ndcs
every deaf child

Teaching phonics to deaf children

Guidance for teachers

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

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Please note that the above list does not reflect any changes, where applicable, to roles since 2012 when these guidelines were first published.

Most activities referred to in this document are generic and will appear in many of the published phonics programme resources, although possibly under different names or with minor changes. Most of the activities referred to in Step 1 Phonological awareness can be found in *Letters and Sounds: Principles and practice of high quality phonics* (Department for Education and Skills, 2007).

Contents

We support children and young people with all types and levels of hearing loss. This includes children who are deaf in one ear or who have a temporary hearing loss such as glue ear.

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

Introduction

Who is this resource for?

This resource is for anyone who teaches phonics to primary school-aged pupils, such as classroom teachers and teaching assistants. We hope that this guidance will make it easier to ensure that deaf pupils can access phonics teaching and achieve as much as hearing pupils. It should also help school staff:

- understand childhood deafness and the needs of deaf pupils
- understand the challenges deaf pupils face in learning phonics
- make sure the teaching areas support effective learning
- ensure the necessary support and learning strategies are put in place so that lessons and activities are accessible for deaf pupils
- understand general principles for teaching phonics to deaf pupils.

How to use this resource

The first chapter of this resource outlines the information you need in order to teach phonics to deaf pupils. The second chapter describes the changes that you may have to make to any 'published'[1] phonics programme in order to use it effectively with a deaf pupil.

We strongly recommend that you read the information in the first chapter of this resource before looking at the more specific guidance in chapter two.

1. A published phonics programme is one which has been listed on the Department for Education (DfE) website in England as having met their core criteria.

Phonics and deaf pupils: General information

1

Phonics is a key tool for developing the literacy skills of all pupils, including deaf pupils. It is best described as the relationship between written letters and their spoken sounds, and involves a reader:

- recognising a letter or group of letters within a word
- identifying the sound for that letter or group of letters
- blending those sounds into the word.

Phonics is a very valuable tool for decoding texts, especially in the early stages of learning to read.

For deaf pupils:

- acquiring phonics skills is only one key skill in developing literacy
- having ongoing opportunities to develop language skills and to read texts is vital as they may have fewer opportunities than other pupils to learn 'incidentally' (through overhearing what other people are saying)
- access to a language-rich environment will help them to develop good language skills.

Newborn hearing screening means that almost half of deaf children will be identified in the first few weeks of life.[2] This and ongoing developments in hearing technologies should lead to improved language development for deaf children in the early years and have a positive impact on deaf children's ability to learn and achieve good outcomes. Where children – deaf or hearing – have good language skills, they are more likely to do well in literacy, which in turn will enable them to access the curriculum.

As a classroom teacher/teaching assistant, it is your responsibility to make sure that deaf pupils have the same access to education as other pupils, but a Teacher of the Deaf will always be able to give you advice on a deaf pupil's individual needs. Every Teacher of the Deaf has undertaken specific training in order to work with deaf children and young people. They can give you information about how you can help your deaf pupil to learn across all the curricular areas.

2. Fortnum et al. 'Prevalence of permanent childhood hearing impairment in the United Kingdom and implications for universal neonatal hearing screening: questionnaire based ascertainment study'. *BMJ*. 2001. 323:536

There are three key actions that teachers should take to ensure that all pupils, including deaf pupils, have access to an inclusive curriculum with relevant and challenging learning opportunities. These are:

- setting suitable challenges
- responding to pupils' needs
- overcoming potential barriers to individuals and groups of pupils.[3]

What you need to know about childhood deafness

- Most school-aged deaf children (around 77%)[4] are educated in mainstream settings where there is no specialist provision for deaf children.
- When a child is identified as deaf in the first few months of life and receives appropriate, timely, evidence-based interventions this means:
  - the child will have the best opportunity to develop good levels of communication and language
  - that any additional learning needs such as auditory or language processing disorders can be identified as early as possible.
- hearing aids, implants and technology, such as radio aids, mean most deaf children can perceive the full range of speech sounds, although not as clearly or as easily as hearing children. Being able to perceive a sound is not the same as being able to hear and understand it.
- Although hearing aids do not restore typical hearing levels, they may provide access to all speech frequencies in a good acoustic environment.
- Any child who has had a hearing loss from birth or for a significant part of their life will have had a different experience of the world to their peers, even if their hearing loss was identified early and they are making good progress.

3. Department for Education. *National Curriculum in England: Framework for key stages 1 to 4*. **www.gov.uk/government/publications/national-curriculum-in-england-framework-for-key-stages-1-to-4/the-national-curriculum-in-england-framework-for-key-stages-1-to-4** (accessed 2016).

4. Consortium for Research into Deaf Education. CRIDE report on 2015 survey on educational provision for deaf children: UK-wide summary. 2016.

The listening environment

- No hearing aids, implants or technology replaces normal hearing. Therefore, if a deaf pupil is to be included effectively in your classroom you will need to consider their individual learning needs.
- All noise, including background noise, is amplified by hearing aids, making communication difficult in noisy environments.
- The listening environment in many classrooms may make it difficult for deaf pupils to make best use of their hearing aids, implants and technology. You can listen to a simulation of a deaf pupil's listening experience in a noisy classroom at **www.ndcs.org.uk/simulation**. Visit **www.ndcs.org.uk/acoustics** for information on creating the best possible listening conditions for learning.
- Even a mild hearing loss can have a major impact on a deaf pupil in school. Watch our short, online video to find out what the classroom environment is like for a deaf pupil with a mild hearing loss and read our booklet for tips on helping deaf pupils to hear as well as possible. **www.ndcs.org.uk/mildmoderate**

Teaching deaf pupils

- Most deaf pupils have the potential for better levels of spoken language than ever before, and your expectations for them should be as high as those for other pupils of similar ability. Low expectations often lead to low achievement.
- Many deaf pupils will benefit from a range of teaching and learning strategies. Visual support can be particularly useful.
- Teaching phonics skills will require differentiation for each deaf pupil.
- 80% of children will have had at least one episode of temporary hearing loss caused by glue ear by the age of 10 years.[5] Any type of hearing loss may impact on a child's communication development and slow their progress. Glue ear will certainly have an impact on a child's ability to access phonemes within speech and so will affect their progress in acquiring phonics skills.
- Around 40% of deaf children have additional needs as well as their deafness which need to be taken into consideration.[6]

5. National Institute of Health and Clinical Excellence. *Surgical Management of Otitis Media with Effusion in Children, Clinical Guideline*. 2008.

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

Deafness can impact on:

- listening skills
- attention and concentration
- language development
- literacy skills
- working memory
- auditory memory
- processing time
- incidental learning (through overhearing others)
- social skills
- self-esteem
- learning style
- stamina (have to work hard to hear).

It is important that you develop appropriate strategies to minimise the possible impact of these difficulties on the deaf pupil in your class.

The effect of a hearing loss

Even a mild fluctuating hearing loss can hinder normal communication development, slow pupils' progress and lead to feelings of failure and social isolation. This hearing loss may be undetected but could be treatable so you need to raise any concerns you have about the hearing of any pupil in your class with their parents and then with appropriate professionals.

Deaf pupils may use a variety of hearing technologies including:

- digital hearing aids
- cochlear implants
- bone conduction hearing implants
- radio aids
- soundfield systems.

See our resource *Supporting the Achievement of Deaf Children in Primary Schools* for a description of these systems and technologies.

Deaf pupils may use a variety of communication methods including:

- spoken English (or other languages)
- Sign Supported English (SSE)
- Cued Speech (a visual version of English or other spoken language)
- British Sign Language (BSL) or Irish Sign Language (ISL).

A Teacher of the Deaf will be able to explain what this means for the individual child.

What you need to know about the deaf pupil in your class

Is their hearing loss:

- mild/moderate/severe/profound[7]
- temporary or permanent
- fluctuating or constant
- affecting one or both ears?

7. These categories come from the British Society of Audiology, 1988.

NOTE

The below statements refer to the level of hearing a pupil has without their hearing aids or implants.

Mild: 20–40dB

Would hear a baby crying or music from a stereo but may be unable to hear whispered conversation.

Moderate: 41–70dB

Would hear a dog barking or telephone ringing but may be unable to hear a baby crying.

Severe: 71–95dB

Would be able to hear a chainsaw or drums being played but may be unable to hear a piano or a dog barking.

Profound: 95dB+

Would be able to hear an articulated lorry or aeroplane noise but would not hear a telephone ringing.

Unilateral deafness

There may be little or no hearing in one ear, but ordinary levels of hearing in the other.

Glue ear (otitis media with effusion)

This leads to fluctuating levels of hearing and can cause periods of deafness.

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

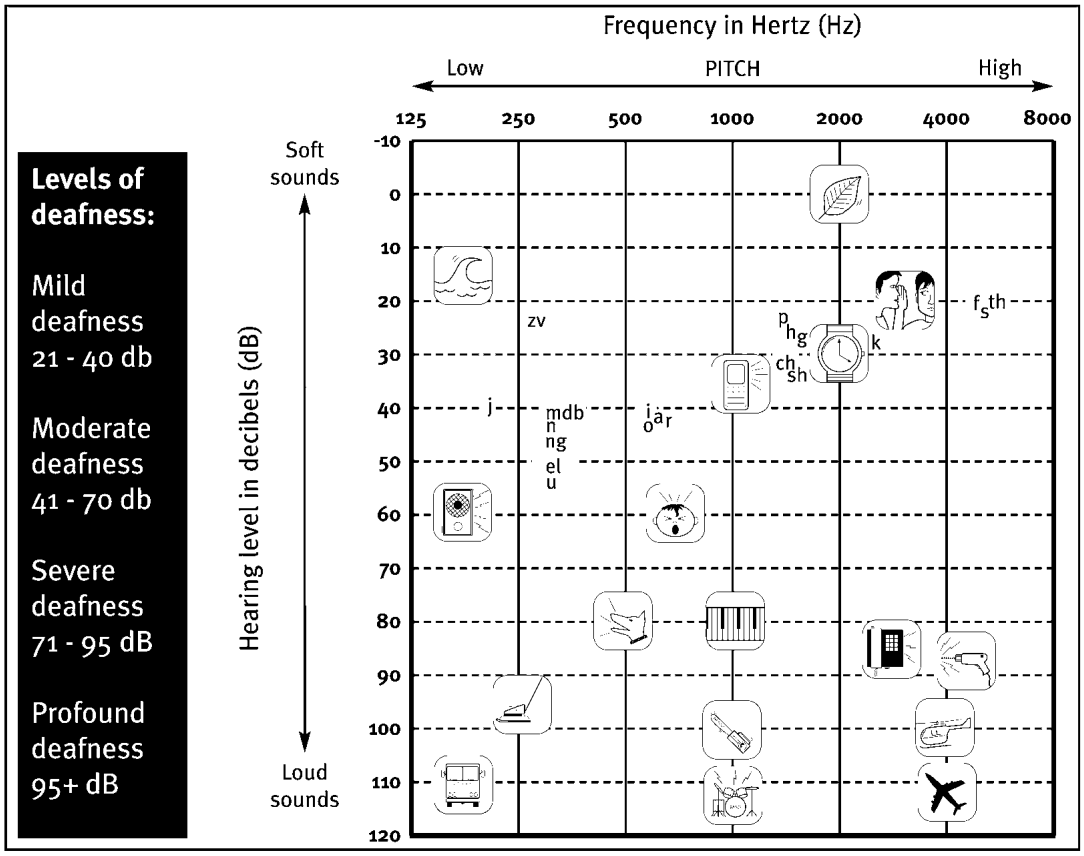

Figure 1 – audiogram with visual representation of the loudness and pitch of a range of everyday sounds and letter/speech sounds

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

The different levels of deafness are represented on the audiogram above. If a line is drawn horizontally from 20dB, normal/typical hearing would be represented by the area above the line.

You will also need to find out about your deaf pupil's:

- hearing aids, implants and technology
  - the type they use
  - how much they can hear with and without it
  - how it works and what to do when it stops working
  - how to use it most effectively, as well as understanding its limitations.

You will find further information in the Resources section on page 79.

- listening skills
  - the current level of their listening skills
  - how to promote and develop their listening skills.
- language and communication skills
  - how to communicate effectively in class
  - their developmental level
  - how to ensure their communication and language development.
- learning style
  - how best to support their preferred learning style and individual learning needs.

See Appendix C (page 75) for an example form that can be used for recording the above information.

When you have gathered all the above information, you will be able to plan the phonics programme for the deaf pupil in your class.

Making sure the teaching areas support effective learning

A good listening environment is essential for all learning, but particularly so when you are teaching phonics to deaf pupils.

You will need to:

- reduce background noise from inside and outside the classroom
- reduce echo/reverberation
- make sure the deaf pupil can see your face clearly
- make sure there is good lighting
- provide a range of visual resources.

You will also need to:

- manage classroom noise levels
- manage visual distraction
- carefully consider your teaching style to ensure it is accessible to deaf pupils.

You will find further information in the Resources section on page 79.

The deaf pupil will only have the potential to hear the sounds you are teaching if you ensure their technology is:

- working properly and is checked at least daily (ideally before a phonics teaching session)
- on the correct settings and levels, where appropriate, for their hearing loss.

All hearing technology comes with instructions on how to check that the equipment is working properly. It is good practice to keep this information up to date and in an accessible place.

The case study on the next page gives an example of a 'first aid kit' for hearing aid users. Bone conduction hearing implant users would require a similar kit. If the pupil has a cochlear implant you could set up a first aid kit by referring to **www.soundingboard.earfoundation.org.uk.**

The five listening checks

You will be asking pupils to listen out for specific, short sounds that could very easily be missed by several pupils, but in particular by the deaf pupil. This means you will need to complete the following five checks to ensure optimal amplification, listening and attending conditions. Check that:

1. all hearing aids or implants and technology is working optimally, e.g. hearing aids, cochlear implants, radio aid
2. background noise is at a minimum, e.g. noisy corridors, computers
3. all the pupils are quiet, calm and ready to listen
4. the deaf pupil is looking at you
5. no noises you intend to use will be uncomfortable or inappropriate for the deaf pupil.

Case study: Rushy Meadow Primary School Hearing Impairment Resource Unit

Hearing aid and radio aid first aid box

The deaf pupils are fully included in their mainstream classes. Trained special educational needs (SEN) teaching assistants check the pupils' hearing aids and radio aids every morning. Mainstream staff have been trained to link up the younger pupils' radio aids to their hearing aids in the absence of the SEN teaching assistants. Each class with a hearing impaired pupil is issued with a first aid box, containing:

- puffer (to dry condensation in the tubing)
- pack of spare hearing aid batteries
- rechargeable battery for a radio aid/transmitter
- stetoclip (for listening checks)
- spare leads and 'shoes' which enable the hearing and radio aid to work together
- antiseptic spray.

Supporting deaf pupils as they learn phonics

Each deaf pupil has individual needs. As with all interventions to support inclusion, you will find that a graduated response to supporting the needs of deaf pupils is needed. Therefore, to be effectively included a deaf pupil may either require:

- small adjustments to the phonics programme
- more differentiated support to acquire listening or language skills, meaning that the published programme needs more modifications
- significantly differentiated or totally different approaches to learning literacy and communication skills. This is only likely to be required for a very small number of deaf pupils.

You will need to know the deaf pupil's level of language development. Some deaf pupils may have age-appropriate language skills, while others will have significantly delayed language skills which will have a significant effect on their phonological development.

You may find that a deaf pupil needs more direct teaching than other pupils to establish each new phonic sound. It is absolutely necessary to achieve mastery (know the sound attributed to the letter or letters) in each new sound if the pupil is going to apply this new knowledge effectively to decoding tasks. A deaf pupil may need to progress at a slower pace (especially in the initial stages) than other pupils.

You may need to give a deaf pupil more time to respond to phonic decoding tasks as all pupils must learn to:

- recognise the letter/s (grapheme) and its sound (phoneme)
- identify the sounds in the word in the order in which they occur
- hold the sounds in their memory
- blend these sounds together in order to decode the word accurately.

These four distinct steps put a heavy load on the auditory memory, which is often not as well developed in deaf pupils. This means that a deaf pupil may need, and should be given, more processing time than other pupils.

Techniques to support the deaf pupil's learning

Even when hearing aids or implants, technology and acoustics are at optimum levels, a deaf pupil may face particular challenges relating to the nature of speech and speech sounds when they are learning phonics.

In most classrooms sounds reverberate because of high ceilings, large uncovered walls and glass windows. Reverberation occurs when the sound from the source has stopped but reflections from the sound continue in the room.

Vowels are low frequency sounds and give power to speech, while consonants are high frequency sounds and give clarity to speech. Most reverberating speech noise will be low frequency sounds which are mainly vowel based. The vowel sounds may mask the consonant sounds, making it difficult for some deaf pupils to understand speech and to understand all the sounds within words.

To illustrate this, the vowels and consonants have been placed on an audiogram (Figure 1, page 11). Normal/typical hearing would fall above a horizontal line drawn across the 20dB point on the chart (a fuller explanation is given in Appendix A, page 67).

It is important that the deaf pupil in your class learns to detect and discriminate sounds before they map the phoneme to the letter.

Lip-reading

Lip-reading (an element of speech-reading) is not a reliable and easily learned system for decoding **every** letter, phoneme or word that is spoken. However, it is an important skill that many deaf pupils will be developing and can often become a useful support for developing phonics skills. For a deaf pupil to get the most benefit from lip-reading make sure that:

- they are sitting near to and facing you
- you do not have your back to a window as this puts your face in shadow and makes lip-reading difficult
- you speak clearly and at or near your usual pace, as speaking too slowly or over-exaggerating your mouth patterns can also make it harder for a deaf pupil to understand what is being said.

The limits of lip-reading include:

- some sounds look very similar on your lips such as p/b/m or f/v
- words that sound different can look the same on your lips such as pan/man, cap/cab, fan/van
- some sounds have no clearly distinguishable lip pattern as they are produced by movements in the throat or mouth such as t/d/n/k/g
- only about 30% of English speech sounds are visible as lip-patterns and therefore can be lip-read.[8]

When introducing new letters, you may find it helpful to provide opportunities for the deaf pupil (and many of the other pupils) to physically manipulate letters using magnetic boards and letters, letter fan, interactive whiteboards, phoneme frames or other visual supports. This will allow the deaf pupil to see the letter shape or grapheme at the same time as listening to the sound.

You will find that very clear visual and/or kinaesthetic formats for writing or, alternatively, putting consonant-vowel-consonant (CVC) words into phoneme frames will provide a way of reinforcing segmenting and blending skills. The deaf pupil may well need extra exposure to, and practice in, these activities.

When pupils work in pairs or follow a general group or class discussion, give careful consideration to the following:

- the peer that the deaf pupil will work with
- how suitable the acoustic environment is
- whether the pupil needs adult support.

8. Campbell, R &Mohammed, T-J,E. *Speechreading for Information Gathering: A survey of scientific sources*. UCL. 2010. **discovery.ucl.ac.uk/1347961/** (accessed 2016).

Even at a very young age, a deaf pupil's peers may benefit from some basic training on how best to communicate with a deaf pupil. Teachers of the Deaf are best placed to deliver this training as they have wide-ranging knowledge on the subject, as well as access to appropriate resources such as hearing aids, for demonstration purposes.

Visual cueing systems

What is a visual cueing system?

As the sound is said, a particular hand shape or movement accompanies the sound. The combination of hearing the sound and seeing the hand shape, hand position and lip shape clarifies the sound that is being taught and also in some cases, the link between the sound and its letter or letters (grapheme or digraph). All 44 sounds (phonemes) of English can be clarified or reinforced in this way.

Deaf people 'see the sound' and so are helped to discriminate between sounds and develop their knowledge of phonics. It gives deaf pupils access to phonological information that is important for the development of English and has been shown to be important for the development of reading in all pupils. This system can be used alongside any other method of communication for deaf pupils, both signed and aural. There are several different visual cueing systems and the most common are:

- Cued Articulation (used by speech and language therapists)
- Cued Speech (although its main aim is to give access to spoken language, it can also have this discrete use).

The purpose of these systems is to clarify the sounds of English that cannot be easily lip-read or clearly heard.

Some of the phonics programmes designed for use in the mainstream setting introduce discrete actions for each sound to provide kinaesthetic support for learning letter-sound correspondence (e.g. Jolly Phonics). There are also specific programmes to support this for deaf pupils who may not hear or discriminate all the sounds of English clearly, for example, Visual Phonics by Hand™.

See Appendix B (page 71) for more detailed information about these programmes.

Considerations

If a visual cueing system seems a possibility for the deaf pupil, you will need to consider the following.

- For all pupils, the use of a multisensory approach to teaching letter sounds is recommended so that pupils learn from simultaneous visual, auditory and kinaesthetic activities.
- You and your school may already be using commercially available schemes that introduce particular hand movements (gestures) for specific sounds. If this is the case, consider whether or not this scheme will meet the deaf pupil's needs.
- There are also several visual cueing systems specifically for deaf people that the pupil may already be using, or that you may wish to use with them. Find out if the pupil is already using one of these systems, as it makes sense to build on this.
- You can use a visual cueing system for the letters that are being confused or to supplement the teaching of all letters.

It is always best to talk to the pupil's Teacher of the Deaf and their parents before you start using any of these systems. You should also make sure that all staff are confident and trained in the use of any manual support systems that are being used to ensure the deaf pupil has the best possible chance of success.

Be aware

Whenever a visual support system is being used purely as a teaching tool for phonics, it is important to ensure that the pupil is linking letters to sounds as sometimes the action/hand cues can become so much fun that the pupil does not focus on the sound being taught.

Introducing non-words

All pupils, including deaf pupils, learn phonics as a means to an end – so that they are able to recognise and read words instantly (known as 'automaticity') and can understand a text by themselves.

It is believed that non-words (also known as 'nonsense' or 'pseudo' words) provide the most convincing evidence for assessing phonics processing skills. This is because the 'words' used will not be known or instantly recognised by any pupil. Many Teachers of the Deaf have avoided using non-words with deaf pupils as the whole focus of their teaching has been on reading for meaning. Others have included non-words in their teaching, introducing them as 'silly'/'funny' words or 'making up new words'.

All deaf pupils learning phonics should be given opportunities to make and read non-words as part of their normal classroom activities. This is especially advisable in England where, since 2012, all Year 1 pupils have taken part in the

national phonics screening check, which contains non-words. In preparation for this screening check, it will be very important to make sure that the pupil understands that they are learning nonsense words and that these will help them to practise their phonics decoding skills.

To avoid demoralising deaf pupils and to ensure learning is positive, it is important that they experience as much success as possible when they start to learn phonics. The first sounds you teach should be those that the deaf pupil can most easily discriminate. This may mean that you will have to consider deviating from the order given in your phonics programme. Your Teacher of the Deaf will be able to advise you on the best order for each deaf pupil.

As with all pupils, you must make sure that your deaf pupil has opportunities every day to apply the phonics information they are learning in appropriate texts that they can enjoy, understand and read.

Your deaf pupil may have additional needs, for example, dyslexia, vision impairment or specific language impairment. The South East Regional SEN partnership's (SERSEN) (now part of the National Sensory Impairment Partnership (NatSIP) *Mapping the Way* document could be helpful if this is the case. See the Resources section on page 79 for more information.

If, during routine monitoring, you feel that the deaf pupil is not progressing at the age-expected level, it is vital that you share your concerns with their Teacher of the Deaf or other relevant professionals (such as a speech and language therapist), and the pupil's parents. This will help you to consider more effective approaches and identify any additional needs the pupil may have.

General principles for teaching phonics to deaf pupils

The phonics programme you use should:[9]

- include high quality systematic, synthetic phonics work
- enable pupils to start learning phonics knowledge and skills using a systematic, synthetic programme by the age of five[10]
- allow for the teaching of discrete, daily phonics sessions progressing from simple to more complex phonics knowledge and skills
- provide progress checks
- use a multisensory approach to teaching phonics so that pupils learn from simultaneous visual, auditory and kinaesthetic activities

9. These characteristics are taken from the *Phonics Teaching Materials; Core criteria and self-assessment* (Department for Education, 2010) which provide "clearly defined key features of an effective systematic synthetic phonics programme" (**www.gov.uk/government/collections/phonics-choosing-a-programme**) and are relevant for deaf pupils, wherever they are being taught in the UK.

10. A few deaf children, especially those using BSL, may not be sufficiently fluent in English at this age to start learning phonics and so it will be important to agree the starting point with your Teacher of the Deaf.

- demonstrate that phonemes are blended in order, from left to right
- demonstrate that words are segmented into their constituent phonemes for spelling and ensure that pupils can hear and identify sounds in words in the order in which they occur
- ensure that pupils apply phonics knowledge and skills as a main approach to reading and spelling, even if a word is not phonically regular
- enable pupils to learn high frequency words that are not phonically regular
- ensure that pupils, as they move through the phonics programme, have the opportunity to read texts that allow them to practice their phonics decoding skills and which they can readily understand.

You need to use your professional judgement, in conjunction with the Teacher of the Deaf when necessary, to ensure:

- the deaf pupil in your class has established an appropriate level of phonological awareness before they start to learn letter sounds. This means considering their ability to discriminate general and environmental sounds, identify rhythm, rhyme, alliteration, intonation, voice sounds, syllabification, oral blending and segmenting, not just their ability to discriminate individual letter sounds
- careful and appropriate monitoring (see below) to find out whether they are ready to move on to the next learning objective of the programme
- any necessary modifications are made to the phonics programme that is being used.

The number of changes required will be dependent on the content of the programme, the deaf pupil's individual needs and the speed of their progress.

Assessment and monitoring of phonics knowledge

Carefully assessing that the targets and activities are at the right level for the deaf pupil is an important first step to ensure successful learning and optimum progress.

Any published phonics scheme used in a school in England should have integrated assessment activities as this is one of the requirements within *Phonics Teaching Materials: Core criteria and self-assessment* (Department for Education, 2010). You should use these assessment activities with all pupils, including the deaf pupil, as set out in the manual accompanying the programme. This should indicate whether or not the pupil has mastered the particular sound/s you are teaching.

We recommend including non-words (also known as nonsense or pseudo words) in any assessment of phonics knowledge. It is equally important to observe if the deaf pupil is applying the phonics knowledge in their 'normal' reading of texts.

Some deaf pupils may need additional and/or more specialised assessments to identify the next step to progress their learning. The pupil's Teacher of the Deaf will be able to advise on this.

Having carried out any assessment of phonics knowledge, it will always be important to differentiate between deaf pupils who are developing their phonics knowledge (albeit more slowly than other pupils) and those few deaf pupils who may need a different approach in the short term.

Always work closely with your pupil's Teacher of the Deaf to ensure that the assessments are appropriate and that the results are interpreted accurately. This will lead to effective planning and ultimately to successful outcomes for the deaf pupil.

NOTE

You should avoid carrying out any assessment activities if there have been any recent changes to the deaf pupil's hearing aids or implants, e.g. new hearing aids or programming of a cochlear implant, as the pupil will take time to adjust. The pupil's parents and/or your Teacher of the Deaf will be able to advise on this.

Working with teaching assistants and other adults

If you require any help from a teaching assistant or an additional adult when teaching phonics activities, make sure:

- they have had at least basic training in working with a deaf pupil and, preferably in teaching them phonics
- they have read the relevant sections of this resource
- that they are working in a suitable acoustic environment
- you give them detailed information on the task and the expected outcomes
- whenever possible, you provide them with a mixed group of pupils to work with (hearing and deaf) to encourage peer learning.

Working with parents

Parents are often keen to support their children to acquire phonics skills and are usually in an excellent position to do so. This additional support will be far more effective if you ensure that:

- parents understand the role of phonics in learning to read
- you inform parents about their child's progress in acquiring phonics skills and how this compares to age-related expectations
- parents understand any particular challenges their child has in learning phonics and the importance of additional practice (i.e. they understand it is additional practice and that they are not expected to be teachers)
- any practice is linked to the phonics work that you are teaching
- you demonstrate new activities to parents
- parents feel they can undertake these activities with their children in a relaxed and fun way.

You may find it helpful to share this resource, or relevant parts of it, with the deaf pupil's parents so that with your direction, they can help their child become competent in the particular aspect of phonics that you are teaching.

A summary of the critical factors in the learning environment

Below is a useful summary of the critical factors in the learning environment that teachers should use as their guide to ensure that any teaching of phonics is successful. It was first published in *BATOD (British Association of Teachers of the Deaf)* magazine.[11]

- High expectations and challenging but realistic targets.
- Effective, consistent amplification and good listening conditions, ensuring optimum use of residual hearing.
- Proactive development of listening skills.
- Careful assessment of the pupil's level of phonological awareness and production.
- A clear understanding of the different approaches to the development of phonics skills and an ability to choose between them on the basis of pupil need. As Rose (2006)[12] states: "Leading edge practice bears no resemblance to a 'one size fits all' model of teaching and learning".
- Planning that takes account of the pupil's phonological development and language development.

11. Cope, T. 'Flippin' Phonics – Principles and Practice with Profoundly Deaf Pupils' in *BATOD magazine*. September 2006.

12. Rose, J. *Independent Review of the Teaching of Early Reading* (DFES). 2006.

- Thorough review of actual learning and evaluation of the suitability of intervention programmes (in the broadest sense).
- Activities that engage and sustain interest, using other senses appropriately to reinforce listening and phonics skills.
- An attitude that sees pupils as active learners rather than passive recipients of knowledge.
- Integration of listening and phonics skills learned in intervention programmes into mainstream learning.
- Adults who provide knowledgeable, sensitive support.

Enjoying and sharing books

Although this resource focuses on developing phonics skills, you should continue to give the deaf pupil opportunities to enjoy and share books.

> ***"Experience shows that children benefit hugely by exposure to books from an early age. Right from the start, lots of opportunities should be provided for children to engage with books that fire their imagination and interest. They should be encouraged to choose and peruse books freely, as well as sharing them when read by an adult. Enjoying and sharing books leads to children seeing them as a source of pleasure and interest and motivates them to value reading."***[13]

13. DES. Letters and Sounds: *Principles and Practice of High Quality Phonics*. Primary National Strategy. 2007. **www.gov.uk/government/publications/letters-and-sounds** (accessed 2016).

Teaching phonics

2

Using any published phonics programme with the deaf pupil

We strongly recommend that you read the information in the first part of this resource before looking at the more specific guidance in this section.

There are many published programmes for teaching phonics. If you are in Northern Ireland, Scotland or Wales you will probably be using one that has been recommended locally or nationally or selected by your school. In England you will be using one that has been evaluated according to *Phonics Teaching Materials: Core criteria and self-assessment* (Department for Education, 2010).

All phonics programmes ultimately cover the same sounds, but the order in which the sounds are introduced can vary. We have used generic descriptive terms at the top of each new step section so that the information and advice will support you in meeting the needs of deaf pupils, no matter which programme you are following.

You can use almost any published phonics programme as an effective resource with a deaf pupil, but you will need to use it flexibly in order to meet individual needs.

The learning objectives are one of the most important elements within any programme and we have included suggested activities to help meet these objectives. However, there may be situations where the suggested activities are inappropriate or too challenging for deaf pupils, but the actual learning objective is not, if approached in a different way. Above all, ensure that the activity remains fun – if too much time is spent on one activity, it may make the deaf pupil less keen to listen. Listening is hard work and tiring for a deaf pupil.

The information in the manual of any published programme will be, for the most part, relevant to the deaf pupil and should still be read.

Deaf pupils and spoken language

Most pupils understand a large amount of spoken language before they start learning to read. However, a deaf pupil may not have achieved age-appropriate levels of receptive and expressive language. A deaf pupil will still benefit from a high quality phonics programme, but you will need to monitor the content and pace. It is also likely that you will need to provide extra listening and language opportunities for deaf pupils. You can discuss this with the Teacher of the Deaf and/or a speech and language therapist who has undergone further training to work with deaf pupils.

As you would with a hearing pupil, use the assessments in your published scheme to determine their starting point and to monitor progress. Your Teacher of the Deaf will also be able to provide specialist information.

All phonics programmes are incremental and so the successful mastery of one step will largely determine the pace of the deaf pupil's progress through the programme. The suggested pace for the programme is only a guide.

At some points in the programme (especially in the early stages), it is important that you exercise your professional judgement and do not regard the boundaries between the sequential phonics steps as absolutely fixed. This is vital for working with deaf pupils as some, for example, may need to continue with rhyme work from Step 1 (phonological awareness) while starting on Step 2 (basic grapheme-phoneme correspondence). You should be guided by your Teacher of the Deaf on this.

Wherever possible, you should encourage parents to work with you in all aspects of literacy learning, as this will help give your deaf pupil additional and much needed practice. When you involve additional adults (including parents), you must ensure they are fully briefed about the task and the particular learning needs of the deaf pupil.

About this section

There are five main steps. Each one deals with a different step in learning phonics:

- phonological awareness
- basic grapheme-phoneme correspondence
- adjacent consonants
- consonant digraphs and vowel digraphs
- split digraphs.

Step 1: Phonological awareness is an important and prerequisite step in learning phonics, especially for a deaf pupil. Many of the published phonics programmes assume a pupil's knowledge is already well established on entry to school and so start with letters and their sounds. This resource, however, starts with phonological awareness and explores seven of its main elements in relation to deaf pupils.

The structure described below is used for each of the seven elements in phonological awareness and for the steps which follow.

- Why this element is included
- General points to consider in relation to the deaf pupil
- Helping deaf pupils access the activities

We advise that you read the relevant section within the scheme you are using and the first part of this resource, which gives vital background information on fully applying any published phonics programme.

The deaf pupil and phonological awareness

Phonological awareness enhances the development of good listening skills and includes not only an understanding of letter sounds and phonemes but also an understanding of features of language such as alliteration, rhythm, rhyme, intonation and syllables.

Phonological awareness is absolutely essential for developing phonics skills. It is of great importance for all pupils, with many becoming competent in this area through activities in early years education. However, a significant number of pupils may require more direct teaching when they start school. The deaf pupil may well be in the latter group, but your Teacher of the Deaf will be able to give you the necessary information.

Many published phonics programmes (Letters and Sounds being one of the exceptions) assume mastery of phonological awareness and so immediately start with Step 2 (grapheme-phoneme correspondence). If no introductory phonological awareness activities have taken place in your school, you should

assess the deaf pupil's competence in this area by following the activities in Step 1 of this resource (page 29). Be prepared to provide a programme on any elements within this step that have not been mastered. In most cases a pupil should complete this programme before progressing to the next step of grapheme-phoneme correspondence. This guidance includes some appropriate activities and you can get advice on other appropriate resources from your Teacher of the Deaf.

Phonological awareness provides the foundation for all other phases

Whether you are providing a phonological awareness programme for the whole class, a small group or a specific programme for the deaf pupil, you will have to monitor their progress carefully to decide if they need to spend more time on specific elements. They may need to either:

- remain on a particular step for longer than most pupils
- move on to the next step while continuing with specific elements of phonological awareness.

You may need to spend more time with the deaf pupil, demonstrating and reinforcing the basic concept of each of the elements by using structured, repetitive or closed activities. This is to ensure that the pupil has grasped the concept before making activities more open, wide-ranging and challenging.

- When working on the concept of rhyme, you may need to ensure that the deaf pupil spends more time listening to nursery rhymes before they are asked to create rhyming words.
- Before playing a game to identify rhyme and using several words and greater variety, you may need to
  - demonstrate the concept again by asking the pupil to listen to a number of sounds and listen for one that is the same or different (this may require visual support)
  - use two words only and demonstrate several times that they do or do not rhyme.
- Similarly, you will need to help the pupil listen to and identify sounds in words before they will be able to segment and blend words.
- Generally, all pupils develop phonological awareness in a set sequence, i.e. from identifying large units of sound (whole words), to rhyme and finally to the smallest unit of sound (individual phonemes). You may occasionally find it helpful to reorder one or more of the different elements within this section of your scheme. This has to be done with some care and you should take advice from your Teacher of the Deaf. As an example, within the elements outlined in this guidance, you could:
- teach Element 1f: Voice sounds (but exclude any activities relating to individual sounds) before Element 1d: Rhythm and rhyme.

- reorder the activities within an element. For example:
  - complete the talking about sounds activities before the tuning into sounds
  - generalise sounds first as a principle.

Deaf pupils may also:

- need more time to experience and process sounds
- be at a different stage of sound awareness than the rest of the class
- find it more difficult to listen in a large group
- at least initially, find it difficult to incorporate listening into more complex games. When delivering phonics and spoken activities take care not to speak too loudly or over-articulate as this can distort the sound for a deaf pupil. Remember to provide activities that will continue to develop their ability to listen and discriminate all sounds, both speech and environmental. Training in phonological awareness recognises the importance of developing speaking and listening skills and these skills are particularly crucial for deaf pupils.

Step 1: Phonological awareness

We recommend that you read the first chapter of this resource before you read this section, as well as the relevant section in the manual of the programme you are using.

Step 1: Element 1a: Sound awareness and discrimination – using the environment

If you are using a published programme for this element, you will find it helpful to read the section in the manual about general sound awareness and discrimination again, with the deaf pupil in mind.

Why this element is included

Before pupils can develop phonological awareness, they need to become aware of environmental sounds and be able to:

- detect them
- discriminate between different sounds
- attribute sounds to their sources and be able to give them meaning
- recall sounds so that they can easily identify them
- describe sounds and the differences between sounds, e.g. loud/quiet, barking, singing, etc.

- associate sounds with appropriate responses e.g. open the door if the doorbell rings, stop when the playground whistle blows and take up a place in the class line.

While most pupils will have learned to identify, name and describe many sounds and to respond appropriately before they start formal education, deaf pupils may not have had sufficient experience of listening to sounds to be at this stage.

Even for hearing pupils there is much benefit in learning to develop attention to a wide variety of sounds and some phonics schemes may begin with activities to draw pupils' attention to the range of sounds in the environment and use them in their games. These activities will benefit all pupils, including deaf pupils, who may need a direct focus on them. Some deaf pupils may need to continue with these activities for much longer than other pupils.

Below are some of the points that you will need to consider when planning teaching for the deaf pupil – it will also help to discuss this with your Teacher of the Deaf.

General points to consider

All activities should be fun and enjoyed by all the pupils in your class, as this will increase their learning. It is important to consider the following points in order to minimise the possibility of causing any stress to the deaf pupil.

You will need to make sure that the sounds used for discrimination and listening activities are accessible to the deaf pupil, especially when outside. You will need to consider whether the sounds are:

- loud enough, particularly if the sound source is at a distance, e.g. during a Listening Walk*
- meaningful, i.e. the deaf pupil can identify the sound as well as simply hear it
- uncomfortably loud, e.g. if a class are shouting loudly in a game such as Teddy is Lost in the Jungle*, or striking different objects with a drumstick (Outdoor Drums*). Sounds can also be distorted when heard through a hearing aid
- sufficiently different from one another. The length of time the deaf pupil has been using hearing aids or implants will affect their discrimination skills and so, for example, in Mrs Browning has a Box* you may need to begin with two sounds that are very different and progress gradually to sounds that require more discrimination. Be aware that Socks and Shakers* may not offer sufficient contrast to allow discrimination.

You will also have to consider the complexity of the games as:

- even walking and listening at the same time can be difficult for a deaf pupil, e.g. they may need to stop to listen during a Listening Walk*

- some concepts are harder for some deaf pupils, such as sounds being made louder or softer depending on the proximity of the hidden object, as in Hot and Cold*
- language and auditory processing time may take longer for a deaf pupil, making activities such as Enlivening Stories* much harder for the deaf pupil in a large group.

Activities and games dependent on auditory memory, e.g. The Listening Moment*, could be challenging for a deaf pupil and will require close monitoring.

Deaf pupils' language development may be delayed and so games such as Describe and Find It* could be challenging. The deaf pupil may need considerable pre-tutoring in order to learn the necessary vocabulary. However, a balance must be made between learning particular words for specific games and encouraging the pupil to develop all aspects of language including grammar and semantics, and individual words.

If you are using commercially produced materials that create various sounds, e.g. Sound Lotto*, they must be of good acoustic quality and, where possible, the sounds should be delivered direct to the hearing aids or implants and technology the deaf pupil is using. Your Teacher of the Deaf will be able to advise.

All of the above will vary according to the deaf pupil's individual range of hearing and their individual ability to use it.

You may need to give the deaf pupil a significant amount of adult support to ensure successful learning outcomes. The adult should provide:

- a clear explanation of the task required
- sensitive modelling to demonstrate what is needed and how the task should be done, without overtly or explicitly 'correcting' the pupil
- discussion to provide the required vocabulary
- appropriate feedback on the pupil's contributions
- participation in, rather than just supervising, the games and activities.

It might also be necessary to provide individual or small group work (both listening and language activities), carefully targeted at the needs of your deaf pupil. You should arrange for some of this work to take place in good acoustic conditions without distraction.

You may find it beneficial to support activities with visual resources, for example using pictures or real objects to illustrate new words or sounds.

You must monitor the deaf pupil's ability to access all these activities and to ensure that they are not becoming distressed because they are unable to hear some of the sounds.

Give feedback to parents or specialist teachers about sounds that a pupil finds uncomfortable or is not able to hear, as they can pass this on to those responsible for ensuring that the deaf pupil's hearing aids or implants and technology is appropriate to their needs.

It is important to be aware that:

- learning good listening behaviour can help a deaf pupil concentrate and be more successful in learning generally
- learning to describe sounds is an important part of a pupil's general language development. However, there needs to be clarity about the difference between those learning objectives that are specifically a foundation for the development of future phonics skills and those that are part of the over-arching language ability.

*These activities are described more fully below.

Helping deaf pupils access the activities for Step 1: Element 1a

Listening Walks

Taking pupils on a walk to 'listen for' environmental sounds is a good idea. It is important to remember that the deaf pupil may not have had hearing aids or implants from an early age and therefore may not have had access to sound and listening for as long as the other pupils. Even listening to environmental sounds may be very new for the pupil and therefore may not be very meaningful in the beginning. You may have to allow the pupil more time to spend on this aspect.

Deaf pupils may find it hard to walk and listen at the same time – ensure that the pupil stops to listen. Check that expectations of what a pupil can hear outside are realistic as sounds may be far away and therefore imperceptible or masked by louder sounds that are closer. You could very usefully involve parents in this activity.

The use of big ears/Mickey Mouse ears

It is often suggested that, particularly in the early stages, pupils should have something concrete to remind them to maintain their concentration on listening, e.g. all the pupils in the class could make big ears/Mickey Mouse ears that they could wear on their headbands during listening walks.

This activity has been used successfully with deaf pupils but be aware that some pupils might be sensitive about this, and that the headbands used to keep the big ears in place could interfere with a hearing aid. You can make a decision about this based on your knowledge of the pupil.

A Listening Moment

Another way to encourage concentration on listening is to ask the pupils to listen carefully for 30 seconds or so (perhaps using a sand timer) and then ask them to recall the sounds they heard. A deaf pupil may be less able to remember a sequence of sounds because of their auditory memory capacity, and may only recall one or two at a time. You should make sure that sounds are not too far away and that they are loud enough for the deaf pupil to hear. It can be harder to hear outside where the sound escapes into the atmosphere and is not confined by walls.

Outdoor Drums

Give pupils drumsticks and ask them to explore how different objects make different sounds depending on the way they are hit and the type of material (wood, plastic, metal, etc.). A deaf pupil might not like the volume of noise being made by other pupils playing their 'drums' simultaneously and so a small group may work better for this activity.

Hot/Cold or Teddy is Lost in the Jungle

Choose one pupil to find a hidden object. They will be guided to the location by the other pupils, singing louder when the 'finder' is closer to the object and quieter when they go further away. A variation on this is to sing faster (nearer the object) and slower (further away).

The deaf pupil may find it easier to make a louder or quieter sound than to sing lyrics faster. If the deaf pupil is 'the rescuer' they may find it hard to perceive the change in volume of sound as they move away from those making it.

You could make a hand gesture to accompany the sound to show whether it is loud or quiet.

Pre-recorded audio resources, such as Sound Lotto or Sound Stories

Where activities, such as Sound Lotto or Sound Stories involve the child listening to an audio resource, you must ensure that the resource is of a good enough quality for a deaf pupil to benefit from using it. The deaf pupil may also benefit from using a radio aid or soundfield system. You can discuss this with your Teacher of the Deaf.

When playing listening games or stories using audio resources, you should remember that:

- a pre-recorded sound may contain sounds that a deaf pupil cannot discriminate or interpret – even some apparently good quality, commercially produced resources may use sounds that are not sufficiently contrasted for a deaf pupil
- sequencing sounds may be beyond the pupil's auditory memory and the pupil may need support from visual prompts
- the pupil may need support with explaining the sequence of events depending on their ability with language.

Lucky Dip/Mrs Browning has a Box

Hide a few noisy objects in a box and ask the pupils to identify the object from the noise it makes and then imitate the sound of the object.

Check that the deaf pupil is familiar with the noisy items and if not, make sure they have some pre-tutoring time so that they can identify the sound and name the object that made it. Be aware that it could be very challenging for a deaf pupil to imitate the sound of the object.

Describe and Find It

Put out a set of objects (zoo animals, domestic animals, vehicles, etc.) and describe one in the set for the pupils to identify. You may need to give the deaf pupil additional time with an adult before the activity to reinforce the vocabulary that will be used. This may be necessary each time you use a new set of objects. You may find that introducing random objects without prior preparation can be very difficult for the deaf pupil as they may not have the vocabulary to name them.

Socks and Shakers

Partially fill containers with different types of noisy materials (pebbles, coins, rice, pasta, etc.) and ask the pupils to shake them in order to identify what might be inside. Consider the hearing ability of the deaf pupil and check there is sufficient contrast between the sounds. You may find it beneficial to do this activity in a small group so the deaf pupil has more opportunity to experience and reinforce vocabulary.

Likes and Dislikes in Sounds

Ask the pupils to make a poster or use a whiteboard to record their favourite and least favourite sounds, and then encourage them to share their likes and dislikes. You may find that recording sounds pictorially is very beneficial for the deaf pupil although they may not be familiar with all the sounds that the other pupils talk about. You may find that this activity requires reinforcement.

Fun with Stories/Enlivening Stories

Encourage pupils to take part in songs and stories by carrying out appropriate actions at certain points and/or making sounds such as animal noises. You could also ask the pupils to act out the story or rhyme.

You may find that the deaf pupil can make a limited range of sounds and that they know a limited range of songs. You may have to provide them with more experience, especially in small groups and quiet listening conditions.

Make sure that the adult leading the activity understands the task and the deaf pupil so they can effectively support the pupil's needs. Using visual resources, props, actions and/or role-play will be very helpful for the pupil.

Case study: general sound discrimination

Amy has a moderate hearing loss, wears two hearing aids and attends her local primary school. A Teacher of the Deaf visits her once a fortnight.

Amy's class teacher, Teacher of the Deaf and her in-class teaching assistant met up before they began phonological awareness training. They agreed that most of the activities would be suitable for Amy with some adjustments and targeted in-class support.

Where appropriate, Amy took part in listening activities in a quieter room with a group no bigger than three or four pupils. The adult leading the session was mindful of the need to check that both Amy's hearing aids were working before the session began and used the agreed strategies to do this.

They gave Amy targeted one-to-one support during the Listening Walk to ensure she was able to identify some environmental sounds. Before Amy took part in activities such as Describe and Find It and Enlivening Stories she had one-to-one tutoring to reinforce the vocabulary she was going to hear during the larger group activity.

They also suggested that Amy's parents should use some of her favourite bedtime stories and rhymes to involve her in listening for and producing repeated sounds.

Amy struggled with the Teddy is Lost in the Jungle activity and so they repeated this with a smaller group and explained again.

They discussed Amy's performance in activities during regular meetings with the visiting Teacher of the Deaf.

Step 1: Element 1b: Sound awareness and discrimination – musical instruments

Why this element is included

Musical activities can be an effective way of building listening skills in young children. To develop an understanding of the sounds within words, pupils must hone their listening skills and then develop an ability to discriminate similarities and differences in sounds. Introducing musical instruments is a fun way of developing both these aspects, and it also gives pupils more opportunities to increase their vocabulary by talking about the sounds that instruments make. They also learn about creating sounds of differing length and pitch and this provides a foundation for later skills, such as Element 1d: Rhythm and rhyme.

General points to consider

Ensure the instruments are loud enough and played closely enough to the deaf child in activities such as Which Instrument?* and Mr Wolf 's/Grandmother's Footsteps*. You will be asking them to listen out for very specific, short sounds

that can very easily be missed so remember to carry out the five listening checks (see page 14) to ensure optimal amplification, listening and attending conditions.

The deaf child may find some noises uncomfortable, especially if the other pupils get very loud and excited in an activity such as Mr Wolf 's Footsteps*, and so you may need to remind the other pupils to move quietly.

A deaf child will enjoy and benefit from many of these activities although you may need to provide some adult support to ensure that they can fully participate (some prompting may be necessary in activities such as Copycat* which involve turn-taking). To begin with it may also be helpful to practise new skills and responses one-to-one or in a very small group in good listening conditions.

Allow plenty of time for the deaf child to play with the instruments and explore the sounds they make. Later, you could use visual prompts such as signs, cards and puppets to help them make links between the instruments and the sounds.

You will find that the success of any rhythm-based musical activities will depend on the individual child and their degree of hearing loss and ability to discriminate sounds. Some visual help could be useful, e.g. big dots and a card to signify the notes and spaces in the sounds, in Matching Sounds*.

You may find that the deaf child's vocabulary for describing music or other sounds is very limited, meaning that although these activities are an excellent opportunity for further language development, they will perhaps require pre-tutoring.

Instrumental sounds

To make the instrumental sound element more interesting and fun for hearing pupils, some of the activities will sometimes link listening to sounds with thinking about a story (Story Sounds*) or different animals (Animal Sounds*). A deaf child may find this confusing as they will probably need to focus all their attention on the instrument and the sound it makes in order to develop and sharpen their listening skills. They may not have sufficiently good language to follow and/or understand the story, and their listening skills may not be developed enough to identify the parts of the story that relate to their instruments. Choose the activities that do not involve another 'layer' first and if your deaf child manages these well, then introduce the activities connected with stories.

*These activities are described more fully on the next page.

Helping deaf pupils access the activities for Step 1: Element 1b

New Words to Old Songs

Ask the pupils to make up new words to a known song or rhyme. Remember that adapting and changing the words to songs and rhymes will only be possible if the deaf child:

- already knows these songs well
- has sufficient vocabulary and language to be able to add new words.

Which Instrument?

Provide two identical sets of musical instruments – one that is visible to all the pupils and the other set hidden behind a screen. Ask one of the pupils to go behind the screen and play one of the instruments and the other pupils have to identify which instrument is being played.

Identifying and naming the instruments may be challenging for the deaf pupil, especially if they have a more severe hearing loss. You can simplify the activity by using just two instruments until they are confident in identifying them, and then adding a third, fourth and so on.

Copycat/Adjust the Volume/Follow the Leader

Two pupils sit opposite each another with identical musical instruments and take it in turns to be the leader. The leader will make loud and quiet sounds and the other child has to copy. To begin with you may find that the deaf child needs picture or symbol cues for this activity. It is also important to ensure the quiet sounds can still be heard by the deaf child.

Mr Wolf 's Footsteps/Grandmother's Footsteps

Different instruments are used to signify different ways of moving, e.g. drum for marching, shakers for walking on tiptoe, etc. Mr Wolf has his back to the pupils and plays an instrument which determines the way the children move towards him, only moving while the instrument is being played. The first child to reach Mr Wolf then becomes Mr Wolf. It will be important to ensure the deaf child can hear the sounds being made and so the other pupils should be encouraged to move quietly. The deaf child may need some pre-tutoring in order to understand the link between the sound and the movement required.

Matching Sounds

One child chooses an instrument and makes a pattern of sounds, then passes it to the next child who has to make the same sequence of sounds – this is repeated with all the other pupils in the circle. Remember that a child's ability to make or repeat more complex sequences of sounds will be limited by their sound perception, sound discrimination and auditory memory, and so this could be a challenging activity for a deaf pupil.

Story Sounds/Enlivening Stories with Instrumental Sounds

As you tell a story, encourage the pupils to play their instruments in different ways to sound like marching, running or the footsteps of a giant, etc.

Listening to stories and responding with instruments requires complex language and listening skills and the deaf pupil may not yet be ready for this.

Animal Sounds

Give the pupils a variety of animal toys and/or animal puppets and a variety of instruments. Encourage the pupils to play the instruments and then choose the one that makes the best sound to match the animal. This could be quite a challenging activity for a deaf pupil.

Case study: deaf pupil in a nursery class group

Amar (4), who is profoundly deaf, was wearing his hearing aids, which had been checked and were working well. He enjoyed playing with the musical instruments in the first part of the session. Although he was unable to identify all the instruments in the circle time session, he showed some good ability in identifying which instrument was being played when there were just two to discriminate between. The activity worked well when both instruments were loud and very different, e.g. a drum and a cymbal.

Step 1: Element 1c: Sound awareness and discrimination – body percussion

Why this element is included

Making all the different body percussion sounds – clapping, tapping, stamping, etc., while responding physically to different stimuli helps pupils to listen and learn about sounds. They will learn:

- to develop an awareness of sounds and rhythms through action songs and sequences of clapping and stamping, etc.
- to distinguish between sounds and to remember patterns of sound
- to talk about sounds we make with our bodies and what the sounds mean.

General points to consider

You will find that the deaf pupil:

- will be able to hear and certainly feel many elements of body sounds
- will enjoy the sound games, clapping, tapping and stamping – these activities are very useful for developing listening skills
- can imitate and really benefit from these action and sound-making games

- can access the movement sequencing and motor planning aspect of the activities in this section.

You will need to make sure that the deaf pupil is able to listen to the sound and discriminate it and is not simply picking up on the visual clue which is suggested as an interim in some activities, including Action Songs* and The Pied Piper*.

As with all other elements in this step, you should remember that the deaf pupil may need more time to tune into the sounds before they are able to discriminate between them, remember sequences of them or discuss and describe them in great detail, as in Listen and Respond to the Music*, Follow the Sound*, etc.

Not all body sounds are easily heard and so you need to make sure that sounds are not too quiet for the deaf pupil, e.g. actions such as finger clicking and yawning are very quiet (e.g. Noisy Neighbour*).

You may find it helpful to limit the range of sounds used initially and then once the pupil is confident with these sounds, add further sounds gradually.

Where the game involves taking turns (e.g. Copycat Sound*), you may need to give the deaf pupil an extra prompt so they know it is their turn. You may also need to leave extra time for the deaf pupil to absorb the auditory information indicating that it is their turn.

It would not be unusual for a deaf pupil to enjoy songs before they are able to sing along to them, as in an activity like Action Songs*. Do not worry if they are not joining in immediately with singing the song, but they are following and enjoying singing action rhymes. You may need to provide lots of repetition and practice until the deaf pupil is showing both confidence and competence. This will be particularly relevant if the pupil is profoundly deaf.

You will find that having additional adult support in many of the activities will help you to achieve the most benefit, especially in developing a wider vocabulary around sounds.

*These activities are described more fully below.

Helping deaf pupils access the activities for Step 1: Element 1c

Action Songs

The deaf pupil may enjoy listening to songs and rhymes but may have a smaller knowledge base in this area than many hearing pupils and need extra support or experience. You may find it helpful to give the deaf pupil clear visual prompts for instructions such as ‘listen now’, ‘move now’. You should use simply worded songs and avoid too many demands within one activity.

Listen and Respond to the Music

Introduce a musical instrument and ask the pupils to take turns in playing it before they are asked to perform an action or specific sequence of actions (e.g. hop, skip, jump) when the instrument is played.

You may have to provide pre-tutoring on this activity in a smaller group for the deaf pupil. Copying rhythms requires auditory memory skills and so you may have to provide extra practice. The deaf pupil may not have experienced as many sounds or have the emotional vocabulary to describe feelings and so you may need to provide additional support to help them describe how sounds make them feel.

Roly Poly

Say the rhyme together: "Roly poly, ever so slowly, roly poly, faster and faster", rotating hand over hand and increasing the speed of the rhyme each time. Then change actions to clap hands, stamp feet or shout 'hurrah' very quietly, or shout 'hurrah' louder and louder.

You may find that a deaf pupil is unfamiliar with the rhyme and so will need further practice with hearing it in a small group or one-to-one before introducing it as a class activity. Using appropriate actions to accompany the rhyme will help to reinforce the language for them.

Copycat Sound

A small group sit in a circle and the adult starts by 'passing on', e.g. a clap, a stamp, a finger click or sequence of sounds to the pupil sitting next to them who then 'passes' it to the next pupil and so on.

Sitting in a circle will be beneficial for the deaf pupil as it allows them to see what is being done and how the sound is being produced. They may, however, still find it challenging to perceive differences in how the sound was produced as it is passed around. If the deaf pupil is not able to see a sequence of sounds first, they may find it hard to recall the sequence. They may need further experience of this – using visual prompt cards will help.

Noisy Neighbour/Giant

You will need two adults for this activity. The pupils pretend to be asleep and one adult tells the story of a noisy neighbour/giant who wakes the pupils up with a sound (which the second adult makes), such as stamping, yawning, washing. The pupils have to identify the sound and then tell the neighbour/giant to be quiet. The story then starts again.

You must make sure that the language level of the story is not beyond the deaf pupil's level of understanding. If it is, they will not be able to access the listening activity. A deaf pupil may find it difficult to identify sounds such as brushing teeth or munching cornflakes for example, as these sounds are relatively quiet. You should arrange to carry out this activity in a smaller group or quieter environment.

Talking about sounds

Discuss noises the pupils like/dislike, when it is a good time to be noisy/quiet, etc., and words that describe sounds. The deaf pupil may have less experience of noises in different scenarios and/or less ability to recall what these are like. You should arrange reinforcement opportunities for these scenarios (in the park, swimming pool, library, etc.) with parents or school staff.

You will most likely have to arrange one-to-one or small group reinforcement activities to make sure the deaf pupil acquires the vocabulary used around sound.

The Pied Piper

Pupils copy the leader, who moves in different ways depending on the music being played. This is a good activity for deaf pupils but you may need to provide more visual reinforcement and one-to-one support to reinforce the language used. Such reinforcement might include puppets, picture cards or role-play, for example.

Step 1: Element 1d: Rhythm and rhyme

Why this element is included

Once pupils can identify and discriminate the sounds around them, they are ready to apply this skill to the sounds and rhythm of spoken language. This is a crucial step for later phonics development as it helps the pupil to begin to focus on the structure of words and tune in to the rhythm of the language. Pupils should be given opportunities to:

- enjoy, experience and appreciate rhythm and rhyme
- develop awareness of rhythm and rhyme in speech
- increase awareness of words that rhyme and to develop knowledge about rhyme
- talk about words that rhyme and to produce rhyming words.

General points to consider

This can be a particularly challenging area for the deaf pupil as they may have less experience of overhearing and internalising the natural rhythm of the spoken language. This means that concepts around rhythm and rhyme may not be well established. You may need to give the deaf pupil extra exposure to these areas and provide focused activities to close this gap.

You should be very clear about the pupil's level of phonological awareness before starting so that you can target any areas that require further work.

You must know what is appropriate for the deaf pupil in your class. For example, some sounds may be too soft (see Appendix A, page 67) for a deaf pupil to pick up, while others may cause distress e.g. in Listen to the Beat*. Although aids,

implants and radio aids provide amplification, they do not enable a deaf pupil to hear sounds in the same way as other pupils.

You may also have to provide pre- and/or post-tutoring on these activities, involving you, the Teacher of the Deaf, a teaching assistant or parent. This extra tutoring may be particularly necessary to get the most from activities such as Rhyming Books*, Songs and Rhymes*, Rhyming Pairs* and taking part in Rhyming Bingo*.

Rhyming is a skill that is purely auditory in nature and it is important that the deaf pupil focuses on this. However, depending on their listening ability and level of language, you may need to provide extra visual cues, such as pictures, objects and sign language (if they use it) to help the deaf pupil access the vocabulary being used, e.g. in activities such as Rhyming Books*.

It is vital for deaf pupils to be exposed to unfamiliar oral language as this will help them to develop language. They may not understand every word being used in a rhyming/non-rhyming set or rhythmic utterance, but remember that a significant aspect of developing phonological awareness relates to intonation and rhythm and not just understanding and discriminating between individual sounds and words.

You will find that repetitive pattern and rhyme books or songs can be very useful and enjoyable for the deaf pupil as well as for other pupils. The ability of the deaf pupil to say the rhyme or join in may be more delayed than a hearing pupil's. Even if you find that the deaf pupil is not joining in with saying a rhyme, they are likely to benefit from hearing it repeated. (We sing rhymes to very young children long before they can join in: the principle is the same.)

Remember that nonsense rhymes can be useful and enjoyable, but a deaf pupil may find these particularly challenging, especially if they are asked to make up their own as in Silly Rhyming Names*. The deaf pupil may offer a real word as a nonsense word, but this does not necessarily mean that they do not understand the activity – it could mean that the word is not yet part of their vocabulary. In activities using rhyming words and associated props, you should try to use language within the deaf pupil's knowledge range.

You should keep the deaf pupil's parents informed about, and provide copies of, new rhymes you are introducing to your class as this will be a source of invaluable additional practice. You must give the deaf pupil lots of opportunities to revisit the activities in this section so they can master rhythm and rhyme.

*These activities are described more fully below.

Helping deaf pupils access the activities for Step 1: Element 1d

Rhyming Books

Include rhyming stories in daily story time sessions and encourage pupils to join in with recurring rhymes.

If the deaf pupil's listening ability is not well developed, you may have to provide opportunities for them to experience rhyme through visual cues (pictures/props) and text (including signs).

You will find that:

- the deaf pupil will need to have a good understanding of language and vocabulary to access this activity
- small groups working in good listening conditions are preferable for this activity
- pre-tutoring and repetition is necessary to reinforce the vocabulary and rhymes.

Learning Songs and Rhymes (Nursery Rhymes)

The information for the Rhyming Books activity above is also appropriate for this activity.

Listen to the Beat

The pupils move in time to different rhythms made by percussion instruments.

It is important that you use instruments that are appropriate to the deaf pupil's hearing loss. Some sounds can be very distressing for a deaf pupil and so you should discuss this activity with your Teacher of the Deaf.

Our Favourite Rhymes

Ask a group of pupils to compile a book of their favourite rhymes. The deaf pupil may need familiar visual cues (pictures/props) for recall. You will find that small groups are preferable for this activity.

Rhyming Soup

Pupils choose rhyming objects to go in the 'soup' pot while singing "We are making silly soup ...". You must check that the vocabulary is accessible for the deaf pupil. You will find that:

- working in a small group will be beneficial
- the visual nature of this activity is helpful.

Rhyming Bingo

The deaf pupil will need to have a good understanding of language and vocabulary to access this activity. You will probably have to provide a lot of pre-tutoring and repetition.

Playing with Big Words

Gather a range of objects that have more than one syllable, e.g. telephone, camera, xylophone, etc., and ask the pupils to name them, talk about them and then clap the number of syllables. It is important that you use objects that are familiar to the deaf pupil as their language development and understanding of vocabulary could be significantly delayed.

Rhyming Pairs

This requires a set of 'rhyming pairs' cards. You will probably need to provide pre- tutoring and repetition to reinforce the vocabulary and sets of rhyming words as the deaf pupil's language development and their understanding of vocabulary could be significantly delayed. You may find that small groups are preferable for this activity.

Songs and Rhymes

You may need to provide:

- a lot of repetition for the deaf pupil in order to reinforce their understanding of sets of rhyming words
- visual cues (pictures/props) and text (including signs) to ensure the deaf pupil is able to access the activity.

Be aware that the deaf pupil may find it difficult to hear some sounds accurately enough in order to be able to imitate them.

Finish the Rhyme

Stop reading just before the rhyming word and ask the pupils to provide it. The deaf pupil:

- will need to have a good understanding of language and vocabulary to access this activity
- may find it difficult to hear some sounds accurately enough to be able to give an appropriate rhyming word.

Silly Rhyming Names

Ask pupils to give 'silly' rhyming names to characters in stories, puppets, animals etc., for example, Nilly, Dilly, Millie, Cobby, Tobby, Bobby.

This is useful for developing the idea of nonsense/silly words. However, if the deaf pupil is severely to profoundly deaf, they may find it difficult to make up non-words as they may have a limited understanding and use of language and vocabulary.

Odd One Out

Provide three objects or pictures where two rhyme and the third is the odd one out. The pupil has to identify the odd one out.

You will need to check that the vocabulary/object is accessible to the deaf pupil as this activity requires a good understanding of language and vocabulary.

I Know a Word

Provide clues to identify a known word, e.g. "I know a word that rhymes with hen and I use it for writing" (pen).

The deaf pupil will need to have a good understanding of language and vocabulary to access 'out of context' learning.

Step 1: Element 1e: Alliteration

Why this element is included

Rhyme focuses attention on the end sound of a word whereas alliteration focuses on words beginning with the same sound. Alliteration is a key skill preparatory to phonemic and phonics skills. As all activities are completed orally at this stage they are, very importantly, helping to develop the pupil's 'ear for sound'. Pupils should be given opportunities:

- to use games and fun activities to develop an understanding of alliteration
- to listen to sounds at the beginning of words and hear the differences between them
- to explore how different sounds are articulated
- to extend understanding of alliteration.

General points to consider

You will find that using fun games is a great way of introducing the concept of alliteration. Most of the published phonological awareness programmes will provide such activities, while many others are available online.

It is often suggested that teachers emphasise the initial sounds in examples to make them more prominent. This is a good idea, but with a deaf pupil it is especially important to emphasise these sounds, while speaking as naturally as possible so that sounds are not distorted. In particular, you must be careful not to introduce any additional sounds, e.g. make the 'mmm' sound and not 'muh'.

To understand alliteration a pupil must be able to hear, discriminate and identify the initial sound of a word. They may need extra practice of this skill in good listening conditions without distractions.

An 'I Spy' game, particularly using pupils's names, is a favourite way of introducing alliteration. A deaf pupil may find this too challenging so it may be better to start with games such as:

- Mirror Play – to introduce how the sounds look and how they sound. Each pupil in the group has a mirror and initially plays at making faces before copying lip and tongue movements, and finally moving on to making actual letter sounds and discussing the position of the lips, tongue, etc. However, take care to ensure that the deaf pupil does not adopt these exaggerations into everyday speech.
- Silly Soup/Magic Spell game – give the pupil a range of items beginning with the same sound (box, block, bus, etc.) to put in a pot/cauldron to make their mixture. The game can be made more challenging later by introducing one item or more that does not have the same initial sound. This game is highly recommended for use with a deaf pupil and they would benefit from repeated exposure to it. A deaf pupil generally

needs a lot of experience in identifying sounds that are similar or different.

- Name Play – the group makes up silly sentences using the initial letter of a pupil's name for each word. This could be challenging for a deaf pupil with limited vocabulary.

For activities such as Digging for Treasure* you should use everyday words that can be accompanied by pictures or objects, or words linked to the themes you are covering in other curricular areas. This will give the deaf pupil more opportunities for adding this vocabulary to their working memory.

An extension of this game is to ask the pupil to create sets of objects or to ask for other objects that could be included in one of the 'found' sets. However, it is advisable to give a lot of examples before asking any pupil, but particularly a deaf pupil, to generate examples.

Remember that a deaf pupil will need lots of extra practice time for most of the alliteration activities and so do ask parents to help.

It is particularly important at this stage to check the deaf pupil's progress and to assess how well they are coping at this level of the programme. You can do this by observing whether they can:

- identify initial sounds of words
- articulate sounds clearly
- discriminate between sounds and group words according to their initial sounds
- generate lists of words beginning with the same sound (or at least identify one, two or more words beginning with the same sound) and produce alliterative phrases/sentences.

If at this point the deaf pupil is not able to do these key tasks, you should get advice from your speech therapist or Teacher of the Deaf.

A visual phonics sandwich

This is a way of using visual phonics during specific activities such as the teaching of alliteration, e.g. when using the word 'snake' you would:

- say the word 'snake' first with no visual phonics cue
- repeat the word with the visual phonics cue
- say it again with no visual phonics cue.

Remember the visual cue is a support and the aim is to develop listening skills. Your Teacher of the Deaf will be able to help you to determine how much visual support is appropriate for the deaf pupil.

*These activities are described more fully on the next page.

Helping deaf pupils access the activities for Step 1: Element 1e

I Spy Names

This could be a very challenging game to use to introduce the concept of alliteration to a deaf pupil. Consider starting with other activities as suggested in the previous section.

Before moving on to pupils' names, you should practise the 'I Spy' game using familiar objects or words that are being used in other areas of the curriculum. You should have a set number of objects or pictures on the whiteboard that the pupils need to identify as having the correct initial sound, e.g. "I spy a word beginning with 'b'".

You should find that incorporating the visual phonics sandwich into this game and using a visual phonics sign together with the beginning sound of each object being 'spied' will help to make the initial sound stand out. When the deaf pupil has mastered the above, you can move on to the names of the other pupils in the class. However, the adult may need to be the caller for a longer time to make sure that the sound is clear for the deaf pupil.

Tongue Twisters/Sounds Around

This involves playing around with initial sounds and having fun with alliterative words e.g. Mike's magic mittens.

This may be a challenging activity for a deaf pupil, especially if you use tongue twisters. Keep examples as simple and as concrete as possible until the pupil understands the concept, e.g. good girl, big boy, etc.

You could:

- use this game to incorporate some deaf awareness, e.g. Joshua's curly cochlear implant and Ahmed's happy, helpful hearing aid
- incorporate visual phonics into this game and use a visual phonics sandwich, but remember the visual cue is a support and that the aim is for the pupil to hear the differences and similarities
- use this as an opportunity to link with home and get parents to generate something with alliteration e.g. a favourite toy like Tom's terrific, tiny teddy
- have an 'alliterated object of the week' up in the class as a visual prompt, e.g. Clare the creepy, crawly caterpillar
- play this game with nonsense words.

Naming and Making Aliens/Monsters

Ask the pupils to make up strange names for an alien or monster using strings of non-words with the same initial sound, e.g. Ting Tang Tong. Then they can either draw the creature or make a model of it.

A deaf pupil will enjoy this fun activity, but may find it difficult to generate names using non-words with the same initial sound because this requires quite

advanced phonological awareness skills and considerable vocabulary. You should:

- be prepared to accept some actual words, beginning with the same letter
- make it easier by having some templates for different aliens and by doing some together
- give the pupils a set of nonsense words and real words and ask them to choose according to which are real and which are nonsense. This means the deaf pupil is being exposed to alliteration without having to generate the words themselves, e.g. "This is Diz Doz, an alien. Which nonsense words go with her? Dizzy, dog, dots, daddy, doozle, dush, dee?" If the deaf pupil is able to complete this task then you could ask them to generate some of their own words. Consider making aliens in the shape of initial sounds (graphemes) as it is easier for deaf pupils to visualise, e.g. create Ping Pang Poo Pop in the shape of 'P'.

If needed, you could incorporate visual phonics into this game by using a visual phonics sign together with the beginning sound of each alliterated word.

Lucky Dip/Digging for Treasure

You need two sets of objects which can be buried in the sand tray or hidden in a magic box or bag. Each set of objects must have names beginning with the same initial sound. As the pupils find these objects they should be grouped by initial sound. You should use objects that the deaf pupil is familiar with and can name.

This activity is fun and can involve quite a bit of excitement, animated chatter and background noise, which may make it difficult for the deaf pupil to hear. When you are giving instructions, and particularly when you are describing the actual objects and initial sounds, make sure that the class are as quiet as possible and looking at you.

You could extend this activity into a simple memory game as a deaf pupil will benefit from every opportunity to extend their auditory memory. You could ask them to remember a list of three to four objects and this could be used as part of the Listening and Remembering Sounds section.

Bertha/Barney the Bus goes to the Zoo

Set up a toy zoo and a bag of animal toys beginning with the same sound (e.g. parrot, penguin, polar bear) and then chant: "Bertha the bus is going to the zoo. Who does she see as she passes through? A pig, a penguin..." – add the new animal name as each animal comes out of the bag and build up a list that is repeated each time before the next animal is taken from the bag.

You will find that this is a good activity as using rhyme alerts the pupils that after the singing they will need to listen out for the object.

Tony the Train's Busy Day

You need a toy train and a group of objects starting with the same sound. Tell a story about "the train going down the track, clackedy clack, and seeing something lying on the track. There on the track was a lovely little lion". You can then ask the pupils what will happen next. Repeat the story in the same format, adding other animals to the list, which is repeated each time.

This is a good activity for a deaf pupil as it has a lot of repetition.

Musical Corners

Each corner will have a set of objects beginning with a particular initial sound. When the music stops, hold up an object and the pupils have to go to the corner where the objects have the same initial sound.

This is a great activity for encouraging pupils to listen to music. You must ensure that after the music is switched off and the pupils stop, you give time for fidgeting to stop so that it is quiet before you raise the object.

Our Sound Box/Bag

Encourage all of the pupils to bring in something from home and make collections of objects that all begin with the same sound. This will be particularly helpful for a deaf pupil as it will provide an opportunity for their family to understand what they are learning at school and so provide support for this learning at home.

Name Play, Mirror Play and Silly Soup/Magic Spell game

You should read the fourth paragraph in 'General points to consider', page 45 for suggestions for how to use and order the presentation of these activities.

Step 1: Element 1f: Voice sounds

Why this element is included

All pupils, including deaf pupils, usually love this element as it encourages them to use their voices to make noises that vary in length, pitch and loudness. Pupils are encouraged to listen closely to sounds and mimic them, a vital skill for acquiring letter sound grapheme-phoneme correspondence later in the programme. Activities are designed:

- to encourage and further develop listening skills by distinguishing the differences in vocal sounds
- to explore and talk about the different sounds we can make with our voice
- to introduce oral blending and segmenting.

General points to consider

There are many fun activities that the deaf pupil will enjoy and that will encourage them to:

- improve their listening skills (Sound Stories, Target Sounds)
- increase the range of vocalisations (Voice Sounds)
- identify the features of different sounds (Using Your Voice). *

*These activities are described in more detail below.

It is also an excellent way to develop the deaf pupil's spoken language and increase their vocabulary. A deaf pupil will get the most benefit from these activities if they work in a small group. This will ensure optimum listening conditions and enable you to see if the deaf pupil fully understands the activities. You may find that the deaf pupil needs to spend longer on some of these activities in order to ensure mastery, so their progress should be closely monitored.

Helping deaf pupils access the activities for Step 1: Element 1f

Mouth Movements

Explore with your class all the different movements you can make with your mouth, such as sucking, blowing and tongue stretching. The deaf pupil should be able to copy these movements and have fun doing so. This activity will also help with their articulation. A speech and language therapist who has undergone further training to work with deaf pupils may suggest other movements that would be helpful for your pupil.

Voice Sounds

Show your class how they can make sounds with their voices by, for example, buzzing like a bee or mooing like a cow. Then ask them to imitate this before asking them to suggest other sounds. This activity will be helpful for a deaf pupil as it allows them to experiment with their voice and their control over it.

Some of the higher frequency sounds may be hard for a deaf pupil to hear and so you may have to use visual cues in addition to your voiced examples.

Making Trumpets

Ask the group to make trumpet/cone shapes from light card to act as amplifiers. Model different sounds for the pupils to make – a wailing siren, fog horn, police car, etc.

A deaf pupil may need:

- longer to develop this sound awareness
- pictures or images that show loud/quiet/long/short sounds, etc. to help them to identify these features of sounds.

Metal Mike (or any activity that requires talking like a robot, computer, puppet)

If the deaf pupil has delayed listening and language, you must take account of:

- the sounds that they can discriminate
- the speech sounds that are within their phonological system
- the extent of their vocabulary.

Initially, you should only use words that the deaf pupil regularly uses, although at other times in the school day you will need to provide work that will focus on extending their vocabulary. Ultimately, you can introduce nonsense or non-words. A deaf pupil will rely heavily on transitions between sounds to identify both the individual sounds within the words and the words themselves, and so may have particular difficulty in following this activity.

Exaggerating the sound of each phoneme may lead to the pupil having distorted patterns of speech if normal speech patterns are not yet well established. Before undertaking this activity we advise that you discuss it with either your Teacher of the Deaf or a speech and language therapist who has undergone further training to work with deaf pupils.

Copycat Chain Games

Make a long sound, varying the pitch, and then pass it around the circle. Each pupil then continues to make the sound after they pass it on to the next pupil. Before this activity you may have to provide the deaf pupil with opportunities to practise making sounds at different pitches. The level of discrimination needed could be hard for them and so they may need a visual prompt to know when it is their turn. You must ensure that the sounds being produced are not uncomfortable for the deaf pupil.

Target Sounds

Give pupils a target sound to put into a story each time they hear a certain word, e.g. moo when they hear the word cow.

It is best to do this activity in a small group with the deaf pupil. You may need to stay with the single sound for longer and you may find that, initially, prompting is beneficial.

Whose Voice?/Sound Lotto

Record the pupils' voices and ask the others to guess who is speaking.

Both activities require the use of recordings made within the classroom, but you must remember that the quality of such recordings, including commercially produced recordings, may not be clear enough for the deaf pupil to access.

Using Your Voice/Give Me a Sound

Make different sounds (high/low, short/long, loud/quiet, etc.) using your voice and then work with the pupils to describe the different sounds.

You may find that the deaf pupil needs:

- longer to develop this sound awareness
- pictures or images that show loud/quiet/long/short sounds, etc. to help them identify these features.

Sound Story Time/Animal Noises/Singing Songs

These activities provide opportunities to promote listening skills, increase the range of vocalisations and speech sounds that a deaf pupil might make, and help them to identify features of different sounds. You may need to encourage the deaf pupil to join in, but be aware that they might need more time to observe others before they take part. You will find it beneficial to provide individual or small group work in quiet listening conditions.

Step 1: Element 1g: Oral blending and segmenting

Why this element is included

Oral blending helps pupils to hear how sounds join together to make words, while oral segmentation breaks words down into sounds. Acquiring these two skills means the pupil gains phonemic awareness, which is the basis for teaching phonics. Pupils should be given opportunities:

- to develop oral blending and segmenting in words
- to listen to phonemes within words and remember them in the order in which they occur
- to talk about different phonemes that, when blended, make up words.

General points to consider

This is likely to be a particularly challenging step for deaf pupils so they may need to spend more time than other pupils on the activities in this section. Make sure that the objects used in the activities are known to the deaf pupil and that they can articulate the sounds and the words clearly.

Many of the suggested activities will be most effective when carried out in small groups, as this will ensure optimum listening conditions and therefore encourage active participation from the deaf pupil.

Many of the activities ask for 'toy talk', 'sound talk' or 'robot talk'. With these activities make sure that you take care not to over-exaggerate the sound of each phoneme, as this could lead to distorted patterns of speech, making it difficult for the deaf pupil to access, especially if normal patterns of speech are not yet well established.

As pupils are being asked to articulate actual speech sounds in this element, this is a good point to assess whether to introduce any of the visual cueing systems. You may find that how the pupil performs in the activities in this element will indicate whether or not a visual cueing system would be advantageous. Such a decision should be taken with your Teacher of the Deaf.

Make sure you discuss all of the activities with either the Teacher of the Deaf or a speech and language therapist who has undergone further training to work with deaf pupils, before undertaking them.

Helping deaf pupils access the activities for Step 1: Element 1g

Oral blending and everyday activities

All pupils, especially deaf pupils, need lots of opportunities to listen to adults modelling oral blending before they are introduced to grapheme-phoneme correspondence. It is good to include oral blending in everyday classroom activities, for example, when giving instructions, asking questions or sharing books. You could do this by segmenting the last word into its phonemes, e.g. where is the d-o-g? Remember that the deaf pupil must have good listening conditions and must be able to see the speaker's face clearly to benefit from this extra practice. The deaf pupil is very likely to require significant additional practice in this activity.

Toy Talk/Sound Talk/Robot Talk

The pupil should select an object and then 'sound out' its name. You may find that initially, the deaf pupil needs to be introduced to this activity on a one-to-one level before accessing the activity within a small group or whole class setting.

The suggested variation of the adult making an error in the blending so that the pupil can make a correction may not be appropriate to use with a deaf pupil.

Clapping Sounds

Give a three-letter word and ask all the pupils in the group to respond together by sounding them out, clapping each phoneme and blending them together to make the word. Take great care when you are choosing the sounds to introduce this activity as a deaf pupil may not be able to hear some high frequency sounds clearly and/or it may not be possible to lip-read (you should check the audiogram on page 11 in the first part of this resource for guidance on this). You may want to use visual props (magnetic letters, etc.), at least initially, to ensure that the deaf pupil is fully included.

Which One?/Cross the River

Both activities use 'sound talk' to break a word up into three phonemes.

In the first activity, the pupil listens to a 'robot/sound talk' toy giving the phonemes. The pupil repeats the phonemes and then gives the word and identifies the correct object from the collection on the table.

In the second activity, each pupil has an object. The pupils repeat the adult's 'sound talk' and blend it into a word – if they are holding the object they can cross the river which has been marked on the ground.

These activities are good for developing and encouraging a pupil's ability to blend phonemes together. It also helps to develop vocabulary (receptive) and encourage recall (expressive). Ensure that you use objects that are within the

vocabulary of the deaf pupil. You will also need to ensure that the learning environment gives the deaf pupil optimum listening experiences.

I Spy

Put a collection of three phoneme words on a table. The 'sound talk' toy/robot says "I spy with my little eye a b-u-s".

This activity could indicate whether or not a visual cueing system may be necessary for the deaf pupil. For example, if the pupil is finding this activity difficult, especially when using words starting with the same phoneme, you could consider using the extra support that a visual cueing system might offer.

Segmenting

Ask the pupils to speak to the 'sound talk' toy/robot in 'sound talk'.

This is a relaxed activity that will encourage the deaf pupil to practise 'sound talk' in the safety of a play environment. With a more relaxed approach, even in small groups it is easy for noise levels to rise, especially when pupils are encouraged to volunteer their own examples, making it harder for the deaf pupil to hear. For segmenting the deaf pupil will need to listen out for small, often fleeting, bits of information that can be easily lost. It is good practice for you to repeat what the other pupils have said to ensure that the information is accessible to the deaf pupil. You will need to be familiar with the deaf pupil's understanding and use of everyday language. They will need more opportunities to explore this activity in a quiet environment with a small group of pupils.

Say the Sounds

The pupils take it in turns to take an object from a bag. Keeping it hidden, they should give its name in 'sound talk' and the other pupils have to blend the sounds to identify the object.

Objects used in this activity need to be within the vocabulary of the deaf pupil. The visual prompts are a good way to make the information more accessible. The deaf pupil may need a bit more time to process both the instructions and the words they are having to 'sound talk' or blend together.

This activity could indicate whether or not a visual cueing system may be necessary for the deaf pupil. You must make sure that you give a deaf pupil opportunities to segment the sounds in the words, and blend them together in order to nurture both these skills. The deaf pupil is likely to require additional practice in this activity.

Talking About Sounds

This activity should only be used once oral blending is established, as the pupils are required to count the number of phonemes they can hear in a given word. This activity requires auditory memory skills as the pupils are asked to hold information about the word in their heads while they count up the phonemes. This can be particularly difficult for the deaf pupil, who may need more time as well as additional visual prompts to help with this. Initially you

may need to introduce the deaf pupil to this activity one-to-one before they access the activity within a small group or whole class setting. They will need more opportunities to develop this skill and you should ensure that the words used are within their vocabulary.

Step 2: Single letters and their sounds

We recommend that you read the first chapter of this resource before you read this section, as well as the relevant section in the manual of the programme you are using.

Why this element is included

The single letters and their sounds (grapheme-phoneme correspondence) step is the very important starting point for the systematic teaching of synthetic phonics. Within a stated period of time (given in the manual of the programme you are using), pupils should:

- know and use the sounds for identified groups of single letters
- move on from oral blending and segmentation to blending and segmenting when looking at actual letters and words
- begin to read and spell some vowel consonant (VC) and consonant vowel consonant (CVC) words. Usually the individual letters are presented in groups of four or more and include at least one vowel so that pupils can start blending VC and CVC words after they master the first group of letters
- read some high frequency/'tricky' words (see page 64).

General points to consider

Before beginning work on this step it is important that you use a progress check for phonological awareness with a deaf pupil. If your preferred programme does not have this assessment, your Teacher of the Deaf will be able to recommend one. This thorough pre-phase assessment is necessary to help you identify the areas of phonics work which may require differentiation in order to meet the deaf pupil's individual learning needs. It will also help you to identify the aspects of phonological awareness which need further reinforcement or continuous practice alongside the new letter-sound work.

It is helpful to carry out ongoing assessment in liaison with other relevant staff, such as the pupil's Teacher of the Deaf or speech and language therapist who has undergone further training to work with deaf pupils.

You will probably find that the suggested pace for knowing and using the sounds for single letters suggested in the manual of your programme, will be very challenging for the deaf pupil. A slower pace may be required to ensure the pupil learns and consolidates one set of letters before moving on to the next set.

Learning these basic sound-letter correspondences must be fully mastered before moving on to the next step.

It is possible that the deaf pupil may have less experience of listening activities such as songs, stories and rhymes. If this is the case, you should provide further experience of listening to and identifying rhymes in songs and stories. You should continue these activities alongside the new letter-sound work, possibly with a teaching assistant or as an activity a parent can support in the home.

A deaf pupil may not be able to distinguish between all the speech sounds and/or blend and segment words orally at this stage. However, this does not necessarily mean that they are not ready to begin work on the letters and their sounds. You should discuss this with your Teacher of the Deaf and/or a speech and language therapist who has undergone further training to work with deaf pupils, in order to clarify the appropriate action.

Not being able to recognise and generate rhyming words should not be an automatic barrier to the deaf pupil beginning work on letters and their sounds. However, it indicates that they may require more activities focusing on grapheme-phoneme and visual-auditory correspondence.

Your published programme will usually suggest an order for introducing the single letters and their sounds. You should look at this carefully as it could be helpful to change the order in which letters are introduced. For example, a programme may suggest starting with 's' and 't'. These are both quiet, high frequency sounds which the deaf pupil may struggle to hear, discriminate and say. See page 64 and Appendix A (page 67) for a fuller description of the effect of high and low frequency sounds. You may find it helpful to discuss the sequence of the introduction of sounds with the Teacher of the Deaf and/or a speech and language therapist who has undergone further training to work with deaf pupils.

The use of magnetic letters and whiteboards, in addition to the other activities and games, should lead to improved awareness and understanding of how rhyme, segmenting and blending work.

You will find that, as with phonological awareness, the deaf pupil will benefit from being taught in a smaller group and/or in a quieter room for some of the activities. Such conditions will benefit all pupils when concentrating on listening but are particularly important for your deaf pupil. They will probably benefit from some additional one-to-one adult support to:

- increase the frequency of listening activities
- make the sessions more responsive to the pupil's individual needs
- work on particular sounds
- reinforce particular activities and vocabulary.

When introducing new sounds, a deaf pupil may find it helpful to watch your face in order to look at lip patterns (lip-read). More information about this is given in the first chapter of this resource.

Helping deaf pupils access the activities for Step 2

Sequence of teaching in a discrete phonics session

The usual sequence of teaching in a discrete phonics session (introduction, revisit and review, teach, apply, assess) should suit the needs of all pupils, including deaf pupils. Due to the load on their auditory memory, the deaf pupil may take longer than other pupils to complete some sections.

Introducing letters, blending and segmenting activities may be challenging for the pupil and so additional practice time will be required. They may also benefit from some pre-tutoring of sounds or blending/segmenting activities before trying larger group activities.

Teaching a letter

A deaf pupil could find it difficult to articulate some of the early sounds, for example, they may find 'd' 't' and 's' challenging when they are first introduced.

You should be aware of what you can realistically expect from the deaf pupil with regard to saying and hearing sounds. In order to understand the individual ability of the deaf pupil you may need to talk to the Teacher of the Deaf or a speech and language therapist who has undergone further training to work with deaf pupils. You may find that the deaf pupil will benefit from using a kinaesthetic movement while introducing a letter sound.

Where a deaf pupil uses some form of manual component such as British Sign Language (BSL), Sign Supported English (SSE) or Makaton as part of their communication system, you will need to consider using a visual cueing system which includes hand shapes.

You could also consider using a manual cueing system as a teaching strategy for the deaf pupil even if they do not use sign language. You should always discuss this with the pupil's parents, Teacher of the Deaf or a speech and language therapist who has undergone further training to work with deaf pupils (see Appendix B, page 71).

Choosing a kinaesthetic/visual cueing system

Some published phonics programmes are based on the principle of supporting phonics teaching with kinaesthetic movements/visual cueing systems. You may already be using one routinely with all or some of the pupils in your class and so it may help the deaf pupil to feel included if they can use the same programme, provided they are not already using a different one. As suggested above, such decisions should always be taken in discussion with your Teacher of the Deaf.

If you need to introduce another visual cueing system (see Appendix B, page 71), you could use this system with the whole class or a group within the class.

Any adult using such a system should be sufficiently trained so that they are confident and competent in using it with the deaf pupil. In England, any programme that is used in a supplementary way or as a standalone should comply with the Department for Education Revised Criteria (2010) for high quality phonics work, while bearing in mind that meeting the individual needs of each pupil and ensuring that they make good progress in acquiring key skills is at the heart of all good teaching.

Practising letter recognition

You may need to give the deaf pupil extra time to process the auditory information given in activities used to practise letter recognition or recall, such as the quick-fire use of flash cards or similar activities using an interactive whiteboard.

Practising oral blending and segmentation

The aim is to make sure that the pupil develops faster recall and recognition of letters plus a quicker ability to blend and segment, as these are important skills for reading and writing. It is important to remember that the 'faster recall' of the deaf pupil in your class may not be as fast as that of many hearing pupils. You could find that small group work or one-to-one sessions may be necessary to give the deaf pupil additional practice time to develop the confidence and auditory memory skills necessary for blending and segmenting.

Georgie's Gym/Robot Talk (giving instructions using sound)

This is a variation on the class teacher giving instructions in 'sound talk'. You provide a robot or a soft toy to turn it into a game. The chosen object then says, for example, "stand on one f-oo-t". You may find that a deaf pupil will need extra time to process the auditory information given in this activity.

Bank of suggested words for practising reading and spelling

Remember that some of the suggested vocabulary for use in the CVC word sets may be unfamiliar to the deaf pupil and therefore you will need to provide further explanation, reinforcement or visual support. For example, they may be familiar with the words 'can', 'cap' and 'cat', but not with the words 'cop' and 'cod'.

Using new vocabulary with the deaf pupil

You shouldn't avoid using new vocabulary with the deaf pupil and it is possible that using new vocabulary in the phonics sessions will help to extend their vocabulary. However, you should discuss strategies for this, including the amount and the pace, with the Teacher of the Deaf and/or a speech and language therapist who has undergone further training to work with deaf pupils.

Using non-words

The use of non-words or nonsense words in the teaching of phonics has been the subject of much debate over the years and particularly so in the teaching of deaf pupils. However, using nonsense words is also one of the best ways of assessing actual phonics knowledge (see 'Supporting deaf pupils as they learn

phonics', page 15, for more information). We advise introducing non-words into some of the activities as well as for assessment purposes. Bear in mind the extra difficulty this may bring to the task, and so it may not reflect the deaf pupil's ability to use phonics skills when reading continuous text.

Step 3: Adjacent consonants (consonant blends)

Why this element is included

This step should be mastered relatively easily provided learning of the single letters and their sounds has been fully established and consolidated. This step aims to extend pupils' knowledge of graphemes in the reading and spelling of words by introducing adjacent consonants at the beginning (CCVC) and/or the end (CVCC and CCVCC) of words.

Many phonics programmes will also introduce the pupil to letter names and polysyllabic words around this time.

General points to consider

As this step is about developing, consolidating and strengthening skills already acquired, you will need to change little in the delivery style.

In terms of pace of delivery, you should find that 4–6 weeks is a realistic time frame if the deaf pupil entering this step is able to:

- give the sound when shown the graphemes from Step 2 of this resource
- represent each of the phonemes from Step 2 by a grapheme
- blend phonemes to read CVC and segment CVC words for spelling
- spell the common words from the previous stage (see page 62).

Consonant blends are sometimes taught as 'families', i.e. the teaching of all the words beginning with 'bl', followed by all the words beginning with 'sl' and so on. This is, in effect, suggesting that pupils need to learn new sounds (the 'br' 'sl' 'cr' etc. sounds). This is an unnecessary teaching step as the two letters making up the blend do not change their sound in any way. This is why we now prefer to call them adjacent consonants.

You should ask the pupil to respond to each sound making up the adjacent consonants. This is particularly important for the deaf pupil as it reduces the load on their auditory memory. The deaf pupil, depending on the sounds, may find it harder to hear two consonants together as they are high frequency sounds. Make sure that you are teaching in an area that has good acoustic conditions.

You may need to build in time for assessment of the deaf pupil's current skills and for revision where necessary. You must also make sure that examples chosen for activities can be represented visually where possible.

The deaf pupil may find words more difficult to remember if they are less familiar or harder to represent visually e.g. 'glad' or 'trust'. They may need extra time to consolidate these.

Activities which are focused on speed may be more difficult for the deaf pupil and they may need a longer processing time.

The alphabet names are often introduced through singing and so you may need to introduce the song with visual stimuli in a small group or individual session to ensure that the deaf pupil can 'hear' the sounds clearly.

During the practice recognition and recall activities, it is particularly important to monitor and assess whether the deaf pupil has any gaps and if they are at the level of consolidation. If not, they should be given more time to reach this level.

Step 4: Two-letter and three-letter grapheme-phoneme correspondences (consonant digraphs and vowel digraphs)

Why this element is included

The transition from one letter-one sound (e.g. single consonant giving its sound: 'a', 'c', 's' etc.) to two or more letters making one sound (e.g. 'sh', 'ch', 'th', etc.) is a critical one for all pupils and especially so for the deaf pupil in your class. The main purpose of this step is:

- to teach two-letter and three-letter grapheme-phoneme correspondences e.g. 'sh', 'oa'
- to provide ongoing practice in blending and segmenting CVC words.

General points to consider

By the end of the one letter-one sound stage, including adjacent consonants (Steps 2 and 3 in this document), all pupils, including the deaf pupil, should:

- understand that there is a relationship between graphemes and phonemes/letters and their sounds
- have acquired the basic skills of identifying sounds in words (a prerequisite to segmenting)
- be able to orally blend and segment words
- be starting to show evidence of using the above skills, albeit in a rudimentary way, in their reading/writing.

You will find that most of the above is covered in the assessment contained in your programme and so this, or an equivalent assessment covering the same skills, must be used at this point with the deaf pupil. Careful assessment should help you to identify the skills that require revisiting and mastering from Steps 1, 2 and 3 outlined in this guidance.

Without the essential skills outlined on page 60, it is not advisable to continue with the new two- and three-letter grapheme-phoneme correspondence work covered in this step.

Assessment

Whichever assessment you are using, the following may affect the deaf pupil's performance.

- Oral blending may be more difficult because transitions between phonemes are missing.
- Their phonological development may make clear blending difficult.
- They may not know the difference between real and non-words.

Helping deaf pupils access the activities

Language

If the deaf pupil does not have age-appropriate language, this step could prove even more challenging as they:

- may not understand and be able to respond to some of the 'rapid-fire' strategies (for example yes or no questions) used to establish automaticity in the recognition of graphemes and their sounds
- may not know or understand the language and vocabulary suggested for the sentences that use words containing the letter sounds already covered
- may not know the difference between words that make sense and those that do not
- may not understand the words even though they can blend them. (Although the stated aim is rapid decoding – ultimately all pupils need to read and understand the meaning as that is the final goal. You must monitor and promote language comprehension throughout all the steps.)

Listening difficulties

- When sounds and words are chanted out loud together, the deaf pupil may not hear the sounds or alphabet names sufficiently well to be able to identify them clearly. The acoustic pattern will be 'smudged' as the individual enunciation by different pupils overlaps.
- When pupils are working in pairs and sounding words out, background speech may stop the deaf pupil from hearing clearly.
- The deaf pupil may find it difficult to say sounds in a mood, e.g. sad or happy, as they may not yet have learned to differentiate the nuances of these aspects of speech production.

Auditory memory

You may find that the deaf pupil takes longer to master the skills required for this stage due to the load on their auditory memory. This could especially be the case if you choose to establish letter names at this time using one of the alphabet songs. You may need to use other teaching strategies to help them master the alphabet.

Identify the problem

If the deaf pupil is not mastering a particular activity, it is important to be clear where the difficulty lies.

- Is the activity itself not being mastered? Is it inappropriate for the deaf pupil?
- Is the skill that is being promoted by the activity too difficult? If it is the latter, you should consider alternative teaching strategies.

NOTE
When this step is completed, the essential skills – identifying, blending, segmenting and manipulating of sounds and letters – should be in place and progress will generally occur as expected in any of the published schemes, albeit at a slower pace for the deaf pupil in your class.

From this point onwards, less specific guidance is required, although you will need to bear in mind the general guidance referring to amplification, listening and attending conditions, including the five listening checks on page 14.

Step 5: Split digraphs and alternative pronunciation for graphemes

Why this element is included

Pupils continue to broaden their knowledge of graphemes and phonemes for use in reading and spelling by adding split digraphs and more of the common (high frequency) words. Many published programmes will also include alternative pronunciation for graphemes in this step as well as reading practice of two-syllable and three-syllable words. The main purpose is to ensure that pupils become more fluent readers and increasingly accurate spellers.

General points to consider

No new skills are introduced in this step, instead the skills already acquired are developed and strengthened. Consequently, you need to change little about delivery and content.

Make sure that:

- you continue to carefully consider how activities are delivered to ensure that the deaf pupil is able to access them
- you carefully monitor and assess all activities and progress
- you give the deaf pupil as long as is needed to assimilate this new knowledge (this may be longer than indicated in your scheme)
- you give enough emphasis to developing the deaf pupil's ability to read high frequency words through a combination of decoding and sight recognition (see page 64)
- the deaf pupil understands as well as recognises new words before they are used
- you take time to introduce new and different pronunciation of known graphemes.

When teaching alternative pronunciations, a pupil is often initially encouraged to try out the alternative pronunciations of graphemes in order to select the correct one. This activity places a significant load on the auditory memory which may not be so well developed in a deaf pupil. Due to the lack of opportunities for incidental learning, a deaf pupil will not have had the opportunities to overhear the correct word, meaning that the task will be quite demanding. It may be helpful to ensure the target words are always presented in context.

Phonics is the step up to fluent word recognition. Automatic, effortless reading and understanding of all words – those that are easily decoded and those that are tricky – is the ultimate goal.

Helping deaf pupils access the activities

Most of the activities suggested in your published scheme will be useful and accessible for the deaf pupil, although you may need to carefully manage those designed to increase the speed of response. The deaf pupil may need more time to process a known word than other pupils, even if the word is known equally well by all of them.

Phoneme Spotter

This is a useful activity which requires the pupils to listen to a story and to make an agreed signal when a specific phoneme (that you choose) is heard.

This may be a very useful activity for a deaf pupil although it could prove to be very difficult. It will help them to enhance their listening skills as well as improve their spelling. You will have to carefully consider how to introduce this activity in order to make sure that the deaf pupil has the opportunity to apply their own skills and is not consistently beaten to the answer by a pupil who is able to process the auditory information more quickly.

NOTE

Teaching high frequency and common/key words

You are teaching phonics as a means of achieving word recognition and so that with practice, a pupil can ultimately achieve automaticity or instant recognition of as many words as possible.

There are 100 words (see Appendix D, page 78) that make up a significant proportion of all the reading material for young children. Many of these words (e.g. up, in, on, not, had) are phonically regular and can be decoded from an early stage. Some are not and are often classed as 'tricky' words for one of two reasons:

- although phonically regular, their grapheme-phoneme correspondence is more advanced than the stage the pupil is at, e.g. at Step 2 the pupil would not be able to work out 'came' and 'down'
- some will have 'tricky' parts that cannot be decoded, e.g. could, people.

Most published phonics schemes will suggest teaching these words from Step 2 onwards and most will suggest which high frequency words to introduce at each stage. It is important to follow the order suggested in your programme as the additional teaching materials will ensure optimum exposure to the high frequency words being introduced.

Teaching high frequency words

Most schemes will suggest the following sequence of steps:

- introduce target word in context
- isolate the word on a card or whiteboard
- 'sound talk' the word, identifying any part that can be phonically decoded
- identify and discuss the 'tricky' part, if any
- read the word
- frequent exposure to the word to gain instant recognition
- practice in writing the word.

The deaf pupil and high frequency words

It is appropriate to teach deaf pupils high frequency words, but be aware that some of the words introduced in the phonics scheme may not yet be a part of the deaf pupil's regularly used vocabulary. It is important that the word is initially introduced in as many different contexts as possible – a caption, phrase, sentence and story.

Identifying the 'tricky' part of a word (e.g. in 'said', 'ai' would be the tricky part) or focusing on particular known letter patterns within words (e.g. 'oo' would be the known letter pattern in 'looked') are good strategies that will be in general use in the classroom. You can use them successfully with a deaf pupil.

The deaf pupil may need to spend longer on each stage of the teaching sequence outlined above than many of the other pupils in the class.

You should discuss specific approaches with the Teacher of the Deaf and/or the speech and language therapist who has undergone further training to work with deaf children.

By this step the deaf pupil should know most of the common grapheme-phoneme correspondences. They will, however, still need regular practice to achieve mastery of phonics knowledge in order to continue to develop their reading and spelling skills.

Reading

It is expected that all pupils will gain fluency and confidence in reading longer and less familiar texts independently. You need to be aware of:

- the developmental level of the deaf pupil's language and communication skills (age of diagnosis, when the pupil started using hearing aids or implants, additional difficulties, etc.)
- the need for the deaf pupil to revisit and reinforce vocabulary and the need for opportunities to transfer that knowledge to different contexts
- the need for the deaf pupil to continue reading aloud for longer as it reinforces their understanding of the text as well as developing clarity of speech.

You must remember that:

- the pace may differ between the deaf pupil and other pupils, especially in a guided reading session
- depending on the degree of hearing loss, the deaf pupil may have difficulty placing stress in polysyllabic words and so they may need pre-tutoring and opportunities and activities for reinforcing vocabulary
- reading 'between the lines' is a skill that needs to be taught very early on to a deaf pupil – through pictorial cues initially and then through text.

Spelling

You need to be aware that a deaf pupil:

- may need to be taught word endings explicitly, such as the past tense, especially for writing purposes
- can benefit from being taught the terminology (prefix, suffix, phonemes, graphemes, digraphs, syllables, base words, analogy, mnemonics, contractions).
- will benefit from being taught the spelling patterns and rules for writing purposes. The deaf pupil should now be well on their way to reading fluently and with understanding.

Appendices

3

Appendix A: Understanding audiograms

In order to understand what sorts of sounds and what level of loudness a deaf pupil can hear, it is useful to understand what their audiogram means. An audiogram is a chart used to record the results of hearing assessments and is a visual representation of the pupil's hearing. It demonstrates the softest sounds that the pupil can hear in each ear, from the low-pitched through to the high-pitched sounds. It should show the pupil's level of hearing with and without a hearing aid or implant.

Figure A1 shows an audiogram chart before the pupil's hearing has been plotted on it. An audiogram represents the softest sounds at the top and as you move down, the sound level gets louder and louder.

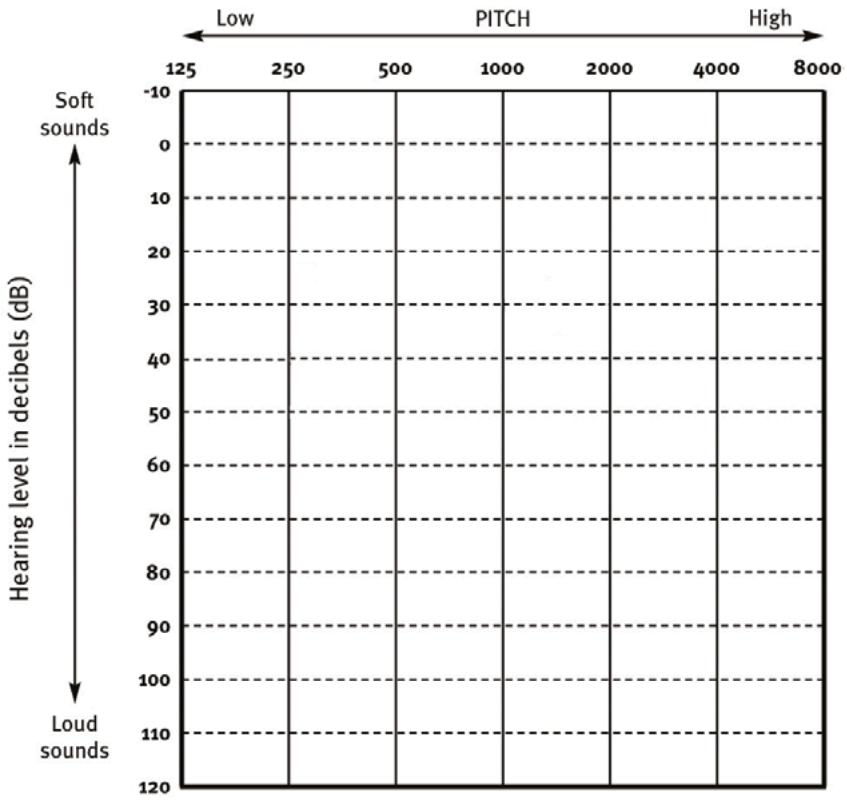

Figure A1 – audiogram chart showing sound and pitch levels

The chart also represents the pitch of sounds. To the left of the graph are the lower-pitched sounds which get higher and higher as you move towards the right of the graph.

Figure A2 shows where our basic speech sounds would be placed on an audiogram.

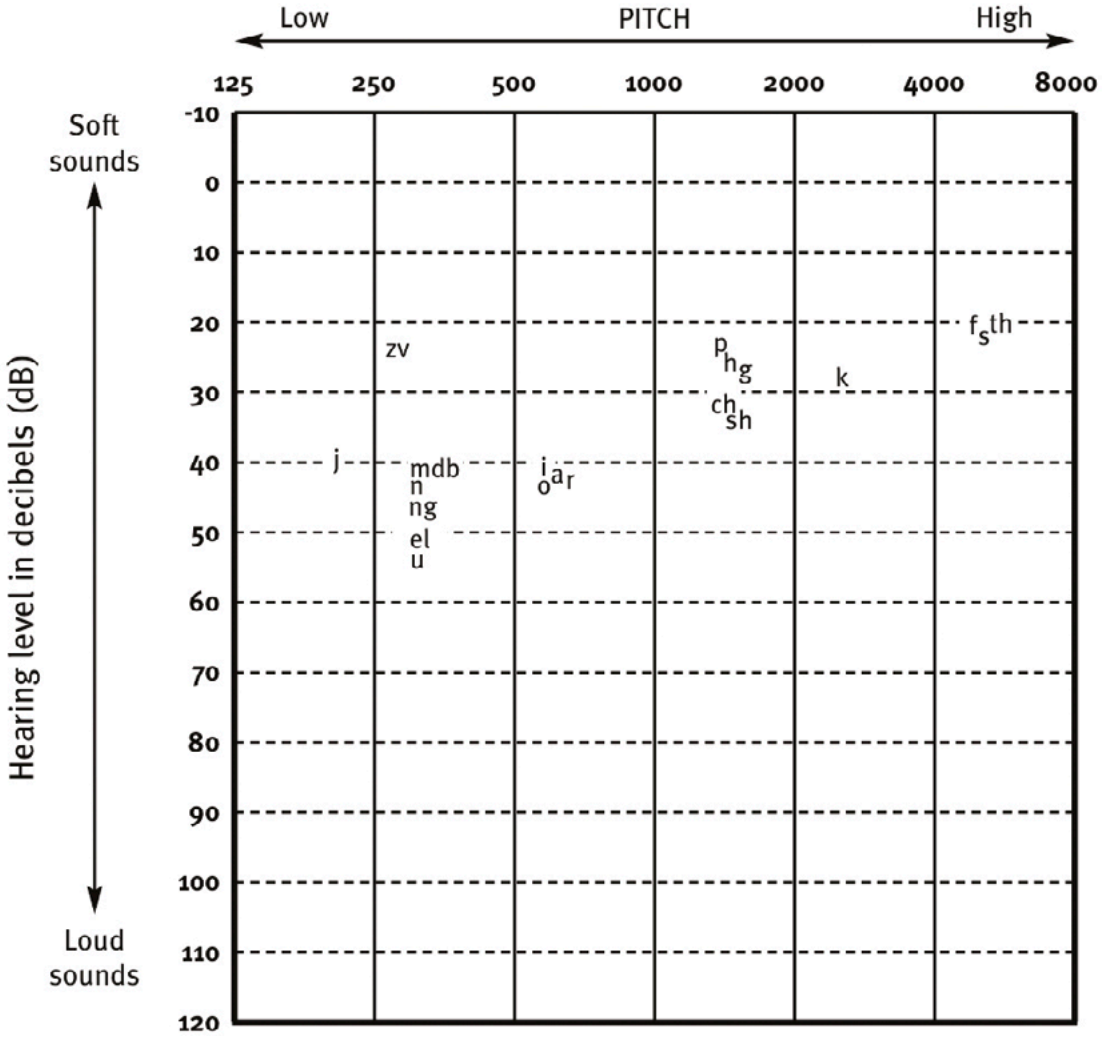

Figure A2 – audiogram with basic speech sounds plotted

Figure A3 shows where our basic speech sounds lie when engaging in typical conversation, as well as visually representing a range of everyday sounds.

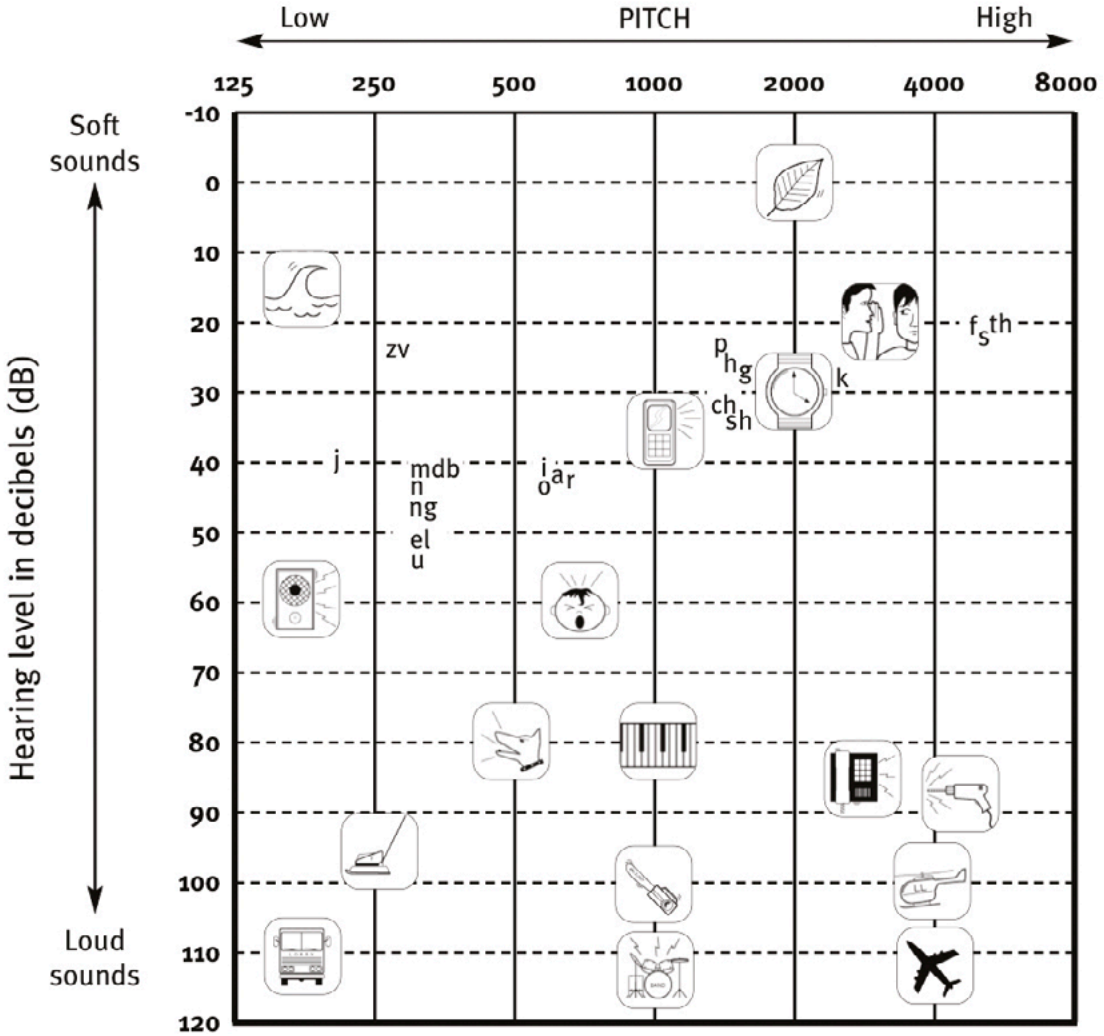

Figure A3 – audiogram with visual representation of the loudness and pitch of a range of everyday sounds and letter/speech sounds

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

Figure A4 illustrates how a hearing loss affects speech comprehension by superimposing the audiogram of a pupil with moderate hearing loss over the speech sounds area. The screened area lies below the pupil's threshold of hearing, i.e. what they cannot hear.

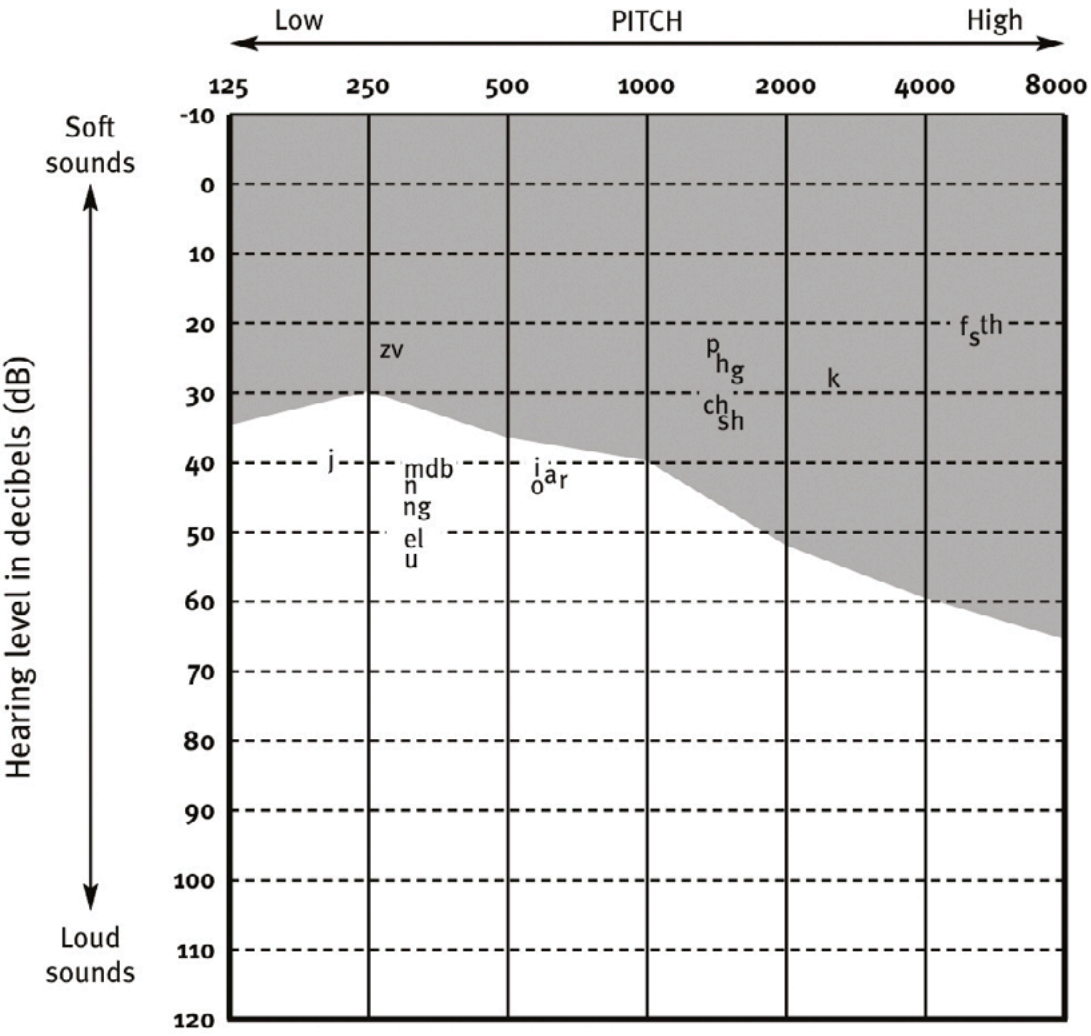

Figure A4 – how hearing loss affects the sounds we can hear

What you can do now

You can compare the audiograms of the deaf pupil in your class with the speech sounds as shown in Figure A4 above.

Appendix B: Visual phonics systems

Cued Articulation	
How does it work?	Works only at single sound level. Designed to teach articulation but can be used to sign the different sounds in phonics. Based around the 44 phonemes.
How is it used?	Used largely by speech and language therapists. Also used by Teachers of the Deaf to teach basic phonemes, especially those that are hard for deaf pupils to discriminate.
How can I learn more about it?	Chart available with different signs. Two books available from Stass Publications – *Cued Articulation* and *Cued Vowels* by Jane Passy.
Other information	Developed in Australia by Jane Passy.

Cued Speech	
How does it work?	Created to give visual access to spoken languages in real time by representing every sound in every word as they are spoken. Hearing speakers cue so that the deaf child has the additional information to enable them to lip-read accurately and develop a mental model of the language. Can also be used to indicate discrete phonemes to support the teaching of phonics. Uses eight hand shapes to clarify consonants and four positions near the mouth to clarify vowels together with the lip patterns of normal speech.
How is it used?	Research suggests it is most effective when used from infancy. Also may be effectively introduced to a deaf child starting school, or to older (even secondary aged) deaf children. The adult cues the sounds/words and there is no expectation that the child will cue but some pick up the cueing expressively and may use it themselves, particularly when first reading.
How can I learn more about it?	Takes approximately 20 hours to learn the system (longer to become fluent, but this develops through use). Can learn online at **www.learntocue.co.uk**. Advised to have some face-to-face tuition – for available courses go to **www.cuedspeech.co.uk**.
Other information	Original system developed at Gallaudet University by Professor Orin Cornett. Now linked up to THRASS (a published programme for teaching handwriting, reading and spelling skills) and there is a free download of the Phoneme Machine which has a Cued Speech option (available from **www.thrass.co.uk**). Most effective when used with adult supervision.

Jolly Phonics	
How does it work?	Teaches letter sounds in a multisensory way. Each sound (phoneme) has a fun action that helps the pupil remember the letter being taught, e.g. 'm' is signed by rubbing the tummy and saying "mmmm".
How is it used?	Generally used in the early stages of learning to read. It is a mainstream resource, but actions can help deaf pupils discriminate sounds. Actions do not focus attention on lip movements and so Jolly Phonics does not aid lip-reading in the same way as the other three resources.
How can I learn more about it?	Detailed handbook available and one-day training courses. Information at **www.jollylearning.co.uk**.
Other information	If Jolly Phonics is already in use in your mainstream school, it is worth trying it with the deaf pupil in your class. If it does not achieve the desired outcomes, you can then try one of the other resources.

Visual Phonics by Hand	
How does it work?	Uses fingerspelling as a starting point. The routine is: • fingerspell the sound • take the letter to a position around the mouth or throat and say the sound.
How is it used?	Not aiming to be a communication system. Aims to provide a quick, easy and logical way to represent the phonemes for reading and spelling, reflecting the manner and placement of the sound.
How can I learn more about it?	Longwill School provides training courses and a training film. Go to **www.visualphonicsbyhand.com**.
Other information	Pupil needs to learn fingerspelling beforehand.

Appendix C: Baseline information recording form

(To be completed when planning a phonics programme for a deaf pupil)

Name of pupil .....
Date of birth ..... Year group .....

Hearing loss (tick as appropriate) ❑ Temporary ❑ Mild ❑ Moderate ❑ Severe ❑ Profound
❑ Unilateral ❑ Bilateral

Hearing aid(s), implant(s) and technology used (tick as appropriate)
❑ Digital hearing aids ❑ Cochlear implants ❑ Bone conduction hearing implants
❑ Radio aids ❑ Soundfield systems
❑ Other (please state which) .....

Professional contacts
Teacher of the Deaf (ToD)
Name .....
Contact details .....

Speech and language therapist
Name .....
Contact details .....

Preferred communication modes (tick as appropriate)
❑ British Sign Language (BSL) ❑ Cued Speech ❑ Fingerspelling
❑ Lip/speech-reading ❑ Signed English ❑ Sign Supported English (SSE)
❑ Spoken English (or other language) ❑ Total Communication (using a combination of methods flexibly)
❑ Other (please state) .....

Any other information/comments:

Listening skills (current level)

Language and speech skills and levels (note date, name and outcome of any assessments)
Receptive

Expressive

Literacy skills and levels (note date, name and outcome of any assessments)

Writing and spelling levels (note date, name and outcome of any assessments)

Any additional needs (include social, emotional etc.)

Phonological development and awareness levels
(note date, name and outcome of any assessments)

Name of phonics programme ..... Date started .....
Comments on progress

Areas to consider when delivering the programme

Completed by ..... Date .....

Appendix D: First 100 high frequency words

First 100 High Frequency Words

in frequency order reading down the columns

the	that	not	look	put
and	with	then	don't	could
a	all	were	come	house
to	we	go	will	old
said	can	little	into	too
in	are	as	back	by
he	up	no	from	day
I	had	mum	children	made
of	my	one	him	time
it	her	them	Mr	I'm
was	what	do	get	if
you	there	me	just	help
they	out	down	now	Mrs
on	this	dad	came	called
she	have	big	oh	here
is	went	when	about	off
for	be	it's	got	asked
at	like	see	their	saw
his	some	looked	people	make
but	so	very	your	an

hfw100fp.pdf Design © www.highfrequencywords.org Precursive

Resources

4

National Deaf Children's Society information resources

These are available to download from our website at **www.ndcs.org.uk/publications** or you can order printed copies from our Freephone Helpline on 0808 800 8880 (voice and text) or by emailing helpline@ndcs.org.uk.

Supporting the Achievement of Hearing Impaired Children in Early Years Settings

Supporting the Achievement of Deaf Children in Primary Schools

www.ndcs.org.uk/supportingachievement

Our Supporting Achievement resources give simple tips for mainstream teachers and other education staff to follow to ensure that deaf pupils can access your teaching. Many of the tips included in these resources will benefit all pupils in your setting.

Here to Learn

A video resource for use by schools. It includes simulations of hearing loss and interviews with deaf children, parents and professionals and gives practical advice on small simple changes that can be made to ensure deaf pupils are fully included in school life. Clips can also be viewed online at **www.ndcs.org.uk/heretolearn**.

Phonics and the Development of Your Child's Reading and Writing Skills

A factsheet for parents who would like to know more about phonics, and how it can be used to help their child learn to read and write. It has information on how phonics is taught and how parents can support this. **www.ndcs.org.uk/phonics**

Helping Your Deaf Child to Develop Language, Read and Write (3–4 years old)

Helping your Deaf Child to Read and Write (5–7 years old)

www.ndcs.org.uk/family_support/education_for_deaf_children/education_during_school_years/developing_reading.html

Resources to help parents of deaf children of different ages to support their child's language development and literacy skills.

Creating Good Listening Conditions for Learning in Education

www.ndcs.org.uk/acoustics

A range of resources to provide education professionals with practical advice on how they can improve the acoustic conditions within the school or setting.

Simulations of the effects of hearing loss can be found at: **www.ndcs.org.uk/simulation**.

Mild hearing loss, major impact: resources for teachers

www.ndcs.org.uk/mildmoderate

A booklet and short, online video describe the impact a mild hearing loss has on a pupil in the classroom, and what teachers can do to make sure deaf pupils can hear as well as possible.

Other resources

Building Bulletin 93: Acoustic design of school – performance standards

Government guidance which provides advice to those involved in the planning and building of new schools and ensuring that acoustic performance targets are met. **www.gov.uk/government/publications/bb93-acoustic-design-of-schools-performance-standards**

The Ewing Foundation

Ewing Foundation consultants and technicians work with Teachers of the Deaf and other professionals to help deaf children succeed in a variety of settings. **www.ewing-foundation.org**

Sounding Board

Sounding Board provides a service for professionals working to help children and young people with cochlear implants to succeed. **www.soundingboard.earfoundation.org.uk**

South East Regional SEN (SERSEN) (now part of the National Sensory Impairment Partnership (NatSIP)

Mapping the Way is now found on the NatSIP website at **www.natsip.org.uk**. To log in or register go to Documents Library and then to SERSEN/SESIP Document Archive.

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

Freephone Helpline: 0808 800 8880 (voice and text)

helpline@ndcs.org.uk

www.ndcs.org.uk/livechat

www.ndcs.org.uk

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