Lancaster University

UK Research and Innovation

HELP MAKE HEARING TECHNOLOGY EVEN BETTER

Hello! We're looking for children aged 6 to 11 to help us with a fun project at Lancaster University and with your audiologist.

We are also asking hearing children to join in. This helps us understand what is the same for all children and what might be different for children who use hearing aids.

You'll try out cool hearing technology, play fun games, and help us learn how to make hearing technology even better for kids like you!





Ready to find out more?

WHY ARE WE DOING THIS RESEARCH?

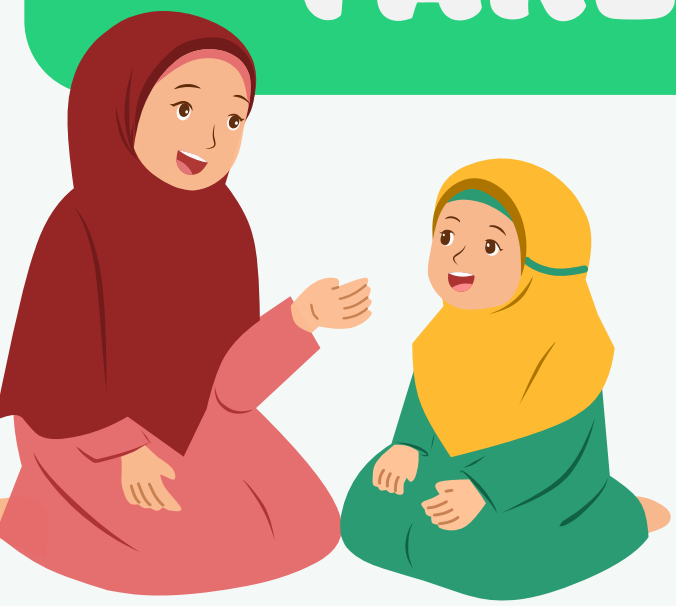
Most hearing devices are designed for adults, and that's where this study comes in.

This research is about learning how hearing aids and other technology can help deaf children hear and listen more easily and if the technology helps in a classroom.

By taking part, you may help us make better hearing technology for deaf children in the future!



DO I HAVE TO TAKE PART?



You don't have to join if you don't want to.

It's your choice and your guardian will help you decide.

If you do join, you can stop at any time. That's totally okay!

WHAT WILL I BE ASKED TO DO?



If you decide to join the study, here's what will happen:

You'll get a study hearing aid called Oticon Play SI for three months. Some children might also get extra technology called the EduMic – it's a surprise if you get it or not!

You'll see your local audiologist three times to check your hearing and make sure everything is working well.

In that time, you'll also visit Lancaster University two times for fun activities like listening and memory games. These two visits will take most of the day, but don't worry! There will be plenty of breaks and fun games to keep it exciting!

After that, you can choose to keep it or go back to your old one.

Want to see where you'll be going?

Check out the video below to meet the team and get a sneak peek of the lab!

Scan the QR code to watch.



WILL MY INFORMATION BE KEPT PRIVATE

GDPR is a law that helps keep your personal information safe. In this study, we will use some information about you, like from your doctor, but only what we need.

Very few people will see your name, and everyone will keep it safe.

Scan Me!

After the study, we might keep some information to check things or help with future research, but nobody will know it's about you.

Scan the QR code to watch a short video that explains GDPR.

USING MICROPHONES AND CAMERAS IN OUR ACTIVITIES

Microphones

For some of the games and activities, we use microphones to help us remember what you say in the games.





Cameras

For some of the games and activities, we use video to see what happens during the tasks and to help keep everyone safe.

WHY DO WE DO THIS?

These recordings help us look back later to make sure we didn't miss anything important you said or did. We will let you know for each activity if your voice or video is being recorded.

WHAT WILL HAPPEN DURING EACH VISIT?



1st visit

You'll go to your audiology clinic – you might have been there before! Your audiologist will:

- Look inside your ears
- Do a quick hearing test
- Make ear moulds to help your new hearing aids fit just right

2nd visit

About three weeks after your first visit, you'll go back to the audiology clinic to get your new hearing devices. Your audiologist will:

- Help you try on your new hearing aids
- Show you how to look after them
- Explain how to use any extra equipment that might help you listen better – like a remote microphone



You'll get a chance to try everything out for the first time!



A few weeks later, you'll come back to take part in our classroom activity. You'll be in a special room made to look and feel like a real classroom. There will even be a friendly teacher to guide the session and help make everything fun and easy! Here's what you might wear during this visit:

- A comfy cap with little red lights (called fNIRS) to see how your brain is working
- Glasses that track where you're looking
- A small microphone to pick up your voice
- Small motion capture sensors on the glasses that will help our special cameras see how you move around the room.

You might do the classroom activity with a teacher on your own, or with a teacher and two other children around your age.

Eye-Tracking Glasses (ET)

These are special glasses that show us where your eyes are looking. They don't change your vision or hurt at all. They just help us see what catches your attention in the classroom.





Functional near-infrared spectroscopy (fNIRS)

The fNIRS kit helps us see how your brain is working. It includes a special cap and other equipment that will be in a backpack for you to carry. The cap fits comfortably on your head and helps us measure your brain's activity while you do fun activities!

4th visit

Not long after you get your new hearing aids, you'll come to Lancaster University. This visit is mainly to get everything ready for your next visit.



We'll measure your head so the special brain cap (called fNIRS) and other gear fit just right – this helps save time later!

You'll also do some fun activities like listening and memory games, and a little bit of reading and maths. These help us learn more about how your brain works when you're learning and paying attention, just like you would in a real classroom!



5th visit

Your last visit will be back at the audiology clinic.

You and your adult will talk with the audiologist about if you want to keep using the new hearing devices.

WILL THE STUDY HELP ME?

Taking part might not help you straight away, but it will help us learn how hearing technology can help kids like you do their best as they grow. You'll be helping lots of other deaf children in the future!



WILL ANYTHING UPSET ME?

Everything we do is safe. You might feel a bit tired from travelling or doing activities. The fNIRS cap and eye-tracking glasses might feel a little strange at first, but we'll take breaks and make sure you're comfortable.

If anything doesn't feel right, we'll stop. It might also take some time to get used to your new hearing aids, and that's completely okay!

HOW CAN I ASK QUESTIONS OR STOP IF I CHANGE MY MIND?

If you have any questions or change your mind about taking part, just tell your parent or a researcher. You can also contact the research team at Lancaster University:



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