

# Building Baby's Brain: Learning Language

The University of Georgia/College of Family and Consumer Sciences

Have you ever tried to learn a foreign language? Did you struggle with Spanish in high school? If you're like most adults, learning a new language is a very tough job. Millions of high school and college students study foreign languages every year, yet few ever become fluent.

But the average baby learns a new language relatively easily. Within a few years, most children can understand what others say and can express themselves fairly well.

## Prime Time for Language Learning

Why can babies learn language so much more easily than adolescents or adults? Part of the answer has to do with differences in our brains.

The baby's brain is actually "primed" to learn language. Babies are born with billions of brain cells, including millions that will control language. During the first years of life, the brain cells connect with other cells to form complex pathways. When babies hear their native language spoken, the language connections become stronger.

Most of the brain's language connections are well-established by about age 10. After age 10, learning a new language is harder because your brain is "wired" for the language you learned first.

## Learning Is Language-Specific

Newborn babies are equipped to hear the sounds of many different languages, not just the language their

parents speak. Three-month-olds can distinguish several hundred sounds, many more than are present in any native language. But as the baby hears people speak a certain language, the brain strengthens connections for that language. The connections for other languages become weaker and may eventually wither. When we try to learn a foreign language as adults, we must fit the new sounds into the language connections already in our brain – connections that are wired specifically to understand and speak English.

By adulthood, most people have trouble distinguishing sounds that are not in their languages. For example, people who learn Japanese as children often confuse the "r" and "l" sounds of English, pronouncing "lake" as "rake," because the "l" and "r" sounds are not different in Japanese.

**"The baby's brain  
is actually 'primed'  
to learn language."**

## Adults Make Learning Language Easier

Adults make learning language easier for babies. Most adults naturally talk differently to babies than to

adults. We talk more slowly, raise the pitch of our voice, and exaggerate the accents in words. These changes make it easier for babies to hear our language and recognize the patterns of our words. Even children as young as 4 years old make some of these changes in their speech when talking to a baby.

Adults also tend to repeat words and phrases when they talk to babies. Repetition helps babies learn to understand speech and strengthens the language connections in the brain.

Supported by the University of Georgia College of Family and Consumer Sciences  
"Strengthening Georgia Families and Communities" Initiative.



## What Can You Do?

Babies learn language by hearing other people speak around them and by practicing those sounds. Here are some ways you can help your baby learn language:

- **Talk to your baby!** This is the most important step you can take. Some parents feel silly talking to a baby who can't talk back. But your baby is listening to your speech and learning from it even before he can answer your questions.
- **Play language "games" with your baby.** When she makes a sound, repeat it and add a new sound. Take turns "talking" with your baby. Smile at her. Sing to her. Recite nursery rhymes. Play Pat-a-cake. Interacting with you is one of the best ways for a baby to experience language.
- **Read aloud to your baby.** Even before he can understand the story, he hears the sounds. And sharing a book helps build a lifelong love of reading.
- **Don't use the TV as a substitute for you.** Babies need interaction with real, live people to learn language. "Canned" TV sounds aren't the same.
- **Have your baby's hearing checked.** Babies with hearing problems don't get the language experience they need. If your baby has a hearing loss, she may need a specialist's help. The earlier hearing problems are identified and corrected, the better.
- **Teach multiple languages early.** If you want your child to speak more than one language, start early! Children growing up in bilingual homes often speak both languages fluently.

## Selected References:

- Fernald, A., & Mazzei, C. (1991). Prosody and focus in speech to infants and adults. *Developmental Psychology, 27*, 209 - 221.
- Jensen, E. (1998). *Teaching with the brain in mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Shore, R. (1997). *Rethinking the brain: New insights into early development*. New York: Families and Work Institute.
- Viadero, D. (1996). Brain trust. *Education Week*, Sept. 18, 1996.

Written by:

*Dr. Diane Bales*  
*Extension Children, Youth, and*  
*Families At Risk Coordinator*  
*Department of Child and Family Development*

September, 1998

Publication No. FACS 01-6

<http://www.fcs.uga.edu/outreach>

