

Building Baby's Brain

Learning Language

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 can be challenging. 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 just a few years, most children can understand what others say and can express themselves well. And young children learn language simply by listening to and interacting with other people around them.

► 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 "primed" to learn language. Babies are born with billions of brain cells called neurons, including millions that will control language. During the first years of life, the neurons connect with other cells to form complex pathways. When babies hear their native language spoken, the language connections in the brain become stronger. As babies continue to hear language and experiment with

making sounds themselves, their language pathways grow and change.

Most of the brain's language connections are well established by about age 10 to 12. After that time, learning a new language is still possible, but 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 any language in the world, not just the language their parents speak. Three-month-old babies can distinguish several hundred sounds—many more than are present in any one language. But as the baby hears people speak a certain language repeatedly, the brain strengthens connections for that language. The connections for languages that the baby does not hear become weaker and will eventually be pruned away. When we try to learn a foreign language as adults, we must fit the new sounds into the language connections already wired in our brain—connections that were created 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.

► Adults Help Babies Learn Language

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 (known as infant-directed speech) 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.

► What Can You Do?

Babies learn language by hearing other people speak around them and by practicing making 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 answer them. But your baby is listening to your speech and learning from it even before he can respond with words of his own.
- **Play language games with your baby.** When she makes a sound, repeat it and add a new sound. Take turns talking with your baby. Sing to her. Recite nursery rhymes. Play games like 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, your baby hears the sounds. And sharing a book gives you time to cuddle and 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. Watching a video or listening to "canned" TV sounds is not the same.
- **Have your baby's hearing checked.** Babies with hearing problems don't get the language experience their developing brains 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 when he is a baby, and expose him to both languages regularly. Children growing up in bilingual homes often speak both languages fluently.

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