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Language Development and Deaf Children

What is the difference between speech and language?

Language is the words, structures, thoughts and concepts we have in our minds. Speech is one way in which we communicate our language to other people. We can also convey our language through sign language or through writing.

It is critical to recognise that any hearing loss a child has will impact on both language and speech development, but language development is more important than speech development. This is because almost all learning depends on language. The better language a child has, the broader the range of their mental concepts and the more they will be able to learn in school.

How do children acquire language?

Children are born with an inner capacity for language development. No-one really knows how we learn language. Noam Chomsky studied language development in children in the 1960's and he suggested that children have a Language Acquisition Device, which he called LAD.

Children use LAD when they take in vast quantities language from birth, process it in their minds and then produce sentences which they have not heard before. They experiment with grammar by applying the rules of the language they are learning. In general, children have developed all the foundations of their future language by the time they are five years of age.

As children get older, the LAD begins to close down. It is virtually not operating by about puberty. After puberty a language cannot be as easily acquired.

What is needed for LAD to work?

For LAD to work properly children need:

- People to talk or sign to them constantly so they see or hear words and sentences again and again.
- People around them to talk or sign conversations so they can see or hear what others are saying or signing.

- People to interact with them in a meaningful way which is frequent and consistent.
- People to extend the child's language by questioning, commenting and modelling new words and phrases.
- People to use interactions that make sense to the child so they learn how to use interactions themselves.
- People to reinforce the child's attempts at using language.

What are some of the barriers deaf children may face in learning language?

Deaf children cannot hear, or only hear parts of what people around them are saying. Often the only input a deaf child can understand is when people talk or sign to them directly, one-to-one.

Deaf children cannot usually overhear conversations between other people or listen to the radio or television so they also miss out on lots of incidental learning. This will limit their background knowledge of different topics.

The input the deaf child receives will be much less than what a hearing child will receive and which may lead to problems with communication and learning in school, e.g. they may have heard a particular word only once or twice and only in one context, while the hearing child may have heard it hundreds of times in many contexts.

What factors affect a deaf or hearing impaired child's learning of language?

Deaf children vary widely in their acquisition of language. Some of the factors include:

Age of onset of the hearing loss

Children who are deaf before language develops will experience much more difficulty acquiring language than those whose hearing loss is acquired later. Even if a hearing loss is acquired in early childhood, the effects on language development will be much less than those who are deaf from birth or just after. The child losing hearing later has had the chance to begin to understand about language and communication.

Degree of hearing loss

The greater the hearing loss, the more effect it usually has on language development (unless the child is given quality language input before they are 6 months old).

The quality of the language input

The quality of input is very important for language development. The better the quality (provided the child can hear and/or see it), the more consistent is the information the child can absorb about language. This all results in a greater opportunity for the child to develop good language skills.

Quantity of language input

The more communication the deaf child is engaged in or observes or listens to, the more opportunity they will have for developing language skills. The deaf child needs to engage with a variety of speakers or signers for a large part of each day for optimal language development.

Parents' hearing status

Research has shown that deaf children of deaf parents perform better in school than deaf children of hearing parents. Deaf parents know how to naturally communicate with their deaf children and they often have a positive attitude towards their child's hearing loss.

Hearing parents need to create opportunities for effective communication with their deaf children, whether it be through English or Auslan, to make sure their children are similarly advantaged.

Early intervention

Research has shown that enrolment in an effective early intervention program is very important for a child's language development, providing options, language models and communication skills. Ideally, access to intervention by the age of six months gives deaf children the best opportunities for learning.

Age of Diagnosis

Research is showing that children who are diagnosed before they are six months of age perform better than children diagnosed later on all areas of language learning.

What happens if a deaf child does not acquire good language before they enter school?

Many deaf children are still learning basic language skills when they arrive at school. Hearing children arrive at school with a sophisticated language base and they use this language as the springboard into literacy; they have an internalised language system which is a foundation for the development of literacy skills. Deaf children are therefore at a disadvantage because they have to deal with learning both language and literacy at the same time, eg, the child may not have in their vocabulary many of the words they are trying to read so they will find it very difficult to build an internal picture of what they are reading.

What are some common language difficulties faced by deaf and hard of hearing children?

Deaf children may have difficulties with:

- Limited vocabulary
- English grammar and syntax
- Grammatical markers such as "-ed", "-ing", or "-er"
- The paralinguistic markers of language, such as turn taking, control, asking for clarification, eye contact, greetings.

Deaf children may also misunderstand common expressions, such as "you've got ants in your pants," idioms, such as "you let the cat out of the bag" and they may understand only in a literal way, such expression as "he fell on hard times" or "open your mind."

Deaf children may also have difficulty in requesting information, asking and answering questions, seeking clarification, greetings and repairing breakdowns in conversations. When questioned about their understanding, they will often say that they have understood, as this is easier than admitting they did not understand.

Will deaf children catch up to hearing children in language?

Deaf children may eventually catch up to their hearing peers if they are given fully accessible input, appropriate support and teaching. Other deaf children may always experience difficulties with language and therefore also with reading and writing. This is particularly the case for those who are diagnosed at a later age and those for whom the quality and quantity of the language input has been poor.

Some deaf children of deaf parents are an exception. This has been attributed to these children's parents having all the strategies and attitudes needed to successfully teach language to their children. However, that is not always the case, and some of these children continue to underachieve.

How well do I need to sign to communicate with a deaf child?

Even the use of key word signing can aid communication. However, if the deaf child does not understand spoken language, key word signing may not be an effective alternative. Children need rich and complex language input in order to develop in age appropriate ways. They need to be exposed to more than just a simple learner's language.

Is it possible for a deaf child to say words, but not to know what they mean?

It is possible that a deaf child has learnt to articulate sounds, but has not learnt to understand language. This means the deaf child may have good speech but doesn't understand what he or she is saying. Their speech comes from training and is not an expression of naturally acquired language. Such a child will need a program developed to improve vocabulary and sentence construction.

Why do some deaf children not watch properly when people are signing or speaking to them?

This may be because they have not learnt that communicating with other people is fun and for a purpose. Their experiences with communication may have been difficult and they have not learnt how to interact with other people through conversation. Another reason may be the child has not learnt the turn taking rules of conversation. A teacher of the deaf or a speech pathologist may be able to help with strategies to assist in this area.

What are some strategies to use when talking or signing with deaf children?

- Ensure the child is watching you before you speak. You can get their attention by either touching them lightly or moving your hand or some other object within their visual field, but not too close to them.
- Keep eye contact with the child when talking.
- Hearing aids do not work well over a distance, so keep about one metre between yourself and the child.
- Don't eat, drink or smoke when talking and keep your hands away from your face. Trim your moustache or beard so it is not covering your mouth.
- Background noise can create difficulties for deaf children and for those with a
 hearing loss in one ear. Also remember reverberation is a problem for hearing
 aid users. Be aware of the difficulties of listening in rooms where there is nothing
 to absorb the sound, such as in bathrooms or gyms.
- Avoid shouting. Speak naturally and if the child does not understand, say the same thing in a different way which may be easier to lipread.
- Facial expressions and natural gestures will aid understanding, but don't exaggerate expressions. When experiencing difficulties in communicating remember that patience will be rewarded.
- Communicating in the dark and when you stand in front of a window is difficult as your face cannot be seen clearly.

- If you use a new word or sign, be aware that the child may not understand and you may need to provide additional explanations. Remember to continually expand your child's vocabulary by using new words or signs.
- Use open ended questions to make sure the child has understood, such as "how will you get to the shop?" Many deaf children will nod their head regardless of whether or not they have understood when they are asked if they understand.
- Group conversations, such as at the family dinner table, are particularly hard for a child with a hearing loss. Try and make sure only one person speaks at a time and cue the deaf child into the changing topics of conversation.

How can families improve deaf children's language skills?

- By spending as much time as they can on talking or signing with the deaf child.
 Use every opportunity they can to extend the deaf child's language; play with the child, talk or sign with the child, read books with the child and work with the child's teacher to develop strategies and games together.
- By visiting new places and providing the child with experiences to talk about later together. The child can draw pictures or write about what happened. Talk or sign about what will happen before the event, when it happens, and then after the event, talk or sign about it together, draw pictures and write stories.
- Photos are a wonderful way to discuss events with the deaf child, and include photos of specific people so that can names of these people, what they do, what they like or don't like can be discussed.
- The limit to activities which can be done with the deaf child is your imagination.