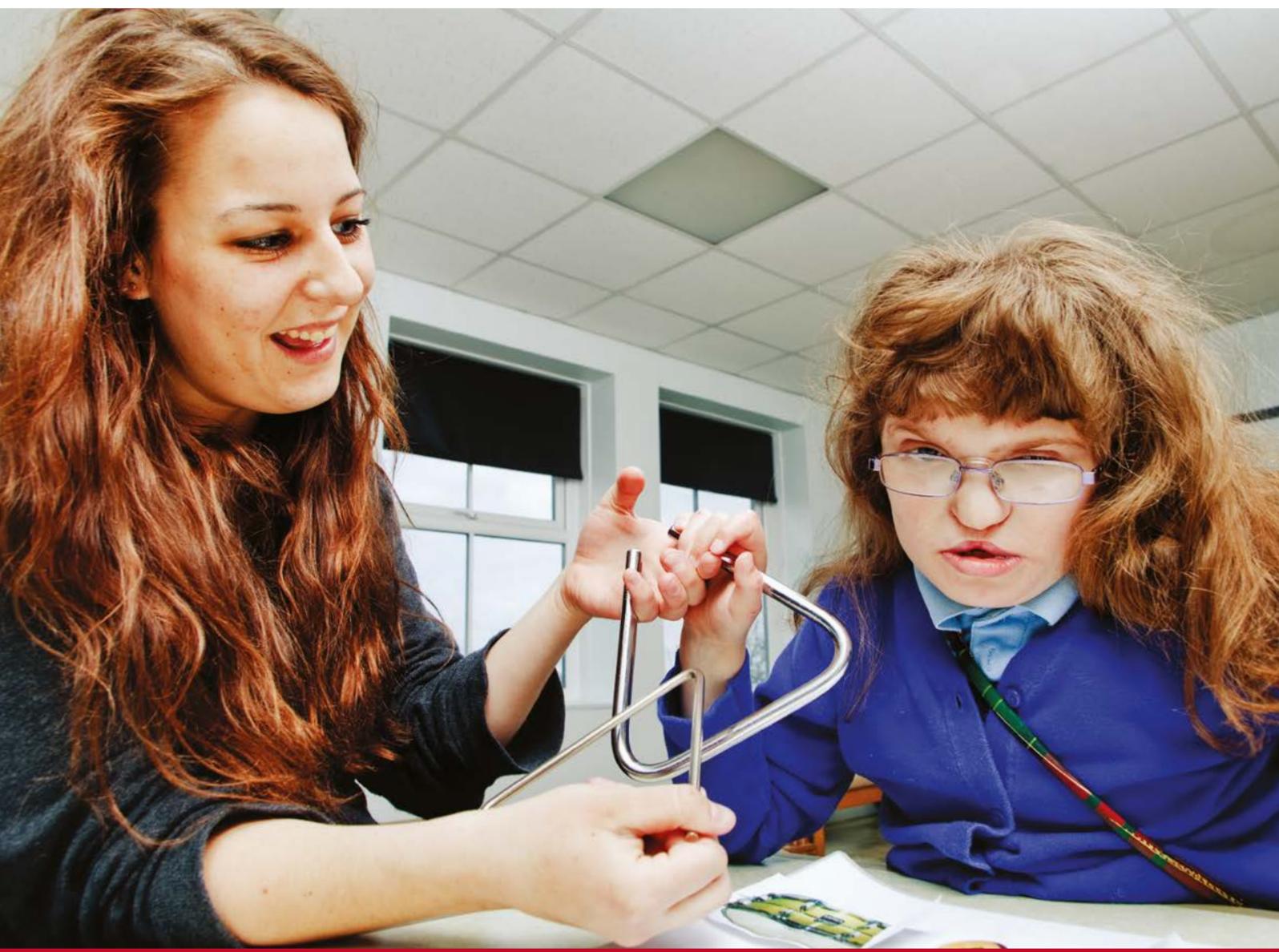


Supporting the achievement of hearing impaired children in special schools

For staff working in schools attended by children with complex needs



Our vision is of a world without barriers for every deaf child.

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Introduction

The National Deaf Children's Society uses the word 'deaf' to refer to all levels of hearing loss. We include pupils who may have been identified as having a hearing impairment in the School Census.

Purpose of booklet

This resource will be useful for anyone who works with deaf pupils in a special school. It will help you to improve outcomes and progress for deaf children and covers the following topics.

- Understanding deafness and how it impacts on a child's ability to access teaching and learning.
- Ensuring the effective use of hearing equipment.
- Creating a good listening and learning environment.
- Knowing how to communicate effectively with a deaf child.
- Adapting teaching and learning strategies to ensure the curriculum is accessible.

This resource will outline practice, strategies and advice that will improve communication for everyone and therefore benefit all children in your school.

Throughout the resource, we have included case studies that show different ways that deaf children with additional needs have been supported by special schools.

No two children with additional needs are the same. However, you may be able to identify strategies from these case studies to support a child you are working with. The child's peripatetic Teacher of the Deaf or local specialist educational support service for deaf children can also support and advise you.

NOTE

We use the term 'parent' to refer to all parents and carers of children.

Background

A significant proportion of pupils in special schools are deaf. Deafness is associated with many medical conditions or syndromes, and often shares a common cause, such as infection. Additionally, there is a high rate of deafness in very premature babies who have a range of difficulties, and increased survival rates mean that the number of deaf pupils in special schools is likely to rise.

Deafness presents a very significant barrier to pupils acquiring language, communicating, making educational progress, developing socially and emotionally and gaining independence. Even mild deafness can have a significant detrimental impact on a child's progress.

Complex Needs, Complex Challenges

The University of Manchester's *Complex Needs, Complex Challenges* research report found that when deaf children also have complex needs, their deafness is often overshadowed by their other difficulties.¹ This is despite the critical importance of deafness and the impact it can have on a child's learning and progress.

The University of Manchester discovered issues including late diagnosis, problems accessing medical treatment and difficulties in getting specialist support. The report described some professionals as being overwhelmed by the complexity of needs and others as treating deafness as a 'minor' condition that could be addressed later in the child's life. However, deafness will always have an impact on a child's ability to learn and develop, and should be addressed as early as possible.

Prevalence of additional disabilities and deafness

Up to 40% of deaf children have additional health, social or educational needs ranging from asthma or dyslexia to more severe disabilities like learning or physical difficulties, or multisensory impairment.²

A child in a special school may have a hearing loss for a number of reasons including:

- as part of a condition or syndrome such as cerebral palsy, CHARGE or Down's syndrome
- congenital infection such as cytomegalovirus (CMV), toxoplasmosis, rubella syndrome or syphilis
- childhood infection such as meningitis

1. University of Manchester (2010). *Complex Needs, Complex Challenges: A report on research into the experiences of families with deaf children with additional complex needs*. Available to download from www.ndcs.org.uk/research.

2. Fortnum et al. (1996). *Health Service Implication of Changes in Aetiology and Referral Patterns of Hearing Impaired Children in the Trent Region*.

- traumatic brain injury
- structural difference in facial or skull anatomy
- medical treatment given in the child's history.

The results of a literature review on the prevalence of additional disabilities and deafness can be downloaded from www.ndcs.org.uk/research.

Working with parents

You will already be working closely with families to ensure that children get the support that is right for them. When working with a deaf child, parents can also be an essential source of information around:

- their child's level of deafness and how it affects them
- any difficulties they have experienced in getting their child to use hearing equipment and what strategies they have used to ensure the child uses them
- their child's communication preferences and what works best
- whether their child is over-sensitive to particular sounds.

For more detail on this see Getting started, page 32.

Many parents have told us that they value information from schools that can help them to support their child's learning. Teachers can help by:

- explaining any tasks that their child should practise
- sharing any challenges their child might face and discussing how to respond
- providing information on topics their child will be learning and how they can help support this at home.

Parents have also told us that they value receiving regular, up-to-date and accessible information about their child's:

- progress against targets and the measures being taken to address any difficulties they may be experiencing
- participation in school life, including developing social skills and friendships
- development of communication and language skills
- use of hearing technology, any challenges experienced or any enjoyable listening experiences.

Working with other professionals

Professionals who support deaf pupils may include the following.

Teacher of the Deaf – deaf pupils should receive support from a Teacher of the Deaf who has a mandatory qualification in deaf education. Teachers of the Deaf are often employed by a local authority peripatetic service. Access varies depending on the local authority and the severity of the child's deafness. The Teacher of the Deaf can provide ongoing support and advice, organise training and can be contacted should any concerns or difficulties arise.

Speech and language therapist – in addition to a therapist that may regularly visit the school to provide advice on communication strategies, language development, challenges with eating, drinking and swallowing, and augmentative and alternative communication (AAC) systems, some health services or local authorities may employ a therapist with a specialism in deafness.

Audiologist – carries out hearing tests to determine the level and type of a child's deafness. They fit and maintain hearing aids and implantable hearing devices, such as bone-anchored hearing aids and cochlear implants, and evaluate the child's hearing and listening development as a result of using their hearing aids. They also work with the Teacher of the Deaf or educational audiologist to ensure that the pupil's hearing technologies, for example, radio aids and hearing aids, are working together effectively and that troubleshooting information is available and up to date.

Educational audiologist – is a Teacher of the Deaf or speech and language therapist with a qualification in education audiology. The role involves offering specialist advice on acoustics, improving the listening environment and suggesting how hearing technologies can be used to best effect to help ensure access to teaching and learning.

Social workers for deaf children or family support officers – if a child's hearing loss and communication and language needs are not fully met, it can have a significant impact on their social and educational development, and emotional well-being. If the school is concerned that the parents need further support or are experiencing difficulties in meeting their child's hearing and communication needs, it should refer the matter to social care using local referral procedures. For example, a school should consider referral if it has worries about hearing equipment not being used or maintained, audiology appointments being missed and lack of interaction between carer and child.

Effective provision

Effective provision for a deaf pupil in any school will entail:

- a thorough assessment of the pupil's needs and strengths
- a plan setting out how the school will meet those needs and overcome any barriers to the pupil making good progress
- effective implementation of the plan
- regular reviews of the pupil's progress and the success of the plan to establish whether changes need to be made and what these are.

In England, this 'assess, plan, do, review' cycle has been incorporated into statutory guidance set out in the *Special Educational Needs and Disability Code of Practice* (2015).³ Using this resource will help you to demonstrate how this approach is being followed.

More information about the assess, plan, do, review cycle can be found in Appendix, page 55.



3. www.gov.uk/government/publications/send-code-of-practice-0-to-25

Understanding deafness

Working together to understand a child's hearing

When a child has complex needs their hearing problems may go unrecognised or undiagnosed. This may be because behaviours associated with deafness are thought of as being part of the child's personality, physical or learning difficulties, or complex needs. When this happens a child may not be referred to audiology services or assessed by an audiologist for a long time.

Unrecognised and unmanaged deafness can cause or contribute to speech or language delays and difficulties with learning and reading, and can cause difficulties communicating with others. Deafness can therefore have a significant impact and exacerbate the effects of any physical or learning difficulties on a child's educational and social development.

It is important to consider a child's needs as a whole and how they can impact on one another. Listening takes energy and in a noisy classroom environment a child may get tired and be unable to concentrate on other tasks for as long as would be expected. Children with physical disabilities who require a lot of energy to sit upright may be unable to concentrate on listening tasks for long. In these situations specialist seating devices and positioning can support the development of listening skills too.

Assessing and identifying deafness

It should be possible to assess the hearing of all children from birth. There are two different types of assessment that can be carried out – **objective tests** and **behavioural tests**. Usually several different tests need to be done over a period of time to build up an accurate picture of a child's hearing. It is important to remember that just because a child shows responses to sound this does not necessarily mean they have normal levels of hearing.

Responses to hearing tests depend on both how the ear and its nerve connections are working and the stage of general development the child has reached. Responses to sound may seem inconsistent and may not be the same as a typically developing child. Therefore assessing the hearing of children with complex needs is often challenging and needs to be undertaken by audiologists who have experience of working with children with complex needs.

In addition, children may not be comfortable in the strange surroundings of audiology clinics and may not perform at their best. Audiologists will therefore rely heavily on observations from the child's parents and teaching staff who spend time with the child on a day-to-day basis in their usual surroundings.

If you think that a child in your school could have hearing difficulties or hasn't had a hearing assessment for a long time, speak to the child's parents. You can ask your school nurse to make a referral to the audiology clinic or the child's parents can ask their GP, health visitor or paediatrician to refer them.

Whilst hearing technology is invaluable in supporting deaf children to overcome these challenges, it is important to remember that no hearing technology will enable a deaf pupil to hear as well as a hearing pupil.

Indicators of deafness

Some children are born deaf but for many people it develops later in childhood or as a young adult. It is possible that some children in your school may have a hearing loss that has not been identified or diagnosed.

This list contains behaviours that can indicate a problem with the ears or a hearing loss.

- Does not respond when called by name.
- Does not respond to verbal instructions or needs visual clues.
- Watches faces intently.
- Appears to hear some voices better than others (for example, low or high pitched).
- Has difficulty following a conversation in a group (for example, when there is a change in topic of conversation).
- Struggles to hear conversation in the presence of background noise.
- Sits very close to the television or turns the volume up loud.
- Is upset by loud noises.
- Is startled by people approaching from behind who they haven't seen/heard.
- Speaks very quietly or loudly, or vocalises very loudly.
- Breathes through their mouth and has a 'blocked nose' most of the time.
- Has discharging ears and/or ears have an unpleasant smell.
- Frequently rub or poke their ears.
- Have problems with balance.

It is also possible that the behaviours above could be explained by a child's personality, learning difficulties or complex needs, but it is worth asking for a hearing assessment to be sure of the cause. Discuss any concerns with the child's parents and the school nurse. Depending on local services, you or the school nurse may be able to refer the child directly to the audiology service. If not, the parents can ask their GP for a referral.

more efficiently. Therefore glue ear is often a temporary condition that can cause hearing to fluctuate but usually clears up on its own without needing any treatment.

The eustachian tube may remain under developed for some children with learning disabilities or complex needs because of structural differences in their anatomy, leading to glue ear persisting longer term. This may affect children with Down's syndrome, those who were born with a cleft palate and those with congenital malformations of their facial or skull bones.

Children with conditions that produce excess amounts of mucus are also more likely to have long-standing glue ear, for example those with cystic fibrosis and primary ciliary dyskinesia.

Sensori-neural (or nerve) deafness happens when there is a fault in the inner ear (most often because the hair cells in the cochlea are not working properly) or with the auditory (hearing) nerve. Sensori-neural deafness is permanent.

- Children can be born with sensori-neural deafness or it can develop during childhood. Sensori-neural deafness in children is most often genetic (inherited), caused by congenital (from birth) infection or caused by neonatal or childhood illness.
- Sensori-neural deafness can also be caused by drugs that can cause damage to the inner ear (known as ototoxic medications). Some children with complex needs may have been exposed to these drugs to treat serious infection or childhood cancer.
- Sensori-neural deafness is common in older adulthood as a result of normal wear and tear of the ear and the ageing process. This type of deafness is known as **presbycusis**. In individuals with Down's syndrome this ageing may happen much earlier than would be expected in the general population and they may develop early-onset presbycusis for the first time as teenagers.

It is also possible to have a sensori-neural and conductive deafness together. This is known as **mixed deafness**.

Hyperacusis is an over-sensitivity to everyday sounds that people with normal levels of hearing do not usually find unpleasant or painful. Hyperacusis can be experienced by any child, however it appears to be more prevalent in children with complex needs such as autism spectrum disorder and Down's syndrome. It may cause distress in some situations, especially when there is a lot of background noise.

You can find more information about hyperacusis on the Tinnitus and Hyperacusis Centre website at www.tinnitus.org

Mild and unilateral deafness

Although many children with mild or unilateral (one-sided) deafness do not receive regular support from a Teacher of the Deaf, they can experience many difficulties. For a significant number, mild or unilateral deafness can have an

adverse impact on their development and how well they do at school if their hearing needs are not supported.

Children with unilateral deafness often have specific difficulties with:

- hearing sounds or speech on the side with the deafness
- identifying the source of a sound, the direction a sound is coming from or judging the distance the sound is coming from
- understanding speech when there is background noise.

Children with mild deafness may:

- experience delayed speech
- mishear and mispronounce words
- not hear what is going on if there is a lot of background noise
- experience problems with concentrating, tiredness and frustration that affect their behaviour
- prefer to play alone
- experience more difficulties than hearing children in reading and learning.

Adults can sometimes find it difficult to understand the impact of mild or unilateral deafness on children. This is because the adult brain is much better at filtering out background noise in a noisy classroom, for example, than a child's. In addition, the adult brain is very good at filling in the gaps of missed information – speech sounds or parts of words – that weren't heard. Children with mild deafness or unilateral deafness are not always able to do this – they lack the knowledge, vocabulary and context to be able to fill in the gaps. This means they miss out on a lot of the new vocabulary and concepts being taught every day at school.

Balance

The brain uses information from the eyes (what we see), our body (what we feel) and the inner ear to balance. The semicircular canals in the inner ear consist of three tubes filled with liquid and movement-sensitive hair cells. As we move, the fluid moves. This creates signals that are sent to the brain about balance.

Balance problems can occur when the organ of balance in the inner ear does not work properly (**vestibular hypofunction**). Children can be born with this or acquire it with illness or trauma. With hypofunction, development of balance function may be delayed and this might mean that babies and young children take longer to reach developmental milestones such as sitting unsupported and walking. Older children may have difficulties with certain activities such as learning to ride a bike. This is called **imbalance**.

Other types of balance problem can give rise to dizziness, vertigo or episodes of unsteadiness. These can occur at any time in childhood.

For more information download our factsheet *Balance and Balance Disorders* which contains information about the balance system, balance testing and balance disorders. For information on how to order this factsheet see About the National Deaf Children's Society, page 58.

Hearing technologies

There are continuing developments in hearing technologies, including hearing aids, cochlear implants and bone-conduction hearing systems. This section includes descriptions of different types of hearing technologies and has information and advice about encouraging the wearing of hearing technologies and learning to listen.

To get the best from their hearing aids or implants children should keep them in all day except when bathing, swimming and sleeping. It can be helpful to have a named person at the school who is responsible for checking the hearing technology daily and changing batteries when required. Children should be encouraged to let staff know if their hearing equipment is not working or if new batteries are needed.

Hearing aids

Hearing aids work by amplifying sounds going into the ear. They come in a range of types and styles to suit different types and levels of deafness. Most children use behind-the-ear hearing aids in each ear.

The hearing aid sits on the top of the pinna (the outside part of the ear) and is connected to an earmould that is specially made to fit in the child's ear. Every hearing aid is programmed for the ear it will be worn behind and should never be worn in the child's other ear or swapped with another child.

Bone-conduction hearing aids and implantable hearing devices

Children who have conductive hearing loss and have problems wearing behind-the-ear hearing aids may benefit from a different type of hearing device that allows the child to hear sounds using bone conduction.

Bone-conduction hearing aids can be worn on metal or soft fabric headbands. They use a vibrating pad that allows sound to be conducted through the bone rather than through the middle ear. The vibrator is worn behind the ear, resting on the mastoid bone (part of the skull behind the ear).

Children who have trialled and found bone-conduction hearing aids effective may be suitable for a bone-conduction hearing implant (BCHI). A bone-conduction hearing implant is designed for people who have a functioning cochlea but the middle or outer part of the ear prevents the information reaching the cochlea in the usual way. It consists of a sound processor that is held on the head behind the ear. This might be clipped to a fixture, known as an 'abutment', a small titanium screw that has been implanted in the skull just behind the ear (known as a bone-anchored hearing aid or system) or with a

magnet holding the processor in place. It also allows sound to be conducted through the bone rather than through the ear canal and middle ear, meaning that sound waves can be transmitted directly to the cochlea in the inner ear. This procedure is usually offered after the age of four years.

In very young children the sound processor of a bone-anchored hearing system may be worn on a soft headband. The soft headband is taken on and off like other bone-conduction hearing aids and can be used permanently or temporarily during the assessment stage.

Much of the information in this resource is suitable for children who use bone-conduction hearing aids or implantable hearing devices. For further information on bone-conduction and bone-anchored hearing aids read: *Bone Anchored Hearing Aids: Information for parents and families*. You can find information on how to order the resource in About the National Deaf Children's Society, page 58.

Using hearing aids

To get the best from their hearing aids children need to wear them consistently and for all their waking hours both in school and at home. Many children with complex needs wear hearing aids very successfully and with little disruption to their daily routines. For other children, establishing consistent use of their hearing aids can be much harder and take much longer than usual.

Observing the impact of hearing aids

There may not be any immediate changes in the child's responses to sounds when they first start wearing their hearing aids and this can discourage parents and teaching staff from persevering with them. Children with complex needs may take much longer to process information and any response to sound may take longer. Therefore it is important to watch for very small changes over a long period of time and for professionals to share this information with one another.

The people who spend most time with the child, parents and teaching staff may be more likely to recognise subtle changes in a child's behaviour that are not obvious in the audiology clinic setting. You may want to consider the following.

- Is the child calmer or more agitated when wearing the hearing aids?
- Does the child turn to the source of a sound or appear more responsive to sounds?
- Does the child vocalise more with the hearing aids in?
- Do they show more enjoyment of music with the hearing aids in?
- Are they more responsive to particular voices or noises?
- Do the hearing aids appear to bother the child? Do they pull at them or try to knock them out?

An example, developed by Birmingham Sensory Support to record a child's response to different sounds can be found on page 39.

Daily checks of hearing aids

It is important that you undertake daily checks of the child's hearing aids to ensure that they are able to access language. The child's Teacher of the Deaf should be able to provide you with a hearing aid care kit and show you how to use the contents.

For further information on daily checks of hearing aids please see our resource *Hearing Aids: Information for families*. You can find information on how to order the booklet in *About the National Deaf Children's Society*, page 58.

There is a short video showing you how to do a daily check at www.ndcs.org.uk/howtovideos.

Whistling hearing aids

Most hearing aids will whistle at some time or another. This is known as feedback and occurs when the microphone picks up the sound coming out of the hearing aid and amplifies it. Modern hearing aids use a range of internal feedback management systems that the audiologist will set when necessary and help to reduce the amount of whistling.

The most likely reason for feedback is that the earmould is not a good fit. This allows sounds to 'leak' from around the earmould and be picked up by the hearing aid's microphone. This can happen because the child has grown out of their current earmould, because the earmould has not been fitted into the ear exactly as it should be or because jaw movement has pushed the mould out of the ear.

If this is a problem the audiologist may try different earmoulds or suggest using petroleum jelly or a special cream. A small amount can help to make a seal between the earmould and the ear itself.

Young children in particular will need earmoulds replacing very regularly to prevent feedback. If you can hear the feedback then the hearing aid itself can also pick up this sound and this will interfere with the child's ability to follow what is going on.

Feedback also occurs when the hearing aid microphone is covered or very near to another object, for example:

- when holding children close to you
- when they are wearing hats
- when using headrests on wheelchairs
- when children are lying on the floor.

It might be necessary to look at changing positions or using pillows to support children in a different position. If the problem is continuous (for example, because of the use of headrests on the wheelchair) it may be necessary to adjust hearing aids or use other equipment (such as a radio aid) to prevent feedback.

Cochlear implants

Cochlear implants are useful for children who have severe to profound sensori-neural deafness and cannot hear the full range of speech sounds with hearing aids. A cochlear implant is different from a hearing aid. It provides a sensation of hearing by stimulating the auditory nerve using electrical signals. The implant has two parts – a receiver which is surgically implanted under the skin behind the ear and an outside part which is worn like a hearing aid.

The decision to have a cochlear implant is an important and difficult one for many families. Children have to be referred to a specialist centre to be assessed over a period of time before a decision to go ahead can be made.

Over the past 25 years cochlear implantation has opened up a range of sound and communication opportunities to profoundly deaf children, the majority of whom can now access spoken language by listening. However, cochlear implants do not seem to have been readily available to deaf children who have additional significant disabilities. Over time, a small but growing number of studies have focused on the benefits for this group of children. Studies have shown measurable benefits in language development, speech and listening.

For further information on cochlear implants read our resource *Cochlear Implants: A guide for families*. You can find information on how to order the booklet in *About the National Deaf Children's Society*, page 58.

For further information about deafblind children and cochlear implants see the two joint publications by Sense and The Ear Foundation, *Cochlear Implantation* and *Practical Issues*. For further information see www.sense.org.uk and www.earfoundation.org.uk.

Much of the practical advice given for hearing aids is appropriate for children with cochlear implants. The Ear Foundation Sounding Board also provides up-to-date practical advice on all makes of cochlear implants and their speech processors, with suggestions for development of listening skills.⁴ It also signposts to other useful websites.

4. soundingboard.earfoundation.org.uk/

❖ Case study

Deena: finding a way of managing cochlear implant use for a child

Deena is 12 years old and attends a special school supporting children with a wide range of complex needs. She has a diagnosis of cerebral palsy, is a wheelchair user and has a profound bilateral sensori-neural hearing loss. She communicates her needs through facial expressions, crying, smiling and laughing.

Deena had a cochlear implant at an early age. Initially she was fitted with a body-worn processor and later a behind-the-ear processor. Problems were encountered with keeping the implant in place. Deena has limited head control which made wearing the implant almost impossible. She also reacted slowly and showed distress in the classroom when the implant was turned on.

Deena's Teacher of the Deaf liaised closely with Deena's parents and the implant team. The Teacher of the Deaf worked closely with the class teacher to create opportunities for Deena to spend 'one-to-one time' in a quiet room so the implant could be introduced gradually in a quiet area. Close observations showed Deena loved looking at books, so this activity was chosen.

A number of techniques were attempted to secure the implant, including using clips and strands of hair to pin the implant in place and earmoulds. The staff liaised with the occupational therapists and reviewed and adjusted the position of the headrest to try to accommodate the position of the implant. It took time and patience before Deena tolerated the implant for a few minutes.

Staff members commented on feeling more confident and they made time to use the implant daily. Gradually the implant was introduced in the classroom and more staff took responsibility for it. Over time Deena was observed vocalising when the implant was switched on and regular use for short periods was established.

What helped Deena

- Support for staff who worked closely with Deena on a daily basis.
- Staff got to know Deena's daily routine and organised one-to-one sessions at times when Deena was most relaxed.
- Sessions took place in a quiet room free from distractions. Books and puppets were used to engage Deena. Gradually Deena used the implant for longer periods of time and in new listening environments.
- Gradually more staff were trained and encouraged to make time to use the implant with Deena.
- Staff kept in close contact with the implant centre to feed back observations and inform them of Deena's responses.
- Staff kept in close contact with the family and celebrated and shared successes.

Wearing hearing aids or implants – problem solving

Tips for getting children to wear hearing aids or cochlear implants

Many children with complex needs wear hearing aids and implants very successfully and with little disruption to their daily routines. For other children establishing consistent use can be much harder and take much longer than usual.

It is important that children are encouraged to wear their aids or implants regularly from the very start. The first task is to encourage the child to like their hearing aids or implant processors, and your attitude towards them can play a key role in this. If you are positive, the child will be more positive about wearing them.

Some tips that might help

- Where earmoulds are used by the child, hold them in your hand for a couple of minutes before trying to put them in. This makes them warmer and less of a shock for the child. It also makes them softer, easier to put in and more comfortable.
- If the child has never worn hearing aids or implants before it may help to gradually build up the length of time that they wear them.
- Discuss with parents the importance of allowing the child some choices about their hearing aids or implants, such as choosing the colour. Hearing aids can also be decorated with stickers to personalise them, while earmoulds come in different colours and can have pictures, logos or glitter inside the plastic.
- At particular times children may try to take their aids out – if they have not heard certain sounds before they may find them distracting and try to ‘return the world to normal’. A good tip is to always fill the child’s hands at the time you are putting the aids or implant processors in and then do something that usually they enjoy and get absorbed in – this leads them to associate sound with positive things.
- If you are having trouble getting the hearing aids or implant processors in, or if the child continually removes them, stop trying and have a rest. Children will sense that you are feeling stressed and this will only make it more difficult. Try again later or the next day when you are both feeling a bit more relaxed.

Children may remove or try to remove their hearing aids or implants if they are uncomfortable or painful. If a child can’t tell you their hearing aids or implants are too loud you may notice that they blink or flinch when there are loud noises. If this happens, you should consult the child’s audiologist or Teacher of the Deaf.

❖ Case study

John: establishing effective hearing aid use

Six-year-old John attends a special school which supports children with moderate or severe learning disabilities. He has a diagnosis of autism and a high frequency sensori-neural deafness.

John had very basic communication skills using Makaton signs and there had been no success when trying to support him to use hearing aids.

John's Teacher of the Deaf discussed this with the educational audiologist, who suggested a programme of activities including games which encouraged the wearing of hats and stroking of his hair and ears, so that John was less tactile defensive. The programme was explained to the class teacher and teaching assistants who worked with John, as well as to John's mother.

The programme also set out the amount of time John was to wear his hearing aid for. This started with small amounts of time, 10 seconds a day for a week, in a quiet environment with stimulating rewards.

John's hearing aid use was established much quicker than everyone predicted and he started to wear the hearing aids for longer periods of time. He began to vocalise and started to enjoy music and being in the sensory room. When a radio aid was trialled John responded immediately and was happy to wear it.

What helped John

- Working with the educational audiologist to introduce hearing aid use.
- Involving staff and parents in the process and giving them very clear guidelines to follow.
- Initially using the hearing aid for small periods of time and encouraging staff to be patient, persevere and be consistent.
- Informing the audiology clinic of the process.

Keeping hearing aids and implants on

Some children have very small and very soft pinna (the external part of the ear) that can make it difficult to keep a behind-the-ear hearing aid or implant in place.

To resolve this issue

- The audiologist can supply hearing aid retainers (huggies). These are rubber bands that attach to the hearing aid and go around the ear. They help hold the hearing aid on the ear and in the right place.
- Surgical tape or wig tape can also be used to help hold the hearing aid in place. The child's audiologist can usually supply this tape.

- Sports headbands or Alice bands can be used to hold hearing aids in place. The band can cover the ear and hearing aid, but make sure it doesn't cover the microphone of the hearing aid which will prevent it picking up sound.

... Case study

Fatima: evaluating the benefit of hearing aids for auditory neuropathy spectrum disorder

Fatima is 11 years old and has a diagnosis of auditory neuropathy spectrum disorder, multisensory impairment and severe learning difficulties following a very traumatic neonatal period. Past behavioural testing has suggested that she has a likely severe to profound hearing loss and she has been fitted with high-powered hearing aids for a number of years, but then began to vigorously reject them.

A programme was introduced to try to re-establish hearing aid use. The hearing aid volume was lowered (to ensure that Fatima wasn't being discomforted by the hearing aid being too 'loud' or over-amplified) and she was offered the hearing aids twice daily in relaxed and calm sessions. Fatima continued to pull the hearing aids out the instant that they were fitted and staff were finding it increasingly challenging to support her to use them.

Next steps

Using an in-house classroom monitoring protocol, Fatima was observed in different listening situations by the audiologists, and her responses were recorded in detail. Some sessions were videoed and reviewed by different members of staff – sometimes with the sound turned off to compare judgements and eliminate bias.

Staff were also asked to record and note any reactions or responses that Fatima may have shown or made to sound or music.

Findings

A very erratic pattern of listening responses were noted over a six-month period. Fatima normally makes unintentional, low-frequency vocalisations and these tend to be mood related. However, in music sessions her vocalisations noticeably changed in tempo and frequency and at times she clearly imitated some sounds (such as a toy fire engine siren) and could copy a range of sounds at different frequencies from a live clarinet. These responses were not consistent but when she was engaged and processing well the responses were very surprising. On each occasion the sounds were measured at ear level using a sound level meter.

Decisions

Fatima's mother had always said that she did not notice a significant difference with Fatima's hearing at home, whether she was wearing her hearing aids or not. Given the inconsistency and variation in Fatima's listening skills, it was decided that using hearing aids was not in her best interests and they have been withdrawn.

The audiologists observed significant fluctuation in Fatima's hearing levels and could not be confident about setting up a hearing aid to match a very inconsistent audiogram. They felt that there were, without doubt, 'good' and 'bad' listening days and this was consistent with her fluctuating cortical vision difficulties. There does not appear to be a pattern to the auditory listening but it does seem that she is less able to process sound using two senses at the same time (dual modes) and is more engaged when there is minimal visual stimulation.

What helped Fatima

- Close monitoring of Fatima's listening repertoire and responses, using an in-house recording sheet
- A multidisciplinary team approach with input from teacher, support workers and therapists, to inform on decisions.
- Liaison with NHS audiology department and family.
- Video reviews with both familiar staff and observers.

Wearing hearing aids or implants and glasses together

There is usually room behind the ear for both the hearing aid or implant processor and the arm of a pair of glasses. The arm of the glasses should be nearest the head and the hearing aid on the outside.

- If the child has adjustable bendy metal arms on their glasses they can occasionally be used to hold the hearing aid in place by putting the arm on the outside of the hearing aid or implant.
- Occasionally the arm of the glasses may need to be adjusted and the child's optician can help with this.
- Sometimes a different model of hearing aid or implant processor might be tried.
- If the ear is naturally cupped forward, surgical tape or wig tape can help to hold the hearing aid in place. The child's audiologist can usually supply this tape if needed.

Other hearing technology or assistive devices

Radio aids

Children find it particularly difficult to listen where:

- there is background noise
- sounds are echoing around the room
- there is a distance between the person who is speaking and the deaf child.

In special schools there may be increased background noise and reverberant surfaces. A radio aid can help overcome this. It consists of a transmitter worn by the person who is speaking (for example, a teacher), and a receiver worn by the child. The radio aid works by making the sound the child needs to hear clearer in relation to other unwanted noise.

Who can a radio aid help?

Any child who uses a hearing aid, bone-conduction hearing aid, bone-conduction hearing implant or cochlear implant may find a radio aid useful. This is because a radio aid will work with the child's hearing aid or cochlear implant to make it easier for them to concentrate on the sounds they want to hear. Children with all levels of deafness benefit from using radio aids. Radio aids do not amplify sounds in the same way as hearing aids, but they help the child to concentrate on the particular sounds or voices they need to hear.

Radio aids may also be useful for children who use a wheelchair with a supportive headrest. Sometimes the headrest can cause the hearing aids to feed back (whistle) because of how close it is to the hearing aid's microphone. By using a radio aid the microphone is effectively moved away from the child (to wherever the transmitter is placed) and the hearing aid's own microphone is switched off. The transmitter could be clipped to an alternative place on the chair (making sure it still picks up sounds from the front of the child where they would usually be hearing from) or may be further away with a teacher in a group listening situation.

Some children with normal levels of hearing may have difficulties processing and understanding sounds. These children may also benefit from a radio aid system (without hearing aids) as a way of helping them hear better quality sound and concentrate better in the classroom.

For further information on radio aids, read the National Deaf Children's Society's resource *How Radio Aids Can Help*. You can find information on how to order the booklet in *About the National Deaf Children's Society*, page 58. Information about leads from radio aids to audio equipment can be found in this resource.

❖ Case study

Edith: establishing FM use with existing hearing aids

Edith is 14 years old and was born prematurely. She has a diagnosis of cerebral palsy, vision impairment and bilateral severe to profound sensorineural hearing loss.

Edith has consistently worn hearing aids in both ears and has had ongoing support from Teachers of the Deaf and an educational audiologist, and has been monitored at the audiology clinic.

Due to the cerebral palsy Edith uses an electric wheelchair with a headrest. Over time her head started to flop sideways on to the headrest and caused the hearing aids to feed back (whistle). She found the hearing aid feedback hard to tolerate. In order to make the microphone remote from the receiver and reduce the likelihood of the whistling, the school decided that she would benefit from a radio aid, which they then ordered and fitted.

What helped Edith

The radio aid enables Edith to enjoy the reassurance of a human voice nearby at an optimal signal-to-noise ratio, especially beneficial in complex listening environments like assembly and minibus rides.

The radio aid allows the teacher/parents to roam more freely around the school without worrying about the distance between them and her, when compared with hearing aid use alone.

Soundfield systems

Soundfield systems are an increasingly popular system in schools. They are designed to improve listening conditions for all children in the classroom and in a hall. They can be used with or without hearing aids or implants.

How do soundfield systems work?

A soundfield system includes a microphone, worn by the teacher. This is linked to an amplifier by a radio transmitter or an infra-red transmitter to avoid the need for wires and allow the teacher to move around the room. The soundfield system makes the teacher's voice louder, but not too loud. The aim is to produce a clear and consistent level of sound throughout the classroom. A soundfield system that is set up correctly may not be noticeable. The teacher may have controls to set the correct level of sound for the room.

Who can it benefit?

All children will benefit and children with mild or unilateral (one-sided) deafness who may not be using hearing aids are likely to gain most from a soundfield system. Most children who wear a hearing aid or a cochlear implant will still need to use a personal radio aid. As well as helping the teacher to avoid straining their voice, research has suggested that soundfield systems can improve discipline and concentration for all children.

Will soundfield systems solve all the problems of poor sound quality in a classroom?

If it is practical to improve the acoustics in a classroom (for example, by lowering or lining ceilings, changing wall coverings and adding soft flooring) this should be the first step. Fitting a soundfield system in a room with very poor acoustics could make listening conditions more difficult, rather than improving them.

Creating a good listening environment

Children with any level of deafness will experience particular difficulties in accessing sound if there is a lot of reverberation and/or background noise in the room.

Reverberation and echo in a room occur where there are a lot of hard surfaces that enable the sound to 'bounce' around. This distorts what is heard through the hearing technology worn by the deaf child. Background noise can drown out the speaker's voice. Controlling background noise is critical for deaf children.

How can I reduce reverberation?

- Fit curtains or blinds.
- Use soft furnishings such as cushions and rugs.
- Use display drapes on walls.
- Cover hard surfaces with fabric.
- Pad the bottom of toy storage boxes or pencil/pen pots with felt or foam.
- Install specialist acoustic treatments, such as acoustic tiles, panels and door seals.

How can I reduce background noise?

- Close windows, curtains and blinds, and doors to noisy areas or corridors.
- Position full bookshelves and cupboards against partition walls.
- Ensure heating and air conditioning systems operate within acceptable noise levels through regular maintenance.

- Turn off equipment such as computers when not in use.
- Avoid playing background music.
- Ensure the deaf child is learning in a quieter area.
- In shared open-plan areas liaise with colleagues so that you do not start a quiet story session when the other group begins their music lesson.

The National Deaf Children's Society has produced a range of resources called *Creating Good Listening Conditions for Learning in Education*, which aim to help improve the attainment of all children and particularly those who are deaf. The resources include top tips for teachers to help make their classroom into a better listening environment. Visit www.ndcs.org.uk/acoustics.

... Case study

Peter: establishing an effective listening environment

Nine-year-old Peter attends a special school for children with multiple disabilities and vision impairment. Peter is pre-intentional in his communications. He has a conductive hearing loss and was given a bone-conduction hearing aid which he was expected to wear on a daily basis.

Peter's classrooms are not soundproofed or acoustically treated – therefore it was crucial that hearing aids were introduced to him in a very calm, motivating way to avoid any negative association with using the hearing aids because of loud unpleasant noises.

One key person – his intervener – was assigned to use the aids daily with Peter so he could build up a trusting relationship within his environment until he was confident in listening. Weekly feedback between the intervener, class teacher and his Teacher of the Deaf took place in order to begin to establish patterns of listening behaviour in a variety of situations. A reward system was set up for Peter to celebrate his daily listening achievements.

Peter's Teacher of the Deaf advised the class team around environmental modifications to further reduce background noise and disturbance. For example, a screen was introduced to the work station to act as a buffer and help block out levels of sound when focused listening work was required of Peter.

Over time staff noted that his ability to tolerate his aids had increased, that there was a higher level of confidence evident in all those involved with Peter and that he could enjoy an effective listening environment.

What helped Peter

- Discussion with his Teacher of the Deaf on how and when to use his hearing aids.
- Discussion of listening activities that would be beneficial.
- Discussion of how to observe Peter while he has wearing his hearing aid and when he was not. These observations were used to build up a clear listening picture of Peter in a variety of contexts.
- The training the class teacher and intervener received.
- The inclusion of Peter's parents at every step, with all progress fed back to them and the Teacher of the Deaf.
- Making changes to the environment so that it was conducive to listening for Peter.

Communicating with deaf children

It is important to know the child's communication preference – which might include sign language, Makaton, pictures or symbols, lipreading, deaf/blind signing, cued speech or a combination of different methods – and to understand how any additional needs impact on their communication preferences. Below is some general information to be aware of that will apply to most deaf children.

Clear and effective communication

- The child's hearing equipment should be working effectively.
- There needs to be a good hearing environment.
- There should be a good knowledge and understanding of the child's preferred communication method.

Some general tips you may find useful

- When speaking to the child try not to block their view of your face with hair, hands or objects or by turning away while you speak, as this will make it difficult for them to pick up what you are saying.
- Avoid visual distractions such as brightly coloured clothing or large jewellery.
- Ensure that the deaf child is close enough to you to allow their hearing technology to work at its optimal level – most hearing technologies have an optimal range of one to three metres.
- Speak clearly and at your normal pace. Speaking too slowly or exaggerating your mouth patterns will make it harder for a deaf child to understand you.
- Avoid shouting and whispering. These distort mouth patterns and sound, making it more difficult to understand what is being said.

- Ensure that you have the deaf child's attention before you start talking, or they may not follow the first part of the conversation or instructions.
- When speaking directly to the deaf child it can help to get down to their eye level so they can focus on your speech and tune in to what you are saying.
- Don't stand with your back to a light source such as a window, as a shadow cast across the face can make it harder to recognise lip patterns.
- Where a child uses a range of communication methods you may need to offer differentiated support to ensure you match their needs. You will need to work in liaison with the speech and language therapist and (if possible) the Teacher of the Deaf to consider how this will fit into the daily routine.

For advice on how autism impacts on a child's communication preferences, the National Autistic Society's online resource on autism and hearing impairment may be helpful.

www.autism.org.uk/about-autism/related-conditions/asds-and-hearing-impairments.aspx

An effective school will:

- be aware of the indicators of a hearing loss
- understand the different types and levels of childhood deafness
- work with the child's parents and Teacher of the Deaf to ensure you have as much information as possible about the child's deafness
- be familiar with the different types of hearing technology that a child may be using and be confident that they are using any hearing technology properly
- promote a good listening environment and consider adaptations to improve it, for example, by reducing background noise
- promote effective communication strategies for all children.

Teaching and learning strategies for deaf pupils with additional needs

No child is exactly the same, and children with both a hearing loss and an additional need may require very different types of support. Because of this, it is not possible to give guidance that is relevant to all types of need.

Instead, this section gives more general information, focusing on strategies that are likely to be relevant to the majority of deaf children who have an additional need.

Deafness and its implications for learning

All deaf children have the potential to attain and achieve as much as any other child with the same cognitive ability, if they are given the right levels of support and access to the curriculum.

However, because most teaching and learning takes place through sight and hearing, deaf children may face particular challenges which need to be addressed.

Deafness has a major impact on the learning of spoken language and can delay language development. This can then impact more broadly on a deaf child's life as language is essential for successful cognitive, emotional and social development. The combination of deafness with other additional needs often amounts to more than just the sum of the individual parts, creating a complex interaction of several difficulties that can lead to the 'overshadowing' of the deafness.

❖ The following table sets out specific challenges to be aware of and outlines how they might be addressed

Be aware of	Summary of possible teaching, learning and support strategies
Slower language development, both spoken and written, with reduced vocabulary and understanding of words and concepts	<p>Ensure you have an accurate knowledge of the child's language level from regular assessment.</p> <p>Monitor and develop language skills, providing focused individual or small group programmes as required.</p> <p>Ensure effective use of hearing technologies.</p> <p>Create a good listening environment.</p> <p>Provide pre- and post-tutoring as required for new topic areas to ensure understanding of the vocabulary used.</p> <p>Adhere to good practice when communicating with deaf children.</p> <p>Involve parents to ensure that the child continues to develop communication and language skills at home through everyday activities.</p>
Listening skills	<p>Ensure effective use of hearing technologies.</p> <p>Create a good listening environment.</p> <p>Practise activities to develop the child's responses to sound and speech.</p> <p>Provide opportunities for the child to enjoy listening to and making music.</p>
Attention and concentration – many deaf children tire easily because lipreading/ trying to hear requires heavy concentration	<p>Ensure effective use of hearing technologies.</p> <p>Ensure pace and length of learning sessions is appropriate for the deaf child.</p> <p>Use visual cues/objects of reference to support teaching points in collaboration with the school and family.</p> <p>Create a good listening environment.</p>
Working memory – struggling to remember information	<p>General classroom games, such as 'Kim's game', guessing hidden objects from descriptions and pairs matching.</p>

Be aware of	Summary of possible teaching, learning and support strategies
Auditory memory	Learning rhymes and listening to stories. Singing and music activities.
Processing time	Learning rhymes and listening to stories. Singing and music activities.
Incidental learning – deaf pupils may struggle to pick up what others are saying through casual listening	Create opportunities for one-to-one and small group work in good acoustic conditions.
Social skills – difficulties with hearing can restrict social integration	Ensure peers are deaf aware and can communicate with the deaf child. Provide small group work requiring turn-taking. Ensure a child taking part in group conversations is under the supervision of an adult. Ensure access to extracurricular activities. Deaf pupils may need specific teaching to see situations from other people’s perspectives. This is known as Theory of Mind and research suggests it can be delayed in deaf children.
Self-esteem	Praise appropriately and genuinely, making the reason for the praise clear.

Getting started

Before a pupil starts school, staff will be collecting information including views from parents and the child about his or her needs and the implications this has for learning. As part of this, it will be important to collect as much information as possible on the child’s hearing loss. The table opposite illustrates the information that is likely to be helpful to school staff.

Hearing and personal hearing technology	
Information required	Implications
<p>Level and nature of deafness:</p> <p>Unaided hearing level:</p> <p>Aided hearing level:</p> <p>Ability to discriminate speech in different environments (for example, in class, workshops, halls):</p> <p>Sounds/words that are difficult to hear:</p> <p>Personal hearing technology used:</p>	<p>What needs to be done to improve access to sound, for example, providing radio aids, improving acoustics or using soundfield systems?</p> <p>What needs to be done to ensure optimum use of hearing technologies, for example, daily checks by staff of batteries and tubing and developing the pupil's skills in managing their own technology?</p> <p>What are the health and safety implications, for example, during fire drills?</p>
Communication	
Information required	Implications
<p>Preferred way of communicating in different locations and situations (in class, at home, with friends):</p> <p>Competence in preferred way of communicating:</p> <p>Lipreading ability:</p>	<p>What needs to be done to promote communication and social interaction with other pupils?</p> <p>What needs to be done in class to support access to teaching and learning including seating position to allow for lipreading, using radio aids, ensuring good acoustics, using soundfield systems, advice/training for teachers, providing communication support workers with appropriate qualifications and training for pupils who use sign to access teaching and learning (for example Level 3 qualification for pupils who use British Sign Language)?</p>

Language	
Information required	Implications
Levels of understanding of language: Level of expressive language: Vocabulary level:	What are the implications for learning, for example, is more processing time needed? If a language gap exists, what targets should be set to close the gap and what support/interventions are required to achieve them? What are the implications for teaching?
Social and emotional aspects	
Information required	Implications
Level of social interaction with other children and adults:	If levels are low how can they be increased? Do other pupils and staff need deaf awareness training and information on how to communicate?

It is important that you know the level and nature of the child's deafness. The Teacher of the Deaf/educational audiologist can explain to you about the hearing level of the deaf child as well as giving you an idea of what to expect functionally from their hearing when they are wearing their aids or implants.

It is also important to remember that using hearing technology will not enable a deaf pupil to hear the same as a hearing pupil. Steps must still be taken to create a good listening environment and ensure good communication.

Assessments

Special schools will be using assessment on a regular basis to identify needs, evaluate teaching and learning strategies, plan provision, set targets and monitor and review progress. Staff in special schools will already be familiar with national curriculum assessment, progression guidance expectations, small step assessments and/or P levels to assess and monitor progress where the deaf child has very significant additional cognitive and learning needs. Their progress should be the same as hearing children of the same cognitive ability.

For deaf pupils, the use of appropriate assessments can help ensure they can:

- follow the same curriculum subjects as other children
- make the same progress as children of a similar ability and have age-related learning outcomes within standard curriculum frameworks
- have expectations made of them that should be as high as those for their peers of a similar age and ability.

Assessment of deaf children with additional needs can be challenging, and subtle responses or signs of progress may be easier to miss. Specialist assessments in the areas of language and communication will be important, as well as non-verbal cognitive ability tests to get a true understanding of the pupil's ability.

For example, a hearing loss will make the child's ability to understand a task more difficult. And if the child has good speech intelligibility this may mask levels of language understanding, leading to under or overestimating the pupil's ability to understand. A Teacher of the Deaf, speech and language therapist or educational psychologist can give advice and help to identify all of the factors that should be considered.

The Champions Evaluation Profiles for Paediatric Cochlear Implant Users (The Ear Foundation) are a useful set of profiles covering assessment of communication skills and listening skills, psychological and social areas, and quality of life profiles, detailing tiny steps of change which may be useful to look at for those without implants too.

Also available from The Ear Foundation, Complex NEAP (Nottingham Early Assessment Package) has been developed to complement the existing NEAP. These materials are a range of profiles, checklists, video analysis measures and questionnaires. The package includes materials from the existing assessment battery, with adaptations to meet the needs of this complex group of children, as well as new measures which have been selected to complement the existing ones.

❖ Case study

Mohammed: assessing listening and communication skills

Mohammed is six years old. He has cerebral palsy, which affects all four limbs, and he uses a wheelchair. Mohammed has been profoundly deaf since birth and received a cochlear implant when he was around four-and-a-half.

Mohammed's parents requested an assessment to find out how much he was hearing through his cochlear implant, how he could communicate at home and at school, and whether spoken language was an option.

Mohammed is still at the earliest stages of learning to communicate. He is also physically very restricted – he cannot handle an object or point to a picture – so standardised tests were not appropriate.

Mohammed's parents completed the Pragmatics Profile of Everyday Communication Skills. This gave useful information about how many messages Mohammed manages to convey despite his lack of language. Mohammed's parents were surprised to see how much Mohammed relied on his hearing.

Mohammed's family, alongside his Teacher of the Deaf and speech and language therapist, also completed the Categories of Auditory Performance and the Meaningful Auditory Integration Scales to measure listening skills. The assessments revealed a significant discrepancy between home and school with parents feeling that he listened far better within the home environment.

School staff were surprised how well Mohammed listened at home. They decided that the school environment was perhaps too noisy and distracting for him, so they considered how to make the classroom more listening friendly. They also put together a listening programme to build on the progress Mohammed had already made.

School staff were impressed by Mohammed's ability to convey messages non-verbally and to understand spoken language in context. His targets for communication were adapted to include a greater emphasis on listening for understanding. He was also included in a school-wide music therapy programme.

What helped Mohammed

- The collaboration between parents and school staff to ensure the school looked at his communication and listening skills in the home and at school.
- A multidisciplinary meeting to discuss the assessment results.
- The assessment helped staff to think about creating a good listening environment.
- The assessment results helped school staff to revise targets with more emphasis on listening for understanding and to plan support including the use of music.

Listening skills, attention and concentration

Much of learning is based on listening. Some deaf children will take more time to learn and develop auditory attention and memory skills and will need more support than their peers, especially when the group size increases and the environment is busier, noisier and more distracting. In particular, deaf children may struggle with their ‘auditory memory’ and making links between words they have learnt and heard, along with their meanings.

Some deaf children will always need to rely on some degree of visual support, which may include lipreading or signed support or sign language or cued speech. Listening skills take time to develop, particularly for children with multiple needs, and need to be worked on regularly with specific activities or outcomes to achieve.

Ideas for developing early listening skills

There are some general principles you may want to bear in mind when working with deaf children to develop their listening skills.

- Always gain the deaf child’s attention before you expect them to listen and consider how you will maintain their attention.
- Give the child a specific focus to listen out for, for example, read stories with a repeating phrase that will hold a child’s attention. Give the child a prop so that they can participate at a particular point in a story or rhyme.
- Model good listening. Indicate clearly how to pay attention and listen. Praise and reward those children who are able to sit still, look at the person who’s talking and take their turn.
- Gradually extend your expectations and increase listening demands. Be selective about the amount of listening you can expect and the circumstances in which it will work best. Some listening activities will work best in a one-to-one situation. It is helpful to indicate the amount of time you want the deaf child to listen for by using a sand timer.

Before trying any of the activities below, it is important to check that the child can hear the noise being made.

- Copy the sounds the child makes while interacting with you – take turns.
- Make expressive sounds when playing or sharing books.
- Play together with noisy or musical toys: turn them on and off, say “listen” or “gone”.
- Hide a toy that makes a noise and go with the child to look for it.
- Make ‘music’ with musical instruments, either bought or homemade.
- Listen for sounds in the environment and tell and show the child what the sounds are (for example, the door closing, a car, a phone ringing).

- Sing and share lots of songs, rhymes and stories that repeat words or phrases.
- Do a 'listening walk'. Walk around inside or outside your setting to focus attention. Focus on sounds that will be familiar to other children but which a deaf child will need practice to pick out. You could make sound maps of the setting and record familiar sounds associated with parts of the school site (toilet flushing, doorbell ringing, children playing).
- Make sounds (claps/bangs etc.) for the child to copy, or you copy their sounds.
- Music therapy can be a key area.

Learning to wait for a signal is a very important skill and there are ways that you can encourage deaf children to develop this.

- Play 'ready steady, go' games and encourage the child to wait for the signal.
- Change the 'go' for a sound like a bell or a musical instrument as the signal.
- Reverse roles and let the child tell you when to go.
- Use action toys to wait and activate.

Remember that some deaf children can find it particularly tiring to listen. Look out for signs of fatigue and consider whether listening tasks may need to be shorter than those for their peers.



❖ Case study

Raheem: developing awareness of sound

Raheem is four years old and attends the nursery at a school for children with severe learning difficulties. He has a moderate sensori-neural hearing loss and glue ear.

Raheem had no communication other than reaching for desired objects, crying and rocking. Although he wears hearing aids he showed no observable response to sound. However, he had been observed tapping his brow with his fingers which possibly indicated that he was trying to listen to the sound of tapping against his head.

On the basis of this observation, targets for Raheem were set with the class teacher, a speech and language therapist, his parents and his Teacher of the Deaf for him to show a response to a meaningful sound. A recording form was used to note any observable responses to sound from Raheem either at home or at school. During a review meeting with Raheem's parents, we discussed the findings and how Raheem responded to different sounds in different circumstances. Meaningful sounds for Raheem were more likely to be related to snacks and outdoor play.

It was decided that objects of reference would be used along with specific sounds. In the nursery playground there were sound-making toys attached to the fence that the children could play with. One of the playground rattles was shaken in the classroom to indicate the children were about to go outside. When the rattle was shaken, Raheem was given his hat to see and feel. This further supported the fact that he was about to go out to play. The staff combined this with gestures, facial expressions, speech and sign which further reinforced the message. His parents agreed to use a similar object of reference and sound when Raheem was going out at home.

By the time of his next review it had been noted that Raheem had started to show some interest in the shakers in the playground and would sometimes hold them and look closely, which indicated that he was developing an association and understanding to support the development of his listening skills.

Progress for Raheem was slow but through the use of other objects of reference, such as the rustle of a biscuit packet at drink and snack time, he did over a period of time show some awareness of meaningful sounds which could be observed by his glances and eye pointing.

Raheem's parents were pleased and understood the value of encouraging him to listen. It gave them confidence in his ability to develop listening and communication skills.

What helped Raheem

- Everyone was involved in target setting and supported the aims.
- Having clear expectations.
- Recording and sharing observations.

❖ Example: session plan

Below is an example session plan used to help Martin, 12 years old, who has severe additional learning needs and hearing loss, to develop his listening and vocalisation skills through listening to music.

Session: music, listening and communication
<p>Preparation for learning</p> <ul style="list-style-type: none"> • Martin will be given his object of reference (miniature drum) for the session at the end of his previous session. • Ensure that Martin is wearing his hearing aids. • Settle Martin into the room and encourage him to sit on the bean bag. • Sing the <i>Hello</i> song, tapping Martin's hand as required. • Musicians to play for a few minutes to settle Martin into the session. Encourage Martin to explore the instruments and interact with others. The music will change from previous sessions depending on the musicians present. Record any preferences for music on Martin's music profile.
<p>Session method</p> <ul style="list-style-type: none"> • Musicians to play simple nursery rhyme melodies and repetitive phrases, pausing regularly. Wait to see if Martin joins in with these. This may be through vocalisations, body movements, smiling etc. • If Martin does make vocalisations, musicians should initially join in with these, mirroring his vocal attempts. If appropriate, musicians can engage in 'music conversation' with Martin. It is important to observe, wait and listen to Martin's responses. This can be transferred to 'conversation' with the drum, responding to Martin's beats. • Musicians to play a short piece of motivating music. Martin to be encouraged, initially through physical prompting, to exchange an object of reference for 'more' music. Accompany his exchange with a clear "more" to further encourage listening to speech. Continue as appropriate.

Review of learning

- Support Martin to recap on a part of the session that he did particularly well in, for example, playing a tune that he joined in vocally with. Give him plenty of praise for his achievements – for example, high five.
- Musicians to play the *Goodbye* song and room prepared for leaving, for example, lights on, door open.
- Give Martin the object of reference for his next session.

Resources

- Object of reference for requesting, for example, live music, bean bag.

Short-term targets

- To choose between a drum and tambourine and engage in active interaction for up to one minute.
- To engage in musical interaction for up to one minute.
- To ask for 'more' of an instrument on three occasions during the session with minimal physical prompting.
- To vocalise along with the music on two separate occasions.

Medium-term targets

- To place object of reference in finished bag with minimal prompt when session has finished, at least 10 times.
- To turn-take using his voice on 10 occasions in one session with no prompt.
- To discriminate between a variety of instruments and begin to show a preference.
- To engage in interaction with others through music.
- To ask for 'more' of a specific instrument through object exchange.
- To increase the vocalisations made during the session.

Supporting learning

A range of adaptations and strategies can be put into place to ensure that pupils can access the curriculum, develop their learning skills and minimise the impact of their deafness on learning. In time you will become aware through a child's responses and development which measures provide them with the best support. These are likely to include the following.

Use of visual aids

Visual aids can be used to support a child's listening and speech/lipreading abilities and aid their understanding. They are helpful in illustrating new concepts and vocabulary and in providing a context for a new subject or situation. They also make use of visual memory, which in deaf children may be more developed than their auditory memory. It is therefore helpful if:

- pictures, illustrations and objects of reference are used to support what is being said – everyone in the school should use the same system for symbols
- spoken instructions are also made visual by using pictures or by demonstrating what is expected
- areas of the room, storage boxes and cupboards are given picture labels and these are used around the building, such as photos of other adults they may encounter.
- Use visual timetables and refer to them regularly.

Using photo diaries and experience books

The communication of everyday information between the setting and home can be particularly difficult for deaf children who may totally miss or misunderstand verbal information or instructions.

Photo diaries and experience books are a labelled pictorial record of what the child has been doing and learning. They can support the child's learning whilst also helping to establish good home–school communication.

Photo diaries and experience books:

- help the child recall activities and provide a prompt to practise the language used
- provide a means of informing parents and enabling conversation at home
- provide a way for parents to record activities at home to share with the school.

To help, the school can:

make use of a home–school notebook that is always kept in the child's school bag to provide an important link between teachers and parents.

Tablets and other portable devices can often act as a good way of capturing information (though photos, video clips, etc.) to share with parents.

“Imran is a very complex little boy and he isn’t able to tell me what’s been going on at nursery – that’s why the communication via the home–school book is so important. And it’s not just the positive things I need to know – Imran can get really grumpy when he’s about to get ill – so if he’s been miserable or badly behaved at school, I really want to know! ”

“I also like to get really specific information about what Imran’s been doing. Telling me that ‘he had a lovely time playing in the sand’ doesn’t tell me very much – I want to know what his teachers are observing and how that fits in with his targets for communication. I know everyone is really busy, but that really does help. ”

– Parent of child with additional complex needs

Using routine and repetition

Routines allow the repetition of language and actions that help a child learn how to use language. Routines enable a deaf child to:

- predict and be ready for what is coming next when they find it difficult to pick up on incidental cues
- practise the same words or phrases in the same context over and over
- understand the context of what is being said so they can begin to link new words and ideas to what they already know
- follow a familiar pattern of events and so be independent.

Deaf children benefit from opportunities to repeat language patterns such as:

- learning action rhymes that use the same words with gradual additions
- sharing storybooks that have their own routine
- playing games that require each child to follow the same pattern – where it is clear when it is your turn and what you are expected to do.

Story time

At story time think about the storybook that you will be using with the children. Do the pictures make sense of what the story is about? It might be a good idea to let the deaf child have a look at the book beforehand so they have some idea of the sequence of the story.

When telling a story:

- use different props and visual clues to help explain what is happening
- use a lot of facial expressions to show the humour or the different moods of the characters

- if a child is learning sign language, use signs to go with the words in the story
- encourage children to act out parts of the story
- include some deaf awareness, for example, some of the characters could be deaf.

Music

Contrary to what many people believe, deaf children are able to access music. Music can encourage a child to listen to sound and to communicate with adults and in a group, and they will benefit from repetitive rhymes and singing. Musical instruments can provide deaf children with valuable auditory experience of rhythmic patterns, tempo and pitch. Access to the skills of a music therapist is invaluable.

In the same way that many people speaking at once is unhelpful to deaf children, too many sounds at once may also be overwhelming. Remember to give instructions clearly before music is played. Visual clues can help the child to follow what is happening such as when to join in and when the music has stopped.

... Example: Foyma and listening to music

Below is an example of some formal targets for a music programme delivered in a special school for children with complex and severe learning difficulties.

Foyma's targets

- I will conduct the musician using a drum.
- I will have access to my hearing aid.
- I will take turns in a group activity using a musical instrument.

Order of programme
1. <i>Hello song.</i>
2. Play lively music with a beat as a warm up.
3. Foyma to be involved in a group activity using a musical instrument and be involved in deciding whose turn is next. Keep music constant in the background at a low level. As Foyma is learning to use her hearing aid, offer the hearing aid to her twice – if she makes a clear refusal each time then move on to activity four.
4. Cue Foyma into the drumming activity with the 'drum, drum, drum, drum' jingle. Give Foyma the box-resonance drum for the pupil-led activity. Where possible follow Foyma's actions with regard to volume, beat, etc.
5. <i>Goodbye song.</i>

Information and communications technology (ICT)

... Examples of how ICT is used in a school for children with complex needs.

Omi-vista	To develop cause and effect skills, gross and fine motor control and development of hand–eye coordination.
Omi-reflex	Opportunity to interact with projections. Used to develop hand–eye coordination, cause and effect, gross motor skills and interaction skills.
iPads	A communication tool to develop understanding of mathematical skills. Use of the iPad to access <i>Choose it! Maker</i> in which specific activities can be designed and made for each pupil. <i>Scene and Heard</i> is a useful app to develop personalised activities which promote attention, concentration, signing skills and listening skills.
Switches	To access equipment, develop cause and effect, ability to follow instructions, colour recognition and sequencing skills.
Plasma screen	Daily timelines shown on a PowerPoint, with hyperlinks to photographs or videos to prepare them for the session. The plasma screen should be in a raised position.
SMART table	To develop understanding of key skills. Access to premade materials and also opportunity to develop personalised activities that will support students' progress towards personal targets, for example, matching skills, sorting skills, reading/labelling and counting skills.

Meeting physical needs

Here are some activities that can be integrated into the school day to promote shoulder development for a pupil with weak shoulder strength. This will aim to promote hand function and in turn support signing skills.

- High fives with arms stretched up.
- Posting objects into a tube that would mean stretching up to reach the items inside.
- Using a scooter board to move between activities.
- Placing coat pegs so that a pupil has to stretch to reach them.
- Maths activities involving sorting big and small objects into a big and small box.

- Using a swing, facing downwards and reaching out to collect items.
- Swimming pool – using the floating basketball hoop to reach up to score a goal.

Additional adult support

Many deaf children will benefit from additional adult support that:

- provides language support alongside activities (this is sometimes carried out by a communication support worker)
- prepares the child for an activity, i.e. introduces new vocabulary
- repeats information and checks understanding after a learning activity.

If a child is being supported by a teaching assistant or a communication support worker, it is important to ensure that staff have a very clear understanding of the communication needs of the individual child, are familiar with any specialist equipment they use and have the appropriate skills to support them.

An example of an information sheet to share with staff working directly with an individual child is on the page opposite.



❖ **Information sheet for staff working with a deaf child**

Photo	<p>General information</p> <p>Name</p> <p>Year group</p>
Hearing loss and hearing technology	
Communication needs	
<p>..... can access your lessons with:</p> 	
<p>Teacher of the Deaf</p> <p>Name</p> <p>Contact details</p> <p>.....</p> <p>.....</p> <p>.....</p>	

It is good practice for teachers working with a teaching assistant to:

- provide copies of work schemes and lesson plans in advance
- provide copies of any texts, books or resources that will be used in advance
- set aside time to meet with the teaching assistant to plan and discuss lessons
- explain the role they want the teaching assistant to take during different parts of the lesson
- remember that the teaching assistant is likely to have considerable knowledge of the pupil, so consult them about how to meet the pupil's needs and involve them in assessment and setting targets
- keep the teaching assistant informed of the pupil's progress
- develop a direct teaching relationship with the deaf pupil to avoid the teaching assistant being the only person teaching them.

If you are working with a child using a communication support worker (CSW) it is important to:

- remember there is a time lag between what they say and it being interpreted. For example, if you ask the class a question, allow the pupil time to watch the CSW and form a reply
- plan activities so that the CSW has a break from signing and the pupil a break from watching, as interpreting and reading an interpreter can be hard, tiring work
- speak directly to the pupil and not the interpreter
- remember that the deaf pupil will be watching the CSW to access the lesson so try to avoid tasks that require divided attention, for example, if carrying out a demonstration build in time so that the pupil can look at the demonstration and turn their attention back to the CSW, otherwise they will miss the explanation
- make sure there is space to enable the CSW to stand near the child and that the lighting is good.

Raising the Achievement of Pupils with a Hearing Impairment: Effective working with teaching assistants in schools, produced by the National Sensory Impairment Partnership (NatSIP) in 2012, has more information about effective working with teaching assistants and communication support workers for deaf children. It is available from the NatSIP website at www.natsip.org.uk or at www.ndcs.org.uk/education_resources. For more information on how to order this resource see About the National Deaf Children's Society, page 58.

❖ Information poster

Some staff in special schools have told us they find it helpful to have posters on display in staff rooms with basic tips on how to include an individual child. This can be particularly helpful for staff who have less direct contact with the child. An example of a poster that can be used for this purpose can be found below.

<p>.....</p> <p>is deaf</p>	<p>Photo</p>
<p>Some important points to remember when working with a deaf child in your class</p> <ul style="list-style-type: none"> • Have high expectations. • Attention to the child's deafness can have a positive impact. Try, try and try again with the child's listening development, it can make a big difference. Hearing as well as you can is key to making progress. • Keep background noise to a minimum as it is hard to listen when there is noise. Use quiet areas in the classroom for directed activities. • Remember the one metre rule – hearing aids/cochlear implants become less effective with distance. • Always make positive use of the radio aid system, where a child is using one. • Seat the deaf child near to where you are speaking. Make sure that they can see your face. • Put the lights on. Don't stand with your face in shadow. • Stand still – it is hard to lipread someone who is moving around. Make sure your mouth is visible at all times and speak clearly. • Use visual clues, objects of reference, gestures and signs to reinforce understanding. • Think about the language you are using. If the child is having difficulty understanding try saying it another way. • Share strategies and interventions with everyone working with the child. • Ask the Teacher of the Deaf for advice and support. 	

Pupil voice

It is important to find out how well the pupil is accessing teaching and learning. Your school will likely have developed processes to support this and ways need to be developed to ensure that the deaf child can contribute wherever possible. Most schools will have developed ways of recording what pupils are feeling about their education. It will be important to include information from the pupil about how well they are hearing in class, whether there are particular areas of school where they experience more difficulty in hearing and what could be done to improve the listening environment.

A personal passport can be a practical and person-centred way of supporting children and young people who may find it hard to articulate their needs. It can also be useful in situations where the pupil is being supported by school supply staff. Examples of personal passports can be found at www.ndcs.org.uk/passport.

Transitions

You will already have procedures in place ensuring successful transitions by pupils from your school to another school/college or into independence. Part of this will involve making sure that other professionals are fully aware of the child's hearing loss, the impact this has and communication support preferences. The case study opposite provides an example of how a deaf child successfully transitioned from a special school.



❖ Case study

Clare: supporting integration into a mainstream school class

Clare is a 10-year-old pupil with a multisensory impairment (MSI) who has worn hearing aids successfully for many years. Her early education was in a specialist provision for children with MSI within a large special school. She acquired good verbal communication skills when in this quiet setting with very familiar adults. She also learnt to rely on a simple set of on-body signs and an object of reference system in order to conceptualise her world.

Both school staff and Clare's family decided that she was ready to start integrating into a mainstream school class on the basis of her growing awareness and level of interest in other pupils.

The process was not rushed and the following steps were taken.

- A familiar adult from the MSI unit staff was identified, who could support Clare in the new school.
- To provide cover for staff absence, a second adult was involved in the integration process.
- A mixed-age class consisting of lively, chatty pupils with clear voices was found. It was considered that the way in which Clare related to other pupils was more important than an exact match of age.
- Staff in the receiving class were given training on Clare's needs, abilities and, above all, how to communicate with her. Pupils were also introduced to her directly through touch and indirectly through photos and videos of her in her usual setting.
- Objects of reference were created which represented the activities she would encounter in her integration class. Staff from the integration class visited Clare in her familiar setting and chatted informally with her so she could distinguish their voices easily.
- An educational audiologist helped to introduce a radio aid to be used in her new class. Clare's support worker used the transmitter and the teacher and other staff talked to her when they were close by. Progressively she learnt to map the room as well as to filter out distant voices which were not directly speaking to her.

After several months it was clear that Clare could become a functional member of the class, who was gaining from the 'buzz' of a lively group rather than being an outside observer.

What helped Clare

- Willingness and determination by everyone involved to make the integration work, not only for Clare but for other pupils too.
- Flexibility which allowed her to work at her own pace and overcome her worries, including those leading to tactile defensiveness, in a new, noisy and challenging situation.

An effective setting will:

- understand the impact of deafness on learning and be proactive in reducing this impact as much as possible, by using support strategies which enable effective teaching and learning to take place
- ensure there is a good understanding of an individual child's deafness and their needs – this should involve working with parents and a Teacher of the Deaf to collect relevant information
- use specialist assessment findings to ensure there is a full understanding of the deaf pupil's learning needs and to support target setting, with support from a Teacher of the Deaf
- know how to promote a deaf child's listening skills, attention and concentration
- encourage staff to make adaptations and develop strategies to support the deaf child – this might include visual aids, photo diaries and experience booklets, and music
- ensure all staff working with the child are familiar with the child's needs.

Quality improvement

Classroom observation

Schools will have systems for monitoring the quality of provision including using data to track pupil progress and assess how well interventions and support strategies for pupils with additional needs are working. An important aspect of this is assessing the effectiveness of support provided through observation.

This checklist will help managers assess the extent to which deaf children are supported effectively within the school.

Quality improvement checklist for school managers

The teacher

- Has the teacher been on deaf awareness training?
- Is the teacher aware of the pupil's level of deafness and implications for accessing learning?
- Has the teacher checked with the pupil that their hearing technology is being worn, is switched on and is functioning?
- Does the teacher know how to use a radio aid if a pupil requires one?
- Has the teacher taken steps to improve the listening conditions by, for example, reducing background noise and reverberation?
- Is the teacher's language matched to the pupil's needs? To what extent is the teacher repeating/reinforcing key points, checking understanding?
- Is the pupil seated in a position where they can hear and see the teacher for lipreading and is also able to identify other speakers in the classroom/see the CSW to follow British Sign Language (BSL) translation?
- Has the teacher used multisensory approaches (for example, visual clues) to help the pupil access learning?
- Is the teacher using clear speech patterns and standing or sitting in a position where the pupil can see her/him for lipreading?

The support staff

- Have they been on deaf awareness training?
- Are they working under the guidance of the teacher and are they fully familiar with the lesson plan and learning objectives?
- Do they have sufficient knowledge of the subject being taught to be able to support the pupil with any pre-lesson preparation (for example, introducing new concepts and vocabulary) or post-tutoring to check full understanding)?
- Are they aware of their role in:
 - implementing strategies and approaches to ensure access to teaching and learning?
 - helping the pupil achieve the learning objectives and targets (including any pre- or post-tutoring, communication support)?
- Do they provide the appropriate level of support that promotes independent learning, with a particular focus on helping the pupil develop understanding rather than just focusing on completing tasks?
- Can they help ensure hearing technology is functioning properly and know what to do if there is a problem?
- Do they have the relevant qualification in BSL if the pupil needs sign support to access what is being said during the lesson?
- Are they fully aware of the specific needs of deaf pupils (type, level of deafness, level of language)?
- Have they discussed support needs with the teacher?

Observations about the pupil's behaviour

- Are they able to follow what the teacher is saying?
- Are they engaged and active in learning?
- Are they able to work and learn independently without over-reliance on support staff?
- Are they able to make effective use of hearing technologies and do they know what to do if there are problems?
- Are they able to interact/communicate with adults and ask questions?
- Are they confident after the lesson that they have achieved the learning objectives?
- Are they well behaved?

This checklist is based on a proforma designed by Helen Bate from Derbyshire local authority.

Appendix: Assess, plan, do, review

Effective provision for any deaf pupil in any school will entail:

- a thorough assessment of the pupil's needs and strengths
- a plan setting out how the school will meet those needs and overcome any barriers to the student making good progress
- effective implementation of the plan
- regular reviews of the pupil's progress and the success of the plan to establish whether changes need to be made and what these are.

In England, this 'assess, plan, do, review' cycle has been incorporated into statutory guidance set out in the *Special Educational Needs and Disability Code of Practice (2015)*⁵.

This section sets out the implications of the assess, plan, do, review cycle for schools.

1. Assessing what support is needed

A good assessment will enable the school to identify potential barriers to progress and the support that is needed to overcome these. An accurate and thorough understanding of a pupil's needs and strengths underpins good planning and progress. A good assessment will require:

- information from the school and information on levels of attainment
- the views of parents about appropriate provision
- the involvement of specialists such as a Teacher of the Deaf
- the use of specialist assessments
- the need for access to technology and communication support.

Before taking into account any other additional needs, deafness will impact on a range of skills that students will need to learn including:

- listening skills
- attention and concentration
- language development
- literacy skills
- working memory

5. www.gov.uk/government/publications/send-code-of-practice-0-to-25

- auditory memory
- processing time
- incidental learning
- social skills
- self-esteem
- learning style.

2. Planning the right support

Plans should be developed with advice and support from a Teacher of the Deaf and should consider the following.

- The outcomes the pupil is expecting to achieve at school and then in adulthood.
- The shorter term targets to achieve those outcomes.
- The provision and adjustments required to achieve the outcomes and targets, meet needs and overcome any barriers to accessing teaching and learning. This would include support strategies and intervention, access arrangements and support from external agencies.
- Arrangements for monitoring and reviewing.

Before taking into account any other additional needs, the challenges presented by a hearing loss suggest that for many deaf pupils their plan is likely to include:

- targets related to the development of language, communication, literacy, confidence and social skills and the support and interventions required to achieve the targets
- the provision and maintenance of hearing equipment
- the provision of communication support
- measures to ensure teaching and learning takes place in rooms which provide a good listening environment and have good acoustics
- access to support from specialist such as Teachers of the Deaf
- the provision of pre- and post-lecture tutoring
- teaching strategies and approaches to ensure access to teaching and learning
- ensuring staff and, as much as possible, other pupils are 'deaf aware' and have a good understanding of what they need to do to ensure the deaf pupil is included within the school
- details of who is responsible for the overall coordination of the plan and who is responsible for delivering key aspects of the provision.

3. Implement or do: putting the provision in place

The plan should set out who is responsible for the overall coordination and implementation of any plan. They will have responsibility for the following.

- Ensuring staff involved in teaching and supporting the deaf child receive the necessary information, advice, guidance and training to ensure the student is supported and can access teaching and learning (a template information sharing sheet can be found on page 47).
- Ensuring the pupil's progress is monitored.
- Liaising with and obtaining feedback from the child and parents on what is going well and not so well.
- Ensuring that support and provision is in place (for example, employment of qualified communication support staff, equipment, adjustments to teaching spaces to improve the listening conditions).
- Ensuring teachers and teaching assistants implement interventions and strategies agreed as part of the support.

4. Keeping the support under review

The effectiveness of the support and its impact on the pupil's progress and breaking down any barriers that they face should be regularly reviewed and evaluated, taking into account the views of the pupil, where possible, and parents. The school will have developed systems and processes for doing this. Key areas that are related to the pupil's deafness that may require consideration include the following.

- Levels of progress in areas of language and communication.
- Levels of overall progress and whether any gaps with other students of similar ability are widening or narrowing.
- The accessibility of the subject content. For example, checking if the pupil is able to understand the language and concepts used in lessons or establishing where and when the student may experience most difficulty in hearing what is said.
- The effectiveness of communication support. For example, is the communication support worker (CSW) able to interpret accurately and fluently what the lecturer is saying.
- The effectiveness of technology.
- Any changes to the pupil's level of hearing.
- The success in communicating with others.

Where the pupil is not making expected levels of progress, specialist assessments, particularly in language and communication, may be helpful in identifying the source of difficulties and revising the plan and support strategies. A Teacher of the Deaf can provide advice on this.

About the National Deaf Children's Society

The National Deaf Children's Society is the leading charity dedicated to creating a world without barriers for deaf children and young people across the UK. We support deaf children, their families and the professionals who work with them, and challenge governments and society to meet their needs.

We provide information on all aspects of childhood deafness and hearing loss including:

- education
- audiology
- benefits
- technology
- communication
- additional needs
- parenting.

At the National Deaf Children's Society we use the term 'deaf' to refer to all levels of hearing loss in children and young people, including a partial or total loss of hearing. This includes those who may describe themselves as having a 'hearing loss', 'hearing impairment' or as 'deaf', and includes those with temporary deafness, such as glue ear. We support all deaf children and young people, regardless of their level of deafness, how they communicate or what technical aids they use.

Got a question?

Our Freephone Helpline can answer your questions about any issues relating to deaf children's education or development. Give us a call on **0808 800 8880**, email us at **helpline@ndcs.org.uk** or take part in a Live Chat at **www.ndcs.org.uk/livechat**. You can also order our publications through the Helpline.

Raising awareness

Deafness isn't a learning disability. With the right support, most deaf children and young people can achieve the same outcomes as other pupils. We produce lots of resources to support professionals who work with deaf children and young people to promote best practice and raise expectations. Our guidance, written by expert Teachers of the Deaf, sets out the interventions and

reasonable adjustments that can be made in education settings to improve deaf children and young people's outcomes.

All of our resources are **free** to download or order. They include:

Assessing and Monitoring the Progress of Deaf Children and Young People

Here to Learn video clips for mainstream school staff who have little or no experience of working with deaf children. Online at www.ndcs.org.uk/heretolearn

Look, Smile, Chat Deaf Awareness Pack

Bullying and Deaf Children: A guide for primary and secondary schools

Creating Good Listening Conditions for Learning in Education

What are you Feeling? (for deaf children with learning difficulties)

How Technology Can Help

To order any of our free resources, visit www.ndcs.org.uk/publications or contact the National Deaf Children's Society Freephone Helpline.

About our free support

We support families from initial diagnosis to adulthood across education, health and social care in a range of ways including:

- free information resources for families including our seasonal *Families* magazine and email updates with the latest news and family stories
- a Freephone Helpline offering clear, balanced information – we offer a free interpreting service for families who do not speak English as a first language
- local support from our Children and Families' Support Officers
- events where families can meet one another and get support from professionals
- support for mainstream art, sport and leisure organisations to run their activities in a deaf-friendly way, with free resources at www.ndcs.org.uk/me2
- Technology Test Drive loan service that enables deaf children and young people to try out equipment, including radio aids, at home or school.

Buzz website

Our Buzz website is a safe space where deaf children and young people can get support. It also provides deaf young people with a range of information on education and growing up. www.buzz.org.uk

Find us on YouTube

We have a YouTube channel full of videos starring deaf teenagers, parents of deaf children and the professionals who work with them, available from www.youtube.com/ndcswebteam.

For more information about the National Deaf Children's Society:

Visit our website: www.ndcs.org.uk

Facebook: www.facebook.com/NDCS.UK

Twitter: twitter.com/NDCS_UK

Become a professional member

Get exclusive benefits, information and support, including:

- access to the members'-only area of our website
- industry-leading guides, tools and research that give you invaluable information on supporting and working with deaf children
- bi-monthly email updates on our latest publications, campaigns and services.

Join the National Deaf Children's Society for free today by calling our Freephone Helpline on **0808 800 8880** or go to www.ndcs.org.uk/professional_support.

About the National Sensory Impairment Partnership (NatSIP)

The National Sensory Impairment Partnership (NatSIP) is a partnership of organisations working together to improve outcomes for children and young people with sensory impairment (SI). The agreed purpose of NatSIP is:

- to improve educational outcomes for children and young people with sensory impairment, closing the gap with their peers, through joint working with all who have an interest in the success of these young people
- to help children achieve more and fulfil the potential of children and young people who have SI
- to promote a national model for the benchmarking of clear progress and impact criteria for children and young people who have SI
- to support a well-trained SI workforce responsive to the Government agenda for education
- to inform and advise the Department for Education in England and other national agencies on the education of children and young people with SI
- to promote collaboration between services, schools, professional bodies and voluntary bodies working with children and young people who have SI
- to promote collaborative working between education, health and social care professionals in the interest of children and young people who have SI.

For more information about NatSIP and to access to resources, visit www.natsip.org.uk – a major gateway for SI professional practice.

The National Deaf Children's Society is the leading charity dedicated to creating a world without barriers for deaf children and young people.

National Deaf Children's Society's Freephone Helpline:
0808 800 8880 (voice and text)

Email: **helpline@ndcs.org.uk**

www.ndcs.org.uk

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www.natsip.org.uk



Department
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