Classroom Adjustments: Hearing loss

| **TIMECODE** | **SPEAKER** | **CONTENT** |
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| 00:00:00:00 | SERPIL | Alright, Maya, talk me through it. What does Roger do? |
| 00:00:03:07 | MAYA | Yeah. It's like a transmitter. |
| 00:00:05:12 | SERPIL | So it connects to your cochlear? |
| 00:00:07:16 | MAYA | Yeah. And hearing aids as well. |
| 00:00:14:17 | MAYA | So this bit will connect to my cochlears and they will make me be able to hear you through my processers and hearing aids and that. |
| 00:00:24:11 | SERPIL | This is Maya, she's 10 years old and has two cochlear implants that enable her to hear. She's showing me how to connect a transmitter that will deliver my voice directly to her auditory nerve. |
| 00:00:37:14 | MAYA | If you do it to my ear, then I'll be connected. But if you just press the connective button not at my ear, then I won't be connected. |
| 00:00:47:09 | SERPIL | OK, so can I connect you? |
| 00:00:49:08 | MAYA | Yeah. |
| 00:00:50:08 | SERPIL | I want to see what's going happen. Connect! Connect! Oh! It says you're connected. |
| 00:00:55:03 | MAYA | Yeah, I am. |
| 00:00:56:07 | SERPIL | And what's going on now? Describe it to me. |
| 00:00:58:22 | MAYA | I just hear like straight through my ears and it sounds really clear. |
| 00:01:04:04 | SERPIL | That is an amazing piece of technology! Hi, I'm Serpil Senelmis and this podcast is part of an NCCD portal series. In this episode, we'll discuss some adjustments that could be made in the classroom to enable students with hearing loss to participate on the same basis as their peers. We'll hear more from Maya and meet her mum Rebecca. Susan Perrins is a teacher specialising in hearing loss who will share some of her most effective adjustments and we'll step inside a softly furnished soundproof booth at Australian Hearing for an expert's perspective. |
| 00:01:51:19 | ALISON KING | I'm Alison King and I'm the Principal Audiologist for Paediatric Services at Australian Hearing. |
| 00:01:57:09 | SERPIL | Alison explains that hearing loss can be temporary or permanent and occurs along a broad spectrum. |
| 00:02:04:10 | ALISON KING | Sometimes, it can be in one ear or both ears. And the amount of impact can vary from words seeming softer to someone being unable to hear anything at all, even if someone's shouting, unless they're wearing assistive technology. |
| 00:02:17:17 | SERPIL | And are there common causes for children having hearing loss? |
| 00:02:21:16 | ALISON KING | So, if we're talking temporary hearing loss, the most common cause is otitis media or ear infections. Many children will have some sort of a bout of ear infections or glue ears up to about the age of seven. About 9 in every 10,000 children are born with a permanent hearing loss that is known to have a significant impact on their development. And those causes can be due to difficulties with birth, genetic causes, inherited causes. Conditions like measles, if the mum's had rubella while she's pregnant, for example, that can cause a hearing loss. So, there's a range of causes. |
| 00:02:59:17 | REBECCA | Hello. My name is Rebecca. And I am the mother of a daughter living with hearing impairment. She is 10 years old and currently in grade 4. Maya has severe hearing loss in both ears. She needs to wear cochlear implants on both ears. Without those implants, she has no hearing at all. So, it is quite important that several things are set up in the classroom to enable her to hear as well as possible.  She was born with hearing. She took a fall off a stool when she was three years old. We didn't have any idea that it was hearing loss. It took several months, several appointments later to find out that it wasn't fluid in the ears. That it was severe hearing loss. |
| 00:03:49:09 | SERPIL | We'll hear from Maya in a moment, but, first, Alison from Australian Hearing describes how hearing loss can impact a student's education in the classroom. |
| 00:03:58:24 | ALISON KING | If you can't hear speech and spoken language, for example, then that affects your ability to learn to speak and process language yourself. So, many children with a hearing loss are fitted with some sort of assistive technology, perhaps a hearing aid or a cochlear implant, if they're severely or profoundly deaf. Hearing is one of the ways our brain receives information. If you can't hear everything clearly, then you're getting incomplete information.  So, you can probably imagine then that if you're in a classroom and you're not hearing clearly... Some people think hearing loss is just a softening of speech, and it's not. Actually, people with hearing loss may have trouble hearing certain speech sounds and not others, even when they've got a hearing aid or a cochlear implant on. They might need to use lip reading and watching your facial expression to really pull the whole picture together. Following instructions can be tricky if you're not hearing things properly. Or if there's bit of interfering noise and you're mishearing, it can be challenging to know what the teacher's expecting you to do. |
| 00:05:04:06 | ALISON KING | There are other effects on children's confidence and, perhaps, fatigue. So, if you're really struggling to hear in class because you're having to concentrate really hard, that can make you tired and that can make some children disengage because they're just too tired to concentrate. Others might play up to distract themselves. And sometimes it can make children appear less confident.  So, if they're not sure what's going on, they might be very quiet. Sometimes, children with hearing loss can appear very well-behaved in the class because they are just sitting there politely. But, actually, they're not really taking in what's going on. So, minimising the level of noise overall is a good strategy. |
| 00:05:50:20 | SERPIL | So rather than making things louder, it's more effective to reduce unnecessary sounds. With that in mind, it's helpful to understand how hearing aids work. In very simple terms, traditional hearing aids amplify and clarify environmental sounds for the ear, while cochlear implants bypass the ear and convert those sounds to electric signals for the auditory nerve. |
| 00:06:16:14 | ALISON KING | Cochlear implants tend to have more components to them. So, you'll have the piece that sits behind your ear. Then, you'll also have a coil that sits over the site where the implant is. I'd encourage, if you've got a student in your class with any sort of hearing technology, talk to the parent or carer about how best to use that. |
| 00:06:40:00 | REBECCA | We do meet with the teachers once a term just to see if Maya's needs are being met. And they are constantly reviewing things to see if there can be anything to be improved. |
| 00:06:51:05 | SERPIL | So let's find out what adjustments Maya's teacher has made in the classroom to meet her needs. |
| 00:07:01:12 | MAYA | Sometimes, we watch videos to see an idea that he is talking about, and he normally puts on the captions so I can actually see the words. |
| 00:07:14:19 | SERPIL | And what about when the teacher is giving instructions in the classroom? Say, the teacher wants you to do a specific task, how does he give the instructions so that you know what you need to do specifically? |
| 00:07:28:08 | MAYA | He gives it slowly so I can keep up and he doesn't do it too fast. |
| 00:07:35:00 | SERPIL | And how many times would he have repeated it for you? |
| 00:07:38:06 | MAYA | He did it once because he put it on the board so I could actually see it. But he would have said it twice if he didn't put it on the board. |
| 00:07:54:21 | SUSAN PERRINS | I think we've moved on from the one-size-fits-all because their loss is unique and the way they've learnt to adapt or their preferred learning mode. There's so many different factors for each student. |
| 00:08:07:10 | SERPIL | That's Susan Perrins. She's a teacher specialising in hearing loss and the coordinator of the Deaf facility in a state primary school. In addition to adjustments for the delivery of instructions, Susan recommends reviewing the classroom environment. |
| 00:08:23:17 | SUSAN PERRINS | That's where we start. It's a very careful choice about the placement in the school. Not being near major thoroughfares or an exit door where there's a lot of foot traffic. Also, your location in the school building near crossroads or a noisy railway line or buses frequently stopping. That kind of environmental noise impacts largely. Also, in the classroom, seating the students fairly close to the teacher's desk for that quick check-in visually. |
| 00:08:50:24 | ALISON KING | A very simple one and it's one on the table that's sitting between us as we talk is putting soft foam and things on tables if that's appropriate, so that there's no clutter and bang. If you've got pin boards up, having soft displays on those can help absorb sound. Have a think about your air conditioning units. I know they can be quite expensive. You, obviously, might not want to replace them, but if there's a lower fan setting, for example, that might be less distracting, that can be useful as well. If you've got a carpeted area, that's a really good area for children with hearing loss because it cuts down the echoes. So, anything that absorbs sound, cuts down echoes, gets rid of reflective surfaces can be really helpful too. |
| 00:09:42:12 | SERPIL | So, once you've reduced the ambient noise in the classroom, then you can focus on helping students with hearing loss to hear your voice and that of other students more clearly. This can be achieved with personal transmitters like the one Maya showed me at the start of this podcast, or in conjunction with sound field speakers. |
| 00:10:02:20 | ALISON KING | Many children in a classroom, if they're using a hearing aid or a cochlear implant, will have some additional assistive technology like a remote microphone system where the teacher would wear a radio transmitter and the child would have a receiver connected to their own personal hearing device. |
| 00:10:17:21 | SERPIL | And if the transmitter can be connected to sound field speakers, there can be even more benefits. |
| 00:10:24:07 | SUSAN PERRINS | Because the audio then comes through the speakers as well, so other students in the grade, the volume tends to drop in the classroom because they're all hearing the teacher really well. Teachers love it because their voices are saved, and we just found it a tendency that the noise levels in the classroom are very manageable. |
| 00:10:45:04 | SERPIL | Maya, do your teachers have some special microphones? Can you tell me about how that works? |
| 00:10:50:14 | MAYA | It has like a strap around it, and it holds it in place and I have to connect to it every day and whoever is speaking, their voice is going into my ears. |
| 00:11:15:07 | SERPIL | In addition to clear audio, teacher Susan Perrins uses visual aids to support students with scaffolding and structure throughout their school day. |
| 00:11:25:02 | SUSAN PERRINS | Because they're often visually strong, or they're using whatever modes they can to assist their learning, we find that visuals are vital, and particularly for planning. Getting rapid-fire instructions is really hard. So, our teachers would generally write them up on the board, quick dot points, so that they're there for quick reference. That it's not being said and then disappears. And we start them off... From prep, they start learning how to organise themselves because it's a skill that's really useful, but it plays a huge part in their learning. So, yes, keep that right-hand side of your whiteboard free for jotting down the reminders or the parts of the instruction that you want to be really embedded. |
| 00:12:05:06 | ALISON KING | Visual aids are great. So is helping the child to prepare by talking to them about what might be coming in the next day's lessons. Having printed notes or notes on the computer. Giving the child time to ask questions and also checking in with them to make sure that they've understood what's required or what's happening. |
| 00:12:27:02 | SERPIL | And just like audio, Alison King from Australian Hearing says visuals work best when visual noise is reduced as well. |
| 00:12:35:14 | ALISON KING | If you're working in a room that's got quite bright lighting outside, just be aware that if the people that the student needs to listen to have their back to a bright window, their face is going to be in shadow and it's going to be really glary and that's really tiring just looking at someone who's got glare behind them as well. |
| 00:12:52:20 | SERPIL | Another way to make comprehension of audio easier is to introduce new elements of vocabulary before they become part of the lesson. |
| 00:13:01:08 | SUSAN PERRINS | When you're exposing them to new learning areas, gear them up with the vocab they're going to need. This empowers them to access the classroom instructions straightaway. And then we talk of scaffolding their learning. So, you can't be teaching at a level way above them if they haven't got a good solid foundation. So, make sure those little building blocks are there in advance. |
| 00:13:22:12 | ALISON KING | Keeping instructions concise and simple can help. So, don't use a million words if a shorter sentence will do. Check for understanding. Give the child time to understand. |
| 00:13:36:03 | SUSAN PERRINS | With instructions and misunderstanding, it's not good enough to ask the closed question. Did you understand that? Do you know what I mean? The yes is far too comfortable. So, asking the child to repeat the instruction, or to tell you their understanding of the question, or what they are going to be doing next, or how they're going to tackle this project. Clarifying on that level makes you really know whether the student has understood. |
| 00:14:00:23 | ALISON KING | Another thing that can help is just keeping an eye on the conversational dynamics at the table with the students. If all the kids are talking at once, that can be really hard for the student with the hearing loss. Whereas, taking turns if there's a group discussion means that the student has a better chance of following the conversation. |
| 00:14:22:01 | SERPIL | You almost have to go old school and give them the conversation spoon. If you're holding the spoon, you get to talk. |
| 00:14:27:10 | ALISON KING | That's why some people like those pass-around microphones because the person who has the microphone... The students quite like it, actually. They feel like they're on telly. And it means that the person who has the microphone, it's their turn to speak. So, they can be really helpful too. |
| 00:14:42:22 | MAYA | In class discussions, there's like a microphone that you can pass around. And it really helps where you have to have answers, and the teacher passes around a mic and everyone can speak into it. It really helps. |
| 00:15:06:20 | SERPIL | Outside of the classroom and moving around the school can create additional challenges for students with hearing loss. Maya's mum Rebecca emphasises the importance of making adjustments in every school environment. |
| 00:15:20:10 | REBECCA | So, they're not just in the classroom hearing the best that they can, but it is across the board. The whole school is on board or the classrooms are set up with acoustics carpet in the rooms. But I think it's incredibly important across the school. |
| 00:15:35:20 | SUSAN PERRINS | It's really important that, the old adage again, "It takes a village to raise a child." So, all our specialist teachers, all the art, music, PE, all those realms also those teachers are equipped with transmitters. So, when the child goes there, they sync up, they're immediately hooked up. Our Monday morning assembly, the equipment is set up for everybody. It's quite normal. You sync in as you come in through the door. It's what we do. And we embody that even in our own staff professional development sessions. If we're in our performing arts centre where we have these, which is also acoustically panelled, the speakers will wear the transmitter. It's just what we do. |
| 00:16:08:18 | SERPIL | In the instance that there is a relief teacher, is there some form of a plan, an adjustment, a bit of a cheat sheet perhaps on the child about what needs to happen for that particular child's learning? |
| 00:16:19:02 | SUSAN PERRINS | Yes, definitely. There's the cheat sheet in with the daily plans and all will be the special adjustments. As it is for any children in the grade, those with other medical needs or behavioural issues that the relief teacher needs to be aware of, they need to be mindful of the needs of the child with the hearing loss too. |
| 00:16:34:05 | ALISON KING | If the student is moving between classrooms, it's not just their main teacher who might need to use the technology. It's other teachers as well. And sometimes, in the assembly halls, for example, there might be different assistive technology that the students use. So, if everyone's across it, it means that no matter where the student goes, they can be accommodated. |
| 00:16:55:17 | SERPIL | I can imagine it would really be challenging if you have to explain that over and over again on a daily basis. |
| 00:17:01:14 | ALISON KING | Absolutely. And the other thing that's worth thinking about is, as students get older, and especially secondary school students, when they're moving between classes, handing over their equipment and collecting it at the end of the class can make them late behind their friends. So, they mightn't get to sit with their friends because they've got to go and collect the transmitter and take it to the next class. Anything that can help that process go smoother is really useful. |
| 00:17:32:22 | ALISON KING | There was a family of one little fellow who had a laminated sheet that had a picture of him on it and said, "Hi. My name's so-and-so. I use hearing aids and I use this particular remote microphone system. It helps me if you pin it here on your clothes." Just a short series of tips. They've done that from their own initiative and they handed it out to their son's teachers. It was great. |
| 00:18:00:10 | SERPIL | With the reliance on hearing aids, transmitters and other equipment, primary school teacher Susan Perrins highlights the importance of students taking responsibility for their own gear. |
| 00:18:12:05 | SUSAN PERRINS | Independence and self-advocacy we engender from the little ones when they come to school early in the morning for their equipment check so that when the music plays and the day begins, they are ready to access their learning. It's not running around and trying to troubleshoot or make sure there's no flat batteries. |
| 00:18:26:07 | SERPIL | And when it comes to the right time for making adjustments, the sooner, the better. |
| 00:18:30:16 | SUSAN PERRINS | Oh, I think it's important to address it as soon as there's a point of need. So, not necessarily that we look at this end of semester or in the middle of the year, the end of the year and that's it. It's got to be a dynamic process that's happening all the time. |
| 00:18:42:20 | SERPIL | For mum Rebecca, it's important for teachers to listen when students express their concerns. |
| 00:18:48:09 | REBECCA | Make sure that they feel confident to speak up in circumstances where they are not hearing properly, where they are finding it quite difficult. Definitely put them at the front of the classroom. If possible, wear a microphone so they can hear, which cuts out the background noise. That's incredibly important. And just have great communication with the student just to make sure that they're on the same page and they are hearing to the best of their abilities. |
| 00:19:15:06 | SERPIL | And what advice would you give to teachers who are about to get a student living with hearing impairment into their classroom for the very first time? What would your advice be to the teacher? |
| 00:19:27:18 | MAYA | Not to yell. |
| 00:19:29:03 | SERPIL | Any other advice? |
| 00:19:31:01 | MAYA | Um...no. That's probably the biggest one. |
| 00:19:34:13 | SERPIL | Not to yell. |
| 00:19:35:23 | MAYA | Yeah. |
| 00:19:36:23 | SERPIL | Got you. Thank you, Maya. |
| 00:19:43:06 | SERPIL | This podcast is part of a series that highlights adjustments that could be made in the classroom to enable students with disability to access and participate in education on the same basis as their peers. You can find all episodes on the NCCD portal. I'm Serpil Senelmis. Thanks for listening. |
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