

# Part 1 – Beginning the Journey to Speech, Language and Communication

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## **How does my infant and toddler learn to speak?**

Babies can't speak to us, but they communicate their needs to their families by crying, laughing, pointing and other gestures. They learn that when they make a sound or cry, someone will come and help meet their needs.

Speech uses the structures and movements used for breathing and feeding, and this is good news because you don't need to wait until your child is speaking to work on the skills needed for speaking. There isn't a separate speech system in the body. Early on, infants move their lips, tongue and jaw for sucking, nursing or bottle-feeding, and then eating solid foods. Infants cry and babble and play with sounds. They play with their lips and tongues and make sounds, improving their muscle strength, range of motion, and feedback system. They test their voice, and make loud and soft sounds. They babble strings of sounds. In English and Spanish, all speech is made during exhalation. If a person is speaking while inhaling, they are choking and gasping. So, one of the skills babies are learning when they cry or babble sounds is to lengthen the time that they exhale, preparing them for speech.

Speech is an output system but it is based on the input that the child receives. So, it is important to ensure that the child's input systems: hearing, vision and touch, are functioning well. If there are sensory input difficulties (hearing or seeing), it is important to treat those difficulties early.

The power for speaking comes from exhalation. Through feeding, crying, cooing and babbling, infants learn to coordinate breathing and the movements that they will use for speaking. Through hearing, vision, and touch, they listen to the language of their families and they learn the words in their language. So, babies are learning and practicing the input and output skills they will need for speech, language and communication early in their development.

## **How early do you need a speech and language evaluation? What type of speech and language evaluation and treatment are needed?**

You should not passively wait for your child to begin to speak. You should seek information and education about speech, language, and communication as soon as you can. Early intervention programs may or may not include a speech and language evaluation as part of their program. Many school system special education programs will not evaluate speech and language until age 3, or even until your child is beginning to speak. Pre-speech and pre-

language evaluations may be available through university clinics or private practices, if they are not available to you through the schools. There are books, talks, and conferences (local, regional, and national/international such as the NDSC Convention), that will provide information to help you and your child get started on the journey to speech and language. During the first year of life, speech and language evaluation and treatment focus on the pre-speech and pre-language skills. Evaluation can determine which skills your child has already mastered and which skills would be best to work on next. Therapy can teach you how to work with your child at home and model how to use play activities (rolling a ball back and forth) and activities of daily living (feeding, bathing) to promote speech and language.

### **What are the pre-language skills?**

From birth to approximately 1 year of age, your child learns many skills that help him/her get ready to use language. These are skills that you can work on at home while you are playing with your child.

## **Interactive Communication Skills**

**A. Communicative intent:** This is when the baby realizes that s/he can get attention by crying or making noises. His family come to help him when he cries. She lifts her arms and mom takes her out of the crib. She points to her toy bear, and her sister gets it for her. What can you do to help your infant learn this skill? Respond to your child! Your infant will learn this skill because you respond to her initiations. She will realize that her family and caregivers respond to her sounds and gestures.

**B. Turn taking:** Your baby learns that communication is two-way. He can initiate communication and he can respond to communication. How do you teach this skill? When your child makes a sound, you talk back to him. You can roll a ball to your baby and teach him to roll the ball back. You can take turns banging on a drum or playing a xylophone with a wand and passing the wand back and forth. Turn taking in play transfers to taking turns in communication.

**C. Engaging attention:** Respond when your baby looks at you or tugs on your arm. Show the baby that he can get your attention.

**D. Requesting:** When your baby “asks” for something by pointing, respond to the request. Later on, when your baby crawls over to a toy but can’t get it off the shelf, help him. He needs to know that his requests get results. Requesting begins with pointing, gestures and signs.

**E. Protesting:** When you baby cries when he doesn’t want to do something, or pushes a food that he does not like away, let him know that you got his message even when you can’t do what he wants. Say, “Do you want a piece of banana” or “I know that you don’t like to eat a banana, but you need to eat this little piece of banana.”

**F. Social communication:** Encourage your baby to wave hi and bye, to smile and interact with people.

## **Attentional Skills**

To learn language, your baby needs to listen to you speaking, watch you, and pay attention. How can you help your baby learn this skill? Explore toys together. Show your baby how to touch, squeeze, turn over and learn more about a toy ball, or a toy giraffe. Comment as you look at the toy together. Play music and sing songs with your child and increase the amount of time that your child listens. Read a book to your child, and progress from very short books to longer books. You are teaching your child to focus and to attend for longer periods of time.

## **Visual Skills**

- Seeing/vision
- Visual attention
- Reciprocal gaze
- Shared gaze
- Visual tracking

Work with the pediatrician and the eye specialist to make sure that your child can see well. Teach your child to look around at the environment: watch birds flying, the puppy moving around, airplanes overhead. Teach your child to watch moving things; this is known as visual tracking. Teach your child to look you in the face, for you and he to look at each other. This is known as reciprocal gaze or eye contact. (Sometimes, I even put stickers on my face, or funny eyeglasses, or make funny faces to get a child to look at me.) Look at the pictures in a book together, or look at the clouds, or the snow falling outside. Looking at something together is known as shared gaze, joint attention, or referential gaze. Infants and toddlers need to be able to look at an object, person, or event with you so that they can learn the words that identify that object, person, or event.

## **Auditory Skills**

- Hearing
- Auditory Attention
- Auditory Localization
- Auditory Processing
- Auditory Integration

Work with the pediatrician and the hearing specialist to monitor your child's hearing. Environmental sounds are all around us. Comment on sounds, e.g. Did you hear that? The dog is barking. Did you hear that? The ambulance has the siren on. It's really loud. Help your child learn to listen longer; this is auditory attention. Listening to music and using finger and hand movements with songs (e.g. the eensy weensy spider) is good practice.

Teach your child where the sound is coming from. That is called auditory localization. I hear some birds chirping. Where are they? Or the car in back of us is honking his horn. Auditory processing means making sense out of the sounds that you hear. When you talk to your child about the sounds he hears and when you read with your child, you are teaching him about words and what they mean. Some children are uncomfortable with loud noises, or with a lot of background noise around them. They cover their ears with their hands at baseball games or when folks are cheering or screaming loudly; this means that they have difficulty with auditory integration. The audiologist can evaluate whether your child has difficulty in this area, and there are specialized treatment methods for auditory integration difficulties.

### **Cognitive/linguistic pre-language skills**

- Object permanence
- Cause and effect
- Means-end
- Referential communication

To learn language, children must realize that when they can't see something, it still exists. We put a toy ball behind our back. The child looks for the toy, and tries to get it back. He knows that even though he no longer can see it, it is still there. He has mastered the skill of object permanence. How can we teach this skill? We can cover a musical toy with a scarf. The child cannot see the toy, but he hears it and he knows that it is there. Put a baby blanket over daddy as he curls up on the floor. Your child will still know that daddy is there even if he is partially or fully covered with the blanket. Say, "Where's daddy?" Then remove the baby blanket and say "There he is!" A game that teaches this skill is Peek-a-Boo, and we play the game many, many times to help the baby learn about object permanence. In play, infants and toddlers learn that actions have results. They love to flip the light switch and turn the lights on and off. They love to push a button on a toy and see it move. They are learning that when you do something, there is a reaction, an effect. This is the skill of cause and effect. Sometimes, you need to make a plan to accomplish your goal. For example, you want to reach the bowl of cookies on the counter, but you can't reach the counter, so you pull a chair over to the counter. You climb on the chair, reach the counter, and get the cookies. Your plan worked and you accomplished your goal. This skill is known as means-end. For many months, you label objects, e.g. door, people, e.g. daddy, and events, e.g. it's raining. At some point, your child makes the connection between the words you have said, and the object, person or event that the word represents. That is known as referential knowledge or referential communication.

Now, your child has mastered all of the skills that will enable them to use language. Your child knows how to learn about his environment. Your child can use vision to learn. She can look at you and look with you at a toy or book. He can listen to music and to the sounds in his environment. He understands cause and effect and that communication can

get results. She can be social and interact with people in her environment. He understands that objects, people and events have names and that these words (symbols) are meaningful. But often, your child is not yet ready to speak. What do we do to bridge the gap, to continue to help your child learn new words and more language skills? What can we do so that your child can continue to communicate and use the language skills s/he has already mastered? What can we do to help your child learn the skills s/he will need to begin speaking?

#### For further reading:

Kumin, L. (2012). *Early Communication Skills for Children with Down Syndrome (third edition)*. Bethesda, MD: Woodbine House.

#### Parent Resource Information:

Go to <https://www.ndsccenter.org/programs-resources/speech-and-language/>

- Speech and Language Resource Guide for Parents of Infants and Toddlers with Down Syndrome: Birth to First Word
- Speech and Language Resource Guide for Parents of Infants and Toddlers with Down Syndrome: First Words to Phrases