Children who are deaf

General information

The term deaf refers to all types and degrees of hearing loss. This includes:

- Congenital (pre-lingual)
- Acquired (post-lingual)
- Permanent sensori-neural
- Temporary conductive loss (glue ear/otitis media)
- Auditory Neuropathy Spectrum Disorder
- High frequency vs. low frequency losses
- Unilateral losses

Degree of loss may vary from mild, moderate, severe to profound.

The term deaf includes all deaf children irrespective of how they communicate, orally or through Cued Speech, a signed system or sign language.

Helping to access the phonics screening check

Some deaf children will have real difficulty accessing the phonics screening check, as they do not have the phonological awareness skills necessary for speech and literacy and disapplication may need to be considered for these children. Other children may have acquired an appropriate level of phonics through, for example, Cued Speech and may be able to undertake the screen.
<table>
<thead>
<tr>
<th>Possible issues</th>
<th>Ways to help</th>
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<tbody>
<tr>
<td><strong>Level of hearing impairment</strong></td>
<td>Instructions should be delivered in an appropriate mode (signed/spoken/Cued Speech etc.), and at an appropriate level, for the receptive and expressive language levels of the child.</td>
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<td>Ensure any hearing aids or other hearing technology used, are in good working order immediately prior to the screen.</td>
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<td>Ensure visual distractions are low and use visual cues, if these are used by the child.</td>
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<td><strong>The child may have delayed language, depending upon the time of diagnosis and the communication environment</strong></td>
<td>Staff administering the phonics screening check should be aware of the child's language and vocabulary levels to ensure the screen is suitable for their language level.</td>
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<td><strong>Recent change in hearing aid technology, for example a change in cochlear implant setting, new hearing aids, one rather than two aids worn</strong></td>
<td>Take advice from the teacher of the deaf as to whether or not this will affect the child's access to the check.</td>
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<tr>
<td><strong>The child may only be able to access certain sounds, and therefore demonstrate limited listening and discrimination ability in the screen</strong></td>
<td>Level of listening and discrimination skills should be known before checking.</td>
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<tr>
<td><strong>Listening conditions will impact on access</strong></td>
<td>Ensure that listening conditions are optimum, reduce background noise, reduce reverberation, light on check administrator’s face for lip reading, and seat checker sitting no more than three feet from hearing aids or use of Radio Aid.</td>
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<td><strong>They may have a phonetic/articulation difficulty, but nevertheless a contrastive sound system. For example, to signal ‘s’ they may use teeth together position, but without sound</strong></td>
<td>It may be advisable to video responses from some deaf children, if this does not cause undue anxiety so that non-speech sounds and lip patterns are acknowledged.</td>
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<td><strong>Children may have letter recognition, but no grapheme phoneme correspondence and an inability to blend because of poor auditory memory</strong></td>
<td>Give the child more time to respond.</td>
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Teachers teaching phonics to children known to be deaf or to have hearing impairment should consider the following, in discussion with parents and with the Teacher of the Deaf:

- Can we introduce a visual system from entry into the reception class, or is a universal visual system, such as Jolly Phonics, already in use?
- Can a phonological awareness programme be introduced with phonics?
- Deaf children learning to read may benefit from wider or additional approaches than just synthetic phonics, such as programmes like THRASS, which incorporates a whole word approach
- Some deaf children acquire phonics at a delayed rate, while others may require specialist support/individualised programs; therefore programs should be flexible
- Has the school received training regarding the deaf child’s ability to listen and discriminate?
- Does the school have a multi-sensory approach, with resources, appropriate for deaf students?

### The outcome of the check

With improved neonatal screening for deafness and much improved hearing aid technology, more deaf children are accessing spoken language, given the appropriate strategies and therefore should be accessing phonics. Where teachers have queries about individual children they should contact their Teacher of the Deaf.

Some deaf children will attempt the task, but due to poor speech and a reduced sound system, resulting from reduced auditory discrimination skills, they may make errors. It may be difficult to judge if children don’t know the phoneme associated with the grapheme or just can’t produce it. The following are possible outcomes:

- Depending on hearing loss some sounds will be harder to hear than others
- Some sounds, although they may be hard to hear, are very visible on the speaker’s lips, so certain phoneme/grapheme correspondences are easier
- There are groups of sounds that are visually similar ‘f/v’, ‘p/b/m’, ‘th/the’, ‘t/d/n’, ‘ch/sh’, etc and these may be confused; words that sound different can look the same on the speaker’s lips such as ‘pan/man’, ‘cap/cab’, ‘fan/van’. Therefore these constitute typical errors for children with hearing impairments
- Common errors include voicing of consonants ‘f’ to ‘v’ and ‘p’ to ‘b’ etc; lack of friction for some sounds, for example ‘f’ to ‘p’ and ‘s’ to ‘t’; missing out sounds like ‘f’, ‘v’ ‘s’ and ‘sh’, as they are less audible; omitting unstressed sounds

Guidance from a speech and language therapist or Teacher of the Deaf will help to identify if the child’s response is likely to be an accurate reflection of their phonic skills.
Responding to the outcome of the check

Approaches to support the literacy development of children who are deaf

In teaching phonics to the deaf or hearing impaired child the following should be considered:

• Give the child longer time to respond to phonic decoding tasks, due to the heavy load on auditory memory

• The first sounds taught in the phonics programme should be those that can be most easily discriminated by the deaf child, therefore some flexibility in the programme for the deaf child should be allowed

• Consider the child’s ability to discriminate general and environmental sounds; identifying rhythm, rhyme, alliteration, intonation, voice sounds, oral blending and segmenting, as well as syllabification, before embarking on phonics

• Consider the need to give more kinaesthetic feedback by manipulating letters and using a visual cueing system such as Cued Speech, or visual phonics system such as Visual Phonics by Hand

You may find additional information on visual cueing and visual phonics useful – for example: www.cuedspeech.co.uk and www.visualphonicsbyhand.com

An evidence resource to inform next steps

Without enough understanding of spoken language, deaf children are unable to become fully literate, vastly reducing their ability to achieve at school and beyond. Some research claims most deaf children leave mainstream school at 16 with a reading age of 9.65

2011 SATS results for English at the end of Key Stage 2 showed that only 55% of deaf children reached the expected standard compared to 93% of their hearing peers with no identified SEN.

Research has also suggested that deaf individuals may be at a disadvantage when compared to hearing peers in the area of working memory.66

However, research has shown that deaf children with early and consistent exposure to cueing develop a phonological representation of words in their language, and can learn phonics generalisations for spelling in the same way as hearing children who speak the language.67

Research68 found that ‘given 1 year of instruction from a phonics-based reading curriculum supplemented by visual phonics, kindergarten and first grade students who are deaf or hard of hearing can demonstrate improvements in beginning reading skills as measured by standardized assessments of a) word reading b) pseudo word decoding and c) reading comprehension.’

65 Gregory et al., 1995
66 Marschark & Mayer, 1998
67 Leybaert & Charles, 1996; Leybaert & Lechat, 2001
68 Trezak (2006)
Additional resources and further support

Publications and resources:
Phonics Guidance for the teaching of phonics to deaf children (BATOD, Ear Foundation, Ewing Foundation and NDCS)
www.ndcs.org.uk/professional_support/news/get_our_updated.html

Cued Speech - www.cuedspeech.co.uk

Thrass – www.thrass.co.uk

Dasl II Developmental Approach to Successful Listening II by Gayle Goldberg Stout and Jill Van Ert Windle

Visual phonics by hand Babs Day, Longwell school

Organisations and websites:
National Deaf Children’s Society – www.ndcs.org.uk

The British Association of Teachers of The Deaf – www.batod.org.uk

DELTA - www.deafeducation.org.uk

Royal College of Speech and Language Therapists – www.rcslt.org.uk

Action on Hearing Loss (RNID) - www.actiononhearingloss.org.uk

British Deaf Association - www.bda.org.uk

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

The Ear Foundation - www.earfoundation.org.uk