

Babies Babble

This chapter is the first on the DVD, *Listen Learn and Talk*. It charts the development of babies from diagnosis to 15 months in listening, language, speech, cognition and **pragmatics**. Segments from home and clinical settings demonstrate strategies that can be used to develop listening and talking. (See Strategies for Developing Listening Skills pp 20-30.)

Parents and professionals work in partnership, giving each other feedback on the baby's progress. Since parents are with their babies most of the time at this young age, they will naturally provide the key language input. The nature and quality of that input is critical. The one-to-one interaction between parent and baby is the focus of this chapter.

The Journey Begins

The journey begins from diagnosis and fitting of appropriate hearing aids. Depending on the degree of hearing loss, your baby may be a candidate for a cochlear implant. Whether your baby has hearing aids and/or a cochlear implant, the principles and strategies are the same. From the very beginning, your baby should wear her hearing aids and/or cochlear implant every waking hour for maximum sound stimulation.

It can be a challenging time for you when your baby learns how to reach up and take off the hearing aids and/or cochlear implant. If you consistently put the devices back on immediately, your baby will learn that she must keep them on. Place a toy or food in baby's hand to distract her while you put the devices on. Another strategy is to engage your baby with interesting activities and talk to her while she plays.



As your baby becomes more interested in her surroundings, she will focus on her toys and be less likely to remove the hearing devices. Also, as she learns to listen, she will not want to remove them, as they increasingly become her link to the world of sound.

If your baby continues to take out the devices, check that her ears are clear of wax and infection and see your audiologist to ensure that your baby is aided and/or MAPped appropriately.

Parent Baby Bond

The natural bond between you and your baby should not be interrupted by a diagnosis of hearing impairment. All the things you do naturally such as establishing eye contact, beginning turn taking and using '**motherese**' (a singsong voice) should continue. Learning to listen can begin as soon as the devices are fitted. It is a time to hold your baby close and speak in a normal voice into the microphone of the hearing aid and/or cochlear implant.

Using a singsong voice, highlights the **suprasegmental** cues of **pitch**, duration and **intensity**, making speech sounds more audible. Your baby will respond by looking at your face. This is the beginning of eye contact, which is an important step in establishing communication. Talk to your baby about immediate things in her environment and alert her to the sounds around her. She may respond by cooing and gurgling. After constant input, your baby should quieten when you speak and start to look more intently at faces.

The DVD shows the interaction between a mother and her baby. The mother looks at her baby's face and holds him close. She talks directly to him, singing and using appropriate actions. Even though he does not look directly at her all the time, the positioning and auditory input will help him direct his gaze towards his mother's face. When he does look away, his mother talks about the things that he is looking at, for example, the picture of a train on the wall.

There are many opportunities at home to use the strategies of speaking close to the microphone, establishing eye contact and using a singsong voice. Nappy/diaper changing, for example, is an ideal time as it is one of the most frequent things you do with your baby. Talk about what is happening. Give correct language in phrases and use real names for objects and parts of the body.

Babies love to hear singing and will laugh and gurgle, especially when songs are accompanied by actions. Songs and rhymes are an excellent way to encourage interaction and enhance the bond between you and your baby. They also promote the development of the suprasegmental features of speech such as pitch, duration and intensity.

The DVD shows a mother playing a game of tickling that her son obviously loves. The mother talks about the game she is playing and her son shows his joy by vocalizing. She uses real names for parts of the body, giving her son every opportunity to hear the language. Repeating language is essential at this early age.

A Quiet Environment

It is very important in the beginning stages of listening to provide a quiet environment. The ideal listening condition means no background noise such as TV, radio or other loud household sounds such as the washing machine and dishwasher. Having

carpets and curtains in rooms where parent/baby interaction occurs can help to diminish reverberation.

Having a quiet environment and speaking close to the microphone will make spoken language more audible to your baby.

Sound Awareness

After your baby has been fitted with hearing aids and/or a cochlear implant, everyone involved should start to observe her reaction to sound. She may startle at sudden noises, quieten when you begin speaking to her or look towards the sound. She will learn to tune into your voice first. Call her by name and she will learn to respond. Do not vary the way you say it, as she needs to hear it over and over again before she will respond to it. Always call her for a reason and praise her when she does turn or vocalize. Once your baby has responded to your voice consistently, ask other family members to call her so she learns to respond to different voices.

You can alert your baby to a variety of environmental sounds so that she begins to learn that sounds have associations and meaning. To do this, turn her towards the sound source, point to the ear, say *Listen* and then name the sound. For example, with an airplane, turn baby to the sound source and label it. Say *Listen, I can hear an airplane. It's up in the sky. Look at the airplane. Can you hear the airplane?* This is an important strategy to develop the skill of localizing sound. In the DVD a mother uses this strategy when there is a knock on the door.

Vocal Turn Taking

As your baby begins to hear her own voice, she experiments with her vocalizations. It is a good time to develop vocal turn taking. Listen to her vocalizations, wait for her to finish, repeat the sounds and add some new ones with appropriate language. Repeat this often so that turn taking is built up.

The DVD shows a mother waiting for her baby to stop vocalizing before she responds. This waiting strategy is an excellent one to use at an early age. It will help your baby to develop vocal turn taking and create an expectation that she will respond to your voice. Turn taking is another important step in developing communication skills. The foundations of conversation are being established.

Performatives

Performatives are sounds that are associated with familiar things in a baby's life. They are used because they cover the speech sounds of a language and lay the foundations for learning to listen for speech and language development. (See Learning to Listen Sounds pg 19. **Error! Reference source not found.**)

The DVD shows a therapist introducing some performatives with the appropriate toys. She introduces each sound through listening first and uses the *listen* cue to focus the baby. She repeats the sound several times before showing the toy. The therapist uses the mother to model the sound and only lets the toy move when mother

vocalizes. She repeats this with the baby. This is an excellent strategy to encourage vocalization.

Always present the sound in association with the name of the toy, for example, *the bus goes bu bu bu, the clown says ha ha ha, the fan goes round and round*. Say the sound before your baby sees the toy. Once your baby sees the toy, repeat the sounds while she plays with it. Use the waiting strategy after saying the sound so that your baby has the opportunity to imitate it. Use **incidental language** but remember the primary focus is on modeling the performatives. In the early stages, use sounds that contrast in duration to help your baby learn to discriminate and set her up for success. For example, the cow goes *mooooo*, *mooooo* versus the duck goes *quack quack*. Gradually, after many repetitions, your baby will make the association with the toy.

Take every opportunity to use these sounds with your baby. Repetition is the key. Use pictures, books, toys, animals and real objects to reinforce the sounds and associated language. For example, use the appropriate sounds and language when playing with a toy bus and when a bus is seen on the road.

In the DVD, the mother uses feeding and playtime to reinforce some of the performatives introduced in the therapy session. She speaks close to the microphone and uses a singsong voice. Learning these sound associations is fun for the baby and will have more meaning if practiced in her day-to-day world.

It is important to observe baby to establish if she is associating the performative with the object. Use the waiting strategy to give her time to show that she is identifying the sound by reaching for the appropriate object or turning to it. If she does this, it means that she is starting to associate meaning with sound. At this stage, she may also start to use the appropriate sound spontaneously.

Once your baby identifies a performative, the next step is to learn to identify the name of the object without the prompt of the performative. Say the word in a sentence and at first use the strategy of **acoustic highlighting**, for example, *Where's your **bus**?* Give your baby time to respond. If she does not understand, repeat the sentence with the performative to assist the child, for example, *Where's your **bus** that goes bu bu bu?*



As your baby becomes more alert, she understands more of her world. She may understand a familiar greeting, for example, *bye bye*, and may be using her voice more to vocalize for needs and wants. She has increasing auditory awareness, eye contact and early turn taking skills. She is interested in people, voices and toys. It is essential to continue to encourage listening development so that your baby learns that sounds have meaning.

Simple Phrases

As well as using performatives, introduce simple phrases that are part of the natural language used with babies in their daily routines and play. For example, *brush brush brush your hair; up up up we go; open the door, open it up; pour pour pour it out; take it off*. These phrases incorporate a number of vocabulary groups such as nouns, verbs and pronouns. Learning to identify, understand and use these phrases is an important step in language development.

In the DVD a mother repeats phrases while she is dressing her baby and getting a drink. She is close to the microphone and uses a singsong voice.

Observe your baby to see if she is starting to understand some familiar phrases. She may reach up to take off her hat when she hears the appropriate phrase. Use the waiting strategy to give her time to respond with the action or to respond vocally. This is the beginning of following simple instructions through listening. Remember to accept your baby's vocal response and then model the correct phrase. Repeat the phrases many times in different contexts. A baby with hearing impairment needs to hear new words and phrases over and over again before she begins to understand them.



Around your baby's first birthday, her vocalizations begin to change from babble to jargon. This means that she continues to babble repeated vowels and consonants but adds some single words. These are approximations of words and are often not

expressed in clear speech. You as parents usually understand the words and model the correct pronunciation. It is important to continue speaking in simple sentences, not single words. As your baby's understanding develops, be aware of using expanded language. Your baby needs to hear correct, clear models in meaningful situations. Use the waiting strategy to give your baby time to respond and encourage communication attempts. As your baby identifies more words and phrases through listening alone, start to use a more natural voice with less motherese.

Auditory Stimulus/Response

As part of your baby's listening skill development, a structured auditory **stimulus/response** activity is introduced to ensure that she can detect a range of sounds. To develop listening and speaking skills, it is important to know exactly what sounds your baby can hear. Because she can now reach for and grasp objects, she can be taught to hold an object to her ear and put it in a container when she hears a sound. Your baby has to learn to wait, and only place the object AFTER she hears the sound. In the initial stages, you and the therapist will need to model the response to teach your baby what to do. You can also take turns giving the sound stimulus as this develops your baby's ability to localize sound. To maintain baby's interest, use a variety of toys for this activity, for example, plastic toys in water, pop up toys, vehicles down a ramp.

The Ling 6 sounds are used for the stimulus (/oo/ /ee/ /ar/ /m/ /sh/ /s/). They cover the speech range from low to high **frequency**. If your baby can detect all these sounds, she has the potential to hear most of the sounds of a language.

In the DVD, a mother models the response to the sound stimulus. The mother holds an object to her ear and when the therapist says the sound, she responds by saying *I heard that*, then puts the object in the container. It is obvious that her baby is detecting the sounds as she turns to the voice.

The next step is for your baby to put the object in the container herself when she hears the stimulus. When learning this activity, your baby may keep vocalizing. She needs to learn to be quiet while waiting to hear the sound. This can also be modeled. The mother can vocalize and the therapist can say *Sh Mommy. Listen!*

Remember to say these sounds with varying lengths of silence between each one. This is so your baby learns to listen and give accurate responses and does not get into the habit of responding to a regular rhythm rather than listening for the sound.

This activity is not only essential for detecting and then identifying speech sounds but also for checking the function of the hearing aids and/or cochlear implant. Your baby will also have to perform this activity in hearing tests and for **MAPping** speech processors. Being able to respond reliably is important.

In chapter two, *Toddlers Talk*, you will see a toddler progress from just detecting the sounds to actually repeating them. Encourage your toddler to do this as it indicates exactly what she is hearing.

Auditory Memory – Item Selection

The DVD shows a therapist asking a baby to select a toy through listening as the toys are being put away. The baby successfully identifies the cat. Selecting one item from a closed set is the beginning of the development of auditory memory. In the initial stages, the word is placed at the end of a sentence. For example, *Let us put away the cat.* The next step is to place the word in the middle of the sentence. For example, *The cat wants to go home.* Make sure your baby has processed a word or performative at the end of the sentence before progressing to putting the word in the middle of the sentence. At first, the word can be acoustically highlighted for emphasis but this should gradually be decreased to a normal voice.

At home, there are many opportunities for developing auditory memory in a fun way. The animals can be put to bed, the vehicles can be put in the garage and the toys can be posted in brightly colored boxes.

The development of auditory memory will be further outlined in *Toddlers Talk*.

As your baby matures, her cognitive processes will also develop. She loves participating in activities and begins to imitate routines such as washing her doll. Her play demonstrates the functional use of objects. Her concentration and attention span are increasing. Her vocalizations may include some alternated syllables and some imitated words. She may also copy varied **intonation** patterns. She is becoming aware of directing conversation at others and her vocal turn taking is developing. She is processing simple language through listening. For example, she may identify some words and familiar phrases, begin to follow simple directions and have an auditory memory of one item or more.

As your baby begins to vocalize with intent, you should respond by expanding language, introducing new vocabulary and modeling correct grammatical structures. You play a key role in this remarkable period of your baby's development.

The listening journey has begun.

Extension Ideas for Babies

The extension ideas on pages 64-71 show you how your baby's language can be expanded and how you can guide your baby through the various steps according to the Integrated Scales of Development.

Activities

The activities follow the sequence of chapter one of the DVD.

Strategies

The strategies mirror the examples of strategies demonstrated in chapter one of the DVD.

Skills and Concepts

The skills and concepts apply to the stage your baby has reached.

Core Language

This is the language that is repeated many times to help your baby access the particular sounds, words or sentences she is learning at her stage of listening development. As your child learns to listen she will not need to hear as many repetitions of the new language.

Extended Language

Use extended language in addition to the core language. This provides an enriched language environment for your baby.

Related Activities

These are suggestions for using the core and extended language in a variety of daily routines and activities.

What next...

This shows the progression to the next few steps of the Integrated Scales of Development in the four areas of listening, language, speech and cognition.

These ideas are only suggestions. You may prefer to use different language that is familiar and relevant to your own family situation.

Making a Drink

Strategies	<ul style="list-style-type: none"> • Be close to the microphone when speaking. • Have a quiet environment. • Use phrases and simple sentences. • Use repetition. • Describe what you are doing. • Capture baby's attention. • Establish joint attention. • Establish eye contact. • Repeat baby's vocalizations. • Add more babble. • Use a singsong voice. • Follow baby's eye gaze. • Observe baby's response to sound.
Skills/concepts and language	<ul style="list-style-type: none"> • Establishing sound awareness. • Developing association of meaning to sound. • Developing understanding of real names of objects. • Developing understanding of action verbs. • Developing vocalizations. • Localizing sound by head turning. • Grasping, reaching and holding. • Beginning turn taking. • Developing eye contact. • Developing joint attention.
Core language (adult input)	<ul style="list-style-type: none"> • Mmm I'm thirsty. • I want a drink. • Open the door. Open it. Open the door. • Shut the door. Push it. Push it. Push it shut. • Yummy water, yum yum yum. • Take the lid off. Take it off. • Turn it round. Round and round. Round and round. • Pour the water. Pour pour pour the water. Pour the water.

Extended language (adult input)	<ul style="list-style-type: none"> • Open the cupboard. Open the door. • Mommy wants a drink. I'm thirsty. • Daddy do you want a drink? Daddy wants a drink. He's thirsty too. • Get the cups. • Open/shut the door. • Where is the water? • Oh oh the water's cold. • It's in the fridge. The water's in the fridge. • Take out the water. • Pour the water into the glass. • Wipe it up, wipe, wipe, wipe. • Oh! Oh! I spilt it.
Related activities at home	<ul style="list-style-type: none"> • Making/getting any drink/food. • Getting food out of fridge/cupboards. • Putting shopping away. • Checking cupboards/fridge to see what food is needed. • Pouring liquids, e.g. bath time, cooking and play time. • Stacking the dishwasher. • Watering the garden. • Feeding the pets. • Taking lids off containers. • Switching on fans/lights/machines.

What next...	<ul style="list-style-type: none"> • Encourage longer attention span. • Introduce new vocabulary for different drinks. • Introduce other verbs, e.g. shake, stir. • Use specific phrases in many situations, e.g. take the lid off (for drink bottle, canned food, toys in containers). • Develop concepts hot/cold, in/out, inside/outside. • Encourage baby to vocalize before giving drink. • Encourage baby to respond to own name. • Speak in simple phrases and sentences. • Use a greater variety of babble including consonants and vowels. • Use the Learning to Listen Sounds. • Develop auditory memory for following simple directions, e.g. wave bye bye.
---------------------	---

Book Share

Strategies	<ul style="list-style-type: none"> • Be close to the microphone when speaking. • Use listening first. • Use a singsong voice. • Use repetition. • Wait for baby to respond. • Have a quiet environment. • Capture baby's attention. • Follow baby's eye gaze. • Observe baby's response to sound.
Skills/concepts and language	<ul style="list-style-type: none"> • Developing joint attention. • Establishing sound awareness. • Associating meaning with sound.
Core language (adult input)	<ul style="list-style-type: none"> • Turn the page. Turn it over. Turn it. • Open the book. Open it up. Open it. • Close the book. • Close it up. Close it up. • Look at the... • The ____ goes ____ (Performatives), e.g. The pigeon goes coo coo coo. Look at the pigeon it goes coo coo coo. • Look at the clown. He goes ha ha ha /ha ha ha. He's rolling, roll roll roll.
Extended language (adult input)	<ul style="list-style-type: none"> • Here's a lovely book. Let's have a look. • Oh look it's all about... • Let's see what's on the next page. • What a beautiful... • Look! What's up there? It's a pigeon. It's gray. It goes coo coo. It's flying. • Look at the goat. The goat is eating the grass. He's hungry. • Look at the funny clown. He's funny. He's laughing. What's he doing? He's rolling over.

Related activities at home	<ul style="list-style-type: none"> • Sharing photos, magazines, a variety of books. • Singing songs and doing actions about pictures in the book. • Using action rhymes and finger plays. • Reading books with actions/pop up pictures/pictures that move.
What next...	<ul style="list-style-type: none"> • Encourage vocalizations. • Develop vocal turn taking by repeating baby's vocalizations. • Use simple descriptions of things in books and around the house. • Use phrases and simple sentences. • Introduce questions, e.g. <i>where?</i> and answer with a prepositional phrase, e.g. <i>Where's the cat gone? He's on the bed.</i>

Reinforcing Performatives

Strategies	<ul style="list-style-type: none"> • Use listening first. • Use repetition. • Use acoustic highlighting. • Use listen cue. • Be close to the microphone when speaking. • Make it fun. • Have a quiet environment.
Skills/concepts and language	<ul style="list-style-type: none"> • Associating meaning with sound. • Developing vocabulary of objects and performatives. • Developing turn taking.
Core language (adult input)	<ul style="list-style-type: none"> • Here's the bird. It goes tweet tweet. • Listen. Here's the bus. It goes bu bu bu... • I can hear the car. It goes brm brm brm... • Yum yum yum it's lunchtime. • Here's your lunch, yum yum yum. • Here's the cat. Meow meow meow says the cat. • Here's the clown, pop up pop up pop up.
Extended language (adult input)	<ul style="list-style-type: none"> • Look at the birds. They're flying, tweet tweet tweet. • Vehicles, e.g. look at the bright red fire engine, ee-or. It's going fast. It's going to put a fire out, ee-or, ee-or. • Here's the bus. It's a bus. Look at all the people/men/children in the bus. • Listen, there's Daddy's car. Toot toot. I heard the horn. Daddy's coming. Here's the car, brm brm. • Farm animals, e.g. Here's the cow. It lives on the farm, moo moo. It eats grass, yum yum. The cow gives us milk, moo moo.

Related activities at home	<p>Give baby as many experiences as you can with the Learning to Listen Sounds:</p> <table> <tr> <td>Birds in garden</td><td>Food</td></tr> <tr> <td>Mobiles/cell phones</td><td>Shopping</td></tr> <tr> <td>Books</td><td>Blowing bubbles</td></tr> <tr> <td>Pets</td><td>Washing up</td></tr> <tr> <td>Playtime</td><td>Vehicles</td></tr> <tr> <td>Bath time</td><td></td></tr> </table>	Birds in garden	Food	Mobiles/cell phones	Shopping	Books	Blowing bubbles	Pets	Washing up	Playtime	Vehicles	Bath time	
Birds in garden	Food												
Mobiles/cell phones	Shopping												
Books	Blowing bubbles												
Pets	Washing up												
Playtime	Vehicles												
Bath time													

What next...	<ul style="list-style-type: none"> • Select one object with the sound repeated at the end of the sentence, e.g. Where's the cat that says meow meow? (closed set) • Select one object with only one sound at the end of the sentence, e.g. Where's the goat that says maa? (closed set) • Start with 3 items in the closed set and extend to 6. • Describe objects and their function, e.g. Look at the wheels on the bus. They go round and round. It's a big bus. • Here's your cup. You can have a drink from the cup. • Match object to object.
---------------------	---

Fruit Salad

Strategies	<ul style="list-style-type: none"> • Use listening first. • Model correct language. • Use expanded language. • Use listen cue. • Use another adult/sibling as a model. • Capture baby's attention. • Use acoustic highlighting. • Be close to the microphone when speaking.
Skills/concepts and language	<ul style="list-style-type: none"> • Developing understanding of functions. • Understanding vocabulary related to parts of an object, e.g. skin, seeds. • Understanding simple phrases. • Beginning to follow a simple direction.
Core language (adult input)	<ul style="list-style-type: none"> • I have a banana. • Do you like bananas? • I like bananas, yum yum. • It's a big/little banana. • Peel the skin off. Peel it off. Peel it off. • I have a knife. • Cut cut cut, cut with the knife. • Cut the banana. • Smell the banana mmmmm.

Extended Language (adult input)	<ul style="list-style-type: none"> • I have a strawberry/kiwi fruit/pineapple. • Look at the seeds. • Look at the skin. It feels furry/smooth/rough. • What do I need to cut with? • I need a knife. A knife will cut the banana. • I need a bowl. • Let's cut up all the fruit. Slice the kiwifruit. Slice it. • Put all the fruit in the bowl. • The skin's yucky. Don't you like that? • Oh you don't want to smell it. • We don't eat the skin. The skin goes in the trash/rubbish bin. • It tastes yummy/nice/delicious/yucky.
Related activities	<ul style="list-style-type: none"> • Having a tea party. • Making a sandwich/popcorn. • Putting faces on cookies/cup cakes. • Playing with doll's house-windows/doors/chimney/fence. The pillow goes on the bed. The bed is for sleeping. The bed goes in the bedroom. • Playing with toy vehicles-wheels/steering wheel/windshield wipers/wings on the airplane. • Labelling parts of the body, e.g. humans/animals. • Labelling household items, e.g. legs on table, handle on doors, lids on pots.
What next...	<ul style="list-style-type: none"> • Label all parts of objects that baby is interested in. • Talk about the functions of many different objects. • Decrease the use of performatives. • Develop auditory memory in a closed set with the word at the end of the sentence. One item selection, e.g. Where's the...? • Follow a direction (closed set). • Develop turn taking. • Highlight prepositions in, on, under, e.g. The train is on the track. • Develop the concepts the same/not the same.

Learning to Listen Sounds*

Sound	Toy
a(r)	airplane
ch ch ch oo	train
pop pop	bubbles, popping toys
bu, bu	bus
beep/brm brm	car
brr	truck
pu, pu, pu	boat
tick tock	clock
ow/ouch	fall down, cut
oowar oowar	ambulance
hee, hee	monkey
ha, ha, ha	clown, laughter
go	running
ho, ho, ho	Santa Claus
ya hoo!	cowboy
whee	slide
wa wa wa	baby doll
hi!	mirror
meow	cat
bow wow, woof woof	dog
moo	cow
neigh	horse
baa	sheep
oink	pig
quack	duck
hoo hoo	owl
hop, hop	rabbit
whistle	bird
cock-a-doodle	rooster
caw, caw	crow
round and around	windmill, top, wheels
mmm	food/any good thing
dig dig dig	toy shovel
s	snake
sh	sleeping games
la	rocking the baby
up, up, up	any up activity
gr- gr-	Bear