

Can Preschool Children Be Taught a Second Language?

by Jeanette Vos Ed.D.

For years it has been thought that teaching a foreign language to preschool-age children would be futile. However, recent studies indicate that the best time for a child to learn another language is in the first three to four years of life. Here are some important reasons for exposing children to early second language learning.

Language Learning Is a Natural Process When Children Are Young

Adults often try to learn languages in a contrived way. Most people, for example, can recite the verbs in French-je suis, tu es, il est, elle est, nous sommes, vous êtes, etc. Yet they find it much more difficult to speak French naturally when they visit France. Yet when people immerse themselves in a language like children, through play and exploration, they can learn a language quickly and easily. So the more we become child-like in language learning, the easier it becomes.

Children growing up in a well-rounded environment learn to speak at least 2,000 basic words by the time they are four years old. Simply observing how babies learn to talk proves that they are natural learners. During the first six months of life, babies babble using 70 sounds that make up all the languages in the world. They will then learn to talk using only the sounds and words they pick up from their environment, most importantly from their parents and caregivers. A baby's brain will then discard the ability to speak in languages he or she does not hear (Kotulak, 1996).

Preschool Years Are Vital Years

"During this period and especially the first three years of life, the foundations for thinking, language, vision, attitudes, aptitudes, and other characteristics are laid down," says Ronald Kotulak, author of *Inside the Brain*. Consequently, it would be a waste not to use a child's natural ability to learn during his or her most vital years, when learning a second language is as easy as learning the first.

Since 50 percent of the ability to learn is developed in the first years of life and another 30 percent by age eight, early childhood development programs have the opportunity to encourage early learning and development. This does not mean, however, that 50 to 80 percent of one's intelligence, wisdom, or knowledge is formed during early childhood. It simply means that during the first few years of life, children form their main learning pathways in the brain (Bloom, 1964). There are six main pathways to the brain. They include learning by sight, sound, taste, touch, smell, and doing (Dryden & Vos, 1997). Later in life, everything an individual learns will grow from the information gained during these early years.

The Brain's Developmental Stages (Dryden & Vos, 1997)

The First Month - As a baby's senses react to his or her environment, he or she develops new synaptic connections at the phenomenal rate of up to three billion a second (Kotulak, 1996). Everything that a baby experiences is absorbed by the brain and stored in its memory cells.

The First Six Months - Babies will babble using the sounds in all of the languages in the world. A child, however, will learn to talk using only the sounds and words he or she picks up from his or her environment. A child will discard the ability to speak in languages he or she does not hear.

Eight Months - A baby's brain has about 1,000 trillion connections. After that, the number of connections begins to decline-unless the child is exposed to stimulation through all his or her senses.

Around Age 10 - About half the connections have died off in the average child. Five hundred trillion will last throughout an individual's lifetime.

Up to Age 12 - The brain is now a super-sponge. It is during this period that the foundations for thinking, language, vision, attitudes, aptitudes, and other characteristics are laid down. After this stage of development, the windows close; the fundamental architecture of the brain is complete (Kotulak, 1996). Therefore, it is easier to learn a foreign language in these vital years.

Young Migrant Children Are the Models

Unfortunately, most American schools teach foreign languages when students are in high school. According to Harry Chugani, a Detroit pediatric neurologist, foreign language teaching should begin when children are in preschool-when teachers can maximize a child's willingness and ability to learn. By the time a student reaches high school, the optimum learning period is lost. The success of foreign language training during the preschool years can be found by visiting migrant nursery schools in Sweden. In these schools you will find three-year-olds speaking three different languages fluently (Dryden & Vos, 1997). In fact, Sweden has one of the highest literacy rates in the world. Many people speak different languages, especially at migrant camps where they learn languages quickly. So how is that possible? They use sensory stimulation and play combined with language learning.

Brain Research Confirms Developmental Stages for Language Learning

Every healthy child is born with 100 billion brain cells, and each cell makes up to 20,000 connections. Whether these brain cells make connections or whether they die depends on if a child lives in an enriched environment (Buzan, 1984; Diamond, 1988; Ornstein, 1984, 1986).

What is an enriched environment? An enriched environment is one that provides plenty of sensory stimulation. Marian Diamond, a brain researcher at the University of California at Berkeley, has produced some of the world's most intelligent rats. When she put the rats in cages filled with games, puzzles, mirrors, colors, and textures, they grew more brain tissue. When she put the rats into non-enriched cages, their brains shrank (Diamond, 1988).

How Can You Teach a Second or Third Language to Young Children?

Infants can learn by listening, seeing, imitating, and practicing. So talk to them from the start. Tell them what you are doing. Introduce them to rhymes, songs, games, and counting in a second or third language. If you can't speak another language yourself, get plenty of tapes. Consider boarding a foreign student. Most importantly, make learning fun (Jensen, 1994; Dryden & Vos, 1997; Dryden & Rose, 1995).

Why Is Having Fun Important?

We have four brains in one: the reptile brain, the emotional brain, the "little brain," and the thinking brain (Jensen, 1994; Dryden & Vos, 1997; MacLean, 1990). The brain stem, sometimes called the reptile brain, controls many of our body's involuntary functions such as breathing. The mammalian or emotional brain is located in the center of the brain and stores memory. Therefore, learning is easier if it is made emotional or fun. In fact, the door to learning is emotion (Jensen, 1994; MacLean, 1990; Dryden & Vos, 1997).

The cerebellum, also called the "little brain," controls the body's balance and is a smaller replication of the whole brain. It is also the only part of the brain where neurons are grown. Neurons die if they are not being used in all of the other parts of the brain. In order to keep our brains healthy, we must use them (Jensen, 1994; Dryden & Vos, 1998).

Where does thinking about the language we are learning take place? Our cortex, or thinking brain, includes the motor cortex and the sensory cortex. Within the cortex, there are many kinds of intelligence centers. Harvard psychologist Howard Gardner has spent many years analyzing the human brain and its impact on education, including language learning. Gardner says that we have several types of intelligence-linguistic, logical-mathematical, visual-spatial, social, introspective, musical, bodily-kinesthetic, and naturalistic (Gardner, 1983; Gardner, 1998). (See "Howard Gardner's Multiple Intelligences" below.)

Howard Gardner's Multiple Intelligences (1983 and 1998)

- **Linguistic Intelligence:** The ability to read, write, and communicate with words.
- **Logical-Mathematical Intelligence:** The ability to reason and calculate.
- **Musical Intelligence:** The musical ability highly developed by composers and top musicians.
- **Visual-Spatial Intelligence:** The ability to master position in space. This intelligence is used by architects, painters, and pilots.
- **Visual Intelligence:** The ability to memorize visually, and use the imagination.
- **Kinesthetic Intelligence:** The physical intelligence used by dancers and athletes.
- **Social Intelligence:** The ability to relate to others, used by salespeople and motivators.
- **Introspective Intelligence:** The ability to know one's inner feelings, wants, and needs.
- **Natural Intelligence:** The ability to learn by exploring nature.

So how do you link all of these intelligences to teaching a second or third language? Here are 13 tips for teaching the children in your care a second language.

1. **Learn by doing.** Play grocery store, make a snack, or take a walk. While you are interacting with the children during these activities, speak a second or third language (Dryden & Rose, 1995).
2. **Reinforce with pictures and sounds.** Say the sounds of the language that accompany a picture in a playful way. For example, "A is for apple" (Dryden & Rose, 1995; Dryden & Vos, 1997).
3. **Learning should be fun.** The more fun it is to learn a language, the more a child will want to stay with it. Learning while playing is the best way to learn because it creates emotional attachments, and emotion is the door to learning (Jensen, 1994; Dryden & Vos, 1997; Dryden & Rose, 1995).
4. **Learn in a relaxed but challenging state.** Never stress a child. Current research shows that 80 percent of learning problems are stress related (Stokes & Whiteside, 1984).
5. **Learn with music and rhythm.** Music is one way to use the whole brain. Do you still remember the songs you learned in early childhood? Most people do because lyrics combined with music are easier to learn (Lozanov, 1978; Campbell, 1997; Brewer & Campbell, 1998).
6. **Learn with lots of movement-use the body and the mind together.** The brain and the body are one. However, the traditional education system encourages students to sit all day long. Now we know that we learn more when we move as we learn. Encourage

children to dance and move to the rhythm when learning a second or third language (Gardner, 1983; Doman, 1984; Dryden & Vos, 1997).

7. **Learn by talking to each other.** Having students practice a language by talking to each other over a meal, for example, is a great way to learn (Gardner, 1983; Dryden & Vos, 1997).
8. **Learn by reflecting.** It is important to let children take time to "simmer." There is a dormant stage to language learning. First children absorb the language. Later they begin to speak (Krashen, 1992).
9. **Link numbers and words in a playful way (Dryden & Rose, 1995).** "The more you link, the more you learn" (Vos, 1997). Anything can be linked when learning a second language, including numbers and new vocabulary words (Dryden & Vos, 1997). For example, reciting the numbers from one to ten in Spanish in rhythm is a fun way to begin language learning - "Uno, dos, tres, cuatro, cinco, seis, siete, ocho, nueve, diez."

How to Count in Japanese - and Learn by Doing

English Japanese Sound Action one ichi itchy Scratch your two ni knee knee.three san sun Point to the sky.four shi she Point to a girl.five go go Walk six rocko rock Rock'n'roll seven shich shi-chi Double sneeze.eight hachi hat-chi Put on a funny hat.nine kyu coo Coo like a dove. ten ju ju Don a Jewish hat.

10. **Learn by touching (Dryden & Rose, 1995).** Do little finger rhymes in a second language. While you sing or say "Itsy, bitsy spider" have the fingers of each hand touch another finger, as if the spider is climbing.
11. **Learn by tasting (Dryden & Rose, 1995).** Have youngsters celebrate language learning by eating foods and saying the food name in the new language.
12. **Learn by smelling (Dryden & Rose, 1995).** Play smelling games. Hide objects in a sack, and have the children guess what is inside. Encourage them to say the new word in the language they are learning.
13. **Use the whole world as your classroom (Dryden & Vos, 1997).** Turn every outing into a learning experience. You can learn a new language while counting oranges; comparing leaves; classifying different birds, food, or anything that interests the children.

Conclusion

In conclusion, I believe the following quotes say it best.

From former Harvard Professor Burton L. White (1994): "Every one of the four educational foundations-the development of language, curiosity, intelligence, and socialness - is a risk during the period from eight months to two years."

From accelerated learning trainer Tony Stockwell: "To learn anything fast and effectively, you have to see it, hear it, and feel it" (Dryden & Vos, 1997).

And from Jean Houston (1997), author of *Educating the Possible Human*: "Children can learn almost anything if they are dancing, tasting, touching, seeing, and feeling information" (Dryden & Vos, 1997).

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