



Supporting Deaf Children in Early Childhood

**A resource for parents,
caregivers and educators**



Acknowledgements

The information contained in this resource is derived from various sources, including:

- Aurora School
- Choices information booklet (Australian Hearing)
- National Early Years Learning Framework
- Victorian Early Years Learning and Development Framework
- Supporting the Achievement of Deaf Children in Early Years Settings (The National Deaf Children's Society, UK)

For further information, please contact:

Aurora School

96 Holland Road/PO Box 249,

Blackburn South 3130

Victoria

Australia

Tel: 03-88789878

Fax: 03-88789800

Email: aurora.sch@edumail.vic.gov.au

Website: www.auroraschool.vic.edu.au



Aurora School is a Victorian Department of Education and Training (DET) early childhood special school that provides a state-wide service to deaf and deafblind children from birth to school age and their families. Programs follow a bilingual Auslan (Australian Sign Language)/English approach and include a home-based early intervention program, a centre-based long day early childhood program for children aged 3 to 6 years, a specialised program for deafblind children and an inclusive community kindergarten for deaf and hearing children.

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Introduction

‘Supporting Deaf Children in Early Childhood’ provides information about deafness and the ways in which parents, caregivers and educators can effectively support and engage with young deaf children in their early childhood environments.

This resource will help you to:

- understand the diverse communication and learning needs of deaf children
- ensure that a wide range of experiences are accessible by deaf children
- know where to go for further information and advice



In this booklet, we use the term ‘deaf’ to describe all types and degrees of hearing loss that are significant enough to require the use of listening devices such as hearing aids or cochlear implants. It is estimated that one baby in every 1,000 babies born in Australia is diagnosed with permanent childhood deafness and will be eligible for early intervention.

Just as every child is unique, so is the impact of deafness on a child’s communication and language development. In order to ensure that deaf children are provided with opportunities to enable them to reach their full developmental potential, parents, caregivers and educators need to be sensitive to ways in which to adapt their interactions to maximize communication and support language development.

Young deaf children have the same potential to achieve as all children when they are given adequate levels of support, a language-rich environment and a wide range of opportunities to engage with their peers and adults. It is important, therefore that early childhood experiences allow deaf children to:

- access a wide range of meaningful experiences
- learn from their peers
- develop confidence, positive self-esteem and a strong identity
- develop appropriate and satisfying social skills

Information and advice

Parents are the experts about the individual needs of their deaf child. It is therefore essential that professionals are well aware of the important role parents play in sharing information and advice about their deaf children's language and developmental needs. Strong parent-professional partnerships need to be built over time so that the child's developmental skills are maximized, particularly in the areas of communication, language and listening. In addition to the information provided in this booklet, valuable support and resources are provided by professionals who may be involved in a deaf child's early childhood years. These professionals may include:

Teacher of the Deaf: Teachers of the Deaf are trained teachers who have gained an additional post-graduate degree that qualifies them to support the educational needs of deaf children. They bring with them specialised skills in this field of education, including an understanding of spoken and sign language development, the development of children's auditory skills and the impact of deafness on a child's overall development.

Speech and Language Therapist: Similar to the Teacher of the Deaf, Speech and Language Therapists support the child's communication and language development and understand the challenges faced by deaf children acquiring language. They are also able to provide appropriate assessments and intervention programs that target a deaf child's specific communication needs.

Psychologist: Psychologists have knowledge and skills in the areas of child development, assessment, counselling, behaviour management and the impact of deafness on family dynamics. They monitor the child's development and consult with teachers and therapists to ensure that progress is maximised.

Deaf language model: One of the valuable ways in which hearing parents of deaf children can learn about effective communication and interaction is by engaging with Deaf adults. Deaf adults understand what it is like to grow up deaf and can help families to adapt to their deaf child's needs.

Social worker: Social workers in the deaf early childhood field have specific knowledge of resource management, family needs assessments and supports in the community. They have in-depth knowledge of funding and resources that may benefit the family and they provide support for the management of issues that may arise with allowances and entitlements.

Audiologist: In Australia, the audiological needs of deaf children are managed by Australian Hearing, a federal government-supported organisation that provides listening devices, assessments and expert advice.

Types of deafness

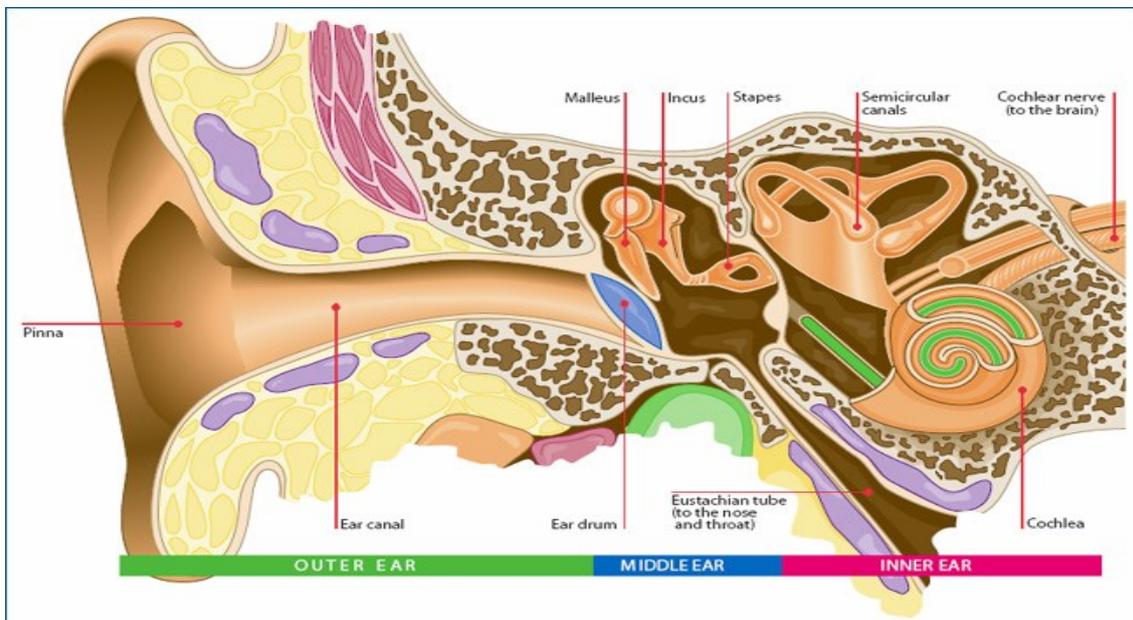
Deafness may be caused by a range of factors, including injury, disease or genetic influences. However in many instances, the cause may be unknown. Deafness may affect the outer, middle or inner ear or the complex auditory nerve pathway leading to the brain and can occur in one ear (**unilateral**) or both ears (**bilateral**).

Deafness can be described as congenital or acquired.

Congenital deafness is present at, or very soon after birth and can be inherited or caused by environmental factors before birth

Acquired deafness occurs after birth and can result from a variety of factors such as illness, accident or a late-onset genetic condition.

Deafness is categorised as **conductive, sensorineural, or mixed**—a combination of both.



Conductive deafness occurs when sound cannot pass from the outer ear to the inner ear and auditory nerve. It is usually temporary and can often be corrected with medication or surgery. Many young children experience conductive deafness due to a build up of fluid in the middle ear ('otitis media'). Other causes include:

- perforation of the tympanic membrane
- excess wax or a foreign object in the outer ear canal
- very narrow (stenosis) or absent outer ear canals
- abnormalities of the tiny bones in the middle ear (ossicles)

Sensorineural deafness occurs from damage or disorder to the inner ear, including the cochlea and the auditory nerve that transmits sound to the brain. This type of deafness is the most common cause of permanent deafness in children and is characterized by distortion and fragmentation of sound.

Congenital causes of sensorineural deafness include:

- genetic abnormalities and syndromes
- maternal infections such as rubella and cytomegalovirus (CMV)
- ototoxic medication, particularly following premature birth
- birth complications such as anoxia (lack of oxygen)

Acquired causes include:

- bacterial meningitis
- acoustic neuroma (tumour on the auditory nerve)
- ototoxic medication
- abnormalities of the inner ear such as Large Vestibular Aqueduct Syndrome



Mixed deafness describes a combination of both conductive and sensorineural hearing loss. For example, when a child with sensorineural deafness has middle-ear fluid (otitis media) or damage to the ossicles, the tiny bones in the middle ear.

Auditory Neuropathy Spectrum Disorder (ANSD) is a relatively complex type of hearing loss that is thought to be due to abnormalities at the synapse of the inner hair cell and auditory nerve, and/or the auditory nerve itself. ANSD can result in a hearing loss of any degree (mild, moderate, severe or profound) and can result in speech sounding very distorted, even with a mild hearing loss.

Impact of deafness on children's learning

Normal Hearing: 0-20 decibels (dB)

NB: Personal wireless devices and/or soundfield systems are recommended in noisy settings for all degrees of deafness

Mild deafness: 20-45 dB

- trouble hearing faint or distant speech
- can miss 25-40% of speech signal
- hearing aids recommended when hearing loss is more than 30 decibels (dB)
- may not discriminate un-emphasised vowels and consonants, especially with high frequency loss
- may miss up to 50% of conversations in noisy environments

Moderate deafness: 45-60 dB

- without hearing aids, lipreading will be necessary
- can understand conversations at 1 metre if vocabulary and syntax is familiar
- may miss up to 80% of conversations
- reduced vocabulary, disordered grammar
- may have difficulty following conversations in groups and noisy situations

Moderate-Severe deafness: 60-75 dB

- even with hearing aids, parts of words may be missed; may discriminate vowels, but not all consonants
- hearing aids essential if conversational speech is to be audible
- visual information necessary to support access to spoken language
- language will be delayed and speech intelligibility will be reduced
- comprehension of spoken language significantly reduced

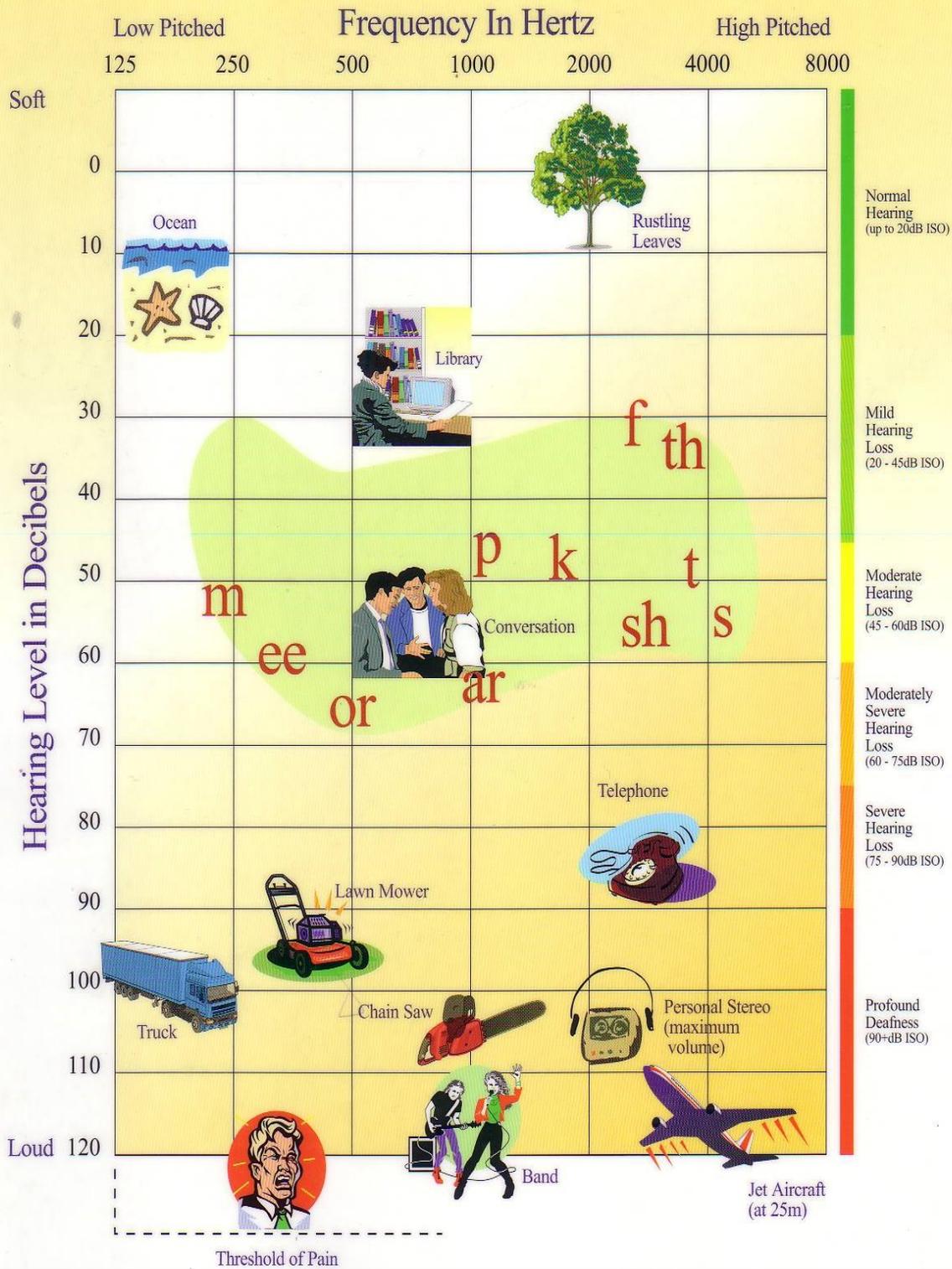
Severe deafness: 75-90 dB

- without hearing aids, speech is inaudible, particularly high frequency sounds
- speech intelligibility will be noticeably affected, even for familiar listeners
- spoken language will not develop spontaneously—consider sign language
cochlear implant/s usually recommended

Profound deafness: 90+ dB or more

- aware of vibrations more than spectral patterns of speech
- spoken language unlikely to develop without amplification
- cochlear implant/s recommended as the only amplification device that will provide access to speech

Frequency and Intensity of Familiar Sounds



A resource for parents, caregivers and educators

Listening Devices

Listening devices such as hearing aids, bone conductors and cochlear implants do not provide normal hearing for deaf children, but they do significantly improve access to sound through amplification. In most cases they will enable children to detect sounds across the speech spectrum and they are specifically programmed for each child's particular type and degree of deafness. It is important to remember that all noise is amplified, including distortion and background noise, which makes listening difficult in noisy environments.

Behind the ear (BTE) hearing aids

A hearing aid has three basic parts: a microphone, amplifier, and speaker. The hearing aid receives sound through a microphone, which converts the sound waves to electrical signals and sends them to an amplifier. The amplifier then increases the power of the signals and sends them to the ear canal via an ear mould. The hearing aid is powered by a small battery situated in a compartment at the base of the aid.



The more severe the hearing loss, the greater the level of amplification needed to provide access to speech sounds. However, there are practical limits to the amount of amplification a hearing aid can provide, in which case an audiologist may recommend that a cochlear implant should be considered for children whose degree of deafness is severe-profound or profound.



Cochlear Implants

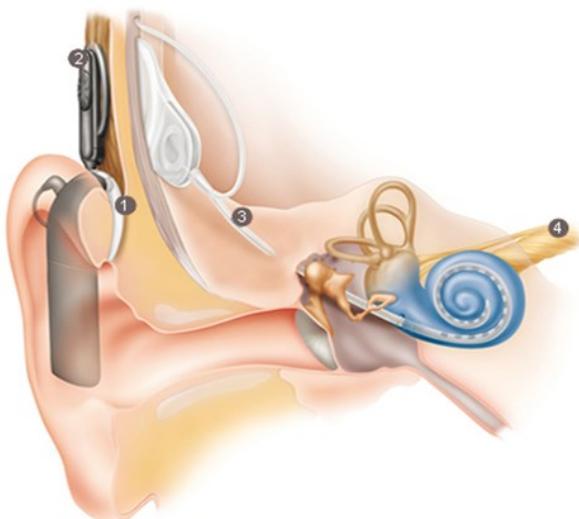


A cochlear implant is a type of listening device that sends electrical signals directly to the cochlea and auditory nerve. As with hearing aids, cochlear implants do not restore normal hearing levels, but provide access to sounds across the speech spectrum for people who have a severe-profound or profound hearing loss and who have limited access to speech sounds through hearing aids.

The implant consists of an external portion that sits behind the ear and a transmitter and electrode array that are surgically placed under the skin.

The cochlear implant system consists of:

1. A microphone, which picks up sound from the environment and a speech processor, which selects and arranges sounds picked up by the microphone. The processor is usually worn behind the ear but may be worn on the body by very young children
2. A coil, which sits against the head and transfers digitally-coded sound through the skin to the transmitter
3. A transmitter, which receives signals from the speech processor and converts them into electric impulses
4. An electrode array, which receives the impulses from the transmitter and stimulate the auditory (hearing) nerve in the cochlea, which then sends the impulses to the brain where they are interpreted as sound



Bone conduction hearing aids

A bone conduction hearing aid bypasses problems in the outer or middle ear and delivers sound to the inner ear via a vibrator or oscillator (bone conductor) placed against the bony area of the skull, just behind the ear. The sound vibrations travel through the bones of the skull, causing movement of the fluid in the cochlea in the inner ear. This causes hair cells in the cochlea to produce electrical signals that are transmitted to the brain and are interpreted as sound.



Bone conduction aids may be the best option when conventional hearing aids cannot be worn, such as when a child's ears have not developed normally and parts of the outer or middle ear are missing or too small, or when there is chronic discharge, irritation or inflammation in the external auditory canal.

The bone conductor needs to be held firmly against the head to be effective and is usually worn on a metal headband. However, very young children frequently use a firmly-fitting fabric headband which holds both the bone conductor and the hearing aid in place.

Bone anchored hearing aids

A bone anchored hearing aid (BAHA) uses a sound processor that attaches to the head either by clipping on to a small titanium screw surgically implanted into the skull behind the ear (an abutment), or by way of a small magnetic implant inserted under the skin. The sound processor picks up sounds through the microphones and converts them into vibrations. These



vibrations are then transmitted through the skin to the small implant which then sends them via the skull bone to the cochlea in the inner ear to be interpreted as sound.

However, children are not able to receive the surgical implant until they are 5 years of age or until their skull bone density is suitable. The BAHA processor is therefore worn on an adjustable soft head band during the early childhood years.

Wireless Communication Systems

Personal wireless communication systems (previously FM systems) are designed to overcome the difficulties of hearing from a distance and discriminating speech in noisy situations. They are used together with the child's hearing aids or cochlear implants and consist of two parts: the transmitter and the receiver. The educator/parent wears a small microphone attached to the transmitter and the speech is sent by radio waves to the child's receiver which is attached to the aid or cochlear implant. The receiver in turn picks up the signal and amplifies it.



Wireless Receivers

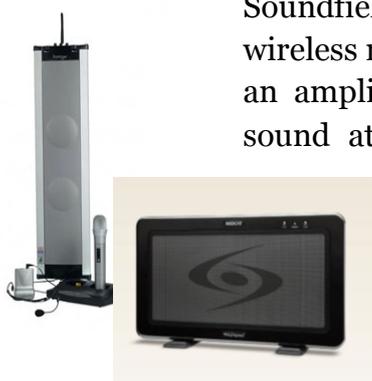


Transmitter

Remember to:

- Wear the microphone about 15 cm from the mouth when speaking
- Check that the child's listening devices are working
- Activate the transmitter when talking to the child and during group times
- Mute the microphone when directing speech to other children
- Avoid knocking the microphone against jewellery or rubbing on clothing
- Do not shout into the microphone

Soundfield Systems



Soundfield Systems project the speaker's voice by way of a wireless microphone that sends radio or infrared signals to an amplifier in the room. They are designed to deliver sound at a consistent and comfortable listening level above the background noise and to enhance the listening conditions for all children in the room. The soundfield system can also be set up to link to a deaf child's personal wireless system.

What you need to know about listening devices

- Children who wear hearing aids, cochlear implants or bone conductors can take part in regular indoor and outdoor activities. However, care must be taken that the devices are protected from exposure to water as damage may occur to electronic components. It is advisable that children either remove their devices or wear specifically designed water resistant covers when playing with water for prolonged periods
- Children's hearing aids or cochlear implants need to be checked to ensure that they are switched on and working throughout the day, particularly after vigorous activity
- It is important to make sure that children's listening devices are put back immediately if removed during play. Hearing aids and cochlear implants must be put back on the correct ear
- Always make a deaf child aware when you are about to take a listening device off or put it back on. For young children, a gentle touch on the ear helps to alert them that their access to sound might change
- Bone conductors on a band need to be placed on the head with the amplifier and oscillator on either side of the child's head
- It is important that background noise is kept to a minimum
- Ill-fitting hearing aid moulds or wax in the outer ear canal can cause acoustic feedback - a high pitched whistling sound emitted from the hearing aid. Usually this sound is reduced when the mould is gently pushed into the ear correctly
- Hearing aid batteries occasionally need replacing, so it is useful to have spare batteries on hand
- Children who use personal wireless listening devices should be alerted by the adult when the transmitter is going to be turned on
- The optimal range of amplification for hearing aids, cochlear implants and bone conductors is approximately three metres in quiet listening conditions
- It is important that you are familiar with any listening devices the children use. Make sure you have appropriate instructions and information to refer to

Communication

Deaf children use a range of strategies to communicate with people in their lives. They may demonstrate a preference for using spoken language or Auslan (Australian Sign Language), or use both languages bilingually. It is important to be aware of how to best meet a deaf child's communication needs so that interactions are positive and rewarding in a range of situations .

The following pages will focus on:

- Communication Strategies
- Enhancing communication with young deaf children
- Language Acquisition
 - Spoken Language
 - Auslan (Australian Sign Language)
 - Bilingual Approach
- Communicating with deaf children with additional developmental needs



Communication Strategies

Regardless of the level of a child's hearing loss, communication will be more rewarding if meaning is attached to what you are communicating about. It is also very important that you gain and maintain the child's attention to ensure that your input is effective. There are a number of specific communication strategies that will help to enhance interactions and will support the foundations of future language development:

Using Facial Expression and Body Language

- Show your emotions on your face, together with appropriate body language and gestures to match what you're communicating about



Gaining the child's attention

- Call the child's name
- Tap on the table or floor
- Sign or gesture in the child's visual field
- Wave your hands within the child's visual field
- Move an object into the child's line of vision



Touch

- Use a gentle touch to praise or reward the child's behaviour and show affection
- Reprimand or warn with a firm touch to indicate your tone of expression
- Gain attention by tapping on the child's arm or leg, but not on the head or face



Waiting till the child is looking at you

- Make sure the child has eye contact with you before you communicate
- Keep within the child's visual field
- Check what the child is looking at and reward for appropriate eye contact.

The child may need to stop playing to pay attention to your conversation, so wait for eye contact before you continue communicating. You may use repetition or exaggeration of your language to make it more meaningful.



Pointing

- Point to an object or person to establish joint attention
- Emphasise or reinforce information related to an object or event
- Direct or redirect a child's attention
- Refer to a person or an item of interest



Placement of self and object within the child's view

- Maximise the child's attention by positioning yourself appropriately so that valuable visual information from your facial expressions, gestures or signs is easily accessible while the child is playing.



Encouraging communication

Auditory awareness

- Sing nursery rhymes & songs
- Play games with animal sounds
- Use a range of musical toys, noisemakers
- Alert children to sounds they make



Visual attention

- Sing songs with movements & gestures
- Make funny faces in the mirror
- Blow bubbles and watch them burst
- Look at picture books together



Imitation

- Blow raspberries
- Sing songs with gestures: 'I'm a little teapot'
- Use Teddy Bears to copy actions
- Play 'Simon Says'



Object permanence

(knowing something is still there even when you can't see it)

- Play Peekaboo
- Find hidden toys
- Play hide and seek



Cause and effect

- Pop-up toys
- Jack in the Box
- Skittles
- Baby activity centres



Anticipation

- Sing Round and round the garden
- Burst bubbles
- Add drops of dye to water
- Roll marbles down marble race



Turntaking

- Make towers of blocks together
- Roll balls to each other
- Toss rings on stacker
- Simple card games e.g Snap



Acquiring Language



Children acquire language or even multiple languages with surprising ease when they are able to participate in meaningful communication exchanges with parents and caregivers during their early childhood years. When children have adequate input, they master the basics of language by the age of five and have acquired a range of grammatical

rules and a vocabulary of many thousands of words by the time they go to school. Having a hearing loss, however, has a major impact on a child's ability to develop language and very often results in communication and language delays if intervention strategies are not put in place early in a deaf child's life.

Language acquisition depends on frequent, consistent and accessible communication, regardless of whether it is spoken or signed. It is also important to determine the type of language input that is most suitable for a young deaf child so that interactions are meaningful and rewarding. Whether you use spoken language or sign language will depend on a number of



factors, including the child's ability to hear and process spoken language and their preference for auditory or visual input. These early interactions establish the foundation upon which language develops and need to occur as soon after birth as possible if a child is to develop optimal language skills in the future.

Another important aspect of language input for young deaf children is the



quality of interactions with parents and caregivers and the fluency of their language input. Families whose first language is not English are therefore encouraged to communicate in their native language during the child's early developmental years. Similarly, families using sign language in a bilingual approach may access fluent

sign language models to ensure that children are exposed to fluent Auslan input.

Spoken language

Today, most deaf children who are diagnosed at birth and fitted with high quality listening devices can learn to use their aided hearing to gain functional spoken language. The improved technology of digital hearing aids and cochlear implants now enables children with severe and profound deafness to access to sounds across the speech spectrum. In addition, access to high quality early intervention programs provide parents and caregivers with the knowledge and support they need to ensure that their children achieve the best possible communication and language outcomes .



The more natural spoken language young deaf children can hear, the more they are given opportunities to communicate in intelligible speech. However, even though listening devices nowadays are very sophisticated and provide important amplification immediately following diagnosis, it is often difficult to know exactly how well a very young child

processes and understands spoken language. Even with improved technology, children with any degree of sensorineural deafness will experience distortion and fragmentation of the speech signal which can present significant challenges to understanding and using speech.

In addition to making use of auditory input, most young deaf children acquire skills in lipreading. Lipreading assists the comprehension of spoken language by giving visual clues about the speech sounds a speaker is saying. However, only about 40% of spoken language is visible on the lips, therefore there is a limit to the amount of language that can be understood through lipreading alone.



It is therefore important to ensure that a deaf child's listening devices are working optimally, acoustic conditions are favourable and language is continually expanded and enriched at every opportunity. It is also beneficial to use other visual information such as Auslan, pictures and photos to support spoken language and attach meaning to your verbal input.

Auslan (Australian Sign Language)

Auslan (Australian Sign language) is a most expressive visual-gestural language that engages children's attention and adds meaning to the verbal language they hear. Auslan has its own vocabulary and grammar which are expressed by using a variety of handshapes, together with specific aspects of orientation, location, movement and non-manual movements such as facial expressions and body movements. There are currently 38 different Auslan handshapes and 28 variations which make up thousands of signs.



Exposure to sign language does not impede the development of a child's spoken language, but rather acts as a bridge to speech and adds meaning to the verbal language the child hears. Although many adults may think that learning sign language is a difficult task, children acquiring sign language when they are very young learn vocabulary and grammar in the same way children

learn a spoken language — through communication exchanges with their parents and primary caregivers in natural social situations. Signing children learn their language as naturally as hearing children learn the spoken language to which they are exposed and they achieve their language milestones in the same sequence and in the same timeframe.

Infants who are immersed in a sign language environment babble with their hands ('manual babble') at around the same age as babies babble vocally, from six to 12 months of age. They then produce their first signs at the same age that babies produce their first words, followed by two-sign phrases by the time they are about 20 months.



As children are further exposed to a rich Auslan input, their language becomes more complex, with many more signs and more sophisticated grammar emerging. By the time they reach school-age, they can communicate confidently, using language appropriate for their developmental age.

The Bilingual Approach

Bilingual deaf children and their families use two languages: spoken language (the family home language and/or English) and Auslan (Australian Sign Language). By using a bilingual model, in which the spoken and signed languages are used in a natural, age appropriate way, young deaf children are given opportunities to determine their preferred language for communicating and learning. By the time the child is ready for school, it should be evident which language is more appropriate and parents' choices for educational programs will be clearer. Speech and listening skills are certainly very important aspects of this approach and are seen to be a part of the bilingual experience rather than the only communication mode available to the child.



In general, if a child is able to acquire two or more languages early in development, there are noticeable advantages to mental processing and concept development, in addition to an ability to use more than one language to express a variety of needs. We also know that if babies are exposed to two languages (even if one is spoken and one is signed), each language can be acquired within normal developmental limits with no interference or delay to either language. The developmental stages of a signed language are the same as those for a spoken language and are acquired at the same rate when there is consistent input by fluent users of the language.

- Regardless of the degree of deafness, children will choose to communicate in their preferred language
- Both languages will not necessarily be acquired at the same level of proficiency. It is acceptable for one language to be dominant at various times. Some deaf children may use Auslan only when they socialize with other signers but at other times use spoken language with non-signers
- Many bilingual children use one language for understanding and the other language to express themselves, for example listening to spoken language and expressing in Auslan, or vice versa.



Supporting language development

Remember to:

- Ensure that the child's hearing aids, cochlear implants or wireless systems are switched on and working
- Use natural, fluent language, accompanied by appropriate facial expressions and body language
- Stand no more than two metres from the child when communicating
- Sustain eye gaze while communicating
- Ensure that your face is not in shadow so that lip patterns are visible
- Provide visual, contextual and auditory cues to support the meaning of what you say or sign
- Alert the child to a change of topic in conversation by using visual and contextual cues
- Keep background noise to a minimum—move to a quieter place if necessary. Turn off or lower the volume of background music and TV
- Ensure that visual displays in the room are not distracting the child from attending to spoken or signed language input
- Ensure that your mouth is clearly visible when you communicate. Do not use exaggerated mouth patterns that distort the rhythm and phrasing of speech
- Allow the child to see the expression in your eyes and on your face
- Ensure that only one person communicates at a time



Deaf children with additional developmental needs

More than 40% of deaf children have additional needs, which may be sensory, physical, cognitive, health impairments or a combination of all. These additional developmental challenges may therefore make it difficult for the child to acquire basic communication or language skills.



For deaf children with additional developmental challenges, AAC (augmentative and alternative communication) options may be appropriate. AAC refers to a communication system that supports and enhances natural spoken or signed language and includes two types:

- Unaided, involving the use of body language, touch cues, gestures and key word signs
- Aided, requiring the use of :
 - ◇ Tangible materials, such as simple objects of reference that represent an activity or event in a child' routine e.g rubber duck for bath-time
 - ◇ Visual communication systems, such as PECS (Picture Exchange Communication System) and PODD (Pragmatic Organisation Dynamic Display), using a wide range of colourful pictographs
 - ◇ A range of programs and apps that use tablet and computer technology to assist effective and spontaneous communication
 - ◇ Speech output devices ranging from simple switch devices that produce one or two-word utterances to more sophisticated speech –generating devices that enable a child to generate more complex utterances that are understood by others

Inclusive early childhood experiences



To ensure that deaf children are fully included in their early childhood program and have the same access to learning as other children, there may need to be changes made to the way play experiences are planned. Below are some examples of effective practice to support young deaf children in programs such as childcare, playgroup and kindergarten.

Communication Books

This can be an effective way for parents and carers to share news about what a child has been doing. Examples of a child's work or new language they have been using could be included so that their parents can follow this up at home. The book can also be used by a child as a prompt when telling their parents about what happened in their early childhood program. Additionally, parents can write about what has been happening at home, for example a recent visit to grandma's or a special birthday in the family. This provides an opening for conversations between carers and the child.

Experience Books

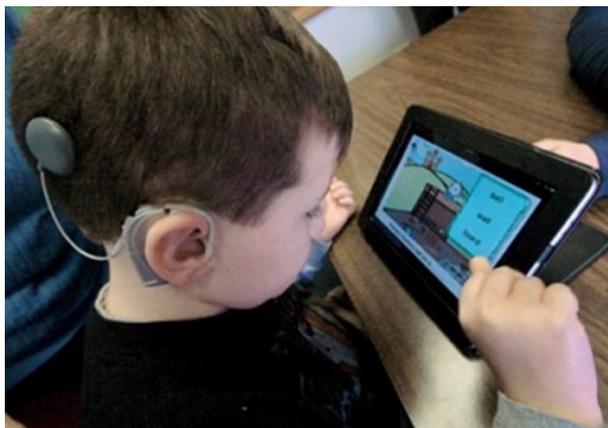
Photos of a child's own experiences can be compiled into an experience book, using small photo albums or pocket display books. In this way, experiences can be relived over and over again with a variety of people while at the same time developing a child's communication skills. Make simple photo books related to routine experiences, such as lunch time, rest time, favourite activities. Write brief, simple sentences and read these aloud while writing, then reread the page or book with the child. Sign about these experiences too, if possible. If an Auslan language model visits the early childhood program, encourage these books to be signed with the deaf child as well as other children in the group. Ideas for experience books include:

- Visit by the mobile farm
- Teddy Bears' picnic
- Grandparents' Days

Experience books can help deaf children to anticipate future events and increase their participation in planning special activities. Providing photos of visitors to the program before the visit also helps to increase the children's understanding and maximises their enjoyment of the event.

Video stories

Another valuable way of sharing a child's experiences at child care or kindergarten is to record interactions, events and routines on a video camera or tablet. These video records may only be a few minutes in length, but are valuable ways to encourage young deaf children to engage in conversations about their experiences.



Clarifying communication



When communicating with a deaf child in speech or Auslan, always ensure that listening devices are in working order and you are at the same level of eye-gaze, preferably not more than a metre away. If you feel the child does not understand or you are unsure about how to sign the instruction you can communicate by:

- Showing a picture or photo to clarify the topic of conversation
- Using 'visual schedules' - pictures depicting simple sequences
- Adding natural gestures and visual cues
- Letting the child watch others doing the same activity

When checking the level of deaf children's understanding, always let them know if you don't understand them and encourage them to repeat their communication. It is important that young deaf children feel confident to 'repair' or repeat their communication in the same way that we encourage hearing children to do. This is a normal aspect of a child's language development and should not be seen as negative or critical.

Reading Books

When reading a book with a deaf child, think about how you are seated so that you maximise the auditory and visual input you provide. For instance, sit behind the child and slightly to the side, or face the child and hold the book in front of you. You also need to be within touching distance so that you can gain the child's attention from time to time. Like all children, deaf children need time to look at pictures and to absorb the information. Use lots of facial expressions and ask questions such as "What do you think will happen next?"



- Use different props and visual clues to help explain what is happening
- Use lots of facial expressions to show the humour or the different moods of the characters
- If you are signing the story, choose signs that are engaging and visible that add meaning to the pictures and story. It will also be fun for other children to learn the new signs and reinforce their learning of new words
- Encourage children to act out parts of the story

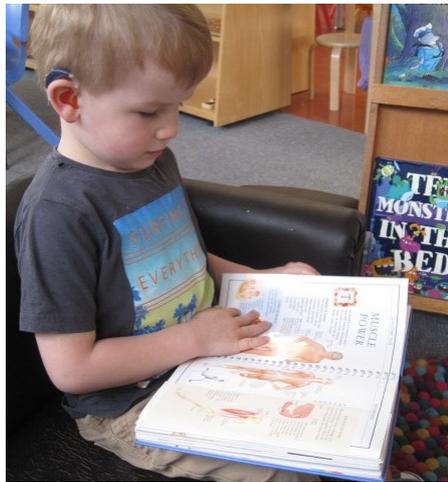


Reading Books (continued)



If possible, it is a good idea to send storybooks home with the deaf child before they are read to the whole group. Parents and caregivers are encouraged to read the story at home so their child becomes familiar with the content, the language, vocabulary and storyline. This assists with understanding and gives the child more confidence to participate in the group discussion.

CDs or DVDs accompanying story books are also a good idea, as long as the sound is of a high quality. At home, children can listen to these audio books and follow the sequence of the story in preparation for the group discussion.



Sometimes it is not possible to send stories home beforehand, as stories may be read spontaneously in response to incidental happenings and children's interests. If this happens, the book can be sent home after it has been read to the group and parents can re-read the story at home to revise vocabulary, concepts and meaning.

Group Time

At group time, remember these important strategies that will support a deaf child's inclusion in their early childhood program:

- Seat the children in a circle so that everyone can see each other
- When asking questions, make sure that the deaf child is aware of who is speaking. Children can be encouraged to raise their hand when it's their turn to speak
- Try to make sure that each child takes turns in talking so that the deaf child can lipread and listen to one child speak at a time
- Be aware of the noise level - make sure the children remember that it is difficult for a deaf child to follow a conversation if too many children are talking at once
- If the deaf child is using a wireless unit, make sure that whoever is speaking has it turned on. If possible, allow the other children to pass the microphone to each other. If not, repeat what has been said
- Explain the rules and other instructions for games in a small group so that the deaf child has better access to the language being shared. Sometimes it is useful to use another child or adult to demonstrate how a game is played



Remember to have some visual props ready to reinforce what the topic is about. Pictures, photos and relevant toys or objects provide extra information about the discussion and immediately tune the child into the topic. For example pictures about people in warm coats and hats will support the concept of Winter. These visual supports will help the deaf child follow the discussion and will provide more opportunities for effective and enjoyable participation and learning.

Music Time

Music is an effective way to encourage a deaf child to listen to a variety of sounds and learn to sequence words in a song. If possible, find a quiet area so that children can try instruments and experience the sounds and vibrations. During music time, use action songs so that everyone can join in at their own level. Remember that a deaf child might need visual clues to follow what is happening, such as when to join in or when the music has stopped. If you know the signs to the songs, you could also add some key signs, as long as the rhythm of the song is not interrupted.



New songs and games can be introduced with an accompanying picture. Each time the particular song or game is chosen, show the picture to cue the deaf child to the correct song, for example a picture of a dog or a bone will help the child be aware that the song will be 'How much is that doggy?' Pictures or cards can also be used to give the children the opportunity to choose which song or game they would like next.

Sending copies of songs, rhymes and poems home to families is also a good idea. Practicing the sequence of words in songs helps to reinforce the language learnt at kindergarten and increases the deaf child's confidence to join in the music activities in the group.

Creating inclusive environments for young deaf children

The design and layout of the room in the early childhood program can impact on a deaf child's ability to focus and learn to the best of their ability. Some rooms may be so acoustically challenging that sounds are echoed or may become distorted for children wearing hearing aids and cochlear implants. It can be very difficult for a deaf child to learn under these conditions and may contribute to poor attention and challenging behaviour. Here are some ways to improve the listening conditions:

Reduce background Noise

- Fitted covers on tables made from soft fleecy material
- Carpeting floors, area, carpet squares for individual mats
- Rubber or felt stops on chair legs
- Closing doors or windows if it is noisy outside

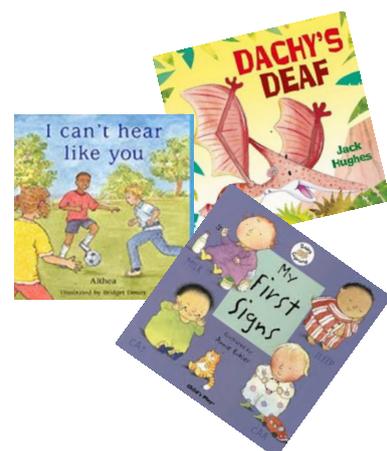
Position

A child cannot see your face well if you are standing in front of a mirror or a window. For activities and group work, ensure that the deaf child stands or sits with their back to the window, so they can see you and the other children and be aware of what is happening in the room. Ensure that activity tables and places with a high level of interest are placed in areas that are not too noisy or visually distracting.

Place colourful pictures and posters a bit higher than child's eye level so they can concentrate on looking at you rather than being distracted by the art work. Making specific changes to a deaf child's physical environment can help to make communicating, learning and socializing a positive and rewarding experience.

Books and pictures

Include books with pictures of children wearing hearing aids or cochlear implants and that feature Auslan in the stories. It is also important to have some simple books which explain about deafness and will help the other children understand about their deaf friends in their early childhood programs.



Promoting positive social experiences

Like all children, deaf children need to learn about socially acceptable behaviour, so require a clear understanding of what is expected of them. Parents and caregivers must therefore set consistent behavioural limits and ensure that the children have access to the language used in their early child environments.



Here are some suggestions:

- If the child becomes upset, wait for him/her to calm down before attempting to gain eye contact
- If the child resists looking at you, be patient and gently reassuring
- Explain the rules of the program by pointing out other children behaving in acceptable and unacceptable ways
- Find opportunities to talk about feelings so that the children become aware of a range of emotions



Useful Websites

Aussie Deaf Kids

Provides support and resources for parents of deaf and hard of hearing children living in Australia. www.aussiedeafkids.org.au



Australian Hearing

Provides hearing services under the Australian Government Hearing Services Program, for children and young people up to the age of 26 and adults who are pensioners. www.hearing.com.au



Bilby

A publishing and consulting company for Auslan resources. www.bilby.net



Cochlear

Provides information about cochlear implants and other products www.cochlear.com



Deaf Access

Supports deaf and hard of hearing people in rural and regional areas of Victoria to become more included in their local community. www.deafaccessvic.com



Deaf Children Australia

Provides information, advocacy, support and educational resources for deaf children and their families. www.deafchildreinaustralia.org.au



Deafness Foundation

Supports deaf and hard of hearing people through research, prevention, early detection and technology. www.deafness.org.au



Parenting SA

An initiative of the South Australian Government that promotes the value of parents and the important role of parenting. Website features Parent Easy Guides—easy-to-read information on many of the issues faced by parents. www.decd.sa.gov.au/parentingsa



Useful Websites

Raising Children Network

The Australian parenting website features comprehensive, practical, expert child health and parenting information and activities for children aged 0-15 years. www.raisingchildren.net.au



Signbank

An Auslan language resource and interactive online dictionary www.auslan.org.au



Sign Planet

A resource for sign language images and activities. Features a fully searchable dictionary and resource database. www.signplanet.net



The Auslan Company

Provides Auslan courses for the community www.auslan.net.au



Victorian Deaf Education Institute (VDEI)

Department of Education Centre of expertise in deaf education www.deafeducation.vic.edu.au



Vicdeaf

The primary source of reference, referral, advice and support for deaf adults in Victoria. www.vicdeaf.com.au



Word of Mouth Technology

Specialises in assistive technology for deaf and hard of hearing people www.wom.com.au

