

Creating good listening conditions for learning in education

We use the term 'deaf' to refer to all types of hearing loss from mild to profound. This includes deafness in one ear or temporary hearing loss such as glue ear. We use the term 'parent' to refer to all parents and carers of children.

Introduction

This information will help you to understand why good listening conditions are important in education, and what can be done to improve them. The need for good listening conditions begins right after birth, where having a quiet environment in the home where you can talk to and play with your child will help to develop their understanding of sounds and language. Once your child starts going to nursery a quiet environment will become much more difficult to achieve and this sudden change can be very challenging. The listening conditions, or acoustics, of a nursery or school will therefore be very important for your child.

Why good listening conditions are important for learning

As adults we know it can be difficult to understand speech in noisy situations such as a busy restaurant or if there is construction work outside a window. School and nursery classrooms can also be very noisy.

Children can spend more than half the school day just listening, so good listening conditions are essential if all children are to access teaching and learning and be fully included in school life. Research* has demonstrated that there is a link between attainment and good acoustics for both deaf and hearing pupils – and poor classroom acoustics can be particularly challenging for children with glue ear or a permanent hearing loss. Poor acoustics can also make it difficult for deaf children to make the best use of their hearing aids and cochlear implants, as they amplify all noises in the classroom, not just the teacher's voice. These noises can drown out the teacher and may mean that the child misses much of the lesson.

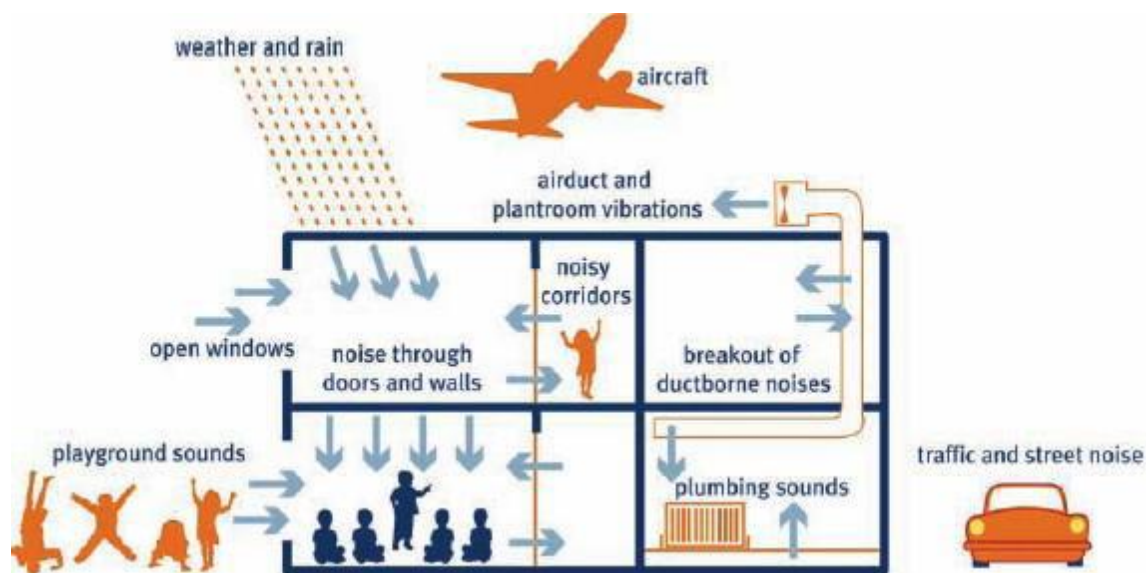
For a child to understand what is being spoken, the teacher's voice needs to be louder than the background noise. If the classroom is too noisy most teachers will have difficulty speaking loud enough to enable good understanding. As adults, because of our knowledge of language, we are able to fill in the gaps where we haven't heard the full message. Children have a more limited language and are therefore less able to fill in the gaps. In addition, many classrooms produce an echo effect which prolongs sounds, making listening more difficult.

Echo occurs when the sound from the source has stopped, but reverberations from the

*Shield, B.M. and Dockrell, J.E. (2008) The effects of environmental and classroom noise on the academic attainments of primary school children. *Journal of the Acoustical Society of America* 123(1), 133-144

sound continue in the room. If the surfaces in the room are hard then the sound may bounce around the room, arriving at the child's ear at different times and making it difficult to listen to the message. If we can make the surfaces more absorbent of sound this can help reduce the echo.

A simulation of what a noisy classroom sounds like to deaf children is online on the National Deaf Children's Society website at www.ndcs.org.uk/simulation.



What should I look at before my child starts nursery or school?

- Make sure you visit the school or nursery during an ordinary working day so you can hear for yourself how noisy it is when all the children are in.
- Talk to staff about any quiet areas that are used for small group or individual work.
- Talk to staff about how much of the day is formally teacher-led, such as story time, when the general background noise would be less.
- Find out if there is any technology that could help your child – such as radio aids or soundfield systems.
- Make sure that the person responsible for special or additional needs in your school (known in England as a special educational needs co-ordinator) and teacher have been told of your child's hearing loss and that the school and local authority (or Education Authority in Northern Ireland) are aware of any possible modifications that would have to be made.
- Ask about support available from the Teacher of the Deaf to ensure rooms are good listening environments and that your child has the necessary support.

Possible questions to consider

Are you concerned about the impact of listening conditions on your child's learning? Some possible questions to consider include the following:

- Does your child come home from school or nursery often complaining that the class is too noisy, and that she cannot hear the teacher or her friends?

- Ask your child how well they can hear what their teacher and friends are saying.
- Ask whether they have more problems in one classroom or area than another.
- Does your child report that other children in her class cannot hear what the teacher is saying? Have you sought views from your child on the listening conditions at their school? Example pupil interview surveys are available on the National Deaf Children's Society website at www.ndcs.org.uk/acoustics.

What can be done to improve acoustic conditions in my child's school?

Under the Equality Act 2010*, schools and nurseries in England, Scotland and Wales have a duty to make reasonable adjustments to ensure disabled pupils are not disadvantaged because of their disability. Schools also have to plan better access for disabled pupils. This includes improving the physical environment of the school such as improving acoustics. The National Deaf Children's Society factsheet *The Equality Act and Your Deaf Child's Education in England, Scotland and Wales* gives more information about the powers of the Equality Act 2010.

Examples of reasonable adjustments, and simple cost-effective improvements, that could be made to classrooms include:

- making sure doors are shut when teaching
- turning off electrical equipment that is not being used
- using fabric in classroom wall and table displays to absorb sound
- fixing plastic buffers on chair or table legs to reduce the noise of scraping chairs
- suspending displays from the ceiling to reduce reverberation
- having as many carpeted areas as possible
- fitting double glazing
- fitting specialist acoustic boarding to ceiling or walls.

If further improvements are needed or you have any concerns, you could consider:

- talking to your local Teacher of the Deaf about advice and support they can offer
- asking the school or local authority for an acoustic review of the classroom from a professional acoustician.

Assistive technologies such as radio aids and soundfield systems can help – but should be additional to, not instead of good acoustics.

More information

Here to Learn is a series of video clips produced by the National Deaf Children's Society for mainstream school staff who have little or no experience of working with deaf children. The clips include 'Reducing background noise' and 'Good acoustics'.

www.ndcs.org.uk/heretolearn.

Our booklet *How Radio Aids Can Help* provides more information about how technology can support your child's listening in the classroom. More information is at

*Please note that the Equality Act 2010 does not apply in Northern Ireland. However, it is still considered good practice to take the above steps to support good listening environments.

www.ndcs.org.uk/family_support/technology_and_products/technology_at_school/index.html

We have also produced a range of resources on good listening environments for teachers and other professionals. These are available online at www.ndcs.org.uk/acoustics.

This information can be requested in large print or as a text file.

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Next review due: [month, year]

For resource references or to give us your feedback email

informationteam@ndcs.org.uk or visit

www.surveymonkey.co.uk/r/informationfeedback

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