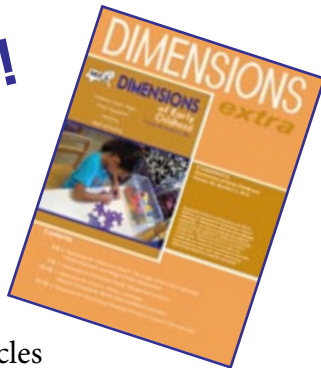


P.O. Box 55930 • Little Rock, AR 72215-5930
Toll Free: 800-305-7322
www.SouthernEarlyChildhood.org

NON-PROFIT
ORGANIZATION
U.S. POSTAGE PAID
Little Rock, AR 72201
Permit No. 2470

Don't Forget!!

Look for the newest issue of *Dimensions Extra* online!



Plenty of ideas to pair up with the articles from this issue of *Dimensions*, so swing by our website and get them now!

Looking for more resources? Check out **SECA online!**

Go to www.southernearlychildhood.org to find:

- SECA publications, like *Dimensions Extra* and the *SECA Reporter*
- Information on the SECA conference, its exhibitors, speakers, location, how to get there, and how to register
- Up to date information on public policy; Find out where SECA stands with position statements and stay in the know with policy briefs
- Access to a variety of resources and publications available for sale through the SECA store



Don't miss out on this treasure trove of resources! Visit SECA's website today!