# Talk to Me, Baby!

## Supporting Language Development in the First 3 Years

#### BETTY BARDIGE

A.L. Mailman Family Foundation, White Plains, NY

#### M. KORI BARDIGE

Abilities Network, Towson, MD

abies come into the world primed to communicate with adults, who are primed to communicate with them. Their survival and well-being depend on their ability to connect with their caregivers. From babyhood into childhood and beyond, language plays an increasingly important role. Language is central to thinking, social exchange, and sense of self. We use words to reason and plan, exchange information and opinions, and make our wishes known. Language lets us express feelings, wheedle and negotiate, and remind ourselves how to behave. We use words to learn—to ask questions, hypothesize,

organize information, and draw conclusions. We also play with words. We tell jokes, sing, make rhymes and other pleasing patterns, retell true stories, and spin imaginary tales. In just 3 or 4 short years, most of us learn enough language to use words with specificity and zest in all of these ways. Many of us do it in more than one language.

Language is also central to culture. Not only the words we use, but how and when we learn and use them, our nonverbal communication patterns, and the responses we expect, all reflect-and carry-culture. As our society becomes more diverse, early childhood professionals are becoming increasingly aware of the need for strategies that support the language and communication skills of children from many cultures and languages. It is important for early care and education providers to be sensitive to the gaps that might exist between staff members' beliefs, practices, and goals for children and those of the families participating in the program. (The effect of culture on language development is further explored by Jones & Lorenzo-Hubert, this issue, p. 11.)

## The Miracle of Language

Almost all children learn to talk, suggesting that language acquisition is a relatively resilient process, although they do not all learn to talk well, suggesting that language acquisition includes some more fragile elements.

—National Research Council and Institute of Medicine (2000, p. 126) A ROUND THE WORLD, babies in widely varying cultures and circumstances tune in to human voices and nonverbal communications; build relationships through responsive interactions; coo and babble; attach meaning to words; use single words to label, inquire, demand, and insist; put words together in novel combinations; and master the key elements of grammar in a similar pattern and on a similar timetable. Parents and caregivers engage babies in relationship-building communications and speak to them in ways that build language.

Only the most extreme circumstances of environmental, relationship, or language deprivation or of biological impairment prevent children from learning the basics of their first language (or languages)-the core vocabulary of everyday needs and the rules for forming words, sentences, and questions. But differences in the quantity, quality, sources, and variety of language inputs and in expectations and opportunities for conversational participation translate into ongoing differences in the richness of children's vocabularies, their command of specialized linguistic forms, the skill with which they "use their words," and how easily and well they will learn to read.

Language acquisition begins in the last trimester of pregnancy, when the unborn child hears his mother's voice and becomes familiar with the sound patterns of her language. Newborns key in to familiar voices and cadences. Young infants communicate with their parents and other caregivers through cries, body movements, eye contact, and facial expressions, in an increasingly attuned "dance" of mutually responsive interaction, breaks, and reengagement.

Starting at about 4 months, babies babble the sounds of languages they hear and of languages they have never heard; babies who cannot hear or make sounds "babble" with their hands. By about 9 months, the babbles of monolingual babies are largely restricted to the sounds of their native language. For babies hearing two or more languages, the sound window stays open longer. They distinguish sounds whose differences are no longer salient to monolingual speakers and maintain a larger repertoire of babbled sounds as they begin to use meaningful words and phrases. During this period, children move from responding to tone of voice and cadence to understanding key words and using gestures and sounds with communicative intent.

Most children speak (or sign) their first word sometime between 8 and 18 months and amass vocabularies of at least 50 words and

#### Abstract

In their first few years, almost all children learn at least one language, though not equally well. Differences in the quantity, quality, sources, and variety of language inputs and conversation opportunities have a longlasting effect. This article provides an overview of early language development and explains how talking with babies promotes rich language acquisition. The authors offer strategies for supporting language at each stage of development and for recognizing and responding to signs of potential disruption or delay.

stock phrases by their second birthdays. During this time, they show increasing understanding of language-following simple directions and participating in conversations with gestures, actions, single words, or babble-talk "sentences."

The real miracle occurs when toddlers put words together. With "telegraphic" sentences of two or three words (Milk all gone?), they express observations, questions, feelings, and demands, carry on conversations, and relate simple stories. By 31/2 years, almost all children speak in simple sentences with patterns that approximate the grammar of their language(s) or dialect(s), although most will still make some predictable grammatical errors.

From a neuroscientist's perspective, language acquisition involves the development and interconnection of specialized circuits or systems: for processing sounds, interpreting visual input, building concepts, coordinating oral movements, attaching meaning to words, and forming words and sentences grammatically. Circuits are built through interaction with people and with the environment; ageappropriate experiences are essential for optimizing their architecture (National Scientific Council on the Developing Child, 2008). As the brain matures and develops, complex circuits build on simpler ones. The critical circuits for receptive language and speech production are built in the first 3 years, with the peak of synapse density occurring at about 9 months. Less used synapses are pruned as processing becomes increasingly automatic.

Children can learn languages later-even as adults-building on what they already know about the world and about language. Still, mastery of subtle but meaningful sound distinctions, accentless speech, and nuances of grammar and usage may be incomplete, especially after puberty. Whereas for native speakers, language processing activates circuits in the left hemisphere, for sequential bilinguals processing their second language will likely involve right hemisphere areas as well (Kim, Belkin, Lee, & Hirsch, 1997). Researchers are just beginning to understand the full benefits of being bi- or multilingual for cultural identity, cognitive abilities, and long-term advantages in both personal and career endeavors. (See Genesee, this issue, p. 17, regarding dual language acquisition.)

## The Power of Play Talk

N A LANDMARK STUDY of language development conducted in the 1980s, Betty Hart and Todd Risley (1995, 1999) observed 42 children born in the Kansas City area. Beginning when the children were 3 months old and continuing until they were 3 years old, researchers made monthly home visits and recorded everything said to or



Young infants use facial expressions to communicate.

by the child during the observation hour. Despite the study's small and culturally restricted sample, it highlighted "meaningful differences" in early linguistic and relationship-building experiences:

- · Family patterns of engagement and talkativeness were consistent over time: Parents who engaged in more talking with infants talked more with toddlers; those who spoke less or used fewer encouraging words continued these patterns.
- · Differences among families were huge and compounded over time. The researchers extrapolated that 3-yearolds in the most verbal families would have heard 33 million words, while those in the least talkative families would have heard only 10 million.
- · Families were alike in the amount of directive language or "business talk" (e.g., initiations, commands, prohibitions) that they used to manage their children; the striking differences were in the amount of additional talkconversation, running commentary, storytelling, wordplay, chitchat, explanation, and thinking aloud.
- . In all families, the "extra talk" was far richer than the business talk. It included longer and more complex sentences and narratives, a greater variety of words (including more rare words), and more descriptive language. It was also richer in information and ideas, and in emotional supports such as affirmation, subtle guidance, responsiveness, and acknowledgment of feelings.

The study showed that toddlers' patterns of talk came to match those of their parents. In more talkative families, toddlers did more talking, and their talk was likely to be richer in vocabulary, description, information, and ideas.

Most striking of all were the differences in child outcomes and their strong connection to early language experience. By age 3, the children who had heard 33 million words with 500,000 affirmations had Stanford-Binet IQ scores approximately 25 points higher than those of the children who had heard only 10 million words and fewer than 60,000 affirmations. These differences persisted. Children's scores on standard vocabulary, language, and academic tests at age 9 years correlated strongly with their vocabulary use at 3 years and even more strongly with the language input they had received from their parents in those early years.

The association of differences in child vocabulary growth with social class in Hart and Risley's (1995) restricted sample has been widely publicized. However, the more powerful association in the study was between the amount of "non-business conversation and commentary" children heard as infants and toddlers and their later vocabulary development. In Risley and Hart's (2006) words, "Parental talkativeness to babies accounted for all the correlation that existed between socio-economic status (SES)-and/or raceand the verbal intellectual accomplishments of these American children (p. 86)."

These differences have lasting import. Toddlers rely on adults as their primary conversation partners. But by age 3, children's talk is as likely to be with other children and



Around 4 months, babies begin to babble the sounds of all languages.

imaginary friends. In preschool, those who use words well have ongoing advantages. They have interesting story ideas and can keep pretend play conversations going. Frequently chosen as playmates, they get lots of opportunities to talk with and learn from peers. Able to talk themselves through problems, explain their feelings, and negotiate conflicts, they rarely respond to challenges with aggression or meltdowns. Teachers respond to their impressive vocabularies and nuanced questions with more opportunities for in-depth learning.

Similarly, children who enter kindergarten with vocabularies of more than 6,000 words—and all of the concept knowledge and wordplay experiences they represent—have a working knowledge of word construction and word meanings that prepares them well for reading. Once they can read independently, reading will become a major source of new words. As their vocabularies grow, so too will their ability to understand and enjoy more complex texts, creating a virtuous circle. Thus, it comes as no surprise that vocabulary at school entry strongly predicts 10th-grade reading comprehension (Snow, Porche, Tabors, & Harris, 2007).

## Supporting Early Language Development

POR CHILDREN LEARNING to talk, every-body matters. While a mother's talk provides strong support for rich language acquisition, a father's use of varied vocabulary in conversations with the child can make an additional contribution (Pancsofar & Vernon-Peagans, 2006). Older siblings and extended family play key roles as well, especially for children learning more

than one language. When family talk is rich—and especially when it isn't—the quality of talk in child care can still make a difference in the speed at which children attain linguistic milestones and in the richness of their vocabularies (Vernon-Feagans, Hurley, Yont, Wamboldt, & Kolak, 2007).

Book sharing is one of the best ways to enrich talk with babies. Whether you focus on the pictures, read the words, or tell your own version of the story, books provide interesting things to talk about. Infants tune in to the cadences of literary language and enjoy seeing pictures of other babies, familiar objects, and daily routines. Toddlers like to get into the act—pointing to and naming pictures, imitating sounds, and manipulating pages as they "help" tell the story. For children who have begun to put words together, books introduce rich vocabulary, exotic sentence structures, and intriguing concepts, and serve as spring-boards for wide-ranging conversation.

## Book sharing is one of the best ways to enrich talk with babies.

Talking with a baby who is too young to understand language may seem counterintuitive, but it also comes naturally. Babies reach out to adults and respond to language. Adults the world over tend to talk to babies faceto-face, in a high-pitched, singsong, repetitive manner, with elongated vowels, engaging intonation, and emphasis on key words. Often referred to as "parentese," this way of speaking gets babies' attention and helps them tune in to language. Their responses delight care-

givers and keep them talking. Similarly, when babies show fatigue or distress, adults are likely to respond with rhythmic murmuring sounds that have a calming effect.

The things that mothers, fathers, and other caregivers tend to do naturally support language development, but this support can be enhanced by intentional use of particular strategies:

- Read the baby's cues, and adjust the intensity and modality of interaction accordingly. Interaction is exciting for young babies (and essential for brain development), but too much can suddenly become stressful. Some babies are hypersensitive to sounds, touch, or position changes; some respond to either talking or eye contact but are overwhelmed by both at once. Babies give moment-to-moment signals of their readiness to engage or their need for a break.
- Use your voice to soothe or arouse a young infant and to provide security. Sing lullabies and silly songs in your home language. Help babies learn to associate particular songs and rhymes with playing, calming down, and going to sleep.
- Engage in frequent back-and-forth baby talk conversations. As the baby grows, introduce silly sounds that evoke a smile or laugh, knee-bouncing rhymes with a drop or lift that she can learn to anticipate, and a variety of peek-a-boo games.
- Use your voice to encourage a mobile infant's exploration and to provide a secure base. Celebrate the baby's efforts and accomplishments with words of encouragement and congratulation.
   Tell him when a change is about to occur. As his play takes him further from your side, use words to let him know that you are still with him.
- Let a baby listen to lots of different sounds: music, rustling leaves, a vacuum or washing machine (some babies find this especially soothing), bells, squeakers, and rattles. Talk about the sounds and the things that make them. Imitate a sound and watch the baby's reaction.
- Play babble games. Imitate a baby's babbling and enjoy her reaction. Catch a baby's attention, babble one consonant sound, and see if she will imitate you. Answer a baby's babbles by repeating them and then adding a new sound.
- Use a baby's sounds to get him "on your wavelength." As you talk to him (or even to someone else while looking at him), punctuate your conversation with his favorite sounds.

 Talk a lot. Babies need to hear real language as well as baby talk. Talk about what you are doing, what the baby is doing, what happened yesterday, and what you want to remember to do today. Make language a part of all baby care activities.

#### Helping Toddlers Learn and Say Words

DOWARD THE END of their first year, babies learn to parse the speech stream into discrete units and attach meaning to words and phrases. Adults help them out by labeling things that the child is focused on, by speaking parentese, and by sharing songs, rhymes, and ritual exchanges that pair words with actions. In a 2006 study by Pruden, Hirsh-Pasek, Golinkoff, and Hennon, 10-month olds who were not yet saying words learned an invented name for a novel object after just two presentations—as long as the researchers used parentese to name the object that the child was looking at.

In some Asian cultures, parents use a special language with young toddlers that is considered easier for the baby to say. In other groups, children's early attempts to pronounce family members' names and other common words may become part of the family's private language. In many families, 1-year-olds learn gestures, such as waving bye-bye or giving a high five, that help them communicate with new people before they can use words. The deliberate teaching of "baby signs" to hearing infants who have begun to communicate with symbolic gestures (Goodwyn, Acredolo, & Brown, 2000) is a new twist on these traditional languagepriming practices.

A child's first word is an exciting milestone. It often has the power of a whole sentence and can take on a variety of meanings depending on intonation and context. Once children discover the power of words, they become eager for more. A word meaning "What's that?" is likely to be a frequently used part of a child's early repertoire.

Rich language input and responsive, playful relationships during the preverbal and one-word stages build a reservoir of linguistic and conceptual knowledge that fuels the toddler's language explosion. The more that parents and caregivers talk, engage, label, and support during this period, the faster a child's vocabulary is likely to grow as he comes to rely on language. The following strategies help build toddler vocabulary:

Use the "follow the CAR" strategy. Follow the child's lead. Focus on what she is looking at, asking for, playing with, or trying to do. Offer a Comment, Ask a question, or Respond by turning her verbal or nonverbal communication

into a full sentence or adding a bit more information (California Institute on Human Services, Sonoma State University, 2003).

- As you interact with a toddler, respond empathically to his emotional tenor. If he's excited by a game, play your part with exaggerated excitement. If he's upset, fussy, or quietly reflective, a gentle, soothing voice is more likely to engage his attention.
- Accompany your words with gestures a child can copy. Give a child words for her gestures.
- Use specific, "grown-up" words in contexts that make their meaning clear.
- Respond to anything that sounds like a word and is used with communicative intent.
   When a child who hears a plane overhead points to the sky and says "ane," you might answer by saying, "I see the PLANE. The plane is high up in the sky."
   Give a child time to repeat a new word.
- Respond to the toddler's efforts to keep the conversation going. Whether she uses babble-talk, grunts, gestures, signs, or words, give her words for what she seems to be trying to say. Pause to see whether she will try to repeat a word, but don't force the issue.
- Take breaks and breathers. Give toddlers time to take in information and frame a response.
- Use language to help toddlers interpret
  their world and to prepare them for transitions. When you see a puzzled or fearful
  expression, find a simple way to explain
  what is going on or what may happen.
  When you pull the bathtub plug, explain
  that the water is going down through
  the pipe, all the way under the ground.
- Talk about a recent event that was special for the toddler. Use props or pictures to help her remember. Help her retell the story by asking questions, expanding her contributions, and filling in the blanks.
- Sing favorite songs frequently and encourage toddlers to join in. Listen for the point when gibberish turns into words. Pause before a key word to let a toddler fill it in by himself.
- Provide children with lots of chances to practice words they know. Read a toddler's favorite book over and over, labeling pictures together. Find similar items in a magazine or catalog.
- Teach words that help toddlers stay safe, manage strong emotions, and control their behavior.
- Keep TV and videos to a minimum. No matter how cleverly a TV show or video engages the child, it can't respond to her communications and expand her language. Toddler TV exposure is



Even very young infants can learn signs.

associated with attention problems at age 7, and more viewing time increases the risk (Christakis, Zimmerman, DiGiuseppe, & McCarty, 2004). A 2007 study by Zimmerman, Christakis, and Meltzoff found that increased viewing of baby "brain-building" videos between 8 and 16 months was associated with significant decreases in parent-reported receptive vocabulary.

 Talk—and listen—a lot. Talk about anything that interests you or the child.

Rich language input and responsive, playful relationships during the preverbal and one-word stages build a reservoir of linguistic and conceptual knowledge that fuels the toddler's language explosion.

## Talking With Older Toddlers

"We're going to get a lot of language out of this!" the teacher announces to her colleagues as she pours a medley of cooked pasta into the sensory table. "Wanna feel something slimy?" she asks the toddlers.

HE LEAP INTO language occurs for most children between 15 and 20 months, though the range for children considered typically developing is



Playing games with nursery rhymes can help teach children the words for different body parts.

wide. In what is often called "the word spurt," a child who took 6 months to learn 50 words is now learning 5 to 10 a day. Soon, single-word sentences give way to original word combinations. Language becomes the child's dominant mode of communication, and she uses it to assert her emerging identity: making comments, expressing choices and opinions, asking what, when, where, and why questions, and telling real and made-up stories.

At this point, language assumes a central role in learning. Words for categories and for time, place, size, and order relationships support toddlers' growing knowledge of how the world works. Explanations, anticipatory guidance, and a growing vocabulary of feelings help them cope with emotional challenges. Songs, rhymes, storybooks, and verbal humor teach information and concepts as they entertain. Shared reminiscences help children recall and make sense of past events, especially when parents use a "highly elaborative" style-adding to the child's story and asking about his feelings, opinions, and understanding as well as memories (Fivush, Haden, & Reese, 2006).

As their language takes off, children crave new words. The basic recipe for enriching language is simple: warm relationships, interesting things to talk about, and interested people to talk with. Every day brings surprises, as toddlers discover the power of words and the fun of wordplay.

Here are some tips for talking with older toddlers in ways that support their leaping language and its accompanying advances in social-emotional, creative, and cognitive development (Bardige, in press):

- Watch a toddler at play, wait to see what she will do, and ask yourself what she is trying to accomplish. What story is she telling? What is she trying to discover or figure out? What is she trying to communicate by her behavior?
- Find a way to enter a child's play world.
   You might play beside her and then link your play to hers, make a comment or ask a question about what she is doing, or talk to or for a toy that she has turned into a pretend companion.
- Name objects and parts of objects and explain their uses and relationships. "I put the key in the ignition and turn it to start the car."
- Respond to what the child meant to say, rather than to how he said it. Expand telegraphic speech into natural sounding sentences, but don't just repeat what the child is saying. Add a bit more to spark the child's response. Don't correct grammar or pronunciation.

- Remember that even 2-year-olds who can use full sentences may still be learning how to carry on conversations. Be flexible and patient when a child responds with silence, abruptly changes the subject, or chatters on without regard to your responses.
- Use specific, descriptive language, including some unusual, interesting words, onomatopoeic words, and other words that are fun to repeat. Little children love big words.
- Ask questions that offer choices, support problem solving, solicit ideas, extend pretend play, or prompt investigation.
   Do less quizzing and more open-ended and reflective questioning (see sidebar The Questions We Ask Young Children).
- Use fanciful language and playful approaches to add interest to ordinary routines. "Hey, hand. Are you hiding in that sleeve? Come out, come out wherever you are!"
- Wonder with children. "Do you think an animal might live in this hole?" Think out loud.
- Don't monopolize the conversation. Give the child lots of chances to chime in, and stop when she loses interest.
- Talk and listen–a lot. Use the language(s) in which you are fully fluent. Support the child's home language with books, songs, and ritual exchanges, and especially with words of affirmation and endearment.

The basic recipe for enriching language is simple: warm relationships, interesting things to talk about, and interested people to talk with.

## Developmental Disruptions

They may have a temporary or permanent hearing loss, oral-motor weakness, or

## THE QUESTIONS WE ASK YOUNG CHILDREN

Questions can be a powerful tool for expanding language learning, especially when they are open-ended or reflective.

Quizzing: Asking for known right answers:

"What color is this block?" or "Give me the red block, please."

Open-Ended Questioning: Asking for opinions, descriptions, predictions, choices, and other unknown information that the child can supply:

"What are you building?" or "Would you like to use the red block or the yellow one?"

**Reflective Questioning:** Asking questions related to a child's activity that provide insight into his thoughts, expand his play, or prompt further exploration:

"I see you are building a tall tower. How you will help it to balance?" or "Where will the people go in your house?"

verbal apraxia. Some children are relatively late to achieve milestones in many domains; others put so much energy into one realm that they have little left over for others. Some children understand language but still rely on gestures and grunts for communication. For other children, delayed speech may indicate that difficulties in relating, communicating, or language processing should be assessed by an early intervention professional.

A comprehensive communication behavior checklist that looks at expression of emotion; use of eye gaze, gestures, and sounds; initiation of communication; and pretending as well as use and understanding of words can help parents and caregivers decide whether further evaluation is warranted (see sidebar, When to Seek Help). The Communication and Symbolic Behavior Scales Developmental Profile Infant/Toddler Checklist (Wetherby & Prizant, 2001) and Ages and Stages Questionnaires (Bricker & Squires, 1999) are available in several languages. Because language is key to so much of later development, it's best to err on the side of caution when

#### WHEN TO SEEK HELP

Consider referring a child for further assessment if you notice the following:

- Difficulties with attachment
- \* Little responsiveness to own name, sounds, language, or interactive play in first 6-12 months
- Limited vocalization or excessive oral—motor sensitivity, weakness, drooting, or feeding problems continuing beyond 6 months
- Little or unvaried babbling by 12 months; no words, verbal imitations, or expressive jargon by 18 months
- · Little use or understanding of conventional gestures (e.g., shaking head, waving) by 15 months
- Little understanding of words and verbal directions by 18 months
- . Little symbolic pretend or constructive play by 18 months
- . Little use of words or signs at 18-24 months
- Communicating primarily through grunts and actions (e.g., pulling someone by the hand) after 24 months
- Very limited vocabulary or little use of word combinations at age 2–3 years
- Continuing difficulty responding to communications and participating in turn-taking games
   (e.g., peek-a-boo or catch) or conversations
- Continuing lack of interest in books, stories, songs, verbal humor, and storytelling
- Slow development of speech combined with difficulties in other communication areas

#### Learn More

The following resources are especially suitable for sharing with families and practitioners and for supporting community efforts.

#### BOOKS

Let's talk . . . it makes a difference! program manual: An innovative approach to supporting children's literacy development Agenda for Children (2008). Cambridge, MA: City of Cambridge.

Poems to learn to read by: Bullding literacy with love. B. S. Bardige & M. M. Segal (2005) Washington, DC: ZERO TO THREE.

Soy bilingue: Language, culture, & young Latino children

S. Cronin & C. S. Masso (2003). Seattle, WA: Center for Linguistic and Cultural Democracy.

Promoting social and emotional health through early literacy [Manual with tip sheets and resources for parents and providers]

Parent, Professional Advocacy League,

M-POWER, Inc., & The Massachusetts Department of Mental Health (2006)

Boston: Massachusetts Department of Education Family Literacy Consortium

Babies & books: A joyous beginning C. Quigg (2002) Decatur, IL: BabyTALK Learning games [Series of booklets with language games for children from birth to 5 years, in English & Spanish] and Learning games manual for family childcare [also available in Spanish]

J. Sparling (2007)

Hillsborough, NC: MindNurture (Teaching Strategies)

#### MULTIMEDIA:

From Iuliabies to literacy [Multimedia kit with workshop facilitator's guide, video segments, PowerPoint presentations, & handout masters] Family Communications. (2005) Pittsburgh, PA: Author

Celebrating language & literacy with infants, toddlers, and twos [DVD] J. Knapp-Philo (2007) Bethesda, MD: Teaching Strategies.

Words for the future/Creando el future [Multimedia kit with manual, activity cards, poster, story handouts, and CD-ROM] National Latino Children's Institute (2007)

San Antonio, TX: Author

TalkAbility: People skills for verbal children on the autism spectrum—a guide for parents [Guidebook & DVD] F. Sussman (2006) Toronto, Ontario, Canada: Hanen Centre

Learning language and loving it: A guide to promoting children's social, language and literacy development [Guidebook & DVD] E. Weitzman & J. Greenber (2002)

E. Weitzman & J. Greenber (2002) Toronto, Ontario, Canada: Hanen Centre A world full of language: Supporting English language learners [Video] WestEd (2006)

Sacramento: California Department of Education

#### WEB SITES

Born Learning www.bornlearning.org

An innovative public engagement campaign that helps parents, caregivers, and communities create quality early learning opportunities for young children. Includes the Your Child @ series of parent tip sheets for supporting language, social-emotional connections, and learning.

#### First Signs

www.firstsigns.org

Tools to help parents and caregivers recognize early signs of potential autism spectrum disorders, or other developmental disorders and delays, and seek appropriate evaluation and intervention.

Teach More/Love More
www.teachmorelovemore.org
Information for parents and caregivers on child
health and development, supporting language and
literacy, and everyday fun activities; in English,
Spanish, or Haitian Kreyol.

Washington Learning Systems
www.walearning.com/Parent-Infant.html
Free reproducible language and early literacy activities in English and Spanish.

concerns arise. It can be difficult to distinguish transient language delays from problems likely to persist, and earlier intervention is likely to be more effective (National Research Council & Institute of Medicine, 2000).

These strategies provide additional support for children with delays or challenges:

- Offer "communication temptations." Place
   a highly desired item in view but out of
   reach or in a clear container. When the
   child requests it using any form of communication, name the object as you give
   it to him.
- Mimic a child's play and narrate the actions. "I'm racing my car down the track. Wow, my car is fast!" Add an element that expands the play, such as a stop sign at the bottom of the ramp, and encourage the child to add one more step to her play.
- Teach a child to use the Picture Exchange Communication System (www.pecs.com).
   For example, when Jaylin, who doesn't speak, wants a cracker, she gives her mom a picture. Mimicking a verbal exchange, Mom speaks for Jaylin, saying, "I want a cracker." She hands Jaylin the cracker, saying, "Here's the cracker you asked for."

- Teach play scripts so the child can join peers in pretend play. For example, if his peers are making "cakes," teach him to get a bowl, add "flour," stir it, bake it, and offer a peer a piece.
- Reinforce all attempts to communicate.
   Expand them with your own gestures and words.

## Preventing the Language Gap

Providing RICH LANGUAGE experience during the first 3 or 4 years can shift the odds for children who might otherwise be at risk of diminished educational success. In longitudinal studies, programs such as the Abecedarian Project, the Parent-Child Home Program, AVANCE, and Parents as Teachers have eliminated or substantially reduced gaps between poor and more economically advantaged children in skills at school entry, reading achievement, and/or rates of high school completion and college entry (Bardige, 2005; Levenstein & Levenstein, 2008).

Newer programs such as Early Head Start, Reach Out and Read, StoryQUEST, Motheread, and Bringing Baby Home are showing similar promise: helping mothers and fathers develop language-supporting habits, with resultant gains in children's language development. Professional education efforts focused on child care quality or specifically on language-including the Program for Infant/Toddler Care and ZERO TO THREE's Cradling Literacyare helping caregivers to do more effective talking with children under 3. Community efforts such as Baby TALK in Decatur, IL, Agenda for Children in Cambridge, MA, Teach More/Love More in Miami-Dade County, FL, and Boston's Thrive in Five are spreading the word about the importance of talk and weaving a web of support for young families. If we work together to align public policies with children's needs, we can give every child a wealth of words.

BETTY BARDIGE, EdD, is vice president of the A.L. Mailman Family Foundation and an early childhood author and consultant. Her books include At a Loss for Words, Building Literacy With Love, and the forthcoming Talk to Me, Baby!

M. Kori Bardige, MSEd, is a curriculum coordinator at the Abilities Network's Project ACT. An experienced teacher of typically developing young children and those with autism spectrum disorders and other communication challenges, she provides training and individual consultation to professionals working with infants, toddlers, preschoolers, and families.

## References

BARDIGE, B. (2005). At a loss for words: How America is failing our children and what we can do about it. Philadelphia: Temple University Press.

Bardige, B. (in press). Talk to me, baby!: How you can support young children's language development. Baltimore: Brookes.

BRICKER, D., & SQUIRES, J. (1999). Ages and Stages Questionaires: A Parent-Completed, Child-Monitoring System, Second Edition. Baltimore: Brookes.

California Institute on Human Services, Sonoma State University. (2003). Language is the key: Follow the car resource guide. Sonoma, CA: National Head Start Family Literacy Center.

CHRISTAKIS, D. A., ZIMMERMAN, F. J., DIGIUSEPPE, D. L., & McCarty, C. A. (2004). Early television exposure and subsequent attentional problems in children. *Pediatrics*, 113, 708–713.

FIVUSH, R., HADEN, C. A., & REESE, E. (2006).
Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. Child Development, 77, 1568–1588.

GENESEE, F. (2008). Early dual language learning. Zero to Three, 29(1), 17-23.

GOODWYN, S. W., AGREDOLO, L. P., & BROWN, C. (2000). Impact of symbolic gesturing on early language development. Journal of Nonverbal Behavior, 24, 81–103.

HABT, B., & RISLEY, T. (1995). Meaningful differences in the everyday experiences of young American children. Baltimore: Brookes.

HART, B., & RISLEY, T. (1999). The social world of children learning to talk. Baltimore: Brookes.

JONES, W., & LORENZO-HUBERT, L (2008). The relationships between language and culture. Zero to Three, 29(1), 11–16.

KIM, K. H. S., BELKIN, N. R., LEF, K. H., & HIRSCH, J. (1997). Distinct cortical areas associated with native and second languages. *Nature*, 388, 171–174.

Levenstein, P., & Levenstein, S. (2008). Messages from home: The parent-child home program for overcoming educational disadvantage (Rev. ed.). Philadelphia: Temple University Press,

NATIONAL RESEARCH COUNCIL & INSTITUTE OF
MEDICINE. (2000). Prom neurons to neighborhoods: The science of early childhood development.
J. P. Shonkoff & D. A. Phillips (Eds.). Washington,
DC: National Academies Press.

NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOP-ING CHILD. (2008). The timing and quality of early experiences combine to shape brain architecture (Working Paper No. 5). Cambridge, MA: Author.

Pancsofar, N., & Vernon-Feagans, L. (2006).

Mother and father language input to young children: Contributions to later language development.

opment. Journal of Applied Developmental Psychology, 27, 571–587.

PRUDEN, S. M., HIRSH-PASER, K., GOLINKOFF, R. M., & HENNON, E. A. (2006). The birth of words: Ten-month-olds learn words through perceptual salience, Child Development, 77, 266–280.

RISLEY, T., & HART, B. (2006). Promoting early language development. In N. F. Watt, C. Ayoub, R. H. Bradley, J. E. Puma, & W. A. LeBoeuf (Vol. Eds.), The crisis in youth mental health: Critical issues and effective programs. Vol. 4. Early intervention programs and policies (pp. 83–88). Westport, CT: Praeger.

Snow, C. E., Porche, M. V., Tabors, P. O., & Harris, S. R. (2007). Is literacy enough? Baltimore: Brookes.

Vernon-Feagans, L., Hurley, M. M., Yont, K. M., Wamboldt, P. M., & Kolar, A. (2007). Quality of childcare and otitis media: Relationship to children's language during naturalistic interactions at 18, 24, and 36 months. Journal of Applied Developmental Psychology, 28, 115–133.

WETHERBY, A., & PRIZANT, B. (2001). Communication and Symbolic Behavior Scales Developmental Profile Infant Toddler Checklist. Baltimore: Brookes.

ZIMMERMAN, F., CHRISTAKIS, D., & MELTZOFF, A. N. (2007). Associations between media viewing and language development in children under age 2 years. *Pediatrics*, 151, 364–368.