

# Listening Environments

## Listening Environment Questionnaire

Some children find it difficult to listen when there is background noise. Having a good listening environment is important to help children develop their speech and language skills and to help them access learning.

Some settings can have poor acoustics such as rooms with high ceilings which can produce an echo. This can make it more difficult for children to listen.

This questionnaire is designed for staff to assess the listening environment in the setting they work in. The idea is to try to improve the listening environment for children who struggle to hear in background noise.

Use the questionnaire below to take a snapshot of the setting during a typical day.

1) Describe the setting	Yes (Tick)
<i>Is the setting open plan?</i>	
<i>Does it have high ceilings?</i>	
<i>Does it have double glazing?</i>	
<i>Does it have hard floors?</i>	
<i>Are there windows without blinds/curtains?</i>	
<i>Does it have hard display boards?</i>	
<i>Does it have hard display tables without fabric?</i>	
<b>Score: (number of ticks)</b>	

2) Noises in the setting (close your eyes and take a snap shot) can you hear any of the following.....	Yes (tick)
<i>Computers, monitors and printers</i>	
<i>Fluorescent strip lights</i>	
<i>Corridor noise</i>	
<i>Digital projector</i>	

<i>Heaters/central heating</i>	
<i>Air conditioning/fans</i>	
<i>Nearby toilets</i>	
<i>Clattering pens/pencils</i>	
<i>Scraping chairs and/or tables</i>	
<i>People talking</i>	
<b>Score: (number of ticks)</b>	

<b>3) Noises outside the room (close your eyes and take a snap shot) Can you hear any of the following coming from outside the room...</b>	<b>Yes (tick)</b>
<i>Noises from outdoor play</i>	
<i>Traffic/grass cutting</i>	
<i>Noise from other rooms</i>	
<b>Score: (number of ticks)</b>	

<b>4) Adult Interaction Style</b>	<b>Yes (tick)</b>
<i>Is the distance between staff member and child 4 metres or more?</i>	
<i>Do staff in the room get children's attention first before speaking?</i>	
<i>Do staff ever talk without facing the child?</i>	
<i>Do staff walk around when talking?</i>	
<b>Score: (number of ticks)</b>	
<b>Total number of ticks across all areas:</b>	

Use the completed questionnaire to identify any areas which would benefit from modification:

- Any area with more than 3 ticks could benefit from modification.
- Use the recommendations below to consider modifications for each area.
- Once modifications have been completed the questionnaire should be completed again to show change.
- The number of ticks across all areas should decrease if relevant changes have been made.

## Recommendations:

1) Room description: Why?	Recommendations:
Rooms with high ceilings and hard surfaces cause reverberation (Sounds to bounce around). This can distort the child's ability to listen.	<ul style="list-style-type: none"> <li>• Acoustical modifications may be considered to create a good listening environment (e.g. carpet, curtains, and other sound absorbing materials).</li> <li>• Position bookshelves/display boards against thin partition walls.</li> <li>• Line partition curtains with acoustic fabric.</li> <li>• Consideration of room sound-field system.</li> <li>• Replace poorly fitted internal doors.</li> <li>• Build acoustic partition walls or add doors into open plan buildings.</li> <li>• Use display drapes on walls.</li> <li>• Cover hard surfaces with fabric.</li> <li>• Angle display boards downwards by allowing a gap from the wall at the top of up to 10cm.</li> <li>• Create a quiet listening environment with bean bags and cushions.</li> <li>• Fit vertical blinds to the windows.</li> <li>• Acoustic panels above display boards in rooms with high ceilings could be considered.</li> </ul>
2) Noises inside room Why?	Recommendations:
Adults are much better at filtering out background noise than children.	<ul style="list-style-type: none"> <li>• Turn off IT equipment when not in use or move it.</li> <li>• Reduce distractions, both auditory and visual.</li> </ul>

It is harder for children with a hearing loss or identified listening difficulties to listen in background noise.	<ul style="list-style-type: none"> <li>• Encourage children to be aware of how room noises can impact on hearing.</li> <li>• Liaising with colleagues in shared open plan areas to keep the noise to a minimum.</li> <li>• Try to reduce corridor noise by creating silent zones in corridors.</li> <li>• Avoid the child sitting near noise sources.</li> <li>• Put fabric in the bottom of pencil pots to reduce clattering sounds.</li> <li>• Use rubber tips or 'hush ups' on the bottom of chairs/table legs.</li> <li>• Make children aware of back ground sounds by using noise level metres e.g. 'It's so noisy' app.</li> </ul>
<b>3) Noises outside the room Why?</b>	<b>Recommendations:</b>
Adults are much better at filtering out background noise than children. It is harder for children with a hearing loss or identified listening difficulties to listen in background noise.	<ul style="list-style-type: none"> <li>• Ensure windows are shut where possible to reduce sounds from outside.</li> <li>• Consider use of quiet locations/spaces for the child to play in where outside noise is too loud.</li> <li>• Avoid sitting the child near competing sound sources e.g. computer monitors or outside.</li> </ul>
<b>4) Adult Interaction Style Why?</b>	<b>Recommendations:</b>
A student with a hearing or listening difficulty will benefit from additional visual information to support the information they are receiving from listening.	<ul style="list-style-type: none"> <li>• Make sure the child is seated appropriately: near the front of the room where your lip pattern is visible.</li> <li>• Ensure the child can see the book/picture/object so they can access visual information more easily.</li> <li>• Check understanding by getting the child to repeat back what you have said to them.</li> <li>• Sit the child near the important sound source.</li> <li>• Avoid sitting the child near competing sound sources e.g. computer monitors or outside noise.</li> </ul>

	<ul style="list-style-type: none"> <li>• Try not to talk whilst your face isn't visible to the child</li> <li>• Try not to walk around when talking as the child won't be able to read your lip pattern as easily and this could distort listening.</li> <li>• Get the child's attention before giving instructions.</li> </ul>
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#### References:

Grant, P, (2009) Classroom Audit. In: Practice guidance: an overview of current management of auditory processing disorder APD (2001). Reading: British Society of Audiology

NDCS, <https://www.ndcs.org.uk/information-and-support/education-and-learning/creating-good-listening-conditions/>

#### Environmental management:

- Work in carpeted areas.
- Think about where the child is sitting e.g. are they near noisy equipment? (e.g. an overhead projector, the fan of a computer, a window or door, the sink, air conditioning).
- Use visual prompts to chart the noise levels in the classroom and manage noise levels.
- Use padding on the bottom of chairs to stop scraping, padding inside the bottom of pencil pots to stop pencils dropping in loudly, make sure drawers run quietly and do not slam etc.
- Do not use background music except in free play.
- Use soft furnishings help to dampen noise.
- Listen to the sounds around you: are there any ways you can reduce them?

## Listening at home

For babies and young infants:

- Get your baby's attention when you want to talk to them: call their name or tap them.
- Reduce any background noise when talking to your baby e.g. turn off the TV/radio.
- Sit facing your baby when you are talking to them.
- Speak clearly and naturally. Speaking too loudly or slowly impacts on the quality of the sound and makes lip reading difficult.
- Make use of visual clues to support your baby's understanding e.g. point or show them what you are talking about.
- Sit facing a window or light source so that your face is clearly visible. Try not to sit with your back to the window as it will put your face in shadow.
- Respond to your baby's attempts at communicating. Interpret what they are communicating and make it meaningful; for example, if they say 'dadada' you could say 'there's Daddy!'
- Respond to your baby's babble by copying it, and making new sounds. For example, if they say 'baba' you could say 'baba....boo!'
- Sing to your baby using lots of intonation and rhythm in your voice. Use actions and dancing to make it fun.

For young children:

- Try not to walk around when you are talking as it will distort the sound.
- Make sure your child is sitting in a good position to see your lip pattern.

- When talking to your child, ensure you are facing a window or light source so that your face is clearly visible. Try not to sit with your back to the window as it will put your face in shadow.
- Get your child's attention before talking to them.
- Speak clearly and naturally. Speaking too loudly or slowly impacts on the quality of the sound and makes lip reading difficult.
- Check your child's understanding by asking open questions e.g. 'I wonder where he's going' or by asking them to explain to a sibling what they need to do.