

Supporting the achievement of deaf children in secondary schools

For school staff working with pupils with hearing impairment



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

This resource has been developed by the National Deaf Children's Society, with support from the National Sensory Impairment Partnership (NatSIP). NatSIP receives funding from the Department for Education (DfE) in England for provision of specialist information, advice, support and training to improve the outcomes for children and young people with sensory impairments.

Acknowledgements

We would like to thank the following people and organisations for their valuable contributions to the creation of this resource.

- Team for Children with Hearing Impairment, Sensory Support, Birmingham
- Sensory Impairment Service, Oxfordshire County Council
- Silvia Trabucchi, Teacher of the Deaf, Design and Technology Co-ordinator and Juliette Grant, Head of School and College, Hamilton Lodge School and College, Brighton
- Julie Mather, Teacher of the Deaf, Nottingham University Samworth Academy, Nottingham
- Jo Collingwood, Specialised Teaching Assistant, Nottingham
- Anne Wilson, Support Teacher for Secondary Hearing Impaired Pupils, Sheffield Service for Deaf and Hearing Impaired Children
- Helen Bate, Teacher of the Deaf, Aldercar Nursery and Infant School, Derbyshire
- Sarah Tomkow, MFL Mainstream Teacher
- Jo Walsh and Rebecca Papadovassilakis, Mary Hare School
- All of the mainstream teachers and Teachers of the Deaf whose ideas and suggestions helped to decide the content of this resource

Contents

Introduction	5
1. Overview	7
2. Working together to support deaf pupils: the role of school staff and other agencies	13
3. Partnerships with parents	19
4. Transition to secondary school	23
5. Deafness and its impact on learning	33
6. Making it easier for deaf pupils to listen and communicate	41
7. Teaching approaches	53
8. Specific subject support	63
Literacy and language-based subjects	64
Mathematics	69
Science	75
PE	78
Modern foreign languages	82
Music and arts	84
9. Working with teaching assistants and communication support workers	85
10. Assessment	91
11. Access arrangements for examinations	93
12. Supporting social and emotional development	97
13. Quality improvement: classroom observation and pupil feedback	103
14. Supporting transition to further education or work	111
Appendices	119
Appendix 1: Types and levels of deafness	119
Appendix 2: Personal hearing technology	123
Appendix 3: Communication options	127
Appendix 4: Useful resources	129
About the National Deaf Children's Society	131
About the National Sensory Impairment Partnership (NatSIP)	134

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.

Who is this resource for?

This resource is for anyone who works with deaf pupils in a secondary school. It provides guidance on ensuring that:

- teaching strategies engage deaf pupils in learning, enabling them to develop key skills in communication, reading, writing and mathematics
- deaf pupils make sustained progress, to narrow attainment gaps compared with other pupils
- the curriculum provides positive experiences for deaf pupils, offering well-organised, imaginative and effective opportunities for learning and a broad range of experiences that contribute to their achievement and spiritual, moral, social and cultural development.

Deafness is not a learning disability and, given the right support, deaf pupils can make the same progress as hearing pupils of similar cognitive ability.

How to use this resource

No two deaf pupils will require the same specific support. The school's special educational needs coordinator (SENCO) or additional learning needs coordinator, with the support of the peripatetic Teacher of the Deaf or local specialist educational support service for deaf children, can use this resource to select specific support interventions and advice to meet individual needs.

As many school staff will play a key role in deaf pupils' education, this resource is written so that the school's SENCO or additional learning needs coordinator can photocopy or download sections to give to staff members. Individual templates and checklists contained in this resource can be downloaded from the National Deaf Children's Society's website at www.ndcs.org.uk/supportingachievement.

NOTE

In different parts of the UK, the terms 'special educational needs coordinator' or 'additional learning needs coordinator' are used. For simplicity, this resource uses 'SENCO' throughout.

NOTE

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

Overview

1

Effective provision for a deaf pupil 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)*.

It should be remembered that deafness in itself is not a learning disability and, given the right support, deaf pupils can make the same progress and attain as much as other pupils of similar cognitive ability. Having high expectations of deaf pupils is vital.

This resource is intended to help you follow this approach, as set out below.

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 include:

1. the pupil's self-evaluation of any support requirements
2. information on the pupil's current levels of progress and attainment. On transition to secondary school this would include the information from their primary school
3. the views of parents about appropriate provision
4. the involvement of specialists such as a Teacher of the Deaf
5. the use of specialist assessments
6. the need for access to technology and communication support
7. consideration of support needed to meet any specific subject requirements.

Deafness will impact on a range of factors that contribute to a pupil's ability to learn including:

- listening skills
- attention and concentration
- language development
- literacy skills
- working memory
- auditory memory
- processing time
- incidental learning
- social skills
- self-esteem
- learning style.

It is therefore likely that assessments will focus on these areas. Further advice on specialist assessments can be found on page 91.

Page 24 of this resource provides more information about the steps that should be taken to ensure there is a proper assessment of the pupil's needs to ensure an effective transition from primary to secondary school.

A checklist to support this can be found on page 25.

Planning the right support

Plans should be developed with the pupil, parents and Teacher of the Deaf, and should consider:

- the outcomes the pupil is expecting to achieve at school
- 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.

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 technology

- the provision of communication support
- measures to ensure teaching and learning take place in rooms which provide a good listening environment and have good acoustics
- access arrangements for assessments/examinations
- access to support from specialist staff such as Teachers of the Deaf, teaching assistants and communication support workers
- the provision of pre- and post-lecture tutoring
- teaching strategies and approaches to ensure access to teaching and learning
- ensuring staff and 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, delivering key aspects of the provision and organising regular reviews.

Again, a checklist to support assessment and transition planning can be found on page 25.

Implement or do: putting the provision in place

A pupil's plan should set out who is responsible for the overall coordination and implementation of any plan. This would be the SENCO with support from the Teacher of the Deaf. They will have responsibility for the following.

- Ensuring all staff involved in teaching and supporting the deaf pupil receive the necessary information, advice, guidance and training to ensure the pupil is supported and can access teaching and learning (a template information sharing sheet can be found on page 31).
- Ensuring the pupil's progress is monitored.
- Liaising with and obtaining feedback from the pupil 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, hearing technology, adjustments to teaching spaces to improve the listening conditions).
- Ensuring subject teachers and teaching assistants implement interventions and strategies agreed as part of the support.

A number of chapters in this resource provide advice on the reasonable adjustments you can make to meet the needs of deaf children including:

- teaching strategies on page 53
- specific subject support on page 63
- supporting social and emotional development on page 97.

The school should also ensure that all necessary modifications and adaptations are in place to ensure the deaf pupil has equal access to examinations. More information on access arrangements can be found on page 93.

Keeping the support and its impact 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 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 pupils 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 pupil may experience most difficulty in hearing what is said.
- The effectiveness of communication support. For example, is the communication support worker able to interpret accurately and fluently what the teacher is saying.
- The effectiveness of technology.
- Any changes to the pupil's level of hearing.
- Their success in communicating with others, socialising and forming friendships.

Where the pupil is not making expected levels of progress, the specialist assessments, particularly in language and communication may be helpful in identifying the source of difficulties and revising the plan and support strategies. When the expected levels of progress are not being made, all aspects of the plan must be interrogated, with consideration given to the possibility that the support provided is not effective. It should not be assumed that the problem simply lies with the pupil. A Teacher of the Deaf can again provide advice on this.

More widely, schools should take steps to review the general effectiveness of provision for deaf learners. This may include a consideration of, for example, the listening environments within the school and whether staff need additional training and support. On page 103, we provide some guidelines for how school leaders can do this. A checklist is provided on page 104.

An effective school will:

- ensure that the assessment of a deaf pupil's needs is based on accurate information about their prior attainment and reflects the type and level of their hearing loss and its effect on their learning, and identifies key barriers to making progress
- seek pupils' and parents' views on the barriers they are experiencing and the strategies and support that will benefit them
- consider the implications of a pupil's deafness when planning how to meet their needs. This will include recognition that good speech intelligibility may mask underlying linguistic difficulties and problems of accessing what is being said during teaching
- ensure that the necessary support is provided, whether this be through modification of teaching strategies, meeting language and communication needs, the effective use of technology, staff training, improving the listening environment and providing for social and emotional needs
- review the effectiveness of their provision for the deaf pupil, monitoring the extent to which the pupil is achieving the expected outcomes.

The above steps should be carried out with support from a Teacher of the Deaf.

Working together to support deaf pupils: the role of school staff and other agencies

2

Deaf children will receive support from a range of professionals. Schools can facilitate effective multidisciplinary working to support the child by:

- providing information to other professionals supporting the child on their progress, for example, informing the audiologists about how well personal hearing technology is working
- ensuring school staff have, as far as possible, the time for necessary liaison with parents and other professionals who support the child
- trying to ensure visits to audiology clinics do not disrupt essential lessons
- providing appropriate facilities for professionals who come into school to support deaf children and young people, for example, ensuring meeting rooms free from interruption and with good acoustics are available
- contributing to multidisciplinary assessments and any resulting support plan.

The role of school staff members

The lists below explain how different staff members can support the achievement and inclusion of deaf pupils. They focus on the roles that are specific to the needs resulting from pupils' deafness.

Special educational needs coordinator (SENCO)

- Ensure the school receives all information on the pupil's deafness and its implications, to plan for starting in September.
- Ensure the required hearing technologies, adjustments to the classroom and support staff are in place for the start of term.
- Ensure all information about the pupil's needs and how to meet them is communicated to other staff.
- Ensure the school works cooperatively with other health and education specialists who are supporting the pupil.

- Organise staff training, such as deaf awareness training.
- Ensure teaching assistants have the knowledge and skills to support the pupil, including at least a Level 3 British Sign Language (BSL) qualification or equivalent for pupils who require signed support.
- Support the school's contribution to 14–19 transition planning.
- Liaise with the examination officer to ensure access to examinations arrangements are in place.
- Ensure that information about the deaf pupil is available on the school portal for supply staff.

Form teacher/year teacher/head of pastoral support

- Get to know the pupil and the impact of their deafness.
- Be aware of the pupil's communication needs and know how to communicate with them.
- Understand the benefits of hearing technologies and know how to use them.
- Identify the pupil's social needs and support their socialising and friendships, offering pastoral support.
- Encourage form/year members to understand the pupil's needs and the support they can give.
- Help ensure there are effective home–school links, encouraging parents to express any concerns or worries.
- Ensure behaviour management strategies take account of the pupil's deafness.
- Promote the development of independence skills.

Subject teacher

- Understand the pupil's needs and the implications for accessing lessons.
- Adapt the teaching approach to ensure the pupil can access teaching and learning.
- Work with teaching assistants and communication support workers to ensure access to teaching and learning with a focus on targets and learning goals.
- Communicate effectively with the deaf pupil.
- Understand and use hearing technologies effectively.
- Assess and track the pupil's progress and report back to the SENCO every term.
- Identify gaps in learning and set ambitious targets.

- Liaise with and meet parents, and review approaches as a result of any discussion.
- Understand and respond to specific behaviour management advice.
- Promote the development of independence skills.
- Engage in professional development to help meet the above.

Teaching assistants and communication support workers

- Support the pupil's communicative, language and listening development.
- Ensure the pupil can access the lesson and achieve their objectives.
- Ensure the pupil is socially included and has similar opportunities to be involved and to contribute to lessons and the school community as other pupils.

Bursar/property manager

- Ensure school premises provide a good listening environment that enables effective teaching and learning.
- Implement specific adaptations required to improve listening conditions for the pupil (for example, improving room acoustics, installing soundfield systems).

School senior management

- Make quality assurance arrangements to ensure deaf pupils are accessing teaching and learning (for example, tracking and classroom observation, pupil feedback).
- Ensure the school makes reasonable adjustments necessary to ensure all pupils are treated equally.



Working with other professionals

The school SENCO has a key role in coordinating the support the pupil receives from other professionals. This includes:

- providing information to help professionals support the pupil, for example, the audiologist may be interested in how well hearing aids are supporting hearing so that adjustments can be made
- ensuring school staff have, as far as possible, the time for necessary liaison with other professionals who support the pupil
- trying to ensure visits by other professionals do not disrupt essential lessons
- providing appropriate facilities for professionals who come into school including, for example, ensuring meeting rooms are free from interruption and have good acoustics
- contributing to multidisciplinary assessments and any resulting support plan.

Other professionals that support deaf pupils may include the following.

Teachers of the Deaf

In many areas, a child with a permanent moderate to profound hearing loss will have received regular support from a Teacher of the Deaf who has a mandatory qualification in deaf education. They may have supported the deaf child in their early years, including through the time of their transition to primary school.

Pupils with a temporary or mild deafness, or deafness in one ear, may not meet the criteria for regular support but the Teacher of the Deaf can advise the school on strategies to meet their needs. The school SENCO should contact their local specialist educational support service for deaf children if they need advice or support from a Teacher of the Deaf.

The Teacher of the Deaf can:

- support and advise teachers on strategies to ensure the pupil can learn
- provide deaf awareness training and specific training on meeting the pupil's needs
- support the effective use and maintenance of hearing technologies
- do specialist assessments to identify the pupil's needs in order to inform teaching and learning strategies and targets
- recommend improvements to the hearing environment and access to learning activities for all pupils
- advise on reasonable expected outcomes for pupils when support is sustained and developed over time
- provide advice and support for all areas of the pupil's development
- support and advise parents



- help coordinate liaison with other agencies involved with the pupil
- support transition to further education
- advise on adjustments needed for examinations.

Speech and language therapists

Deaf pupils may also get support from a speech and language therapist, who may assess and monitor their understanding and use of language, listening skills, speech production and vocal skills.

In some cases the therapist will work directly with the pupil. In others, they will suggest programmes for the school to implement and will monitor the pupil's progress and suggest updates.

Audiologists

Audiologists carry out hearing tests to determine the level and type of deafness and the appropriate hearing technology. They fit hearing aids and review the pupil's progress until they transfer to adult services.

It is unlikely that a member of school staff will meet their deaf pupil's audiologist but they can supply information and will find observations about the effectiveness of the pupil's hearing technology useful. Audiologists 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.

Educational audiologists

Educational audiologists are Teachers of the Deaf with a qualification in education audiology and offer specialist advice on acoustics and hearing technologies.

Involving the deaf pupil

It is really important to involve the deaf pupil in determining the type of support they receive. Examples of how you can gain pupil feedback can be found later in this resource in chapter 13.

An effective school will:

- ensure all staff are clear on roles and responsibilities in relation to the deaf pupil
- ensure that all relevant staff have received appropriate training to meet the deaf pupil's needs
- encourage staff to discuss individual needs and support with the deaf pupil
- ensure that it makes the necessary reasonable adjustments to meet the deaf pupil's needs and ensure they are not placed at a substantial disadvantage
- work closely with outside agencies, including the pupil's Teacher of the Deaf, to support the deaf pupil effectively.



Partnerships with parents

3

“My child needs to grow up to live the life similar to a hearing peer. The same level of confidence, intelligence, academic qualifications, job prospects and opportunities, independence, be able to form relationships with other people and live a satisfying life.”

— Parent of a deaf child

Parents play a key role in supporting their deaf child's achievement. They can provide useful information about their child's needs and development and how they can be supported at home.

Contact prior to starting school

Discussion with parents prior to the child's admission will enable you to gather important information about the pupil's needs so that measures can be put in place to ensure a successful start at school. It gives the school an opportunity to respond to any worries parents may have about their child starting at school, helping them to feel valued, welcomed and involved in their child's education.

Helping parents support their deaf child's learning

Many parents will want to support their child's learning. Teachers can help them by:

- explaining any tasks that their child should practise
- sharing any challenges their child might face and discussing how to respond
- demonstrating the task if required (or inviting the parent to watch a teaching session in class time)
- providing details on topics their child will be learning and how they can help support this at home.

Parents often help their child practise specific aspects of their language and communication, literacy or numeracy skills. They can reinforce new concepts and vocabulary. It is important to keep in contact with parents to ensure this support is enjoyable and stress free. Like all pupils, deaf pupils need time to relax and enjoy extracurricular activities so it should not be too demanding.

Keeping parents informed

Parents 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.

It is important to plan with parents when and how they can expect to receive this information and the frequency with which they will receive it.

Establishing good home–school communication

Communicating everyday information between school and home can be hard for deaf pupils, who may miss or misunderstand verbal information or instructions. 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
- establish a regular way for staff to update parents by emailing, meeting or phoning
- send text messages to ask parents to look out for information coming home or when a pre-planned activity is imminent.

A nominated person may take on a role to ensure confidential information reaches parents in a secure way.



Structured conversations with parents

Schools participating in the Achievement for All programme have reported the structured conversations as an “*outstanding success*”, both for staff and parents. The programme found that “*a more holistic view of pupils has led to a culture shift in parent engagement and has been effective in building a genuine partnership between home and school*”.

For more information on Achievement for All see www.afa3as.org.uk.

An effective school will:

- work closely with parents to enable the school to better understand the pupil’s needs
- keep parents informed of strategies to support the child’s educational and social development, and let them know how they can help.

Transition to secondary school

4

Challenges for deaf pupils

Moving from primary to secondary school can be daunting for any pupil. For deaf pupils there are extra challenges that they may encounter including:

- frequent changes of classroom with varying quality in acoustics
- frequent changes of teaching staff, with varying teaching styles, expectations and ease of communication/lipreading
- varying deaf awareness levels among staff and pupils
- more demanding subject content
- a lot of new vocabulary, particularly specialist subject vocabulary
- making new friends
- differing expectations of behaviour and independence.

It is important for the school's SENCO and tutor to work with the parents, pupil, primary school and Teacher of the Deaf to develop a transition plan that helps overcome these potential challenges and ensures a successful start.



The transition plan

A good transition plan will:

- be prepared well in advance of the pupil starting, to give time for the support arrangements to be put in place
- clearly identify the member of staff responsible for preparing the plan and coordinating its implementation
- involve the pupil and their parents and address any concerns they have
- be based on a thorough analysis of the pupil's needs and strengths including information from specialist assessments where necessary (a checklist for collecting relevant information follows)
- set out what needs to be done to meet the pupil's needs including:
 - what should be provided (for example, hearing technology, teaching assistant support, staff training, further assessment, improvements in classroom acoustics, opportunities to visit the school, specialist support)
 - who in the school is responsible for each identified action
 - timescale for delivery.



... Example checklist for collecting information to support the transfer from primary school

Primary to secondary school transfer Information to support a successful transition	
<p>Pupil name:</p> <p>Primary school:</p> <p>Primary school contact:</p> <p>Parents:</p>	
Hearing and personal hearing technology	
Information required	Implications for transition plan
<p>In this section record:</p> <p>Degree and nature of deafness:</p> <p>Un-aided hearing level:</p> <p>Aided hearing level:</p> <p>Ability to discriminate speech in different environments (for example, class, workshops, halls):</p> <p>Sounds/words that are difficult to hear:</p> <p>Personal hearing technology used:</p>	<p>In this section record:</p> <p>What needs to be done to improve access to sound, for example, providing radio aids, improving acoustics, using soundfield systems?</p> <p>What needs to be done to ensure optimum use of hearing technologies, for example, daily checks by staff of battery, tubing, etc., developing the pupil's skills in managing their own technology?</p> <p>What are the health and safety implications, for example, fire drills, giving instructions in workshops where machinery is used?</p>

Communication	
Information required	Implications for transition plan
<p>In this section record:</p> <p>Preferred way of communicating in different locations and situations (class, home, friends):</p> <p>Competence in preferred way of communicating:</p> <p>Lipreading ability:</p>	<p>In this section record:</p> <p>What needs to be done in class to support access to teaching and learning including, for example:</p> <ul style="list-style-type: none"> • seating position to allow for lipreading • using radio aids • ensuring good acoustics • using a soundfield system • advice/training for the teachers • providing communication support workers with Level 3 qualification for pupils who use BSL? <p>What needs to be done to promote communication and social interaction with other pupils?</p>
Language	
Information required	Implications for transition plan
<p>In this section record:</p> <p>Levels of understanding of language:</p> <p>Level of expressive language:</p> <p>Vocabulary level:</p> <p>Grammatical constructions:</p> <p>Social interaction and use of language:</p>	<p>In this section record:</p> <p>How does this compare with hearing pupils?</p> <p>What are the implications for learning, for example, more processing time?</p> <p>If a gap exists, what targets should be set to close the gap and what support/interventions are required to achieve them?</p> <p>What are the implications for teaching?</p>

Cognition	
Information required	Implications for transition plan
<p>In this section record:</p> <p>Non-verbal cognitive skills to:</p> <p>a) ensure teachers have high expectations</p> <p>b) check whether or not there are other underlying learning difficulties.</p>	<p>In this section record:</p> <p>What needs to be done to address any other underlying difficulties the pupil may be experiencing?</p>
Progress in curricular areas	
Information required	Implications for transition plan
<p>In this section record:</p> <p>Progress in different curricular and extracurricular areas:</p> <p>Are there particular strengths? Are there particular difficulties?</p>	<p>In this section record:</p> <p>Is more support required in particular areas? What targets need to be set?</p>
Social and emotional aspects	
Information required	Implications for transition plan
<p>In this section record:</p> <p>Level of social interaction in class/ school friendship groups:</p>	<p>In this section record:</p> <p>If levels are low how can they be increased?</p> <p>Do other pupils need deaf awareness training and information on how to communicate?</p>

Pupil's views	
Information required	Implications for transition plan
<p>In this section record:</p> <p>What are the pupil's hopes, aspirations and concerns about moving to a new school?</p> <p>What information and help do they think they need to support their move to a new school?</p>	<p>In this section record:</p> <p>What information and opportunities are needed to help with the transition?</p>
Parents' views	
Information required	Implications for transition plan
<p>In this section record:</p> <p>What are the parent's hopes, aspirations and concerns about their child moving to a new school?</p> <p>What information and help do they think they need to support their child's move to a new school?</p>	<p>In this section record:</p> <p>What information and opportunities are needed to help with the transition?</p>
Other considerations	
Information required	Implications for transition plan
<p>In this section record:</p> <p>Any other considerations, for example:</p> <ul style="list-style-type: none"> • any other difficulties or medical conditions or medical needs • attendance issues • behaviour issues. 	

Strategies that could be included in the transition process and plan

Assessing the pupil's needs

- Arrangements for assessing the pupil's needs including information from the primary school, supporting specialist services in health, education and social care, parents and the pupil.

Information for the pupil

- Familiarisation/taster days with friends and possibly extra days to meet and get to know key staff members. These visits should be planned to enable the pupil to take full part in the activities.
- Accessible information about the school, such as a map, a timetable, photos of relevant staff, information about breaks and lunchtimes and information on who can help with any concerns.

Primary–secondary school liaison

- Regular transition meetings and ongoing liaison between key members of staff from both schools and the support service.
- Primary school staff and the Teacher of the Deaf provide information about the pupil's deafness, its impact and their needs.
- Secondary school staff visit and observe the pupil at primary school.

Preparation in the secondary school

- An acoustic audit of teaching spaces that identifies measures required to improve the listening environment.
- Ensuring that any hearing technology such as radio aids and/or a soundfield system is in place in good time.
- Arrangements for deaf awareness training for other pupils in the form/year group.
- Arrangements for providing secondary school staff with information on the pupil's needs and how they are best supported in accessing teaching and learning. An example of information that could be provided is given on page 31.
- Arrangements for training and advising relevant staff – this could include deaf awareness training for staff including lunchtime supervisors.
- Arrangements for meeting social needs including continuity of existing friendship groups.
- Arrangements for having the teaching assistant support/communication support worker in place for the start of term.

These strategies should be selected according to the individual pupil's needs.

Resources for promoting deaf awareness

- Our *Look, Smile, Chat Deaf Awareness Pack*, available at youngpeople.ndcsbuzz.org.uk/looksmilechat, contains lots of resources to increase deaf awareness at school, such as communication tips for deaf and hearing young people, a lesson plan for secondary school pupils and a poster.
- Our DVD, *Here to Learn* is a resource for mainstream schools covering all aspects of deaf awareness within a school. It can be watched as a whole, or as individual modules, and includes interviews with deaf pupils, their parents and school staff. The video clips can be watched online at www.ndcs.org.uk/heretolearn.



In addition to or instead of the previous information sheet, some deaf pupils may already have developed a 'personal passport' or an 'information card' containing key information about themselves and their needs. They can range from small laminated cards that can be attached to, for example, a lanyard or a locker key to A4 sheets of paper with more detailed information.

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.

... Example: information card

Cassie Thomas 9H

I use a hearing aid

It helps if you:

- face me when talking
- repeat what you've said if I ask
- allow my friends to prompt me
- understand it is harder for me to listen when there's lots of background noise.

Thank you

When using the radio aid

- I have the attachments needed to fit on my hearing aid.
- You need to wear the microphone around your neck, roughly 15cm from your mouth and switched on. When you talk to other students you can switch it off.

Thank you

An effective school will:

- recognise the additional challenges that deaf pupils may face in moving from primary to secondary school
- make sure that it has received all the necessary information from the primary school, other relevant professionals and parents well in advance of the transition
- develop a transition plan that identifies a lead member of staff responsible for ensuring that the move is successful for the deaf pupil and that all the necessary provision is in place for the first day of term
- ensure that the transition plan sets out what support needs to be provided to meet the deaf pupil's needs and that it is put in place. This includes ensuring that any necessary training is provided
- distribute relevant information on the deaf pupil to staff.

Deafness and its impact on learning

5

Deaf pupils cover the whole range of ability. Deafness is not a learning disability and deaf pupils have the potential to attain and achieve the same as any other pupil, given the right support and access to the curriculum. However, as most teaching and learning takes place through the main senses of sight and hearing, this presents deaf pupils with particular challenges when trying to access teaching and learning.

Deaf pupils have a diverse range of needs, including types of hearing technologies and their preferred way of communicating and learning. It is important to find out from the pupil and their Teacher of the Deaf what their needs are and how these impact on their learning.

Levels and types of deafness

There is considerable variation in the levels and types of childhood deafness.

Children who are deaf may have a permanent mild, moderate, severe or profound hearing loss in one or both ears or a temporary loss such as glue ear.

The Teacher of the Deaf will be able to explain the individual deaf pupil's level of hearing by showing you an audiogram. An audiogram is a chart used by an audiologist to record the results of the hearing assessment.

Further details on the types and levels of deafness are given in Appendix 1.

Hearing technologies

Deaf pupils use different types of personal hearing technologies supplied by the NHS, such as a hearing aids, bone-conduction hearing implants or cochlear implants. More information about the technology that deaf children may use can be found in Appendix 2.

The audiologist will have assessed and recorded how much the deaf child can hear with their hearing technology fitted. However it is important to understand that while the hearing technology used is set and programmed to enable the deaf child to access sound as near to typical hearing levels as possible, it does not replace normal hearing.

Acquired deafness

Pupils may start school without a diagnosis of deafness, or acquire a permanent deafness while at school. At secondary age this is most likely to happen following a serious illness, such as meningitis, but it can happen at any time. It is important for school staff to look out for any possible signs of deafness. It is also essential to monitor deaf pupils' hearing levels in case of deterioration.

Deafness and additional needs

There is a relatively high prevalence of deafness in pupils who have learning difficulties/other disabilities. Often the pupil's deafness is overshadowed by their other difficulties. It is important to take steps to address the impact of the deafness so that they can access learning, communicate and socialise.

Impact of deafness on language

Childhood deafness has a major impact on learning spoken language as it is usually acquired through hearing and vision together. Early hearing screening of babies and improved hearing technologies mean that more deaf pupils now enter a mainstream secondary school using spoken language (with or without signed support) and some form of hearing technology. **However, their language, communication and learning needs may not be immediately apparent, with good speech intelligibility masking their level of linguistic ability.**

The impact of deafness on a pupil will also be influenced by factors such as:

- the age at which they became deaf
- whether deafness was diagnosed and managed early or late
- support from parents
- the quality of professional support they receive
- their cognitive ability
- personal characteristics, such as determination
- the functioning of their hearing technology and how often it is worn.

**“It takes me longer to process information
– [it's] harder to understand some things. ”**
– Deaf pupil

Impact of deafness on access to learning

The impact of deafness on language development can mean a deaf child has difficulty in being able to:

- make sense of what people say and understand what is happening around them
- learn to think things through and problem solve
- understand and express what they are feeling and manage their emotions.

Deaf pupils are likely to require additional support if they are to make the same progress as other pupils of a similar age and cognitive ability. Adaptations and strategies will need to be put in place that manage and minimise the impact of their hearing loss, develop their learning skills, provide access to the curriculum and lead to higher levels of academic achievement.



This table describes how deafness can impact on a pupil's learning and outlines some teaching and learning strategies. These strategies are further described in later sections.

Teachers should 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	<ul style="list-style-type: none"> • Know the pupil's language level from regular assessment. • Monitor and develop language skills. • Ensure effective use of hearing technologies. • Create a good listening environment. • Provide focused, individual/small group programmes as required. • Provide pre- and post-tutoring as required for new topic areas, ensuring the pupil is aware of new concepts. • Adhere to good practice when communicating with deaf pupils. • Involve parents in providing additional language practice.
Listening skills	<ul style="list-style-type: none"> • Ensure effective use of hearing technologies. • Create a good listening environment.

Teachers should be aware of:	Summary of possible teaching, learning and support strategies
Attention and concentration issues/tiring easily because lipreading and trying to hear require heavy concentration	<ul style="list-style-type: none"> • Ensure effective use of hearing technologies. • Ensure pace and length of learning sessions are appropriate. • Check levels of understanding after lessons. • Ensure the pupil has good notes on the lesson. • Use visual cues to support teaching points. • Create a good listening environment.
Literacy skills, including grammar	<ul style="list-style-type: none"> • As above plus additional tuition. • Differentiated curriculum. • Use specific programmes, resources and strategies to help the deaf pupil learn.
Memory – struggling to remember information, particularly large chunks; working and auditory memory issues	<ul style="list-style-type: none"> • Check the pupil’s understanding. • Allow more time to process information. • Differentiate the delivery.
Difficulties with multitasking, for example, taking notes and listening/lipreading and/or watching demonstrations at same time	<ul style="list-style-type: none"> • Use teaching assistants as notetakers. • Repeat demonstrations. • Check the pupil’s understanding. • Check the pupil has a full set of notes. • Break tasks up to ensure understanding.

Teachers should be aware of:	Summary of possible teaching, learning and support strategies
Difficulties around incidental learning – deaf pupils may struggle to pick up what others are saying through casual listening	<ul style="list-style-type: none"> • Create opportunities for one-to-one and small group work in good listening environment. • Check understanding, reinforce concepts and language and explain gaps in knowledge base.
Social skills – difficulties with hearing can restrict social integration	<ul style="list-style-type: none"> • Ensure peers are deaf aware and can communicate with the deaf pupil. • Create opportunities for small group work requiring turn-taking under the supervision of an adult. • Ensure access to extracurricular activities. • For older primary pupils, focused group work on dealing with/taking responsibility for their own deafness. • Deaf pupils may need specific teaching to see situations from other people’s perspective. This is known as Theory of Mind and research suggests it can be delayed in deaf children.
Self-esteem	<p>Praise appropriately and genuinely, describing exactly the reason for the praise.</p> <p>Ensure that disabilities including deafness are included in the personal, social, health and economic education (PSHE) curriculum.</p> <p>Use specific resources developed for deaf children, for example, the National Deaf Children’s Society’s <i>Healthy Minds</i> resource.</p>



It is important for the SENCO to understand the pupil's needs and identify potential barriers to learning. Where appropriate, the pupil should be involved in deciding what support methods are most suitable. The Teacher of the Deaf will help to establish what type of support is best.

An effective school 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
- be confident in using hearing technology.

Making it easier for deaf pupils to listen and communicate

6

This section explains how you can make it easier for deaf pupils to listen and communicate in the classroom through:

- supporting their use of hearing technologies
- creating good listening environments
- promoting effective communication across the school.

Supporting the use of hearing technologies

It is essential that any hearing technologies, such as hearing aids and cochlear implants, are working properly. As deaf pupils get older, they will take more responsibility for their own technology, but the school should still ensure they are gaining maximum benefit.

- All staff must understand the use and limitations of hearing technologies – see Appendix 2 for guidelines.
- The SENCO can provide details about the pupil in ‘Notes to staff’ as in the example overleaf. See ‘**Transition to secondary school**’ on page 23 for more information.



... Example: Notes to staff

Hearing loss and hearing technology	
<p>Mohammed:</p> <ul style="list-style-type: none"> • is profoundly deaf • wears two hearing aids • uses a radio aid in all lessons (see attached guidelines) • relies on lipreading to supplement his hearing. 	
<p>Mohammed can:</p> <ul style="list-style-type: none"> • hear speech sounds and follow one-to-one conversation in a quiet environment • make use of direct audio input • manage his own hearing technology; carries spare batteries, etc. 	<p>Challenges for Mohammed:</p> <ul style="list-style-type: none"> • picking up distant sounds directly without the use of the radio aid system • discriminating which voice is more important to listen to against a background babble of voices • following a group or class conversation without support.

Some staff members should be trained to assist the pupil in managing and maintaining their hearing technology on a day-to-day basis, check for faults and troubleshoot.

- An equipment care kit that includes, for example, spare batteries, a puffer, tubing, etc., should be kept somewhere accessible at school. It should be in a place that means the pupil does not have to be away from lessons or their friends for long to have their hearing technology checked.
- The SENCO, key worker or teaching assistant should communicate regularly with the pupil about how they feel their hearing technology is working. Any concerns over technology should be dealt with immediately.
- Supply and visiting staff should be offered guidance and advice.



Radio aids

Many deaf pupils may benefit from using a radio aid with their main hearing technology. In the UK, education providers are responsible for providing radio aids, not the NHS. Radio aids reduce problems caused by distance between the speaker and pupil, and background noise. They do this by carrying the teacher's voice directly via a microphone to a receiver attached to the pupil's hearing technology.

Radio aids need to be recharged, usually overnight, and the pupil should carry the microphone and transmitter between lessons.

When using radio aids, teachers should:

- switch the transmitter on when talking to the whole class or group in which the deaf pupil is working
- wear the microphone about 15cm from the mouth
- switch it off or mute the microphone when having a conversation that the deaf pupil does not need to hear (the signal can travel some distance and even through some walls)
- avoid standing in a noisy place, such as next to an overhead projector or open window, as the microphone will pick up background noise and transmit this to the deaf pupil
- avoid letting the microphone knock against clothing or jewellery
- make the handover and return of any hearing technology at the beginning and end of each lesson as smooth and inconspicuous as possible. For example, some pupils do not like giving radio aid equipment to their teachers if they are concerned about drawing attention from peers
- ask the Teacher of the Deaf about leads from the radio aid to audio equipment such as language lab, soundfield system or computer.

The Teacher of the Deaf can advise the school on how to check and maintain the technology, ensuring it is at the correct setting and is used effectively, and can liaise with audiologists, cochlear implant centres and suppliers if problems arise.

The National Deaf Children's Society lends radio aids to pupils wishing to try them out in school. Parents have said:

“It made an enormous difference – we just didn't realise how much her hearing loss was affecting her at school.”

“It was brilliant, really helpful and improved her progress at school.”

“It made a tremendous difference. It's the first time we have tried something which actually helped him.”

For further information see our resource *How Radio Aids Can Help*.

What else to consider

As a deaf pupil progresses through their secondary school they become more independent in using and managing their hearing technology – fitting, cleaning and changing batteries when necessary, and identifying when a problem arises. This can be encouraged and monitored using a structured programme of support such as The Ear Foundation's Personal Understanding of Deafness (PUD) programme, which provides a set of progressive learning objectives that promote individual understanding of deafness.

The recharging equipment should be kept somewhere accessible and near to the pupil to ensure they recharge it. If it is kept at home, clear guidelines are needed to support this process.

Creating a good listening environment

“Secondary school gets louder.”

– Pupil

No technology can replace normal hearing and its effectiveness depends on the acoustic quality of the school. The listening environment in a typical classroom can make it difficult for deaf pupils to make best use of their hearing technologies.

A good listening environment benefits all pupils. Deaf pupils in particular will experience difficulties in learning if:

- there is a lot of reverberation and echo in a room (i.e. poor acoustics). Rooms with hard surfaces (large uncovered/painted walls, glass windows and tiled or wooden floors) and high ceilings allow sounds to ‘bounce around’. This distorts what is heard through the hearing technology worn by the deaf pupil
- there is a lot of background noise that drowns out the voice of the teacher.

Adaptations can be made to improve acoustics

School managers should liaise with the Teacher of the Deaf or educational audiologist to ensure the school building meets the national minimum standard on acoustics. All teaching spaces should be regularly assessed and adaptations put in place to reduce reverberation and background noise.

Schools can reduce reverberation by:

- fitting curtains, carpets or blinds
- installing specialist acoustic treatments to rooms (for example, acoustic tiles, panels and door seals)
- putting rubber tips or ‘hush ups’ on the bottom of chair and table legs
- using display drapes on walls and covering hard surfaces with drapes.

Feedback from the deaf pupil on the rooms and areas with the best listening conditions should also be sought, with the pupil encouraged to request support where needed.



Reducing background noise

Teachers can reduce background noise by doing the following.

Managing the room	Managing the class
<p>Closing doors to noisy areas or corridors.</p> <p>Closing windows to outside noise, closing curtains and blinds if necessary.</p> <p>Positioning full bookshelves and cupboards against partition walls (to minimise noise transfer from other rooms).</p> <p>Ensuring heating and air conditioning systems operate within acceptable noise levels through regular maintenance.</p> <p>Turning off IT equipment, such as interactive whiteboards, computers and overhead projectors, when not in use.</p>	<p>Introducing classroom strategies that can establish and maintain a quiet working atmosphere within the classroom, including good behaviour management.</p> <p>Encouraging pupils to develop an understanding of how classroom noises, such as chairs scraping, doors banging, dropping objects, shouting, etc., can interfere with what deaf pupils can hear.</p> <p>Liaising with colleagues to coordinate activities to avoid disturbance in areas where noise particularly carries (for example, drama rehearsals in open hall areas).</p>

Schools might also consider introducing a soundfield system. These systems 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 cochlear implants. More information about soundfield systems can be found in Appendix 2.

The National Deaf Children's Society has produced a range of resources, *Creating Good Listening Conditions for Learning in Education*, which helps to improve the attainment of all pupils 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.

Promoting effective communication across the school

All communication with deaf pupils must be clear and effective. This will support learning and encourage social and emotional development.

For communication to be clear and effective:

- make sure you have the deaf pupil's attention before you start talking
- speak clearly and at your normal level and pace – speaking too slowly or exaggerating mouth patterns make you harder to understand
- ensure that the pupil is sitting at an appropriate distance from you – hearing technologies have an optimal range of 1–3m in which to access speech clearly
- allow the deaf pupil to see your face and lips when speaking – putting something in front of your face or turning to write on the whiteboard will make it difficult for them to lipread
- ensure you are not standing with your back to a light source, as a shadow cast across your face can obstruct the deaf pupil's view
- check that the pupil understands what has been said in a sensitive way, as some deaf pupils may dislike admitting they have not understood, repeating or rephrasing if needed
- make sure the pupil can see the teacher and the communication support worker and speaking directly to the pupil not the communication support worker
- for those deaf pupils who rely particularly on watching your face when you speak, allow them time to move their attention between you and visual support
- repeat any questions that other pupils in the classroom may have raised before answering them
- seek advice from a Teacher of the Deaf about meeting individual pupils' needs, for example, where English is an additional language or the pupil has additional needs.

“I am not always able to see the lips of the person talking and [so] can't lipread.”

— Deaf pupil

❖ Example: Notes to staff

Communication

Discuss the best seating arrangement in class with Mohammed.

In whole-class activities Mohammed needs to:

- sit in a position where he can lipread the teacher
- face the teacher with an unobstructed view
- have light on the teacher if the room is darkened
- avoid sitting under the whiteboard projector or near the classroom door
- be able to see his peers to access their contributions to a lesson.

Involving peers

Successful communication with other children is important for the deaf pupil's self-esteem, social development and inclusion. Teachers should:

- ensure other pupils in the class understand how background noise affects the listening environment and what they need to do to communicate with the deaf pupil
- establish with the deaf pupil and other children which measures make it easier to understand each other and admit when they have not understood each other
- if the pupil signs, provide opportunities for other pupils to develop signing skills, for example, a lunchtime club
- in agreement with the pupil, select a nominated hearing friend or peer who can prompt when something is missed
- set up 'quiet zones' inside and outside the school where deaf pupils can go to communicate with their friends
- encourage the pupil to take responsibility for explaining their needs to other pupils.

❖ Resources for promoting deaf awareness

- Our *Look, Smile, Chat Deaf Awareness Pack*, available at youngpeople.ndcsbuzz.org.uk/looksmilechat, contains lots of resources to increase deaf awareness at school, including communication tips for deaf and hearing young people, a lesson plan for secondary school pupils and a poster.
- Our DVD, *Here to Learn* is a resource for mainstream schools covering all aspects of deaf awareness within a school. It can be watched as a whole, or as individual modules, and includes interviews with deaf pupils, their parents and school staff. The video clips can be watched online at www.ndcs.org.uk/heretolearn.



Pupil voice

It is important to find out how well the pupil is accessing teaching and learning.

The Teacher of the Deaf can help to find this out.

Consultation may involve:

- conversations about teaching and learning
- seeking advice from pupils about new initiatives
- asking the pupil how they think any problems could be solved
- asking the pupil what they think about recent developments in school or classroom policy and practice.

The following example shows an approach that could be used to record the pupil's views.

... Example: Recording a pupil's views

Oxfordshire County Council's Sensory Impairment Service developed a *How Well Can You Access in Class?* resource. It is used at least once a year, ideally during term one to identify and address any access issues in a particular subject area. This questionnaire helps to identify areas of difficulty and evaluate intervention strategies. Pupils can complete it in different ways, such as ticks and crosses, colour-coding or faces. Notes of difficulties discussed and actions agreed are kept. This can then be reviewed after a suitable period of time.



❖❖❖ **How well can you access in class?**

	English	Maths	Science	ICT	History	Geography	RE	PE	Art	Drama	Music	Tutor
Seating												
Lip patterns												
Repeating pupil comments												
Visual aids												
Clear speaking voice												
Whiteboard												
DVDs/videos/ online clips												
CDs/audiotapes												
Pair/group work												
Radio aid												
Soundfield system												
Other comments												
Teaching assistant support	Things that really help me						Things that could be changed/improved					
Teacher of the Deaf support	Things that really help me						Things that could be changed/improved					
Other things	Things that really help me						Things that could be changed/improved					

Reproduced with the kind permission of the National Sensory Impairment Partnership from its publication *SEN Support and Outreach Services: Case studies* to illustrate how different services are seeking to meet the quality standards (2012).

An effective school will:

- be confident that any hearing technology is being used properly by a deaf pupil
- identify a staff member who can carry out listening checks and simple repairs to hearing technology
- consider adaptations to improve the listening environment, for example, by reducing background noise
- promote effective communication strategies for all pupils
- promote peer awareness and understanding of the deaf pupil's needs
- encourage the deaf pupil to give their views on the support they receive
- encourage the deaf pupil to consider what steps they can take to support their own learning.



Teaching approaches

7

Pupils who are deaf cover the whole range of ability. They have the same potential to attain and achieve as any other pupil given the right levels of support.

However, most teaching and learning takes place through the main senses of sight and hearing, presenting pupils who have hearing difficulties with particular challenges which need to be addressed by the school.

Deaf pupils are likely to need extra support to make the same progress as other pupils of a similar age and cognitive ability. Adaptations and strategies should be put in place to:

- manage and minimise the impact of their deafness on their learning
- develop their learning skills
- provide access to the curriculum
- lead to higher levels of academic achievement.

These strategies will benefit all pupils and are good practice to enable access to the curriculum.

This section discusses these strategies and issues to take into account in relation to:

- using visual aids
- vocabulary and support handouts
- prepared notes
- pre- and post-tutoring sessions
- group work and discussion
- reading round the class
- allowing time to think
- using whiteboard and PowerPoint presentations
- using videos/DVDs/online clips
- demonstrations
- notetaking
- checking understanding
- reducing fatigue
- setting homework.

“I need that additional support, I can’t really do it on my own because I don’t really understand the language so I need the teachers to help me translate that language and let me clarify exactly what’s going on.”

– Deaf pupil

Using visual aids

Presenting information and concepts visually is a vital support method in all subject areas because it:

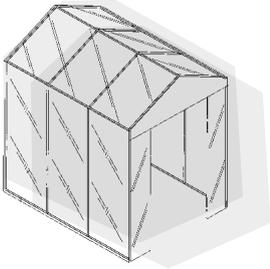
- ensures the deaf pupil is not just relying on listening and speech/ lipreading for information
- gives context to a subject or situation, particularly when it has just been introduced
- illustrates new concepts and specialist subject terminology
- makes use of the deaf pupil’s visual memory skills
- generally reinforces what is being said.

Wherever possible, support spoken explanation and written texts with visual materials, for example:

- incorporate pictures, diagrams, illustrations, objects and artefacts that support what is being said
- point clearly to the visual clues you are using and show when pupils refer to them during discussion
- use PowerPoint presentations via the interactive whiteboard to incorporate visual images supporting the spoken explanation
- make specific ‘support/vocabulary handouts’ (see following page for an example)
- use display work to consolidate and develop understanding – displays with pictures and captions provide important visual clues. It may also be useful to have a small whiteboard to hand so illustrations can be made to reinforce understanding
- allow enough time for the deaf pupil to look at the visual material before you start talking again – this gives them time to focus their attention back on the teacher or the teaching assistant.

... Example: Visual aid

Global warming – the greenhouse effect



Heat is trapped inside.



Heat is trapped in by the poisonous gases. Plants and animals will die. The ice caps will melt causing floods all over the world.



Vocabulary and support handouts

If the pupil has teaching assistant support, the teaching assistant could make the following resources.

- Support handouts that show the lesson content as pictures, particularly when complex specialist terms are introduced. The pupil can refer to these as the lesson progresses and when subsequent work is set.
- Specific vocabulary handouts that include words related to the subject or topic being taught, illustrating each word with a picture.

... Example: Vocabulary and support handouts

Astonished



surprised, amazed

These people have all seen or heard something astonishing.

They are astonished.

Vocabulary and support handouts can relay lesson content through simplified English for deaf pupils who are struggling with what the teacher is saying because the subject language is demanding. The language used in support resources should be accessible to the pupil. Handouts are also useful for pupils who use signed support.

It is important that the pupil's vocabulary and understanding of more complex language structures is extended – deaf pupils often miss out on picking up vocabulary by overhearing language. Particular support may be needed with the variety of words used for a certain topic. A limited vocabulary can inhibit development, comprehension and expressive skills.

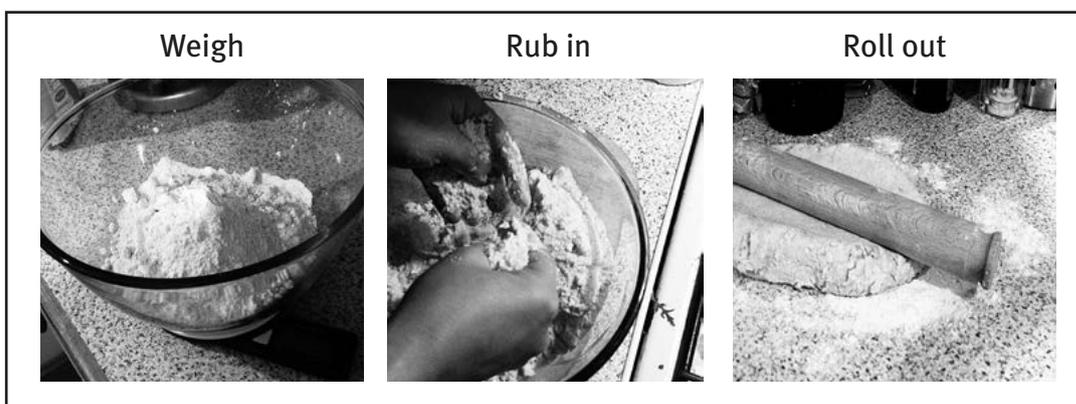
❖ Case study: Literacy challenges

Food technology teacher Silvia Trabucchi at Hamilton Lodge School describes some of the literacy challenges deaf pupils may face in specific subject areas when they reach secondary school.

“I teach food technology within the secondary age range at school and it’s not unusual for me to hear ‘Cooking must be easy to teach to deaf children because it is so visual.’ However, the specialist subject terminology and concepts pupils encounter may present them with challenges to their understanding.

- *Ingredients lists may appear clearly listed but often attach instructions, for example, one onion, peeled and finely chopped. Ensure pupils are clear on these instructions.*
- *Use of contracted forms of measurements, for example, spoon measurements: tsp, tbsp, need reinforcement to understand and use, as they do not fall commonly into use.*
- *The use of a familiar verb in a new context can also cause confusion, for example, ‘beating the mixture’ may not be as familiar as beating someone in a race. Similarly when instructed to ‘cream the mixture’ a deaf student may initially look to find the ‘cream’ unless taught about this first.*
- *There is a large amount of vocabulary – foodstuffs, equipment, tools and processes – that have not been heard incidentally and of which there are no agreed signs. Work is needed to build up and reinforce this vocabulary with pictures and visual clues.*
- *Many recipes have superfluous language and too many instructions in one sentence, which pupils have to navigate to get to what’s really required, for example, ‘meanwhile in a wok or large frying pan, heat the remaining oil and the butter or margarine and gently fry the leek, garlic and tofu for one to two minutes until the vegetables have just softened’.*
- *The internet has helped greatly with demonstrations shown on YouTube and Videojug which help them to cook but on their own these will not help pupils develop their literacy skills and understanding in this area.”*

❖ Example: Visual aids



Prepared notes

Deaf pupils may not take in the same amount of information as hearing pupils during lessons. It can be difficult to take in new information while listening and using visual clues.

- Give deaf pupils and their support staff copies of handouts, PowerPoint slides and lecture notes before the lesson.
- Supply copies of texts that are to be used with the class for dictation.

Pre- and post-tutoring sessions

This involves going through a lesson, or specific aspects of it, before or after it is delivered. Pupils tell us that pre-class preparation in particular enables them to relax and participate in lessons, having had the chance to grasp new vocabulary and concepts.

Pre-tutoring can be used to:

- check what the deaf pupil knows and identify and fill any gaps in their knowledge
- introduce new vocabulary, terminology or concepts to enable pupils to concentrate and participate more fully in the lesson.

Post-tutoring can be used to:

- reinforce, repeat and clarify the lesson
- establish any areas of the lesson the pupil did not understand
- give the pupil time to absorb what has been taught.

An issue many schools face is finding time to provide tutoring. Occasional lunchtime sessions are possible, but the levels of concentration required for deaf pupils to listen means they may need breaks more often than hearing pupils. Another option is to take one fewer GCSE, which would need to be agreed with the pupil and parents. Timing should be discussed with the pupil to find the best opportunity to provide tuition.

Group work and discussion

Pupils who need signed support, a notetaker or rely on lipreading or visual clues will need time in group discussions to understand what is said. If teachers ask the class for views, they should ensure the pupil has received the question before accepting answers.

Deaf pupils say that learning in small groups is easier than in large groups.

Whether in group work or during class discussions it is important to:

- ask speakers to identify themselves by raising a hand or stating their name, then allowing their deaf peer time to locate and look at them before speaking
- repeat what speakers who may not easily be seen or heard say
- pass the transmitter between speakers if the pupil is using a radio aid
- ask speakers to keep their faces visible (uncovered by hands, hair or objects) and look in the direction of the deaf pupil when speaking
- allow only one person to talk at a time
- allow sufficient time for the pupil to receive and respond to what the teacher or another pupil says.

Reading round the class

This should be adapted for deaf pupils as per the group work guidelines. It can also be helpful to:

- show the pupil the text before the lesson and if necessary go through it in a pre-tutoring session
- use a radio aid round the class, passing the transmitter between readers
- use a 'buddy' system where a hearing peer helps the pupil keep track of the text
- ensure the pupil is prompted to read
- make it clear when reading is stopped to discuss a specific point.

Allowing time to think

As well as allowing time for deaf pupils to receive and respond to what has been said in class, some pupils' auditory memories may not be as well developed as their hearing peers. It can help to:

- allow processing time during lessons, particularly when new information is included and during question and answer sessions
- break down periods of spoken input into smaller sections within an overall lesson to give time to absorb information
- include opportunities for repetition in lesson time.

Using whiteboard and PowerPoint presentations

Viewing a PowerPoint presentation often requires classroom lights to be dimmed, which can make lipreading or watching signed support difficult. It is helpful to:

- use an anglepoise lamp to illuminate the speaker or support worker
- provide a brief pause between slides to enable the pupil to view the slide
- give deaf pupils and staff members copies of PowerPoint slides before the lesson
- make sure the pupil can see the board clearly (but is not close to or under the whiteboard projector, to avoid background noise)
- be mindful of the background noise produced by the computer.

Using videos/DVDs/online clips

- When possible, use the pupil's radio aid to provide direct access to sound.
- Purchased DVDs or those produced by the school should have subtitles. Online clips, such as those on YouTube, sometimes have subtitles or captions but may be of variable quality. It is important that you check these in advance.
- Discuss the content you plan to watch with teaching assistants or support workers, giving them time to watch it and discuss any key points or vocabulary with the pupil.
- Some pupils might benefit from watching the content before or after the lesson, with their support worker or at home.
- If appropriate, get a transcript/summary of the content (give plenty of notice as it takes time to transcribe).
- Stop the video/DVD/online clip to allow notes to be taken – the pupil may miss information if they take notes while watching.

Demonstrations

Deaf pupils cannot watch a demonstration, lipread their teacher/follow signed support and take notes at the same time. It can help to:

- explain before a demonstration what the equipment is and how it will be used
- break the demonstration down into sections to explain each part
- allow time for the pupil to look at the demonstration before the speaker begins again.

Notetaking

Deaf pupils will find it difficult to lipread/follow signed support while taking notes. Having a support worker or teaching assistant to make notes lets deaf pupils concentrate on the lesson.

- Some pupils may prefer to read notes as they are written, but they can also be read later and used to support further work.
- Notetaking can be particularly useful in subjects where diagrams, formulae or flow charts are used.
- Where appropriate, language may be modified to suit the pupil's reading skills.
- Notetaking can be done manually or electronically (SpeedText, Stereotype and TypeWell can be used with laptops).
- Notetakers should record as much that happens in the classroom as possible, including pupil discussion, asides, jokes and interruptions.

Checking understanding

It is important to check the pupil has understood, without drawing unnecessary attention to them. Use open-ended questions to check understanding, as this prevents the deaf pupil from nodding without really understanding.

Reducing fatigue

It takes more concentration for deaf pupils to listen than for hearing pupils, which can be tiring.

- Consider the pace of the lesson, breaking down periods of spoken input. Deaf pupils become fatigued when they concentrate on watching and listening for long periods of time.
- Get to know what teaching methods or activities the pupil finds most tiring and build in breaks, or find alternative methods and adapt activities to include tasks that do not solely rely on lipreading.
- Become familiar with the pupil's signs of tiredness so you can intervene before they become frustrated.

Setting homework

All pupils must have the same opportunities to understand their homework as their peers. Deaf pupils have said that often it is set when background noise is high, for example, at the end of lessons.

“One of the teachers writes [our homework] on the board. I am okay with that, it is just one or two teachers, it is last minute, all rapid fire and it is hard to keep track and at the same time I am trying to get out in time for my lunch. ”

– Deaf pupil

“When the teacher gives us homework he writes what we have to do on the whiteboard which means I can copy it down. The problem is that he explains about the homework at the same time as writing and so I can’t read his lips. It means that I don’t really understand what I have to do and then the lesson ends so there’s no time to ask for help. ”

– Deaf pupil

Teachers should ensure homework details, including deadlines, are communicated clearly at a quiet point in the lesson that allows time for clarification. Deaf pupils will benefit from having their homework written down on paper or the whiteboard.

An effective school will:

- encourage staff to make adaptations and develop strategies to support the deaf child where necessary. These will benefit all pupils in the class. Strategies might include:
 - visual aids
 - vocabulary handouts
 - a check on the pupil’s understanding
 - pre- and post-tutoring.
 - ensuring any videos/DVDs/online content is accessible to deaf pupils
 - giving the pupil opportunities to rest if they are experiencing fatigue.

Specific subject support

8

A pupil's needs will determine the nature of the support they require within specific subjects. Sometimes more than one type of support may be necessary; this information needs to be disseminated to staff responsible for different curriculum areas.

The SENCO may be responsible for collating and distributing information to all the subject teachers. The school may have a format for this, for example, notes on a staff-accessible database, pupil information packs or a film on the intranet to support training. An example can be found on page 31 in **'Transition to secondary school'**.

The SENCO should discuss with the pupil and the Teacher of the Deaf which additional support methods, teaching adaptations and strategies to use. As the pupil becomes older they can participate more in these discussions, guiding what sort of support is most beneficial. You will find it helpful to refer to the strategies in **'Teaching approaches'**.

Discussions with, and feedback from the subject teacher will help to keep learning support recommendations up to date. The SENCO and Teacher of the Deaf may help staff to support the pupil but individual teachers must ensure the pupil is included in all aspects of their lesson.

An effective subject teacher will:

- attend staff training to understand how they can meet the needs of a deaf pupil
- expect the progress of deaf pupils to be the same as hearing pupils of similar cognitive ability
- develop an understanding of how deafness has affected the pupil
- work with specialist advisers, such as Teachers of the Deaf, and deploy specialist support staff
- evaluate the outcomes of additional support to inform planning
- ensure that communication strategies are implemented including the effective use of technology
- adapt teaching styles and strategies to maximise the pupil's learning and participation
- monitor the pupil's progress and take advice from specialist support if issues emerge.

Supporting the achievement of deaf children in secondary schools – video clips

A series of short films which provide simple and easy-to-follow guidance to ensure that deaf pupils can fully participate in the class, access the curriculum and achieve their full potential have been produced in partnership by the National Deaf Children's Society and Team for Children with Hearing Impairment, Birmingham. The films include a general introduction and overview of strategies to support deaf children and subject-specific films about English, maths, science and modern foreign languages. These can be viewed online by going to www.ndcs.org.uk/supportingachievement.

These can be used for training and could be placed on the school intranet for subject teachers to view.

Literacy and language-based subjects

The main impact of deafness is on acquiring and developing language.

Some deaf pupils' language skills may be less developed than hearing pupils'.

As literacy learning is integrally linked to language development, the reading and writing content of many literacy-based subjects, such as English literacy, history and social sciences, may be challenging. Measures may need to be put in place to make the subject language accessible.

Even pupils who have good speech intelligibility and age-appropriate literacy skills may have language access needs that are not immediately apparent. Subject teachers should be aware that a deaf pupil may not:

- have a broad vocabulary and so may not have a range of alternative words for the same object, feature, feeling, place, etc.
- understand when one word has several meanings, for example, the word 'catch' means:
 - to catch a ball
 - to catch a cold
 - the catch on a gate
 - the catch of the day on a menu
- know words used in specific curriculum areas
- understand idioms or colloquialisms
- grasp sophisticated skills to understand higher order language, for example, making inferences
- have a broad general knowledge.

In lessons where there is emphasis on listening and discussion, support measures should focus on:

- clarity of communication
- visual aids
- vocabulary support
- group work.

In subjects that focus on the use of written texts, teachers should:

- supply texts before the lesson or at pre-tutoring sessions
- provide vocabulary handouts and modified texts
- manage group discussion effectively
- put in place support measures when reading around the class
- check the pupil's understanding.

Deaf pupils can have difficulty with reading and writing when there are aspects of written language that they have not heard or are not used in sign language. Teachers may find that:

- deaf pupils may not hear all the words that are spoken or hear all the sounds in any one word – their spoken and written English may reflect this. For example, 's' is a soft, high-frequency sound and deaf pupils may not detect this, so plurals can be lost in both their speech and writing
- there is a discrepancy between a deaf pupil's ability to spell learnt words correctly and their ability to work out the spellings of new words
- British Sign Language (BSL) and Irish Sign Language (ISL) have their own syntax and word order and do not have a written form
- more assistance is needed to understand, for example:
 - the grammatical significance of function verbs, auxiliary verbs and the verb
 - 'to be' in all its forms
 - features that are only in punctuated written form.

For some deaf pupils additional support may include specific lessons that address language and literacy needs in parallel or additional programmes. For others the support may include the following options.

- Taking time to explain any corrections. A teaching assistant could:
 - put emphasis on identifying what has been written well
 - ask the pupil to read what they have written, giving them the opportunity to identify what needs correcting
 - read a corrected version identifying what is required
 - set specific language targets for the next piece of work.
- Setting specific targets relating to their writing skills alongside the subject's learning objectives. These could be summarised on prompt cards.

... Example: Prompt cards

<p>Becky's writing targets</p> <p>Remember to include:</p> <p>a, an, the, and, to, as, of</p> <p>full stops, at the end of sentences.</p> <p>Re-read as you write</p>			
Remember when you're writing...	to be	to do	to have
Now	am is are	do does	have has
In the past	was were been	did done	had
Action	being	doing	having



Many subjects such as history, geography, media studies and sociology anticipate a level of background understanding that hearing pupils pick up by listening and responding to family and friends. Some deaf pupils will have gaps in their general knowledge as a result of having fewer opportunities to overhear and gain information incidentally. Teachers should not assume that deaf pupils will have the same level of general knowledge as their hearing peers. This can be addressed through:

- pre- and post-tutoring
- including basic background information in the lesson plenary and providing opportunities for repetition and reinforcement during the lesson
- involving families to gain experiences, go on trips, watch and read the news – encouraging learning at every opportunity
- using visual aids.

... Example: Notes to staff

Ways of helping Mike access learning during lessons

Mike can access your lessons with:

- his FM system
- in-class support from his teaching assistant (TA)
- some modified resources (made by his TA)
- vocabulary cards
- summaries of texts to be studied
- writing target prompts.

Remember:

- Establish a regular meeting time with Mike's TA to hand over planning and resources that need adaptation. Note: Mike's TA has requested at least a week's notice to create resources or adapt text.
- Mike has a post-tutoring session with his TA every Thursday, last period, to go through features of his written work, focusing primarily on grammar and spelling. Alert his TA to any concerns you may have.

During lessons:

- Allow Mike to be assisted by his TA when texts are read around the class (follow group discussion guidelines with FM system, identifying speakers etc.).
- The TA will direct Mike to use vocabulary handouts and writing target prompts.
- Write topic headings and key questions for the lesson on the whiteboard.
- Make use of pictures in PowerPoint presentations and worksheets to give as much context as possible to what is written.
- Allow Mike some thinking time before expecting an answer.

Watch online

A short video clip on supporting achievement in English is available online by going to www.ndcs.org.uk/supportingachievement.

Mathematics

Deaf pupils may require additional language support to make progress in numeracy at secondary level. Teachers need to be aware that a deaf pupil may:

- be able to competently acquire and use a numerical computation but need to learn the related, often varied, mathematical terminology
- not encounter specialist mathematical vocabulary elsewhere through incidental learning
- after learning new mathematical terms, still be confused by questions and instructions that include additional language
- need extra opportunities to practise new vocabulary as well as practise the computation itself
- have difficulty transferring their knowledge and making links between mathematics topics, particularly if vocabulary varies or new words are introduced
- process information more slowly than their hearing peers.

Mathematics teachers should:

- use pictures and diagrams that clearly illustrate the meaning of the vocabulary and concepts
- go through key words for the lesson as part of the introduction – if possible these should be visible for the whole lesson or be in vocabulary handouts
- clarify when similar language has a different application, for example, a ‘bigger number’ being different from a ‘bigger size’
- support transition from structured to unstructured questions
- point to new vocabulary when saying it so the pupil can connect pronunciation with written form and regularly revise pronunciation and word meaning at intervals during each lesson
- match the complexity of the questions asked or set to the pupil’s language level
- allow processing time during lessons, particularly when new information is included and during question and answer sessions
- include opportunities for repetition in lesson time
- check understanding by using open-ended questions.

If the pupil uses signed support, teachers should work with their teaching assistant or communication support worker to:

- ensure the best signs are used to present the intended meaning
- ensure consistency over how numbers are demonstrated through formal sign language and/or informal gestures/handshapes.

... Example: Notes to staff

Ways of helping Joe access learning during lessons

Joe can access your lessons with:

- his FM system
- specialist vocabulary support.

Remember:

- Joe's progress with maths last term has prompted him to suggest he can manage without TA support in these lessons. Please monitor this until half term.
- Joe's next meeting with his Teacher of the Deaf is on the last Thursday of this half term. I will be meeting with her also to discuss the alterations made to Joe's TA support. Please meet with me at 4pm on Tuesday 29 to review how he has managed and any concerns we need to consider.

During lessons:

- Provide Joe with key vocabulary words, preferably on a supplementary sheet; refer him to this as you teach.
- When textbooks or worksheets you've prepared include new vocabulary highlight these and provide meanings on a supplementary sheet.
- Check he is 'clued in' to new topics.
- Joe finds it useful to go through written questions briefly before starting work, try choosing a suitable 'work buddy' from within the class who can also do this with him this term.
- Allow Joe some thinking time before expecting an answer.
- Joe's understanding should be checked during lessons, through questioning.
- Prompt sheets with guided steps are helpful to him when completing homework.

... Example: Key vocabulary sheet**Key vocabulary – division (\div)**

Division is splitting numbers into equal parts or groups. It is the result of 'fair sharing'.

We use the \div symbol

$$12 \div 3 = 4$$

Division is the opposite of multiplying. If you know a multiplication fact you can find a division fact:

Example: $3 \times 5 = 15$, so $15 \div 5 = 3$

... Example: Textbook words

All the questions on page four of your workbook are division (\div) sums. Questions containing these words mean you need to divide to get the answer:

- shared
- share equally
- divided by
- groups of
- repeated
- each group needs the same.

Watch online

A short video clip on supporting achievement in maths is available online by going to www.ndcs.org.uk/supportingachievement.

... Example: Homework – prompt sheet with guided steps

Bus stop division method:

To divide a large number by a one-digit number you can set it out like this:

$$\begin{array}{r} 137 \text{ r}5 \\ 7 \overline{) 92654} \end{array}$$

1. 7 goes into 9 once with 2 remaining (remainder 2), so put a 1 above the 9 and carry the 2 to the tens column.
2. 7 goes into 26 three times, remainder 5, so put 3 over the 6 and carry 5 to the hundreds column.
3. 7 goes into 54 seven times, remainder 5, so put 7 over the 4 and have a remainder of 5. So $964 \div 7 = 137 \text{ remainder } 5$

We write this with an 'r' for 'remainder'.



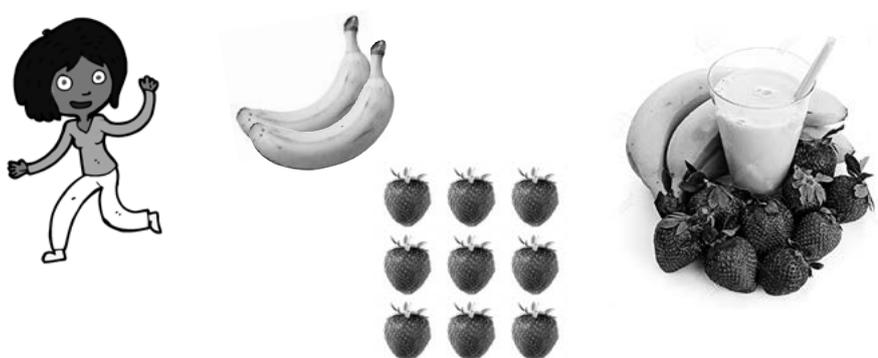
... Example: Multiplicative reasoning

Below is an example of how a Teacher of the Deaf delivers an activity to support understanding.

“Within my setting I often find the pupils have particular problems with multiplicative reasoning which underpins children’s ability to work with ratios, fractions and proportionality. Below is some visual support for the understanding of a simple ratio in ‘recipe’ type questions.”

‘Smoothie’ activity

Ellie says she has made the perfect fruit smoothie!



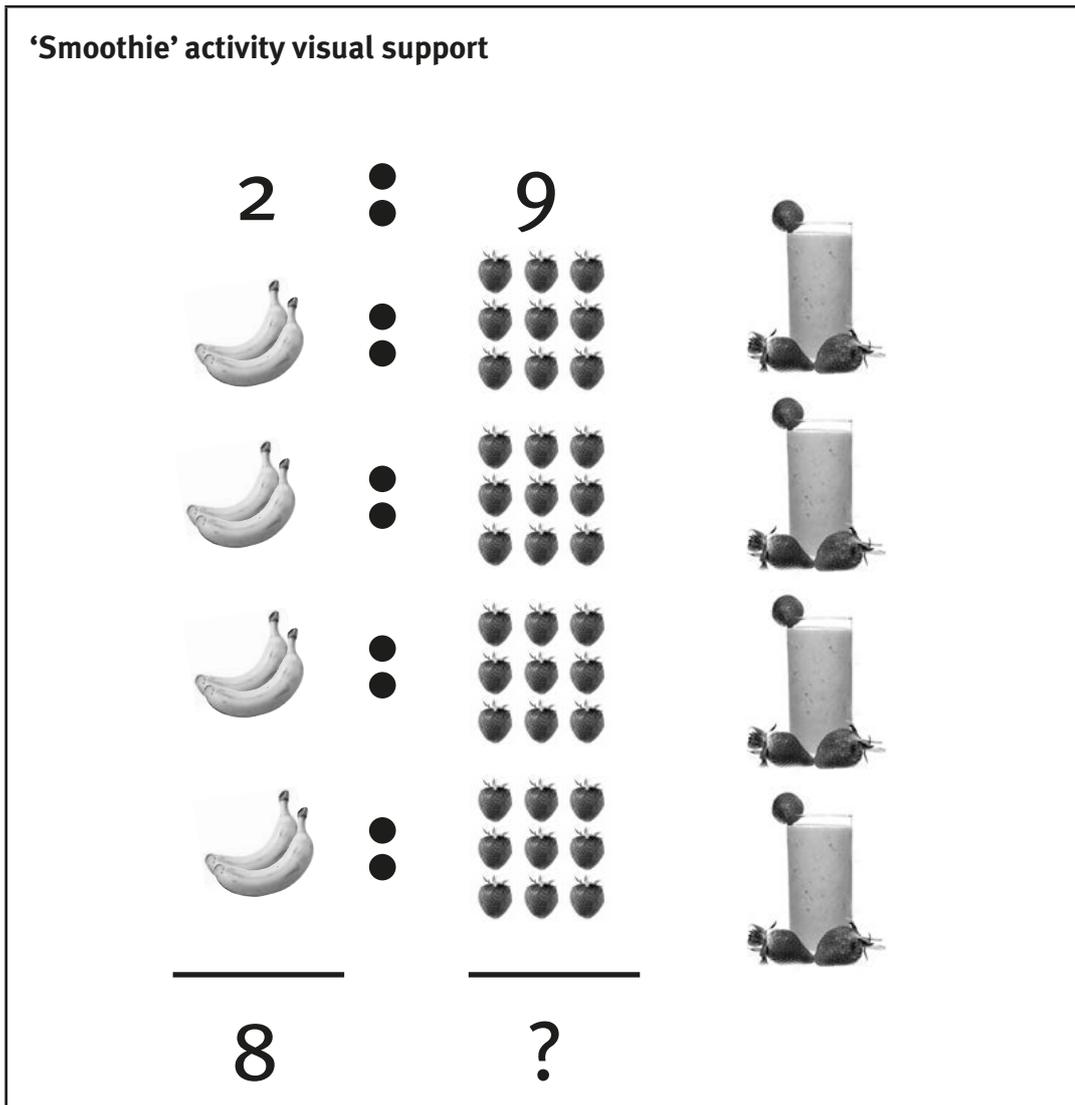
She used 2 bananas with 9 strawberries

What is the ratio of bananas to strawberries in her recipe?

How many strawberries does she need to mix with 8 bananas?

“Stating the ratio as 2:9 does not normally cause children a problem. The second question is where the difficulty occurs. Pupils have a tendency to add on six strawberries to make it fair.”

To help pupils visualise the concept an interactive whiteboard can be used to build up to the picture on page 74.



“Building up the picture helps to emphasise the multiplicative relationship. Pupils can see that four times as many bananas need four times as many strawberries and crucially this will give us four times as much ‘smoothie’. Pupils often think we should end up with eight times as much ‘smoothie’ or even 16 times as much but the visual image helps dispel this misconception. Reinforcement and practice are needed to consolidate the concept.

I use a large selection of ‘fruit’ cards, for example, three kiwis, two apples, 10 grapes. The children work in groups and choose their ingredients before setting each other recipe challenges, for example, how many kiwis with six apples? There are plenty of cards made available so that they can lay them out and build up the recipe if necessary. Inevitably, harder problems are set by the children such as how many apples with five kiwis, but a discussion of which problems are ‘hard’ and why is very ‘fruitful!’.

As pupils become more confident we move to a visualisation of the problem and then to modelling a written solution.”

Science

Guidelines for science teachers should always include use of available hearing technologies, communication and classroom management strategies.

In some schools, science labs are designed with high ceilings and an expanse of hard, reverberant workbenches, which can make listening difficult for pupils wearing hearing technologies. This needs to be addressed before the pupil uses the lab so modifications, such as adding acoustic ceiling tiles, chair tips or 'hush ups', can be made. The Teacher of the Deaf or educational audiologist can advise on adaptations. Guidelines for science teaching staff should include prompts to regularly check with the pupil, SENCO and Teacher of the Deaf that the acoustics of the room are suitable.

The science curriculum often includes abstract concepts and can be difficult for deaf pupils who may not have the language or background knowledge to understand these concepts. It will introduce subject-specific concepts and vocabulary that a deaf pupil may need extra support strategies to understand. Teachers should:

- use pictures and diagrams that clearly illustrate the meaning of the vocabulary and concepts
- support working scientifically to develop more abstract thinking and prediction skills
- go through key words for the lesson as part of the introduction – if possible these should be visible for the whole lesson
- emphasise new vocabulary so the pupil can connect pronunciation with written form
- provide supplementary vocabulary sheets when possible (the teaching assistant may be able to prepare these). Some examination boards provide scientific vocabulary lists
- develop cross-curricular links with the maths department to support mathematical skills required for science
- consider creating lesson summaries, particularly when introducing new topics for pupils to take home, go over with their Teacher of the Deaf or use in pre- and post-tutoring sessions.

Science lessons often include experiments or demonstrations; teachers should consider health and safety and ensure the pupil understands procedures.

If the deaf pupil has a teaching assistant give them plenty of time to make support resources, modify texts or research and learn appropriate signs to support learning. If lesson content is particularly difficult, pre-lesson meetings with teaching staff are essential for teaching assistants to deliver lesson content accurately.

Demonstrating how to use equipment and complete experiments could be difficult for a deaf pupil. It is important to use a consecutive teaching

technique – first explain what you are going to do, then say it again while actually delivering the demonstration, then check the pupil’s understanding. It is important that the deaf pupil has all the information before the task. Deaf pupils cannot look through optical equipment, such as a microscope, and listen at the same time – they may need to avert their gaze and they may miss information or be interrupted in their task. Noisy equipment makes it difficult to hear speech.

NOTE

Cochlear implant users should never use a Van der Graaf generator because the static electricity generated can scramble the programming in their speech processors, making them unusable. If they are watching it in use they should remove their processor and stand well back. Attach a label to the generator that explains this so all staff members are aware. Safety goggles can be uncomfortable for cochlear implant users to wear over their implant coil. However, in most cases standard safety goggles are adequate and will not harm the implant site.



❖ Example: Notes to staff

Ways of helping Mohammed access learning during lessons

Mohammed can access your lessons:

- with his FM system
- specialist vocabulary support
- adaptation to some complex texts.

Remember:

- He does not have TA support. Any concerns you have must be raised with the SENCO, who meets with Mohammed during Period 4, every Wednesday afternoon.
- Mohammed has requested you agree a regular time and place with him when he can contact you, if necessary, regarding his work.
- You'll know Mohammed to be a conscientious pupil, who's well aware of his needs. Please be guided by him regarding his access to lesson content.

During lessons:

- Provide Mohammed with key vocabulary words, preferably on a supplementary sheet.
- Refer to this as you teach. Head of science has kept some examples that worked well during his GCSE preparation.
- Mohammed is happy for his friend Mike to prompt him.
- During demonstrations or when using PowerPoints allow Mohammed time to watch and then listen to what you are saying – he's happy to guide you on this. Use the available anglepoise spotlight when speaking if the room is darkened.
- Provide Mohammed with dictation texts.
- When textbooks or worksheets you've prepared include new vocabulary, highlight these and provide meanings on a supplementary sheet. Alternatively Mohammed is reliable and willing to come to class early for you to take him through vocab; he finds it most useful to know what's coming.
- Check he has understood homework tasks.

Watch online

A short video clip on supporting achievement in science is available online by going to www.ndcs.org.uk/supportingachievement.

PE

Guidelines for PE teachers should always include communication strategies to ensure the deaf pupil can follow instructions and participate effectively.

Whether deaf pupils choose to wear their hearing technologies during PE and games lessons is down to personal preference; some may not tolerate sound in echoing conditions such as sports halls or in windy conditions outside. Most hearing technologies are not waterproof and should not be worn for long periods in the rain. Some physical activities, such as contact sports like rugby, may require hearing technologies to be removed or additional protections to be in place (such as protective headgear, for example, scrum caps). Parents, the pupil and the Teacher of the Deaf can guide the teacher on manufacturers' recommendations.

The optimum range for hearing technologies is 3m. Whether or not a pupil wears their hearing technology, it is important that they are not at a disadvantage when participating in physical activities.

Activities may be adapted so that:

- instructions, rules and explanations are given while the pupil is wearing their hearing technology or within range of the teacher. When providing feedback to the whole group, bring the pupils together in a semicircle. If you need them to remember where they were on the field of play ask them to leave their ball/bibs where they were standing
- as many teaching points as possible take the form of demonstration. This can include providing 'silent' demonstrations, as pupils cannot lipread and watch the demonstration at the same time
- the teacher makes use of visual clues, for example, waving the linesman's flag as well as using a whistle. Use of referee or umpire signals, tactics boards/whiteboards and video analysis where appropriate will support all pupils, especially deaf pupils
- another class member can act as a 'hearing buddy' who can alert their deaf peer to any change of instructions
- visual rapport is provided for pupils alongside verbal feedback, for example, thumbs up alongside "well done".



Swimming

Although some cochlear implants are now waterproof, most deaf pupils will not be able to wear their hearing technologies during the swimming lesson. For communication and safety it is essential that:

- routines/rules are explained before pupils remove their hearing technologies. Instructions should be supported by visual clues and signs/gestures to stop should be agreed beforehand.
- there is a safe, dry place to store the hearing technologies while swimming
- when the pupil is in the water instructions are given close enough to enable lipreading
- a reliable friend is chosen to be a 'hearing buddy' who alerts the deaf pupil to any changes of instructions
- pupils are encouraged to wear swimming hats or towel dry their hair before putting their hearing technologies back on. Pupils with hearing aids will need access to their puffer, as there is likely to be a build-up of condensation, which can prevent the hearing aid from working
- lifeguards are made aware that you have a deaf pupil in your lesson and that they may not hear the whistle or command to get out of the pool/ changing room in an emergency.

Further information for teachers and coaches on a range of sports, including swimming, is available at www.ndcs.org.uk/me2.

“The football coach lets me go to the front because I do not have a hearing aid in while playing football. Teacher in the class will clarify to you what you have to do, what you need to know.”

— Deaf pupil

❖ Example: Information sheet to share with PE colleagues

Photo	<p>General information Pupil: Isabel Rose Year: 7 Teaching assistant: Mrs Bains Form tutor: Miss Imran SENCO: Mr Knowles Isabel has PE with you: Lesson 1–2 Tuesday and 7–8 Wednesday.</p>
<p>Hearing loss and hearing technology Severe hearing loss. Bilateral cochlear implants. Isabel can manage her hearing technology well.</p>	
<p>Communication Isabel communicates mainly with speech. However, during PE at her primary school she found it better not to wear her radio aid. Please show her where this can be left securely in the PE office. Her primary school hearing buddies who used to prompt her during games are in her PE group. It would be useful for Isabel’s new peers (who weren’t at primary school with her) to learn some deaf awareness tips for PE. Chat to Isabel and Mrs Bains ASAP to see how they feel this will work best.</p>	
<p>Ways of helping Isabel access learning during lessons Isabel can access your lessons with:</p> <ul style="list-style-type: none"> • TA support • the help of hearing buddies (see above) • as many teaching points as possible taking the form of demonstration. <p>Remember:</p> <ul style="list-style-type: none"> • Any immediate concerns can be raised with Mrs Bains or the SENCO, who will be meeting with Isabel lesson 5 every Friday. • Isabel is receiving TA support in all lessons for the first half term until she settles in. This will be reviewed prior to the half-term break. I will be contacting you before then to request your feedback about Isabel’s communication, understanding and level of independence in PE. <p>During lessons:</p> <ul style="list-style-type: none"> • Allow Isabel time to be assisted by her TA if necessary. • Use other pupils to demonstrate your teaching points. • Allow Isabel’s hearing buddies time to communicate your instructions to her, in particular referee decisions during games and when you are at a distance from her. 	

❖ Example: Information sheet to share with colleagues

Photo	<p>General information Pupil: Louise Johns Year: 10 Teaching assistant: None Form tutor: Mr Thomas SENCO: Mr Knowles Louise has GCSE PE (Year 10 – option block C) with you: Period 4–5 Thursday and Friday</p>
<p>Hearing loss and hearing technology Mild hearing loss. Louise wears two hearing aids and carries a supply of batteries. She can manage her hearing technology well.</p>	
<p>Communication As you know Louise communicates using speech and is happy to continue using the ‘distance’ signals you’ve developed with her for when she is participating in active lessons. However, none of her friends who’ve acted as ‘hearing buddies’ during PE lessons have opted to do GCSE PE, and she tells me she isn’t familiar with anyone on the new class list. She has agreed that it’ll be necessary for you to have a PE deaf awareness lesson as early as possible in the term. She is willing to meet with you to discuss what this will cover. Please can you look over the class names and suggest to her which pupils are reliable and could be approached to be ‘hearing buddies’.</p>	
<p>Ways of helping Louise access learning during lessons Louise can access your lessons with:</p> <ul style="list-style-type: none"> • use of distance signals and help of hearing buddies (see above) • as many teaching points as possible taking the form of demonstration • some adjustments made to classroom teaching (see below). <p>Remember:</p> <ul style="list-style-type: none"> • Louise doesn’t have TA support. Any concerns you have must be raised with the SENCO, who meets with her every Wednesday afternoon, last period. • As GCSE PE includes theory lessons, teaching Louise in a classroom needs to include the following adjustments. <p>During lessons:</p> <ul style="list-style-type: none"> • Louise will need to sit near to where you are speaking. • Provide Louise with any dictation texts. • When using PowerPoint, allow Louise time to watch and then listen to what you are saying. Louise has alerted other staff that although YouTube clips are useful to her, the sound quality isn’t always good. So please check with her and repeat what is said in such clips when necessary. Use the available anglepoise spotlight when speaking if the room is darkened for whiteboard use. • Check she has understood homework tasks. 	

Modern foreign languages

Many deaf pupils can successfully learn foreign languages. They must have full access to the curriculum and, while for some there may be potential difficulties, adjustments should be made in lessons to enable them to learn a modern foreign language (MFL).

Guidelines for MFL teachers should always include use of available hearing technologies, communication and classroom management strategies.

Some pupils may have difficulty with pronunciation because they cannot hear the sound clearly enough. It is then difficult to relate the sounds of the language to its written form. Pupils may need:

- ‘semi-phonetic’ transcriptions of the language to present pronunciation in an accessible way. It may help to group words with consistent pronunciation together (for example, pain, sain; sans, dans; mere, pere). The most common MFLs taught in school have a better phoneme/grapheme correspondence than English so once pronunciation is grasped it will be the same in all cases. Once the pupil is comfortable with pronunciation, they can concentrate on learning correct spellings
- teachers and teaching assistants to work together so teaching assistants are familiar with pronunciation. If there are specific language assistants it can be useful for them to model vocabulary pronunciation on DVD for teaching assistants to use in class and the pupil to take home
- extra opportunities to practise pronunciation during lessons or in pre- and post-tutoring sessions
- additional practice or pre-tutoring to grasp letters that do not sound the same as in English, for example, the ‘h’ sound does not exist in French – words like hôtel, homme, haché are all pronounced without the ‘h’. This can be confusing for pupils who lipread, as the lip patterns will be different from what they expect.

Deaf pupils may experience difficulties in understanding new vocabulary (particularly pupils with ‘low-level’ English language skills).

Pupils may need:

- visual aids and vocabulary support sheets
- a check that they know the equivalent English vocabulary
- role play, gestures and facial expressions to understand meanings
- one-to-one teaching assistant support in pre-tutored sessions to reinforce meaning.

“Languages isn’t exactly a strength for me – pronunciation is hard to learn.”

– Deaf pupil

MFL teaching often involves using audio material or ‘aural’ learning. Pupils may need:

- their radio aid and additional leads to provide direct access to audio-visual systems for listening exercises; language labs may provide better quality sound
- audio material to be used less often, with live speaker versions of material provided, for example, a film of a staff member speaking the material. If this is not possible, the teacher, language assistant or teaching assistant should provide lipreadable repetition. If there is more than one voice, this should be shown by visual clues, for example, name cards or different hats for different speakers
- to have an opportunity to hear audio materials or read a transcript before their classmates.

Some deaf pupils will be disadvantaged in aural assessments and require access arrangements for examinations. A live speaker version of the audio content should be provided. This must be applied for via the school’s examination office within the examination board’s timescale, with the advice of the Teacher of the Deaf. **‘Access arrangement for examinations’** on page 93 contains more information.

Watch online

A short video clip on supporting achievement in MFL is available online by going to www.ndcs.org.uk/supportingachievement.

Music and arts

The benefits for young people of engaging in the arts are well documented. Research confirms that deaf children and young people are interested in participating in drama, dance, music and visual arts.

Deaf children should be able to take part in music sessions. Opportunities to sing can provide deaf children with a fun way to practise controlling their voices, both in terms of pitch and frequency and in recognising the melody of intonation in spoken language.

Musical instruments can also provide deaf children with valuable auditory experience of rhythmic patterns, tempo and pitch. Today's technology means recorded music can be amplified comfortably. Musical instruments can also be learnt and used; the vibration caused allows deaf children to use all their senses in perceiving sound.

Care is advised in organising groups of children using musical instruments together. In the same way many people speaking at once is unhelpful to deaf children, too many sounds at the same time may be overwhelming. Remember to give instructions clearly before music is played.

More detailed information to support the teaching of music and the arts is available at www.ndcs.org.uk/me2/resources.html.

An effective school will:

- ensure that subject departments receive specific training relevant to their subject from a Teacher of the Deaf and consider any implications for their teaching strategies
- ensure that all teaching staff have high expectations for deaf children in their school.

Working with teaching assistants and communication support workers

Teaching assistants' and communication support workers' roles¹

“TAs [teaching assistants] play a vital role in helping the teacher ensure that deaf pupils access learning and participate in the life of the school. They help to minimise the barriers to accessing the curriculum and support the inclusion and achievement of deaf pupils. Their involvement in supporting deaf pupils' learning has traditionally been threefold, recognising the impact of deafness on learning.

- *To further secure the communicative, language and listening development of the pupil so that any gap between the pupil's current level of development and that of their peers is reduced.*
- *To ensure the pupil is able to access the lesson and achieve the objectives set for him or her.*
- *To ensure the pupil is socially included and has similar opportunities to be involved and to contribute to lessons and the school community as other pupils.*

TAs have supported specialist interventions specifically aimed at helping deaf pupils improve:

- *their attending and listening skills*
- *their language and literacy levels and communication skills*
- *their access to lessons and social experiences.”*

1. This section summarises key points from *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, available from the NatSIP website at www.natsip.org.uk or at www.ndcs.org.uk/professional_support/other_academic_and_professional_resources/education_resources.html.

The range of activities carried out by teaching assistants (TAs) could include:

- pre- and post-lesson tutoring in a variety of subjects
- one-to-one support in the classroom to help achieve a specific learning target, for example, explaining or checking a deaf pupil's understanding of new vocabulary or concepts
- planning lessons with teachers
- observing the pupil and assessing progress
- contributing to target setting
- supporting a pupil as part of a group activity
- adapting resources and teaching materials
- ensuring all hearing technology is working and maintained
- monitoring the effectiveness of the hearing environment
- working with the pupil on speech and language therapy exercises
- acting as a notetaker
- attending meetings, for example, annual reviews
- sharing the pupil's feedback on their access to the curriculum.

Many teaching assistants will support a deaf pupil across the curriculum, potentially through a long period of their secondary school. The teaching assistant will play an important role in the continuity of support the pupil receives in each subject by knowing their needs and ensuring adaptations and measures are in place.

Getting the most from teaching assistants

Managers can support teaching assistants by:

- ensuring they have the training, information and support to understand the pupil's needs and how to meet them, including how to use and maintain hearing technologies and meeting the Teacher of the Deaf
- ensuring the roles of those involved in the pupil's education are clear (particularly for the teaching assistant and the subject teacher)
- ensuring there are opportunities for collaborative planning and communication between teachers and the teaching assistant, for example, giving teaching assistants teaching plans in time for them to gather and adapt resources and teaching materials
- giving the teaching assistant time to study background notes and references for lessons so that they have sufficient knowledge of the subject matter to be able to support the pupil

- ensuring there is a focus on supporting the achievement of the pupil's targets
- using classroom observation and giving feedback to the teaching assistant and teacher
- involving the teaching assistant in setting targets and clarifying their role in helping the pupil to meet targets
- agreeing targets and intended outcomes for the pupil and evaluating the impact of support and interventions
- giving teaching assistants clear professional status and holding them accountable for their work.



Effective working between subject teachers and teaching assistants

It is good practice for the subject teachers working with teaching assistants 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.

Using a communication support worker

Some deaf pupils may need additional communication support to understand what the teacher and other pupils are saying. The teaching assistant can have an additional role as a British Sign Language (BSL) interpreter. In this case, they will probably have a qualification in communication support and be referred to as a communication support worker. They will do this as well as their teaching assistant responsibilities.

Working with a communication support worker: tips for subject teachers

- Remember there is a time lag between what you say and it being interpreted. So, for example, if you ask the class a question, allow the pupil time to watch the communication support worker and form a reply.
- Ensure the communication support worker has a copy of the lesson plan and resources (textbooks, videos etc.) you intend to use so that they can prepare and ask questions if they do not understand anything.
- Plan activities so that the communication support worker 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 communication support worker 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 communication support worker, otherwise they will miss the explanation.
- Make sure there is space to enable the communication support worker to stand near them and the lighting is good.

The school will need to be confident that communication support workers have good enough BSL skills to translate the curriculum.²

When they start secondary school, deaf pupils will have the level and type of support decided and arranged by the Teacher of the Deaf and SENCO, but as they get older they usually appreciate taking part in these decisions. However, the teaching assistant must ensure with the SENCO and subject teachers that the support works towards independence in learning and responds to both the pupil's social and academic needs.

2. NatSIP recommends that a communication support worker should have a Level 3 qualification in BSL, which is roughly equivalent to an A-Level. Schools should seek specialist advice from a Teacher of the Deaf on this issue, where needed.

Possible negative features of teaching assistant support that need to be avoided include:

- the teaching assistant taking responsibility for a task away from the pupil
- prioritising the end product of the task rather than focusing on the pupil's understanding
- reactive and unplanned intervention
- teaching assistants explaining something in an inaccurate or confusing way
- teaching assistants frequently giving pupils answers
- teachers delegating responsibility for teaching to the teaching assistant.³

An effective school will:

- ensure that teaching assistants and communication support workers have the necessary skills and qualifications to deliver effective support to the deaf pupil. The National Deaf Children's Society expects communication support workers to, at the minimum, hold a Level 3 qualification in BSL
- organise specialist training for teaching assistants and communication support workers where necessary
- ensure that teachers and teaching assistants/communication support workers are clear on their respective responsibilities. The teacher remains responsible for the deaf pupil's learning
- expect teachers and teaching assistants/communication support workers to work together effectively to plan and review teaching and learning for the deaf pupil.

3. Findings from the Department for Education (England) funded Deployment and Impact of Support Staff Project, 2009.

Assessment

10

As with every pupil in secondary school, assessment and monitoring procedures for deaf pupils are most effective when used:

- regularly
- to track progress over time
- to identify when there is a delay in progress that needs to be addressed
- to identify and address difference in progress between the pupil and others of a similar ability and age
- to inform planning of future learning outcomes
- to evaluate the effectiveness of teaching and learning strategies.

With effective assessment, support and monitoring deaf pupils have the potential to:

- follow the same curriculum subjects as other pupils
- make the same progress as pupils of a similar ability and have age-related learning outcomes within standard curriculum frameworks
- be expected to achieve the same as their peers of similar age and ability.

Such expectations are most likely to be met when the right teaching strategies and support interventions are in place to meet the pupil's individual needs. The assessment should include a focus on evaluating the teaching and learning strategies used. It may be necessary to supplement assessment against national benchmarks with additional information.

The Department for Education's *Progression 2010–2011* guidance gives more information about benchmarks for schools, available at www.raiseonline.org/documentlibrary/ViewDocumentLibrary.aspx. Go to 'Library' and search for 'progression' in the search field. The Teacher of the Deaf can support schools with this.

Assessment of need

Assessing a deaf pupil should be informed by an understanding of the impact that deafness has had on their learning. The Teacher of the Deaf or SENCO can help to identify what should be considered. For example, good speech intelligibility may mask levels of language understanding, leading to under or overestimating the pupil's ability to understand.

The Teacher of the Deaf can use extra assessments to monitor progress in specialist areas of need, such as communication, language and audition, to:

- help to set realistic learning outcomes
- analyse progress made against national performance indicators
- identify what support and strategies are needed to enable the pupil to make progress in specified areas
- evaluate the effectiveness of additional class support and tailored intervention on learning outcomes.

The National Deaf Children's Society, in collaboration with The Ear Foundation and with support from NatSIP, has produced a new online resource to support professionals in assessing and monitoring the progress of deaf young people in communication, language, listening, literacy, numeracy, cognitive development and social/emotional well-being.

It also includes guidance on issues to consider when carrying out assessments as well as examples of assessments in practice. Assessments in other areas will be added to the resource over time.

The resource is aimed at Teachers of the Deaf and other professionals working with deaf children and young people. However, it may also be of interest to other professionals who would like more information on the assessments being carried out with a deaf pupil. The resource and an accompanying short video are available to download from www.ndcs.org.uk/assessments.

An effective school will:

- 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
- use the results of these assessments to review the deaf pupil's learning and teaching strategies.

The above will be in addition to normal and ongoing assessment, monitoring and tracking of pupil progress.

Access arrangements for examinations

11

Some standardised tests may not be accessible to deaf pupils, especially if there is a listening element. For more information on access arrangements for assessment and examinations see:

- BATOD: www.batod.org.uk
- Joint Council for Qualifications: www.jcq.org.uk
- Scottish Qualifications Authority (SQA): www.sqa.org.uk.

The Equality Act 2010 requires awarding bodies and schools in Great Britain to make arrangements to ensure disabled pupils are not unfairly disadvantaged because of their disability when accessing public examinations or tests.

Northern Ireland is not covered by the Equality Act 2010 but it has its own anti-discrimination legislation, namely the Special Educational Needs and Disability (Northern Ireland) Order 2005 and the Disability Discrimination (Northern Ireland) Order 2006.

Access arrangements involve making adjustments to the way that examinations are written or assessed. This is important for deaf pupils because they may have difficulties with language as a consequence of their deafness. It might be harder for them to be sure what they are being asked or to show what they know. Subjects that require strong reading and writing skills, such as history, can be particularly hard.



When should access arrangements be made?

Not all deaf pupils require access arrangements; it will depend on the individual pupil and their deafness. The Teacher of the Deaf can advise on this.

Access arrangements should be discussed before courses that include examinations start. They should be discussed early so the pupil knows what to expect and the school can make arrangements. It is helpful to think about access arrangements when the pupil makes choices about what subjects to study for GCSE (or Highers in Scotland).

Access arrangements must be reflected in the pupil's day-to-day support so they know what to expect. The arrangements should be in place for any internal or mock examinations or SATS.

In Year 10 (S3 in Scotland and Y11 in Northern Ireland), teaching staff should be made aware of appropriate and available arrangements so they can apply to the awarding bodies in good time (usually at the beginning of Year 10). The arrangements will cover the final written examinations and any modules or coursework.

What access arrangements are available?

Awarding bodies must ensure that access arrangements do not make exams easier for deaf pupils than for hearing pupils. This is important for deaf pupils, who will want to show their true capabilities to future employers and education providers. The arrangements that can be made are limited and there are strict rules about how arrangements in GCSEs, A-Levels, Standards and Highers can be used. The following list of arrangements that are allowed for 'general qualifications' might be appropriate for some deaf pupils, depending on their specific needs.

Modified language papers

The language and sentence structure of exams can be changed so that deaf pupils (and others) find it easier to understand. Awarding bodies are working hard to make sure that every paper is written in plain and clear English, but this is not always achieved, so modified papers can be useful. Changes can be made when the examination is written or after it has been produced and should be carried out by a Teacher of the Deaf. (Modified papers are not available in Scotland.)

Readers

Some deaf pupils have difficulty processing the written word but can comprehend the spoken word more quickly. These pupils can use a reader. If the pupil has a standardised score of below 85 on a reading test (taken within two years of the start of the course) they will qualify for a reader.

Oral language modification

Oral language modifiers (OLMs) can clarify the wording of a question during an examination if the pupil asks. Pupils who have a standardised score of below 69 on a reading test are eligible for an OLM and they can only be used if a paper has been modified to make it as clear as possible (see page 94). A teaching assistant, communication support worker or Teacher of the Deaf would usually perform this role.

There are strict rules about how OLMs work – they can use BSL, speak or write their explanations, but they must not explain any technical terms. Any changes have to be recorded for the awarding body. They can be used for most exams apart from the reading part of an English examination. (OLMs are not available in Scotland.)

British Sign Language (BSL) interpretation

Pupils who use BSL can have the paper signed to them in some exams. This is not permitted in the ‘speaking and listening’ or written parts of English, Gaelic, Welsh or modern foreign language exams. However, BSL interpreters can interpret the instructions in the paper. Students can sign some or all of their responses and are filmed doing so (with the child and their parent’s permission). BSL is permitted in the speaking, listening and communication element of the Functional Skills qualification in England, Wales and Northern Ireland. This is allowed as a matter of course in Scotland but will be exceptional in England, Wales and Northern Ireland. This will be on request and will have to be justified because this arrangement does not have the same status as in Scotland.

Extra time

Some deaf pupils need longer to process what they read than hearing pupils, so they are allowed up to 25% extra time. Sometimes they are allowed extra time in combination with one of the adjustments described above. In England, Wales and Northern Ireland the school can approve this. If the pupil needs more than 25% extra time, the school will apply to the awarding body. In Scotland, the school will need to apply to the Scottish Qualifications Authority (SQA) for any extra time. Examinations may be taken in a separate room to accommodate this arrangement.

Vocational qualifications

The rules for vocational qualifications are more varied but awarding bodies must also make reasonable adjustments for disabled pupils. The only reason not to allow one of the above adjustments is if it interferes with a ‘competence standard’, which is a way of testing whether a pupil has a particular level of ability. Usually, examinations can be adjusted to use a different way to find out whether a pupil meets a competence standard. However, sometimes the assessment process is in itself a competence standard and no adjustments can be made.

Exemptions

Sometimes the pupil's needs and the nature of the examination will be such that it is not possible to make adjustments without fundamentally changing what is being assessed. For example, some deaf pupils might be unable to access the speaking and listening part of an English examination, but having a BSL interpreter would be inappropriate because they would not be displaying an understanding of the language they were being examined in.

In these cases the pupil might be given an exemption. When an exemption is granted their marks are 'enhanced' and their grade is worked out using the marks they got in the parts of the examination they did take. This means they can still get the highest grades. For an exemption to be granted, the pupil must complete at least 60% of the examination components. They will not be granted an exemption if they can only complete part of a component. Their results certificate will indicate that an exemption was awarded.

An effective school will:

- ask the Teacher of the Deaf for advice on access arrangements for examinations
- organise and support any special arrangements for examinations.

Supporting social and emotional development

12

Feeling included and that they are a valued member of the group can improve a pupil's self-esteem, confidence and emotional well-being. However, communication difficulties associated with deafness can affect how a pupil is able to integrate socially because:

- it is difficult to talk in groups, because of deafness but also because of the attitudes of other pupils
- many opportunities to socialise take place in the noisiest parts of the school where deaf pupils are more likely to mishear
- some pupils are bullied because of their deafness
- social acceptance requires an understanding of social norms but hearing pupils acquire these by incidental learning experiences, which deaf pupils are less likely to have. Deaf pupils may need specific teaching to understand situations from other people's perspective. This is known as Theory of Mind and research suggests it can be delayed in deaf children
- they may worry that they will not understand what is being said or that their peers will misunderstand them
- they may become over-dependent on support from adults and lose confidence when support is not there
- they are often unaware of current social language, slang and 'street talk'.

“I often have problems with my friends – I've missed what's been said and gone before, then we misunderstand.”

— Deaf pupil

Putting support strategies in place

Deaf pupils say that it is helpful if their peers understand the problems presented by deafness and how to support them. A Teacher of the Deaf can deliver peer awareness training. Some deaf pupils may not want to draw attention to their needs so training should be carried out in consultation with them.

It helps deaf pupils to understand how their deafness impacts on their lives and learn strategies to advocate their needs and improve difficult situations. To support this:

- promote deaf awareness in the classroom using materials such as our *Look, Smile, Chat* resources
- provide opportunities for the pupil to practise social strategies related to their deafness, for example, identifying why a conversation is becoming difficult and how to improve the situation
- provide opportunities to meet other deaf young people – service providers, parents, local deaf groups or charities may be able to help
- it can be helpful for deaf pupils to meet deaf adults who have successfully managed issues arising from their deafness and may act as role models to younger deaf people
- encourage deaf pupils to take responsibility for their own deafness and to develop the confidence to ask for support.

It is important for secondary schools to note the following.

- It is important that deaf pupils do not become over-dependent on specialist staff for social support.
- Deaf pupils need the same opportunities as their peers to join in extracurricular activities. After-school clubs, including those run by external organisations, should meet the pupil's communication needs and make reasonable adjustments to ensure they can participate. Deaf pupils may need encouragement to join in and seek reassurance about the support they will receive.
- It is beneficial to provide designated 'quiet zones' at school where a deaf pupil and their social group can meet, particularly at lunch and break times.
- If a deaf pupil experiences emotional or social difficulties that cannot be supported within school, they can be referred to other organisations for support, such as the National Deaf Child and Adolescent Mental Health Services (up to age 18). The Teacher of the Deaf or local specialist educational service for deaf children may be able to advise on local services.

Anti-bullying policy

Deaf pupils are more vulnerable to bullying than hearing pupils. The University of Cambridge comprehensive literature review in *Responding to Bullying Among Children with Special Educational Needs and/or Disabilities* found that:

“Children with SEN [special educational needs] and/or disabilities have many characteristics that may make them more vulnerable to bullying. However, social skills, language and communication emerge as key issues in much of the bullying that affects pupils with SEN and/or disabilities. Social behaviours are crucially important with regard to peer victimisation since the ability to understand social behaviour and to communicate effectively in social situations are central to social engagement. Language and communication are key elements in the development of social competence, so even subtle shifts in children’s responses within the peer group can make them vulnerable to ostracism and teasing.”

Schools face a number of challenges in identifying, responding to and preventing pupils with SEN and/or disabilities being bullied and victimised.

Staff can help prevent and deal with bullying by:

- giving the pupil time to give a full account of what happened, recognising that communication can be particularly difficult when they are upset
- ensuring the pupil and their parents know the school’s anti-bullying policy and understand related procedures
- ensuring the pupil understands the concept and different types of bullying – that all pupils tease and are teased, but unacceptable levels should be challenged and personal toleration levels should be respected
- identifying a staff member for the deaf pupil to discuss worries and concerns with
- regularly observing and monitoring the interaction between pupils and being alert to signs of bullying, such as a pupil:
 - asking to stay inside at break time
 - becoming anxious near lunch and home time
 - not taking part in class activities
- providing opportunities in Personal, Social and Health Education (PSHE) or individual sessions for the pupil to decide and practise (for example, through role play) how to respond to bullying and how to problem solve
- providing deaf awareness training for pupils and, when appropriate, involving the deaf pupil in choosing the content.

Bullying and Deaf Children: A guide for primary and secondary schools (2014)

Our resource has been produced for mainstream teachers, SENCOs, Teachers of the Deaf, teaching assistants, communication support workers and any other education professionals working to support deaf pupils in primary and secondary schools. It provides guidance on how schools can adapt existing arrangements to prevent bullying and for handling bullying incidents in order to meet the needs of deaf pupils. Many of the suggested actions set out in this resource will benefit all pupils in your school. Resources for parents and young people are also available via www.ndcs.org.uk/bullying.

Behaviour and discipline

In theory, there should be no difference between discipline approaches used with deaf pupils and hearing pupils. However, the Equality Act 2010 requires schools to take reasonable steps to avoid treating disabled pupils less favourably because of their disability. It is important to remember that deaf pupils can mishear or misunderstand instructions, which can be a reason for not doing what they're told.

Schools should strike a balance between making reasonable allowances for a pupil's deafness and communication difficulties, while holding deaf pupils to the same behaviour standards as other pupils.

Schools can support good behaviour by ensuring:

- instructions about timing and expectations in all areas of school are clear and reinforced
- the pupil has understood any timetable changes
- the pupil knows the rules and the consequences of breaking them
- staff members are aware that the cause of any indiscipline could be frustrations about not being able to hear/understand what is going on, fatigue (deaf pupils can have a shorter attention span and tire more quickly as they have to concentrate hard to hear) or being teased or bullied about their deafness
- the pupil understands why they are being disciplined – deaf pupils' understanding of emotions and other people's mental states may be less developed than their peers, so it is important that they understand the reason for discipline and not just that they got caught.

An effective school will:

- promote the social and emotional development of the deaf pupil, encouraging them to be independent, feel positive about their deafness and identify what support they require
- organise peer awareness training to help other pupils understand the needs of the deaf pupil
- ensure that their anti-bullying policy considers the specific needs of deaf pupils and take steps to prevent bullying.

Quality improvement: classroom observation and pupil feedback

13

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 teaching and learning through classroom observation.



❖ Quality improvement checklist for school managers⁴

This checklist will help managers assess the extent to which deaf pupils are engaged in teaching and learning during lesson observation.

The teacher	Observations and recommendations
<ul style="list-style-type: none"> • 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 minimise background noise? • 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 but is also able to identify other speakers in the classroom? • Has the teacher used multisensory approaches (for example, visual clues) to help the pupil access learning? • Has the teacher enabled the pupil to follow classroom discussion by identifying speakers and repeating contributions and questions from others? • Is the teacher using clear speech patterns and standing or sitting in a position where the pupil can see them for lipreading? • Is the teacher using good whiteboard practice, such as listing lesson objectives and new vocabulary? 	

4. This checklist is based on a pro forma designed by Helen Bate from Derbyshire local authority.

The support staff	Observations and recommendations
<p>Are support staff demonstrating that they:</p> <ul style="list-style-type: none"> • are working under the guidance of the teacher and are fully familiar with the lesson plan and learning objectives • 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 aware of their role in: <ol style="list-style-type: none"> 1. implementing strategies and approaches to ensure access to teaching and learning 2. helping the pupil to achieve the learning objectives and targets (including any pre- or post-tutoring, communication support) • (if they are used as notetakers) are taking sufficiently full and accurate lesson notes • 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 help ensure hearing technology is functioning properly and know what to do if there is a problem • have the relevant qualification in BSL if the pupil needs sign support to access what is being said during the lesson • are fully aware of the specific needs of deaf pupils (type, degree of deafness, residual hearing, level of language) • have discussed support needs with the teacher and pupil? 	

Observed behaviour in the pupil	Observations and recommendations
<p data-bbox="181 309 344 342">Is the pupil:</p> <ul data-bbox="181 365 823 1193" style="list-style-type: none"><li data-bbox="181 365 746 398">• able to follow what the teacher is saying<li data-bbox="181 421 619 454">• engaged and active in learning<li data-bbox="181 477 823 544">• able to work and learn independently without over-reliance on support staff<li data-bbox="181 566 823 678">• confident, with developed self-help strategies and able to identify their own needs and strategies to support access to learning<li data-bbox="181 701 802 813">• able to make effective use of hearing technologies and do they know what to do if there are problems<li data-bbox="181 835 823 902">• able to interact/communicate with adults and ask questions<li data-bbox="181 925 754 958">• able to interact/communicate with peers<li data-bbox="181 981 746 1048">• confident after the lesson that they have achieved the learning objectives<li data-bbox="181 1070 823 1137">• fully aware after the lesson of any homework that has been set<li data-bbox="181 1160 395 1193">• well behaved?	

Standards for specialist hearing support services

Specialist hearing support services should be operating to service standards set out by the Department for Education in *Quality Standards for Special Educational Needs (SEN) Support and Outreach Services*, available at www.education.gov.uk/publications/standard/publicationDetail/Page1/DCSF-00582-2008.

Specialist hearing support services should also be benchmarking their performance by measuring the outcomes of the deaf pupils they support. This can be done by using the NatSIP *Quality Improvement Pack*, available online at www.natsip.org.uk/index.php/524-qilaunch.

Pupil feedback

Getting pupils' views is an increasing part of a school's quality assurance systems. The following approach was developed by the Sensory Impairment Service in Oxfordshire. The questionnaire is usually used annually with children and young people (more frequently when there are concerns about social inclusion).

The questionnaire is intentionally simple so children and young people can access and answer the questions independently. The questions tend to stimulate more in-depth discussions and this helps to identify areas of difficulty and possible intervention strategies. The percentage score provides a statistical measure (if appropriate) to demonstrate the effectiveness of interventions and improved outcomes.

The second example form is used by Birmingham Team for Children with Hearing Impairment and covers a broader range of issues than just the listening environment.

❖ Example: Pupil feedback form 1⁵

Recording and monitoring outcomes: Oxfordshire's questionnaire

How's it going?

Please could you fill in this form to help us to help you?

Point score	10	7	4	0
I enjoy school	Always	Most of the time	Some of the time	Never
I feel safe at school	Always	Most of the time	Some of the time	Never
I do well at school	Always	Most of the time	Some of the time	Never
I am able to take part in activities that other children do	Always	Most of the time	Some of the time	Never
I feel I have friends	Always	Most of the time	Some of the time	Never
I enjoy breaks and lunchtimes	Always	Most of the time	Some of the time	Never
I feel comfortable when there is pair or group work	Always	Most of the time	Some of the time	Never
I can talk to an adult if I am worried about something	Always	Most of the time	Some of the time	Never
My teachers understand what I need and do things to help	Always	Most of the time	Some of the time	Never
My support workers understand what I need and do things to help	Always	Most of the time	Some of the time	Never
At school I enjoy...				
At school I don't enjoy...				
Other things that would help me are...				

Total point score/percentage:

5. Reproduced with the kind permission of NatSIP from its publication *SEN Support and Outreach Services: Case studies to illustrate how different services are seeking to meet the quality standards* (2012).

... Example: Pupil feedback form 2

Example of a pupil voice exercise with a deaf pupil used by the Team for Children with Hearing Impairment in Birmingham

**Who helps you at school? What do these people do to help you?
How do you find these subjects at school?**

Subject	Easy	OK	Hard	Comment – why?	What are the listening conditions like in these subjects?
English					
Maths					
Science					
ICT					
Humanities					
Technology					
Arts					
PE					
Music					
Other					

Do you ever miss important information?

Can you always understand your subject teachers?

Do any of your subject teachers carry on talking with their backs turned?

Do your teachers use the radio aid correctly?

Do your subject teachers use subtitles on DVD presentations?

Do your subject teachers use visual aids?

Do you sit near the front in a good position?

Do you sometimes miss what your friends are saying?

What would help you?

What helps you most with your deafness?

What sort of support from your Teacher of the Deaf do you like/dislike?

What sort of support from your teaching assistants do you like/dislike?

What sorts of things might make learning easier for you?

Are any of these things a problem for you?

- Noise outside.
- Noise inside.
- Noise from other pupils.
- Overhead projectors/interactive whiteboards.
- Teachers giving instructions/homework while you are tidying up.
- Rooms that echo.

Do you understand how your hearing aids/cochlear implant works?

Are you happy to talk about your deafness?

When people ask you about your deafness how do you explain it to them?

Are there any situations outside of school that you find difficult because of your deafness?

An effective school will:

- support quality improvement to ensure that education provision for deaf pupils is of high quality
- encourage deaf pupils to give feedback, and use their feedback to improve provision in school.

Supporting transition to further education or work

14

The school has two key roles in supporting the development and implementation of transition plans:

1. Helping the pupil to make choices and prepare for post-16 (or post-18) education and work.
2. Providing information to other professionals including careers advisers (in school or external), the next educational placement or employers. This should include the pupil's support preferences and needs as well as any other relevant information to support a positive transition.

Helping deaf pupils make choices

The school can help the pupil make choices by ensuring:

- it plays a positive part in the local authority's transition procedures
- the pupil has full information on the educational (both academic and vocational) and employment choices available to them, including any specialist provision so that they can make independent and informed choices
- relevant careers professionals have sufficiently high expectations and an understanding of the pupil's deafness and its implications for education and employment settings
- careers professionals know how to communicate with the pupil
- any careers advice that the school is responsible for is fully integrated with other sources of advice and support during transition
- the pupil is encouraged to have ambitious and realistic aspirations
- the pupil is helped at an early stage to evaluate their strengths and weaknesses
- support is provided to overcome any potential barriers to them achieving their preferred choice
- the pupil has the same access to high-quality work experience as their hearing peers and is supported to ensure its success.

Information for young people

The National Deaf Children's Society's website for deaf young people, the Buzz, contains further information and signposts to other sites covering a range of topics including college, university and work youngpeople.ndcsbuzz.org.uk/infoadvice.

Helping deaf pupils with applications

The school can help pupils apply for college, university, an apprenticeship or work by:

- providing guidance on preparing CVs and completing application forms
- advising on what they need to say about their deafness when applying
- giving opportunities to practise interview techniques.

Helping deaf pupils prepare

The school can help pupils prepare for the start of college, university, an apprenticeship or work by encouraging them to:

- visit different settings and explore the communication support options
- think about the questions they need to ask when they visit potential educational placements
- be assertive about their legal rights and their communication and information needs.

Further education

If the deaf pupil is moving to a further education college, the National Deaf Children's Society's resource *Supporting the Achievement of Deaf Young People in Further Education* may be helpful. The resource includes information on how schools and colleges can work together to ensure a successful transition. The resource is available online at www.ndcs.org.uk/supportingachievement.



Providing information to support successful transition

The school will have a range of information on the pupil's needs, strengths, weaknesses, views and aspirations. This information will be critical to supporting transition planning. It will also contribute to any assessments the local authority or the pupil's next educational placement undertake. Ultimately, it should help to ensure appropriate measures are in place to help the pupil succeed in their next educational placement or workplace.

The checklist overleaf illustrates the type of information the school could provide to support successful transition. A lot of this information may be held by Teachers of the Deaf or other professionals employed by the local authority, rather than directly by the school. Often, and as good practice, local authorities will coordinate this process as part of the support that they provide for pupils going through transition. However, it is still the school's responsibility and it is important that staff members are aware of the type of information they should pass on.

Checklist: Information the school could provide to help post-16 transition planning	
Hearing and personal hearing technology	
Information required	Implications for transition plan
<p>In this section record: Degree and nature of deafness: Un-aided hearing level: Aided hearing level: Ability to discriminate speech in different environments (class, workshops, halls): Sounds/words that are difficult to hear: Personal hearing technology used:</p>	<p>In this section record: What needs to be done to improve access to sound, for example, using radio aids, improving acoustics, using soundfield systems? What needs to be done to ensure optimum use of hearing technologies? What are the health and safety implications, for example, fire drills, giving instructions in workshops where machinery is used?</p>
Communication	
Information required	Implications for transition plan
<p>In this section record: Preferred way of communicating in different locations and situations (class, home, friends): Competence in preferred way of communication: Lipreading ability:</p>	<p>In this section record: What needs to be done in the college to support access to teaching and learning, for example:</p> <ul style="list-style-type: none"> • seating position to allow for speech reading • using radio aids • using soundfield systems • advice/training for the teachers/lectures • providing communication support workers with Level 3 qualification for pupils who use BSL? <p>What needs to be done in the workplace to facilitate good communication? What needs to be done to promote communication and social interaction with other pupils/work colleagues?</p>

Checklist: Information the school could provide to help post-16 transition planning	
Language	
Information required	Implications for transition plan
<p>In this section record: Levels of understanding of language: Level of expressive language: Vocabulary level: Grammatical constructions: Social interaction and use of language:</p>	<p>In this section record: How does this compare with hearing pupils? What are the implications for learning (for example, more processing time)? If a 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? What are the implications for career choices and the workplace?</p>
Cognition	
Information required	Implications for transition plan
<p>In this section record: Non-verbal cognitive skills to:</p> <ul style="list-style-type: none"> • ensure teachers/lecturers have high expectations: • check whether there are other underlying learning difficulties: 	<p>In this section record: What needs to be done to address any other underlying difficulties the pupils may be experiencing? What are the implications for career choices and the workplace?</p>
Progress in curricular areas	
Information required	Implications for transition plan
<p>In this section record: Progress in different curricular and extracurricular areas – are there particular strengths? Are there particular difficulties?</p>	<p>In this section record: Is more support required in particular areas? What needs to be done to build on the strengths and address the weaknesses?</p>

Checklist: Information the school could provide to help post-16 transition planning	
Social and emotional aspects	
Information required	Implications for transition plan
<p>In this section record: Level of social interaction in class/ school, friendship groups:</p>	<p>In this section record: If low, how can they be increased? Do other pupils need deaf awareness training and information on how to communicate? What are the implications for career choices? What support can be put in place in the workplace?</p>
Pupil's views	
Information required	Implications for transition plan
<p>In this section record: What are the pupil's hopes, aspirations and concerns about moving on? What information and help do they think they need to ensure the move to college or work is a success? Pupil's self-evaluation of support requirements:</p>	<p>In this section record: What information and opportunities are needed to help with the transition?</p>
Parent's views	
Information required	Implications for transition plan
<p>In this section record: What are the parent's hopes, aspirations and concerns about moving on? What information and help do they think they need to support the transition to further education or work? What provision do they think is appropriate?</p>	<p>In this section record: What information and opportunities are needed to help with the transition?</p>

Checklist: Information the school could provide to help post-16 transition planning	
Other considerations	
Information required	Implications for transition plan
<p>In this section record: Any other information, for example:</p> <ul style="list-style-type: none"> a) any other difficulties, medical conditions or medication needs: b) attendance issues: c) behaviour issues: 	
<p>Existing support by the school:</p>	

An effective school will:

- help the deaf pupil to make an informed choice on their post-school options
- provide information to colleges, employers, universities, etc. to support an effective transition for that deaf pupil
- support the deaf pupil with applications and preparation for interviews.



Appendix 1: Types and levels of deafness

Levels of hearing loss

Deafness is measured in two ways:

- how **loud** the sound has to be so that the child can hear it, measured in **decibels**
- which **frequencies** (pitch) the child can or cannot hear, measured in **hertz**.

Each child's deafness is different depending on which frequencies are affected and how loud a sound has to be before they can hear.

Few children are totally deaf. Most children can hear some sounds at certain pitches and volumes, known as their 'residual hearing'. There are different degrees of deafness classified as follows.

Mild hearing loss

Although for many young people mild loss does not require audiological interventions such as hearing aids, in terms of education it can mean a significant loss.

- Pupils can usually hear everything that is said to them in a quiet room, but not if there is background noise or if they are far away from the speaker.
- A pupil would not be able to follow a whispered conversation.
- Some pupils with a mild hearing loss will use hearing aids.

Moderate hearing loss

- Most pupils with a moderate hearing loss will use hearing aids.
- Without hearing aids a pupil is likely to be able to hear most of what someone says to them within a quiet room as long as they speak clearly.
- With hearing aids they are likely to be able to follow a conversation within a quiet room.
- They will find it extremely difficult to follow a conversation in a large group, if there is background noise or if they are far away from the speaker.



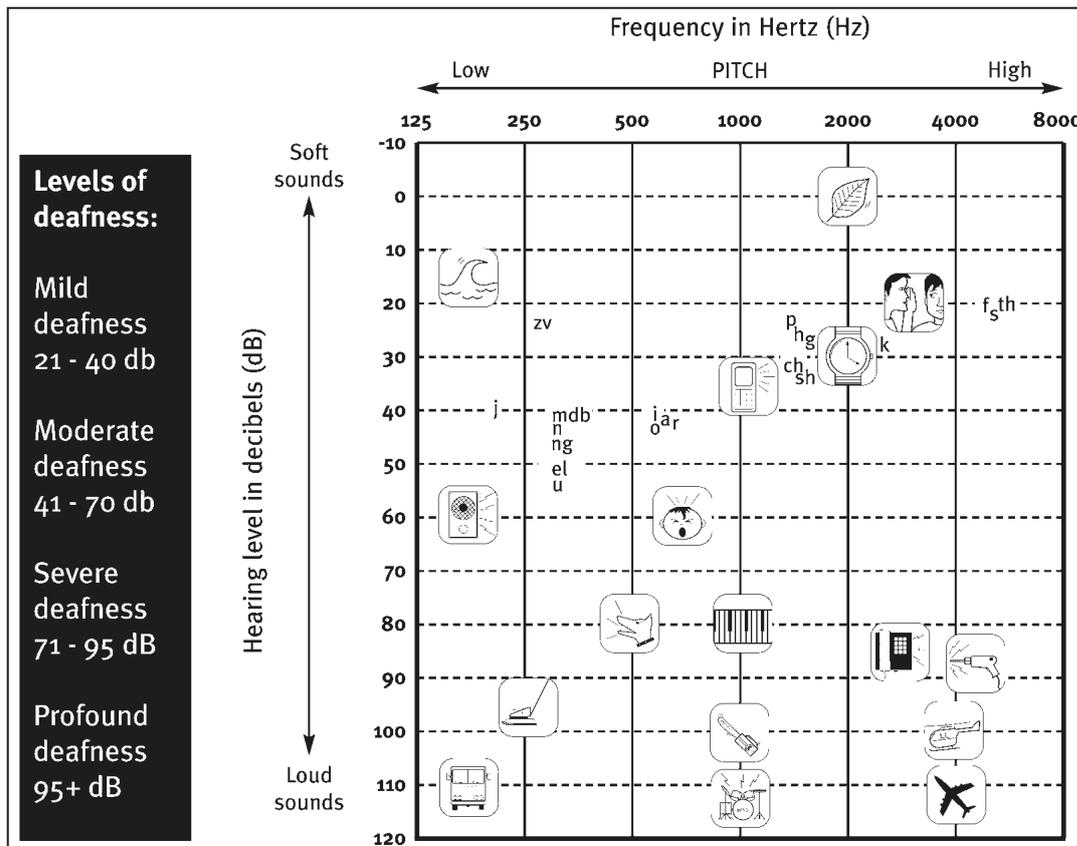
Severe hearing loss

- A pupil will be unable to access conversation at normal levels without hearing aids or a cochlear implant but may be able to hear loud sounds such as a dog barking or a drum.
- With hearing aids or a cochlear implant most pupils will be able to follow a conversation within a quiet room provided that the speaker is within 2–3m of them.
- A pupil is likely to require additional communication support, for example, sign support or lipreading, to understand speech in the presence of any background noise or within a group conversation.
- In the presence of background noise the pupil may find it extremely difficult to understand speech even with communication support.

Profound hearing loss

- The majority of profoundly deaf pupils will use a cochlear implant or hearing aids.
- Without a cochlear implant or hearing aids a pupil will not be able to hear speech or other sounds. They may be able to feel very loud sounds such as a lorry passing them in the street.
- Without a cochlear implant or hearing aids the pupil is likely to use a sign-based language to communicate directly with another person.
- With cochlear implants or hearing aids the pupil may require additional communication support (for example through sign language or cued speech) to access speech, especially within background noise or within a group conversation.
- In the presence of background noise the pupil will find it more difficult to understand speech.

Visual representation of the loudness and pitch of a range of everyday sounds



This diagram is based on British Society of Audiology definitions of hearing loss.

The Teacher of the Deaf will be able to explain the individual deaf child's level of hearing by using an audiogram, similar to the one above. An **audiogram** is a chart used by an audiologist to record the results of the hearing assessment and is a visual representation of the child's hearing.

Some pupils may have a malformation of the inner ear – an absence or malformation of the cochlear or auditory nerve. This will mean they will have no access to sound at all. In these situations hearing aids or cochlear implants would offer no benefit. They will, therefore, use sign language as their main means of communication.

Unilateral deafness

- There may be little or no hearing in one ear, but ordinary levels of hearing in the other.
- The pupil will be unable to localise sound and follow group conversations and will find it difficult to understand speech in the presence of background noise.

Auditory neuropathy spectrum disorder

Auditory neuropathy spectrum disorder occurs when there are faults which affect how sound is transmitted along parts of the auditory nervous system. It affects the brain's ability to process all sound including speech. Pupils will experience fluctuating hearing levels and often find it difficult to access speech, especially in the presence of background noise. Some pupils with auditory neuropathy spectrum disorder will use hearing aids or cochlear implants; others will not find them beneficial and therefore not use them.

Deaf culture

About 10% of deaf young people have deaf parents. These families often use British Sign Language (BSL)⁶ as the first language of the home. Other families may also choose to use BSL as a first language with their family members. These families, and indeed many other deaf young people and adults, consider deafness as a culture rather than a disability. Within their community they are able to communicate and function effectively with each other. They describe themselves as 'Deaf' with a capital D. British Sign Language is the language of the Deaf community.

6. Where the deaf pupil lives in Northern Ireland, Irish Sign Language may be used.

Appendix 2: Personal hearing technology

It is likely that your deaf pupils will rely on various hearing technologies. The following is an overview of the types of technology you may come across, how they work and what limitations they have. It is important to note that hearing technologies do not replace normal hearing.

Hearing aids



A hearing aid amplifies sound and is worn in or behind the ear. It has three basic parts: a microphone, amplifier and speaker. Modern digital hearing aids can be programmed very closely to match the wearer's hearing loss and compared with those of the past, provide a radically different listening experience for deaf people.

Hearing aids are designed to maximise the hearing the wearer has (known as their residual hearing). If the student has no measurable hearing at all at certain frequencies, especially the higher frequencies such as 'ss' and 'th' then a hearing aid will not improve this.

For more information on hearing aids see the National Deaf Children's Society's resource *Hearing Aids: Information for families*.



Cochlear implants

This is a surgically implanted hearing device that can provide access to spoken language for many profoundly deaf people. A profound hearing loss occurs when there is significant damage to either the cochlear hair cells, which are the mechanism by which sound waves are converted into electrical impulses that the brain can then interpret, or to the auditory nerve itself. A cochlear implant works by stimulating the auditory nerve directly bypassing damage to the cochlear. If an implant is fully functional then it can provide the user with access to sounds across the full range of speech frequencies. For many users this gives them access to speech in good listening conditions.

For more information on cochlear implants see the National Deaf Children's Society's resource *Cochlear Implants: A guide for families* or go to **soundingboard.earfoundation.org.uk**.



Bone conduction hearing implants

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 with a magnet holding the processor in place. This allows sound to be conducted through the bone rather than through the ear canal and middle ear. This allows sound waves to be transmitted directly to the cochlea in the inner ear.

For more information see the National Deaf Children's Society's resource *Bone Anchored Hearing Aids: Information for parents and families*.



Radio aids

A radio aid carries the teacher's voice directly to the pupil's receiver attached to their hearing aid, bone conduction hearing implant or cochlear implant. It reduces some of the problems presented by distance from the teacher and background noise. The microphone and transmitter are worn by the teacher and the receiver is worn by the pupil and attached to their hearing technology such as a hearing aid. Some radio aids can be used by pupils without personal hearing technology by wearing an earpiece receiver. This may be particularly useful for pupils with unilateral deafness with the earpiece worn in their good ear.

Most pupils will have their hearing technology programmed to allow them to hear from both the radio aid and their surroundings so that they can hear other pupils as well as the teacher. However, it is possible to programme their hearing technology to only hear the radio aid. The microphone can be passed to pupils speaking in group work or class discussion to aid clarity. The radio aid transmitter can also be connected to equipment such as televisions or computers to assist clarity.

For further information see the National Deaf Children's Society's resource *How Radio Aids Can Help*.



Soundfield systems

Soundfield systems rely on a radio or wireless microphone worn by the teacher and loudspeakers, which are placed around the room. They project the teacher's voice at a consistent level around the classroom. These systems can improve the listening conditions for all pupils in a classroom.

Portable systems are available that can be moved between learning spaces as required. Some systems can link with other classroom equipment such as interactive whiteboards.

A pupil may need to use radio aids alongside the soundfield system and both can be set up to work side by side.

Appendix 3: Communication options

The information below covers the variety of communication options for deaf children. It is important for staff to respect their preferred means of communication.

Spoken language

Nearly all (more than 90%) of deaf children are from families with no first-hand experience of deafness. It is important to remember that whichever language is used in the home, the child could still experience a significant delay. In many cases, spoken language will be supported by signing and speech reading.

British Sign Language (BSL)

Deaf children with deaf parents who use BSL as their first language are likely to also have BSL as their first language. BSL is a visual language that uses hand shapes, facial expression, gestures, body language and fingerspelling. It has a structure and grammar different from that of written and spoken English. Many children using BSL will develop spoken English. Deaf children brought up by deaf parents will often start school with age-appropriate or near age-appropriate language in BSL.

Some deaf pupils in Northern Ireland may use Irish Sign Language instead.

Sign Supported English (SSE)

For many children their spoken English may be supported with signs taken from BSL. When signs are used to support spoken English in this way it is known as Sign Supported English. This is used to add clarity to what is being said, for example, in situations where they may struggle with background noise or if they are too distant from the speaker.

Speech reading/lipreading

Speech reading or lipreading has an important role in helping children access spoken language. Lip patterns of spoken words can help the deaf child identify what is being said, supporting the interpretation of the speech sounds that can be heard. If used on its own it has a number of limitations but it is a natural support to understanding spoken communication and is especially helpful to the deaf child.

Cued speech

Cued speech is a lipreading tool that enables access to language visually. It uses eight hand shapes in four different positions and accompanies natural speech. Whereas some sounds cannot be fully lipread (for example, 'p', 'm' and 'b' all look the same on the lips and sounds like 'k' and 'g' cannot be seen at all), the cues make it clear exactly what sound is used so that the deaf child may see the sound in each word as it is spoken in real time. This enables the child to develop a mental model of the spoken language regardless of whether they have any hearing or not.

Appendix 4: Useful resources

Action on Hearing Loss
www.actiononhearingloss.org.uk

Association of Deaf Education Professionals and Trainees
www.adeptuk.co.uk

Association of Lipspeakers (ALS)
www.lipspeaking.co.uk

Association for Language Learning (resources for pupils aged 7 to 14)
www.all-languages.org.uk/support

British Association of Teachers of the Deaf
www.batod.org.uk

Cued Speech Association
www.cuedspeech.co.uk

National Careers Service
www.nationalcareersservice.direct.gov.uk

Deaf Action
www.deafaction.org

Deaf Connections
www.deafconnections.co.uk

The Ear Foundation
www.earfoundation.org.uk

The Ewing Foundation
www.ewing-foundation.org.uk

Signature
www.signature.org.uk

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, set 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 DVD: A resource for schools*
also 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*

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

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

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

www.natsip.org.uk



Department
for Education

This resource has been developed by the National Deaf Children's Society, with support from the National Sensory Impairment Partnership (NatSIP). NatSIP receives funding from the Department for Education (DfE) in England.

Published by the National Deaf Children's Society © December 2015

Next review due: April 2017

Ground Floor South, Castle House, 37-45 Paul Street, London EC2A 4LS

Tel: 020 7490 8656 (voice and text) Fax: 020 7251 5020

NDCS is a registered charity in England and Wales no. 1016532

and in Scotland no. SC040779.

This publication can be requested in large print, in Braille and on audio CD.

