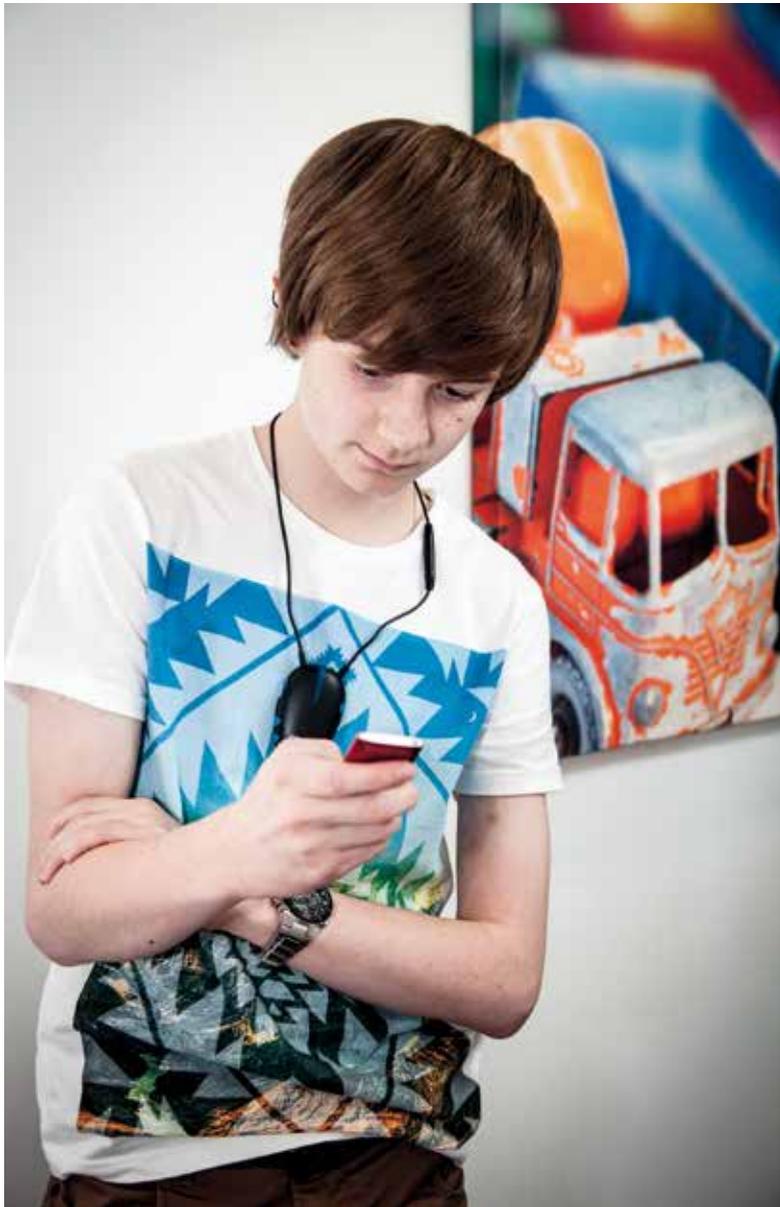


# Telecoils – making hearing aids cool for kids?



**When products make huge leaps in development it is easy to get carried away with the latest features that are available. Sometimes we need to be reminded about the forgotten technology that is still on most hearing instruments. Vicki Kirwin from NDCS often sees children without their telecoil activated. In this article she explains why every child should know about the telecoil.**

'cool', improve their listening experience, and increase opportunities for language and social development. **“He has been able to speak to all grandparents on his own – it is wonderful for them and him.”**

## Induction loop technology

Induction loop technology is the oldest of the wireless technologies and works with a telecoil, which has been a standard feature in NHS hearing aids for many years. Room loops help overcome some limitations of hearing aids and reduce the negative effects of distance and background noise, improving the signal-to-noise ratio and reducing listening effort for the wearer.

During the analogue era of hearing aids the telecoil was always available and a visual MTO switch meant that wearers were prompted to ask questions about it or go out and research it even if the audiologist didn't directly tell them about its use. New and innovative products which use magnetic induction technology are making mainstream products more accessible to deaf children enabling them to share experiences with their hearing friends. These include inductive earhooks, neckloops and Bluetooth streamers with neckloops. These products allow a child wearing a hearing aid to listen to mobile

**H**earing aid wearers are most familiar with their 'T' switch to help them hear better in public places fitted with loop systems, such as churches, theatres, banks and post offices. These aren't situations we generally consider as being very relevant to children and young people but a new generation of assistive devices have the potential to make hearing aids

phones or an entertainment device, such as an iPod, MP3 player, laptop or portable games console.

Modern digital hearing aids now have multiple programme capability but the telecoil setting must be activated. The wearer must be able to reliably change programmes as there is no visual indicator the 'T' setting is being used. Our experience at NDCS is that the majority of children and young people attending our events or visiting the Listening Bus do not know what the telecoil is and do not have it activated and so are unable to try out equipment that could be of benefit.

**“She can listen to her music, play quietly on her DS and hear better on my mobile phone.”**

### Deaf children and young people asking for more information

In 2007 NDCS carried out a consultation with nearly 1500 children and young people aged nine to 18. The results found significant numbers of children and young people in both the younger and older age groups wanted more information on deafness and the technologies that can support them.

**“I could listen to music without taking my hearing aids out.”**

### Using loop technology with children

#### ● Not deaf enough for a 'T' setting?

Children with any type or level of deafness and who use hearing aids can benefit from an activated telecoil programme and advice on how to use the programme effectively. There are no audiometric contraindications to recommending use of a loop system.

**“They were able to hear music much better & clearer than they used to on headphones.”**

#### ● Too young for a 'T' setting?

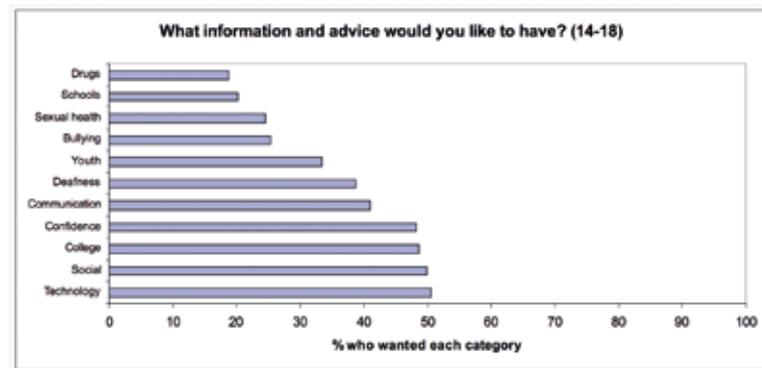
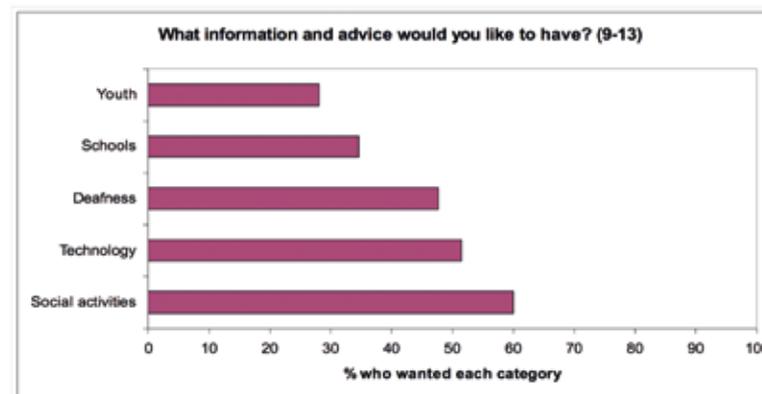
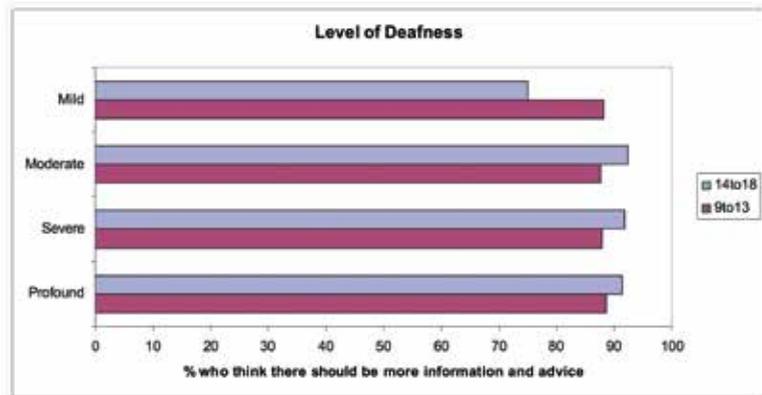
Children are very technologically aware these days and if they have already mastered smart phones, iPods, the TV remote control and an X-box they can probably manage different programmes on their hearing aid.

**One 8 year old boy used his to listen to his PSP and DVD player in the car “He was able to listen directly without headphones.”**

#### ● Too hard explaining the technical information to a child?

Find out about the child's hobbies and interests. Talk to them about how loop technology could help them

**The National Deaf Children's Society**  
 NDCS is the UK's leading charity supporting all deaf children, young people and their families, regardless of level of deafness, communication method or educational placement.



hear music, mobiles and chat with friends more easily. Better still can you show them in clinic? Plug in a pair of inexpensive ear hooks to their mobile phone and try with their choice of music. The look on their face is usually worth it alone!

**“A big difference especially to my daughter as we struggle to get headphones for her that will still allow her to wear her hearing aids, also she finds when making a call or receiving one she struggles to hear with background noises or they're not talking loud enough, but with this it made it so much better for her.”**

#### ● Worried about noise interference?

The telecoil setting does sometimes pick up interference from other electrical equipment such as strip lighting, or nearby loop systems. Explain this to the family. Similar to

## >> References

The impact that technology can have on the lives of deaf children - an NDCS study, 2012 <http://www.ndcs.org.uk/technology>

Change your world; Youth consultation - What 9-13 year olds said to us..., NDCS, 2007 [http://www.ndcs.org.uk/family\\_support/14\\_years\\_/information\\_for\\_young\\_deaf\\_people/consultation\\_results/consultation\\_results.html](http://www.ndcs.org.uk/family_support/14_years_/information_for_young_deaf_people/consultation_results/consultation_results.html)

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[http://www.ndcs.org.uk/family\\_support/14\\_years\\_/information\\_for\\_young\\_deaf\\_people/consultation\\_results/consultation\\_results.html](http://www.ndcs.org.uk/family_support/14_years_/information_for_young_deaf_people/consultation_results/consultation_results.html)

when you change the programming on a child's hearing aid the family's monitoring and feedback is vital. Children are often good at showing us when they aren't hearing well with their hearing aids. If they don't tell us they may simply choose not to use equipment and if families know what the possible causes are they can monitor this.

**“Amazing product. She can now hear her calls. We were relying on text messages before, but this has changed everything! Love it.”**

### ● T or M/T?

There are no general recommendations for children regarding T or MT settings so this is something that is best done in consultation with the child and family. It depends on when they use their T setting and their preferences are likely to change over time. However having an M/T setting allows sound from the environment to be heard along with the sound from the loop system. This offers benefits of feeling less cut off and allows important environmental sounds such as fire alarms, door bells and sirens to be heard. This is probably the best starting point although some young people choose to have one hearing aid on T and the other on M instead.

**“He was not able to hear the TV before using the loop. Now he was able to join in with the family more and was very excited to hear the words to films he had watched many times before and be able to understand them.”**

### ● They already have a personal FM system. Isn't that better?

Great! There are many products and technologies which can help deaf children at school, at home or when socialising with friends. It might be that after talking with the family you can recommend alternative equipment, such as direct input leads that they can use with their MP3 player or computer, and this

might be all that is necessary at the time. However, many deaf children don't have a radio aid and many that do don't have access to it outside of school. Sometimes an inductive loop option could better meet their needs by being less noticeable, more flexible, or cheaper. Some will work with their FM receivers.

**“She can now listen to her MP3 player and doesn't feel 'left out' by not being able to use gadgets like her friends can.”**

### ● I don't feel confident recommending assistive listening products?

No problem. There are a lot of products out there, all children are individuals and not all products are suitable for every deaf child. You could instead refer the family to the NDCS Technology Test Drive [www.ndcs.org.uk/technology](http://www.ndcs.org.uk/technology). Last year the Technology Test Drive helped 350 families to make decisions by loaning them products to try. Just activate their telecoil programme first!

**“She has been able to have a private phone conversation (she had to use speakerphone before). Also she can listen to her music without everyone else having to listen as well.”**

### One more tool in their toolbox!

Loop technology has moved out of dusty meeting halls and has become very relevant to deaf children and young people. At the same time deaf children and young people are reporting that they need more information about both deaf and mainstream technologies and how they can access these. New technologies are making mainstream products more accessible to deaf children enabling them to enjoy the same communication, music, and entertainment devices as their hearing peers. Telecoils are one more tool for children, with the potential to enhance their language, educational and social development.

**“It means he can use a smart phone which he considers 'cool' amongst his friends – an important factor at 11 years of age!”**

Vicki Kirwin

*All the quotes used in this article come from parents following the trial of equipment from the NDCS Technology Test Drive during 2011-12.*

### About the author

Vicki Kirwin, Development Manager (Audiology) for the National Deaf Children's Society (NDCS) is a paediatric audiologist working as a specialist advisor for the charity. She is responsible for NDCS information provided to families about ears, hearing and conditions that cause deafness. She also works with professionals to raise standards in audiology services, and advises on Government health policy and the effect of policies on deaf children and the services they receive.

