Young Exceptional Children

Language Is Everywhere! Universally Designed Strategies to Nurture Oral and Written Language
Susan D. Dixon

The online version of this article can be found at:
http://yec.sagepub.com/content/11/4/2

Additional services and information for *Young Exceptional Children* can be found at:

Email Alerts: http://yec.sagepub.com/cgi/alerts

Subscriptions: http://yec.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

>> Version of Record - Aug 8, 2008

OnlineFirst Version of Record - Jun 18, 2008

What is This?

Language Is Everywhere! Universally Designed Strategies to Nurture Oral and Written Language

Maia just could not decide what to do. It had been an exciting day. The veterinarian had come to visit 4-year-old Maia's preschool class this morning and had brought animals for everyone to see, smell, hear, and touch. The bunnies hopped around the classroom, and everyone laughed at the kisses given by the puppies. This afternoon her teacher had put out so many activities that Maia was having trouble choosing. She could look at books about animals with José or listen to a tape about veterinarians with TeOhna. She could use the computer to watch a video with Jillian. Some of her friends were making a mural about the animals that had visited. Carlos was painting the background with a paint roller while other children were drawing, using the overhead projector, or cutting and gluing to create their own elements to be added later. At the writing table, some children are writing thank-you notes to the veterinarian. What would Maia choose?

Susan D. Dixon, MA, CCC

Early Childhood Center, Indiana Institute
on Disability and Community

> "
> [U]niversal design
> for a learning framework
> promotes access
> to learning.
> „

Universal Design in Early Education

The principles of universal design, originally developed as architects were challenged with designing physical spaces to meet the needs of all users (Center for Universal Design, 1997), have become increasingly useful as a framework to guide educators in their quest to design programs that meet the needs of all students. The Center for Applied Special Technology (2006) states that the universal design for a learning framework promotes access to learning through multiple means of engagement to tap into learners' interests, offer appropriate challenges, and increase motivation; multiple means of representation to give learners various ways of acquiring information and knowledge; and multiple means of expression to provide learners alternatives for demonstrating what they know.

Adopting a universal design framework means that the physical and social environments, as well as instruction, are designed so that all young children with their diverse and individual strengths and needs have meaningful learning experiences. This means that programs are designed so that every child feels welcomed as a full and equal member, has access to and engages in all learning opportunities, is able to learn according to his or her individual strengths and interests, and demonstrates his or her learning in ways that reflect the individual's strengths (Conn-Powers, Cross, Traub, & Hutter-Pishgahi, 2006).

A short list of resources on universal design is provided in Table 1.

The beauty of a universally designed program is that every child can find multiple ways to access, engage in, and learn from the information and experiences offered. In the opening vignette, there was no need to state that TeOhna has vision impairments and needs to access information either tactilely or auditorily or that Jillian has Down syndrome and prefers to see and hear information at the same time. Nor did it need to be said that Carlos has cerebral palsy and currently has hand splints; thus rolling on background paint was easier than drawing or cutting during that particular activity. What is clear is that not only Maia but all the children could both interact with and learn from their experiences with the veterinarian activity physically, socially, cognitively, and linguistically as well as participate in the many learning activities offered afterward. Within each and every experience is the opportunity to be engaged in the rich language inherent in the world around us.

Language Is Everywhere!

We are bathed in oral and written language wherever we go. We know from years of research that language and literacy are one dynamic system, each informing the other. As Braunger and Lewis (1997) so eloquently state, "Reading, writing, listening and speaking are streams that flow into the same pool; they are constantly refreshing each other" (p. 62). We also know that the changing demographics of our society mean that children attending early care

Table 1
Recommended Readings on Universal Design

Blagojevic, B., Twomey, D., & Labas, L. (2007). *Universal design for learning: From the start.* Online at http://www.ccids.umaine.edu/resources/facts/facts6/udl.htm.

Center for Applied Special Technology. (2006). *Summary of universal design for learning concepts.* Online at http://www.cast.org/research/index.html.

Conn-Powers, M. C., Cross, A. F., Traub, E. K., & Hutter-Pishgahi, L. (2006). The universal design of early education: Moving forward for all children. *Beyond the Journal: Young Children on the Web.* Online at http://journal.naeyc.org/btj/200609/ConnPowersBTJ.pdf.

Council for Exceptional Children. (Ed.). (2005). *Universal design for learning: A guide for teachers and education professionals.* Upper Saddle River, NJ: Pearson Prentice Hall.

and education settings have become more diverse linguistically, culturally, and in their ability levels. How are educators approaching language development to meet the needs of these diverse populations?

Although many factors affect a child's ability to succeed in acquiring language and literacy skills, there are many fundamental strategies that we, as early care and education professionals, can implement to ensure successful learning for all children. The strategies proposed here are a sampling of those appropriate for the broad range of abilities and backgrounds we increasingly find in our settings.

In this article, we describe how early childhood professionals can create positive environments that foster the growth of both oral and written language and how the concept of universal design can inform these practices. These activities are designed with a focus on children 3 to 5 years old. We will first look at oral language through representative facets of sound play and conversation, followed by exposure to print materials and writing, two aspects of written language. In each section, a table presents examples of activities and suggestions for ways in which universal design principles can enhance practices.

Oral Language

Babies observe the world around them from the moment they are born. The early interactions between caregiver and child lay the foundation for later social communication interactions and language growth. Everything a child does during the day, whether at home or in child care, has the potential for communication interactions. From the first cooing hugs between an infant and caregiver, we are shaping knowledge not only of how the social dance of communication happens but of how the sounds of our language work, how words are formed, how sentences are put together, and how we get information from all these symbols. Babies are beginning to make connections between sounds and events, words and people, and this early awareness of the sounds in the environment is, in a way, the beginning of learning to read.

Playing with the sounds of our language, as when we recite nursery rhymes and finger plays or sing

> "
> A simple example of universal design is to embed sound play into daily routines and activities using varied levels of complexity.
> "

songs, can help to develop an understanding of the sounds and letters that make words. An important factor that research has identified in successful reading is phonemic awareness, in other words, the ability to hear and manipulate separate sounds in words (National Reading Panel, 2000).

Early sound play, rhymes, finger plays, and songs all prepare a child's brain for the eventual task of learning that those sounds translate to the letters on the page. The rhythms and sound patterns of rhymes elicit a sense of familiarity for children and lend themselves to being read aloud, a nice natural transition between the oral and written facets of language learning.

A simple example of universal design is to embed sound play into daily routines and activities using varied levels of complexity so that children are able to participate and enjoy regardless of their own linguistic or motor sophistication. Sound play is one of the easiest activities to embed into those unplanned moments while waiting in line or swinging on the playground ("Way up high, in the sky, Maia's flying way up high"), because all it takes is a love of playing with our voices. Maia's teacher had prepared a "song bag" for the weeks surrounding the veterinarian's visit. In it she had pictures of songs or finger plays about animals that the class had been learning as well as puppets and small rubber toy animals for more concrete representations. The song bag came out during the formal small-group language time, went to the gym where the children often needed to wait for their bus, and was an activity choice during free-choice time each day. "Old McDonald's Farm" was especially popular. Carlos helped read the animal names on the cards, and Jillian always tried to pull the cat out of the bag because "meow" was her favorite animal sound. Playing with open syllables, beginning sounds, ending sounds, and rhyming sounds all contribute not only to the development of speech skills but also to the phonemic awareness that is a critical component in learning to read (National Reading Panel, 2000).

More examples of using the sounds of our language in your universally designed program can be found in Table 2.

Development of Oral Language: Conversation and Instruction

Children who grow up in environments where adults engage in meaningful conversations with them develop knowledge of how language works. We know that linguistic responsiveness in adult–child interactions serves as a support to children's language development. Researchers tell us that children whose communication interactions are encouraged and expanded by adults have advantages over children who have more limited access to meaningful conversation (Baridge & Segal, 2004; Hart & Risley, 1995). Because language proficiency is a strong predictor of reading success (Dickinson & Tabors, 2001; Larney, 2002; Snow, Burns, & Griffen, 1998), it is important to recognize that our language-based interactions play a critical role in our children's development of both language and literacy skills.

Table 2

Universal Design in Oral Language Activities: The Sounds of Our Language

Activity	Universal Design Examples
Play with sounds (Neuman, Copple, & Bredekamp, 2000).	Engage children in different aspects of the activity to tap into varied interests and ability levels: oral imitation, phonemic awareness, rhyming. These are but a few of the potential variations in focus to engage all participants in the activity. For example, use a simple, recognizable song, such as "Twinkle Twinkle Little Star" with a different letter at the beginning of each syllable (e.g., "ma ma ma ma" or "dee dee dee dee") while pushing a child on the swing. Adding the "chugga-chugga" of a motor or the "toot" of the train as you play with the cars demonstrates simple environmental sounds that introduce another level of sound play. Some children can engage in the simple auditory experience, some can imitate the sounds, some can discuss the way the word is altered when the beginning sound changes.
Use rhymes and songs (Kimura, 2006; Knapp-Philo, Notari-Syverson, & Stice, 2005).	Rhymes and songs that have physical motions involved allow children with speech and/or language difficulties to participate motorically in the absence of oral language skills. The physical motions will also facilitate the involvement and learning of children with hearing impairments. Start with simple clapping songs and move to more elaborate movements, such as those found in "The Itsy Bitsy Spider." Choose books with rhyming patterns, such as *I Went Walking* by Sue Williams. Focus attention on the basic rhyming presented in the book, then move to making your own rhymes to facilitate the explicit teaching of the structure (Lane & Pullen, 2004).
Add illustrations and written words to the rhymes and songs you teach (Snow, Burns, & Griffen, 1998).	Pairing visual cues to the auditory repetition will provide support for the more visual learners as well as a logical transition from oral to visual communication for all (Notari-Syverson, O'Connor, & Vadasy, 1998).

Early care and education professionals who create environments that foster oral language development play with sounds and words and nurture positive experiences during social communication interactions. They model and expand appropriate language and facilitate learning of new vocabulary (National Reading Panel, 2000). They engage children in conversations that encourage them to use language to get information, give information, and explore ideas.

Table 3

Universal Design in Oral Language Activities: Conversation and Instruction

Activity	Universal Design Examples
Use different modes for presenting information so that children have multiple ways to interact communicatively (Mason, Orkwis, & Scott, 2005).	Add gestures, sign language, or pictures to spoken language to accommodate visual, auditory, or cognitive needs. The use of books, audio- and videotapes, puppet shows, stories from individual children's lives, artwork, and the Internet provides multiple means of representation.
Encourage children to express ideas using many different modes so that children have multiple ways to respond (Mason et al., 2005).	Allow children to demonstrate their understanding of ideas through drama, artwork, dance, story-telling, conversation, or any other format children in your program find interesting.
	Record children's ideas via written language, audio, or video, providing alternate ways for children to interact with the material.
Positively reinforce all communication attempts so that all attempts at communicating are seen as valued contributions to the interaction (Sigafoos & Mirenda, 2002).	Explore curricular ideas and areas of interest and make real choices about daily routines in whatever expressive communication means is most comfortable and successful for each individual child spoken, signed, gestured, augmentative communication device such as a communication board or speech output device (Romski, Sevcik, & Forrest, 2001).

Conversations that help children learn about the world around them, that encourage concept development and vocabulary building, and that teach them how to actively engage in listening are invaluable to later learning success. Experiences that model the use of language to solve problems and negotiate solutions are essential to the future interactions in which all children will be engaged. In the vignette, Maia's teacher could have helped her decide in what activity she wanted to participate by exploring her interests and preferences, by pointing out which activities were currently in need of some extra helping hands, and by verbally guiding her thinking and choice making.

Table 3 provides several ideas for ways in which to immerse children in multiple ways of representing and interpreting information around them. This helps them approach ideas and activities from their preferred mode of understanding and demonstrate their knowledge in the ways best suited to their abilities.

Above all, talk! Playing with both adults and peers has significant effects on children's language development (Hart & Risley, 1995; Heroman & Jones, 2004). Play with sounds. Talk about what you are doing, the attributes of objects in the environment, and how you are feeling. Different cultures approach talking during unplanned moments during the day in different ways, but we know

that however it is done, talking and listening are important for all children.

Written Language

A critical factor influencing literacy development is children's early exposure to books. Children who have had early experience with books enter school with knowledge and skills that are important to learning to read. They know how books work and they know that the words on the page have meaning. They know that words are made up of sounds that fit together to make meaningful units, and they have experience with the types of behaviors expected when reading.

Early care and education professionals who use print awareness to facilitate language and literacy development design environments in which books and other print and written materials are available to children throughout the day for pleasure and as resources. They use books as a basis for interactions: looking at new words, expanding on ideas, and talking about the content.

Books are used not only for their content but also as vehicles to teach concepts of written language and its many forms and features (Justice & Ezell, 2004). Maia's teacher provided a wide variety of print materials about animals, such as books of all sizes, with print and without; pamphlets from the veterinarian; computer programs about animals; and charts and posters on the walls. Finally, on the book table, she displayed the stories the children had written and illustrated about the veterinarian's visit. In Table 4, you will find examples of ways in which teachers implementing a universally designed program can expose children to print materials.

Another way in which children can see and use print language in functional ways is through writing. Children who have repeated exposure to writing as an activity have an increased understanding of the way print works. Researchers show that teaching reading and writing together improves children's skills in both areas (Pikulski, 1994) and supports skills that are important to later reading (Dyson, 2001). Writing encourages children to break down the components of the words, furthering their phonemic awareness, understanding of letters, and word recognition. Reading improves children's writing, and teaching both together has been shown to improve both areas.

By integrating writing into the activities and routines of everyday classroom experiences, children can observe the many ways written language can convey information. Examples of ways to expand writing experiences by taking into account multiple ways of accessing and engaging in the task can be found in Table 5.

Table 4
Universal Design in Written Language Activities: Exposure to Print Material

Activity	Universal Design Examples
Provide books and other print materials that illustrate a variety of individual differences that allow children to see themselves represented in print (Sandall, Hemmeter, Smith, & McLean, 2005).	Ensure that the books available represent varied ability levels and health status and reflect economic, social, cultural, ethnic, and linguistic diversity so that no child feels stigmatized or excluded because of representations in the literature. Use print materials in displays such as posters or bulletin boards that illustrate a variety of personal characteristics and individual need. For example, make sure that children of color, children wearing glasses, or children using wheelchairs are depicted in nonstereotypical and appropriate ways.
Design contexts in which the many uses of print materials are embedded, encouraging their use for a wide variety of purposes (Heroman & Jones, 2004).	Label artwork, shelves, cubbies, and recipes in multiple ways, such as with written words, pictures, and Braille. Document class activities, such as the visit from the veterinarian in the vignette, with pictures, written stories, audio- and videotaped stories, and thank you letters. Compose a book with illustrations created by the class. Audiotape it for addition to the books on tape collection. Label the mural created by the class. Provide a range of print opportunities in all play areas. For example, in the post office, some children may be placing stickers on notes, whereas others may be reading the address and delivering mail (Justice & Pullen, 2003).
Illustrate written instructions or labels with alternative formats to assure that all children can access the information (Koppenhaver, Hendrix, & Williams, 2007).	Hand-washing routines can be written, presented in Braille, and illustrated with either photos or commercially available pictorial instructions (Grisham-Brown, Hemmeter, & Pretti-Frontczak, 2005). Labeled toy shelves can include tactile cues, such as raised, textured shapes as well as photos or hand-drawn illustrations.

Table 5
Universal Design in Writing Experiences: Writing Activities

Activity	Universal Design Examples
Plan writing experiences that are embedded into activities in meaningful ways and engage children on multiple levels of difficulty (Justice & Pullen, 2003).	Write and post ideas throughout the day: the questions you want to ask the veterinarian when she visits, grocery lists for the pizza project, the narrative for a piece of artwork. All demonstrate ways written language can be used meaningfully and provide models, at multiple levels of complexity, to meet many learners' needs. Lists of single words as in a grocery list (written, pictured, or tape recorded) represent one level of complexity, whereas writing questions and narratives are more difficult conceptually and linguistically (Hemmeter, McCollum, & Hsieh, 2005).
Accept all attempts at writing as valid (Barratt-Pugh, 2002).	Recognize that drawings and scribbles carry as meaningful a message as written words with invented spelling, as do words written with beautiful penmanship. By using scaffolding, teachers can move each child's written contributions to more complex levels. Computers, typewriters, and other electronic devices provide another route to expressive language in the written form for children whose visual or motor skills make writing with a pencil or marker more difficult (Romski, Sevcik, & Forrest, 2001).
Take into account varied physical needs and provide opportunities that are sensitive to the physical demands placed on individual children (Ruedel et al., 2005).	Materials that are available for writing are thick and thin, are large and small, and have grips to assist with proper grasp. Use magnetic letters as a vehicle for putting letters together to make words. Offer keyboard input devices to all children. Be sure switches or alternative input devices are available to further address physical needs.

give learners a variety of ways of acquiring information and knowledge, and multiple ways for them to demonstrate what they know. The manner in which we talk to children, the materials we choose, and the way we present them all contribute to quality early childhood education. As we physically design classrooms in which children are not segregated or stigmatized, it is equally important to develop programs that provide activities and routines in which all children are treated equitably; where early care and education professionals encourage language and literacy skills that value and respect all children's individual culture, language, and abilities; and where they use ongoing data to individualize and adapt practices to meet each child's changing needs (Sandall, Hemmeter, Smith, & McLean, 2005). In doing so, we provide all children with the opportunities necessary to develop the skills needed for later communicative success both in school and in life.

Conclusion

Early care and education professionals can ensure that all children access, engage in, and learn from their classroom experiences by exposing them to a range of oral and written language opportunities designed to provide multiple ways for them to approach learning, multiple means of representation to

References

Baridge, B., & Segal, M. (2004). Conversations in child care. *Zero to Three*, *25*(1), 16-22.

Barratt-Pugh, C. (2002). Children as writers. In L. Makin & C. J. Diaz (Eds.), *Literacies in early childhood: Changing views challenging practices* (pp. 93-116). Sydney, Australia: MacLennan and Petty.

Blagojevic, B., Twomey, D., & Labas, L. (2007). Universal design for learning: From the start. Retrieved May 27, 2008, from http://www.ccids.umaine.edu/resources/facts/facts6/udl.htm

Braunger, J., & Lewis, J. P. (1997). *Building a knowledge base in reading*. Portland, OR: Northwest Regional Educational Laboratory; Urbana, IL: National Council of Teachers of English; & Newark, DE: International Reading Association.

Center for Applied Special Technology. (2006). *Summary of universal design for learning concepts*. Retrieved January 25, 2007, from http://www.cast.org/research/index.html

Center for Universal Design. (1997). *About UD: Universal design principles*. Raleigh: North Carolina State University. Retrieved May 27, 2008, from http://design.ncsu.edu/cud/about_ud/udprinciplestext.htm

Conn-Powers, M., Cross, A. F., Traub, E. K., & Hutter-Pishgahi, L. (2006). The universal design of early education: Moving forward for all children. *Beyond the Journal: Young Children on the Web*. Retrieved January 25, 2007, from http://journal.naeyc.org/btj/200609/ConnPowersBTJ.pdf

Council for Exceptional Children. (Ed.). (2005). *Universal design for learning: A guide for teachers and education professionals*. Upper Saddle River, NJ: Pearson Prentice Hall.

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Baltimore: Brookes.

Dyson, A. H. (2001). Writing and children's symbolic repertoires: Development unhinged. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 126-141). New York: Guilford.

Grisham-Brown, J., Hemmeter, L. M., & Pretti-Frontczak, K. (2005). *Blended practices for teaching young children in inclusive settings*. Baltimore: Brookes.

Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore: Brookes.

Hemmeter, M. L., McCollum, J., & Hsieh, W. Y. (2005). Practical strategies for supporting emergent literacy in the preschool classroom. In E. Horn & H. Jones (Eds.), *Young Exceptional Children Monograph Series No 7: Supporting early literacy development in young children* (pp. 59-74). Longmont, CO: Sopris West.

Heroman, C., & Jones, C. (2004). *Literacy: The creative curriculum approach*. Washington, DC: Teaching Strategies.

Justice, L. M., & Ezell, H. (2004). Print referencing: An emergent literacy enhancement strategy and its clinical application. *Language, Speech and Hearing Services in Schools*, *35*, 185-193.

Justice, L. M., & Pullen, P. C. (2003). Promising interventions for promoting emergent literacy skills: Three evidence-based approaches. *Topics in Early Childhood Special Education*, *23*(3), 99-113.

Kimura, L. (2006). Music: The great organizer for early language and literacy. In S. E. Rosenkoetter & J. Knapp-Philo (Eds.), *Learning to read the world: Language and literacy in the first three years* (pp. 235-253). Washington, DC: Zero to Three.

Knapp-Philo, J., Notari-Syverson, A., & Stice, K. (2005). The tools of literacy for infants and toddlers. In E. Horn & H. Jones (Eds.), *Young Exceptional Children Monograph Series No 7: Supporting early literacy development in young children* (pp. 43-58). Longmont, CO: Sopris West.

Koppenhaver, D. A., Hendrix, M. P., & Williams, A. R. (2007). Toward evidence-based literacy interventions for children with severe and multiple disabilities. *Seminars in Speech and Language*, *28*(1), 79-89.

Lane, H. B., & Pullen, P. C. (2004). *Phonological awareness assessment and instruction: A sound beginning*. Needham Heights, MA: Allyn & Bacon.

Larney, R. (2002). The relationship between early language delay and later difficulties in literacy. *Early Child Development and Care*, *172*, 183-193.

Mason, C., Orkwis, R., & Scott, R. (2005). Instructional theories supporting universal design for learning: Teaching to individual learners. In Council for Exceptional Children (Ed.), *Universal design for learning: A guide for teachers and education professionals* (pp. 21-40). Upper Saddle River, NJ: Pearson Prentice Hall.

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Washington, DC: National Institute of Child Health and Human Development.

Neuman, S. B., Copple, C., & Bredekamp, S. (2000). *Learning to read and write: Developmentally appropriate practices for young children.* Washington, DC: National Association for the Education of Young Children.

Notari-Syverson, A., O'Connor, R. E., & Vadasy, P. (1998). *Ladders to literacy: A preschool activity book*. Baltimore: Brookes.

Pikulski, J. J. (1994). Preventing reading failure: A review of five effective programs. *Reading Teacher*, *48*(1), 30-39.

Romski, M. A., Sevcik, R. A., & Forrest, S. (2001). Assistive technology and augmentative and alternative communication in inclusive early childhood programs. In M. J. Guralnick (Ed.), *Early childhood inclusion: Focus on change* (pp. 465-479). Baltimore: Brookes.

Ruedel, K., Fulcher, A., Diamond, C., O'Cummings, M., Jackson, S., & McInerney, M. (2005). Assistive technology and universal design for learning in content areas. In Council for Exceptional Children (Ed.), *Universal design for learning: A guide for teachers and education professionals* (pp. 41-50). Upper Saddle River, NJ: Pearson Prentice Hall.

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

Sigafoos, J., & Mirenda, P. (2002). Strengthening communicative behaviors for gaining access to desired items and activities. In J. Reichle, D. Beukelman, & J. Light (Eds.), *Exemplary practices for beginning communicators: Implications for AAC* (pp. 123-156). Baltimore: Brookes.

Snow, C., Burns, M. S., & Griffen, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.