From Clinic to Classroom: Functional Approaches to Working with Children with Unilateral Hearing Loss Pt. 2, in partnership with Educational Audiology Association

Presenter: Kate Jablonski, AuD

It is my pleasure to welcome to you our guest speaker today, Dr. Kate Jablonski. Dr. Jablonski comes to us from the Lake Washington School District in Washington State. This course is in partnership with EAA Educational Audiology Association.

It is a two part series, so if you missed the first part with Dr. Kristen Deline, that is available in our course library. But at this time I hand the mic over to you. Dr. Jabonski.

Thank you for that introduction. We have disclosures today and I'd like to thank Dr. Kristen Delai, who did the presentation last week, part one of this series, and the Educational Audiology Association. Christy Nguyen and Kimberly Rojas for helping take me through this process. And Cheryl Decon Johnson and Jane B.

Seton. They are the authors of the Educational Audiology Handbook, which is vital to our profession. And I'd also like to thank all of the professionals that I work with at the Lake Washington School District that make thorough evaluations and supporting our students possible.

These are the learning outcomes of the class that we're doing today.

And now we begin. So a quick note. There are. I'll be using terms like clinical audiologist and educational audiologist. I wanted to make the distinction between the two.

The clinical audiologist is the professional doing the diagnostic portion of what we do. And the educational audiologist is the one doing the evaluation, support and counseling of students.

And I also want to say how incredibly important it is to create and foster relationships between the clinical side and the educational side. For those of us that don't do both, some do. But having a good working relationship with outside entities is extremely important.

So in a clinical setting, you would see a patient with unilateral hearing loss. And typically with the testing that you do, you would base it on your concerns that you have based on your professional knowledge. What is their speech perception? How is it in quiet? And how is it impacted by background noise?

What is their ability to localize sounds in a booth? And what do you see for auditory fatigue? What are your observations? How do they weather the testing?

Then? What the research shows is that students with unilateral hearing loss are often failing or repeating grades. I will say that this information is from the 80s. Education itself has changed a bit in that retention is not necessarily something that we see as much. But certainly we see students struggling with unilateral hearing loss that includes academic and also behavioral concerns.

So attention or acting out. And we will often see students with unilateral hearing loss that present with other diagnoses, language development and social emotional concerns.

So that's what the research says. What do we see in school? How does this present in the day to day? So listening in noise in schools, kids are in a variety of situations. It's not necessarily a lecture based type of situation anymore.

So listening in noise, working in small discussion groups, having teachers split kids up into different groups, but within a classroom, each group is talking about their own subject or question and that's going on simultaneously.

This also interferes with incidental learning. So 80% of what a child learns is incidental. It's overhearing. And when you have a unilateral hearing loss, when there's a lot of background noise present, then

you're not able to tune into things that are going on, especially on the side with the hearing loss. Localizing sound, again a clinical, a research term.

But what does that look like? Often a teacher is leading a discussion, a group discussion, and so there are questions and responses and they're happening throughout the room. It can be difficult to figure out who's talking during a discussion. So being able to locate which student is responding to the question and turning so that you're able to hear what that student is saying. You also have a variety of students in their ability to project their voice, the confidence with which they speak.

And so some students are easier to hear than other students. We ask that teachers repeat and rephrase what students are saying. But if that's not happening, half of the conversation, half of the questions, or half of the answers are lost to the student. Auditory fatigue Often we'll have parents and staff reporting that they have attention concerns for students. And really what it is, is listening for learning requires a high level of cognitive energy and you only have so much of that.

So a student who is having to compensate for a unilateral hearing loss throughout the day access the auditory information around them will go through their, their energy stores much faster than their peers that do not have hearing loss.

So we are going to have a, an example student, a case study and this is following up on Dr. Delai's student.

So we have Scooby again and it's a Tuesday morning and for me and I think for other audiologists, we get an email that is your first referral or there's different referral processes, but this comes as an email attachment and you see that there is a moderately severe hearing loss in the right ear and normal hearing in the left ear. And Scooby is five years old, he's a kindergartner. And luckily there's a release of information attached to the audiogram so that you have access to the clinical audiologist to reach out

and get additional information or schedule time for a chat to find out how the student did with testing, any kinds of concerns that the clinical audiologist has. You find out that this particular student has a history of CMV and did not pass their newborn hearing screening.

Clinical audiologist sends a list of recommendations. And these are pretty standard visual supports for auditory information. Preferential seating or strategic steering.

Seating in a quiet place away from noise, seated with his better ear to the class, and access to a personal FM or DM system, which even though technology wise we have moved on to dm, FM still seems to hang in there and be something that more people are familiar with that term. And DM can sometimes be a new term for them.

When we have a student that is referred to us and there's a question about how can we best support this student within the educational setting, the team will go into an evaluation.

So we have to do an evaluation to determine if the student is eligible for services. So there are some terms here that you will hear over and over again. And these are sort of important to how we write our reports, how we present our information, how we go into basically crafting what is a legal document. So one, we are determining that the student has a disability that adversely impacts education. Do they require specially designed instruction or SDI with accommodations, or are we able to meet their needs with accommodations alone?

When we do an evaluation, it is a team endeavor. And so typically we have the school psychologist, who is a person that coordinates the team, puts together and presents the report as a part of the team. I'm sure we're all familiar with SLPs. Educational audiologists and teachers of the deaf should always be involved in an evaluation that involves a student with hearing loss. We work with OTs, PTs, school nurses, teachers and specialists, and the family are an important part of the evaluation team.

And knowing that our friend Scooby has a CMV diagnosis, I think it's important to reach out to the different team members and we'll talk a little bit about a little bit more about that based on what our knowledge is and what we know of CMV as audiologists.

If a student qualifies for services through an initial evaluation, we then reevaluate that student every three years to determine if they continue to demonstrate a need for services, if the category that they qualify under still makes sense. But if something, if there's new information that comes to light, we can do an evaluation at any time based on a Recommendation from a team member or from the family.

The role of the educational audiologist as a part of that evaluation team. So helping the team understand the impact of a medical diagnosis that it can have impacts on cognition, balance, many different areas. Again, talking about our student Scooby and the CMV diagnosis, Often it is the educational audiologist that has the most background and knowledge about that particular diagnosis. Knowing that I believe it's about half of babies that are born with CMV don't display any kind of impact at all, and the other half have varying degrees or combinations of things. So knowing that, knowing that it would make sense to reach out to the OT to see if there's any kind of fine motor concerns, especially if we have a student that's needing to deal with equipment, getting a hearing aid on and off, or dealing with a DM system or balance the pt.

There is an overlap between audiology and PT when it comes to balance. So reaching out to them to say, with this diagnosis, do we have any concerns? Do we see anything that would indicate that balance would be a concern and therefore a safety issue in, say, gym class or something like that.

We assess the student to determine the adverse impact of the hearing loss on auditory access. That's why we're there. That is our specialty. We know that students are in a variety of settings throughout the day. They're in a general or whole class setting.

Sometimes they're in a one on one instruction. They see specialists, they go to library, they go to gym, they go to music class. How do those different environments impact how well our student is able to access information within that setting? How much is the amount of energy that a student is taking or using to learn, listening, to learn within the classroom and within all of these settings? And how does that impact their energy levels?

How does that. Are they displaying issues with fatigue or their concerns regarding fatigue? How well are they advocating for their needs? Are they demonstrating the ability to do that? Is it observed?

Is it a concern? And unilateral hearing loss can also affect our students socially. So how well are they doing on the playground? Do they have friends? Are there concerns about that?

Or concerns about the way that they're interacting socially with not only their peers, but also adults? So we also look to present clinical documentation of the disability, speak to the adverse impact of the disability, and work with the team to establish if specially designed instruction is needed in any area assessed. That can be OT pt, it can be academic, it can be audiology services, or it can be teacher of the deaf services.

So educational audiologists can use a variety of tools that aren't necessarily well known to or used by our clinical colleagues. So again, looking at those, what accommodations make sense? What is the adverse impact of the hearing loss on the student? So, first and foremost, we're all familiar with the audiogram.

What is the configuration of the hearing loss? What does. What are the speech scores? Oh, with, with an etiology, with a known etiology, do we expect it to progress or change over time? Is it stable?

This is one of those key pieces of counseling that you can use with the team. I think that that's. Sometimes team members will say, what percent of hearing loss does this person have? I don't know. We all love that one.

Counseling around the audiogram and what that means for acoustics and for speech access. That's again, a really important piece when you are to be well connected with the clinical audiologist so that you're able to reach out to them and perhaps get some insight in what went into putting together that audiogram. If it's incomplete, why is it incomplete? Why weren't you able to get certain pieces of it? Is this student prone to middle ear impact?

So do we expect that even the better ear might fluctuate over time, which is something that the team needs to take into consideration and again, is part of that clinical piece and is communicated to the team through the audiogram. We look at surveys that parents and staff can fill out that are looking at their observations of how the student functions at home or in the school setting. So things like the chaps and the child will give us information about how those kids are interacting with sound. Perhaps there's questions about how well are they able to discriminate between fine sounds? Because phonics is the building blocks for reading.

And so if the student is struggling with the ability to discriminate between fine sounds that will impact phonics. So the compass test for auditory discrimination is a quick 50 card set with four target words on it. There's no visual cues given while giving the target word. There's another word that sounds like it, it's phonetically very close, and two words that are completely unrelated. So which one is the student picking?

How well are they able to discriminate between those sounds? The Vanderbilt fatigue scales are helpful to say it quantifies that question about what is the impact on the energy level of the student? How well are they able to go through their day? How is fatigue perhaps impacting their ability to attend? Do we

see attention issues?

Again, these are ways of quantifying these questions. A functional Listening evaluation can be an extremely important piece. Dr. Delai, in her presentation, talked about how she, in a clinical setting, is able to simulate noise coming from different sources, or how does the noise simulation impact the student? And for the educational audiologist, we're looking at how does that happen in the classroom?

So in situ, as opposed to a simulation, so sitting in the student's classroom, observing what's going on in the classroom and giving. Typically, when I do a functional listening evaluation, it is sentences that we give that the student would repeat back to us. So if they see my face, if they can't see my face, if I'm close, if I'm far, if it's noisy, if it's quiet, how do all things. How do all these things impact the way that the student is able to access auditory information? I think too, there's an observational piece to that.

I did a functional listening evaluation once where the student. The teacher had set up a. A aquatic farm in. In the classroom. So every 30 minutes, the lettuce tower would go off, and so you would see a significant increase in background noise.

And the student was seated quite close to the lettuce farm. So again, something that needs to be taken into consideration that you would only see in the classroom.

The Listening Inventory for Education is something that I use often that has a teacher piece where we look at the teacher's observations of how the student is accessing sound. Are they advocating for themselves? Are they using the accommodations? It has a student piece where they're able to score 15 common listening situations that they're in and say, how difficult are those for listening for them? You can compare and contrast the teacher responses to the student responses and see if they agree with each other or disagree and if so, why.

The sifter is also one that is used often. It's given to the teacher. It's a screening instrument for targeting educational risk. And so you're able to get a score off of that that says, are they in the passing range? Are they.

Is that an area of concern? Or is it an area where the student really does need help? So all of these tools go into driving the recommendations that we make for accommodations for placement and for services.

So the accommodations. The evaluation drives what accommodations we choose as an educational team. Because if you remember, the Scoubie's audiogram came with recommendations for accommodations based on the clinical audiologist observations. We look at family and staff reports and how well the student is functioning within the classroom. So again, that functional listening evaluation is really important to figure out what modes work Best for that student?

Are they a student that needs visual input with their auditory input? Are they an auditory only learner? Which seems counterintuitive, but surprisingly, you will find students with hearing loss that do better with, in some cases, with auditory only, or making sure that they are getting their visual supports separate from the auditory. Again, it depends on the student. It depends on what you see.

Within that evaluation, you can find some things that you find surprising or even counterintuitive. But every student is different and you need to meet them where their needs are.

We can determine what educational settings and situations are difficult and what accommodations make sense. So again, if we're looking at the teachers splitting kids up into small groups for discussions, we see a huge increase in background noise at that time. So what do we need to do? What kind of accommodation do we put in place for that situation? So sometimes we'll say we allow that student to take their group into a different area that's, that's quieter.

Even the way that schools are set up now can be quite different in that there are common areas or small group work rooms that are adjacent to the classroom. So these are if, if we see a need for that accommodation, the school in general has the ability to meet that accommodation and meet that need.

So as part of the evaluation, the team requires something called an educational impact statement. This is an important piece of the. Again, the legal document that we are creating, and I did put this into this slide verbatim. This is the educational impact statement that I use most often because I feel like it really addresses the complexities and the different pieces that we have for our students with hearing loss, especially our students with unilateral hearing loss, because it is so important to get across that impact.

Often you'll hear, the student has a good ear, they hear just fine. And through these evaluations, we see that they do hear a lot, but they are impacted by different situations and different pieces that we need to look at. So to say that the hearing loss is educationally significant, the evaluation information shows that. And how does it adversely impact them? It adversely impacts their access, their access to auditory information across settings.

Our kids are in many different situations throughout the day. It impacts expressive and receptive language, even if they don't show a deficit in that area. It's something that we have to consider because of the hearing loss. It impacts them socially. Again, it situations like the playground and the way that they're interacting with their peers and what they miss out on, it can, you can see that manifest as anxiety because they think that they've missed something or they read into a situation incorrectly because they, they have missed pieces of that information.

Even though they have a good ear, there are situations that you just can't. That good ear isn't enough to help you through those. And so it speaks again to the ways that the information, or I'm sorry, that the, that the hearing loss adversely impacts the student. I also say you can't fight physics. So background

noise, distance from speaker, and environmental acoustics all work against a student.

With hearing loss, we can't get around that. We can apply technology, we can apply accommodations, but we always have to take those things into consideration. I think I hear too. Again, getting back to this. Well, they have a good ear.

They can. They. They hear just fine. I hear this a lot. Or I hear well.

I call their name and they turn. They can hear me just fine. There is a huge difference between hearing something and listening. There's also a difference between listening and listening to learn. So we're dealing with different ways that we use our brain.

Hearing something is a very entry level way to deal with sound. It keeps us safe. We react to things. But listening requires that cognitive piece, that processing piece. Listening to learn is that high level of cognitive work.

I say that we, the students are like sports cars, and during the day, their engine is revving at full rpm. They are going as fast and as hard as they can to learn everything, and they're going to run out of gas faster than their peers. So putting all of that into this impact statement is a compact way to get that point across to the team, to have that documented in this legal document that we are creating.

So once you have written the report, you will meet as an evaluation team and as a team, you will make recommendations that will create an outcome. We do have two possible outcomes. So we will take a look at both of those different outcomes and at our student Scooby to say, this is what it would look like if we have an iep and this is what it would look like if we had a 504. And I will go over what that means, the differences between them.

I will say, I do come across some people that say, oh, they have a hearing loss. Oh, well, then they get, they get an iep. Right. Well, so we just talked about the evaluation process that has to happen before we take this into consideration. An IEP or an individualized education plan means that the student has a disability.

We have documentation of a disability. It adversely impacts their education. So again, there's that word adverse. It's kind of important. It keeps coming up.

And three, the student demonstrates a need for specially designed instruction, or sdi. And in the, in the education realm, we do we call this the three prongs, because all three of these need to be met. You have to answer yes to all three of these in order to qualify for an Individualized Education plan.

So an iep, an individual Individualized Education Plan, is the document that details the present levels of performance. Where is the student at this time, and where do we want to be in a year? How do we do that? How do we measure it? How do we get from A to B?

And we do that through setting up goals. A goal is measurable. It starts one place and ends in another. And being measurable is that key piece to it being an actual goal. Goals need to be as functional as possible related to classroom performance expectations.

They have to do with academics. They have to move the student forward. We do progress reports on an IEP throughout the year, so most students will receive different updates throughout the year. So perhaps the system is quarterly or triennial. And so whenever the general population of students get a report card, then our students, their IEP is updated for the team and for the family.

We review the IEP plan every year. So every year we meet as a team and we address those goals. We say, this is where we started and this is where we're at. Did we meet that goal? Did we fall short of that

goal?

Do we need to adjust the goal a little bit based on what we've learned over the year? That's the time annually that we make changes. If something were to happen, if there was a change for that student, we could call an IEP meeting at any time. Either someone at school or the family could reach out and request a meeting at any time. The IEP determines placement for the student based on the least restrictive environment.

And again, that's a very important term within the educational community because we're always striving to place the student in the least restrictive environment, give them access to the general education curriculum, give them access to their peers, and meet and provide the supports that they need to be able to do that. So some students will be in a general education setting. Some students will be in a more restrictive setting that better meets their needs locally. Here, in some cases, we have students that need a special program. That happens regionally.

The IEP is set up based on national laws, but you'll find that how those are interpreted and actually implemented can differ highly from state to state or from county to county, or even District to district.

Our other option is something called a 504 plan. So thinking back to that three prongs for a student to be eligible for a 504 plan. We are able to demonstrate that they have a disability documented and it adversely impacts their education. However, the student does not demonstrate a need for specially designed instruction. They don't need goals to move them forward in their education.

They don't need modifications. They don't need an additional professional to come in and work with them on those goals. They really are just demonstrating a need for accommodations. In that case, they meet two not an IEP. It's a 504 plan.

So we move forward with a 504 plan. 504 is based on the Americans with Disability act and applies to all ages in all environments. I did forget to mention that the IEP plan is part of a different law idea and it is applicable from birth to 22. It is an education plan. It is education based.

But a 504 plan is part of the Americans with Disability act and therefore a student can graduate from high school and move forward with that 504 plan because it is applicable in at universities, in work settings and really looks to support an individual with accessibility in the school setting. We also do look at communication for students who are deaf and hard of hearing. So the 504 plan again supports access even when it has to do with communication needs.

Oh pardon. Sorry. So Scooby, our friend, let's say we have done the evaluation for Scooby. We have established that he has a unilateral hearing loss, that it adversely impacts his access to his education and other team members as a part of the evaluation determined that he is showing some delays or need for specially designed instruction around reading. So the resource room teacher would evaluate and support Scoubie with reading.

Perhaps Scooby is also demonstrating some articulation differences which could be or could not be related to the hearing loss. And so the SLP determined that he needs specially designed instruction around communication so he would see each of those individuals as a part of his school day for that specially designed instruction piece to work on the goals that are laid out as a part of the plan. His least restrictive environment is in the general education setting, so he will receive some pull out services which means he leaves the classroom to go see the special education teacher or the slp. We do also now see special education teachers and other professionals doing what's called push in which means they go into the classroom and work on those goals. With that student without pulling them out of the general education setting.

So different ways of supplying services. Based on the evaluation, the surveys that we did, teacher feedback, student feedback. Thinking back to those recommended accommodations from the clinical audiologist, We've decided that scoubie should have auditory information presented with visual reinforcements. So perhaps that functional listening evaluation showed that when he can hear you and see your face, he does better. He's able to identify more of those sentences that we gave him to repeat back.

Referential seating away from noise with the better ear facing the class. So again, perhaps this is feedback from the student that says, I really like sitting in this part of the class. Or feedback from the teacher saying, when I see the student here, Their attention is better. They're able to follow conversations better. I just see a better outcome from this placement.

We look at a variety of situations throughout the day. Small group work, independent work, Lecture type or discussion type, Things going on with students. So preferential seating means what works for that student in that given situation, and it can change based on the situation. Option for small group work outside of classroom. So again, that would be where the student would take their group.

They would leave the room. Perhaps you can control background noise better that way. So the team decided that that was the way to meet that particular need. Repeating and rephrasing comments during group discussion. This is one that's used often.

And I think, again, it's not only beneficial for our student, Especially if the teacher noticed that, you know, during classroom discussions, Scooby seemed lost. Maybe he would try and build off of what one of his peers said, A comment, but it wasn't quite right. Like, it was just a little bit off. So if the teacher is repeating and rephrasing what the student said, the whole class is able to get that information. Again, Scooby gets it.

He can then appropriately build upon those comments and participate more in that conversation.

Taking listening breaks. If we found through the evaluation that the parents, the teacher or the student really noted that fatigue is an issue, they are tired. Providing them with listening breaks during the day can help address that. Assistive listening technology was a recommendation from the clinical audiologist. And perhaps that functional listening evaluation was done with assistive listening technology with a remote microphone with a DM system.

And scores improved. So we were able to improve the access to the information. The student demonstrated that, and then this becomes an accommodation.

So Scooby, again, Scooby, in his evaluation in this scenario, did not demonstrate a need for specially designed instruction.

So we would be able to meet his needs with accommodations. So I Actually just went over all of these accommodations. And if you go back through the slides, you'll notice that the accommodations for the IEP and for the 504 are identical because the accommodations did not change. Those stay the same. The only difference between the IEP and the 504 plan is that need for specially designed instruction.

The 504 plan, like the IEP plan, should be reviewed annually. So that gives us an opportunity to take a look at these accommodations and decide whether they continue to be applicable, if we need to make some slight changes to them, or if we need to add or remove other accommodations. And something that I would like to note, if you see here, there's six accommodations that are related to hearing. Some students will have other diagnoses. And in that case they may have accommodations that are specific to other needs, perhaps vision or sensory.

And so you can get a list of accommodations that becomes quite long. And so I did want to say, I do feel it's so very important for the hearing related accommodations and the audiologist to streamline and really craft those to be as specific as possible while still meeting the greater need.

Assistive listening technology is an umbrella term that covers many, many different things that we use within the school. So most often for kids with unilateral hearing loss, you will see a variety of technology that can be employed. For Scooby, specifically, on his audiogram, it was noted that he was fit with a hearing aid. And so that's something that we have to take into consideration.

We look at the what situations did the student score as being challenging? So if group discussions are challenging, what kind of technology can we apply to that specific situation?

Where is the student spending the majority of their time? If we're looking again at that least restrictive environment, what does that look like? Is it a general education setting? Is it a more specific setting that has a smaller class size or an alternative type of classroom situation? Those have to be taken into consideration.

What kind of personal amplification was fit? So for our unilateral students, we are seeing hearing aids, bahas, and now cochlear implants. And the family and the clinical audiologist are often the driving force behind what form factor is chosen by the family. What direction do they go in? And the audiologist, the educational audiologist is then there to support the choices made by the family.

So based on these things, what kinds of assistive listening technology do we choose? We can choose tech that is specifically compatible with a specific type of personal amplification. So a cochlear implant or a Hearing aid, some type of receiver that goes on and has a class, a teacher microphone?

It's more and more we're seeing retrofits of schools or new schools being fit with sound field systems. So there are speakers in the classroom that have a teacher microphone. And the teacher's voice is amplified throughout the classroom. We have teachers that use that regardless of whether their students have hearing loss or not. Because we see benefits for students with adhd, English language learners, frankly, the teacher's voice, vocal hygiene.

So we see benefits from those sound field systems in many different areas. And we can decide to actually use two systems simultaneously. Do we have a personal system that goes directly to the hearing aid or cochlear implant or baha that then works in concert with the sound field system? Is the teacher having to wear one microphone or two microphones? I have to say this is a piece of my profession that was surprising to have to become not only an audiologist, but also an AV expert.

Or frankly treat your AV and your tech team very, very well. Because you will need to call upon their services and their assistance to get all kinds of technology to work together under this assistive listening device umbrella.

So again, getting back to Scooby, either as a part of the IEP or the 504 plan, because this is an accommodation. So the clinical audiologist decided that Scooby was a hearing aid candidate and show and did testing to show that not only did they do better with a hearing aid, but also with a DM system. That was a part of the report. It was a part of clinical recommendations. The educational audiologist then takes that.

And again, looking at that evaluation, Scooby struggles when the teacher's not facing them. And during small group work and large class discussions were areas that he noted were specifically difficult for listening. So the educational audiologist we went ahead and fit the student with a DM system. It's compatible with the hearing aid, but it can also be patched into the classroom system. So they can work together for having the option of using a pass around mic using the DM system while the classroom

system is being used multiple different configurations.

And I will tell that, I will say that to a team that the process of finding the correct ALD configuration for a student is ongoing. And as kids age, their needs change. So it's something that we would want to revisit with Scooby, check in with them, see how the different configurations are going. And if a problem comes up, troubleshooting with the student to figure out a configuration to meet his needs.

So in Summary Unilateral hearing loss can adversely impact a student's ability to access auditory information in a variety of educational settings. That's such an important takeaway, I think, especially when you're met with, oh, if they have a good ear, they hear just fine. What do we do with that? How do we fully investigate this and provide information to perhaps change someone's mind? We need to evaluate students as a team so that we get all those different pieces examined on how a student learns, how they interact with their education, and figure out what the impact of the hearing loss is on access and academic progress.

We can support a student through either an IEP, an Individualized Education Plan, or a 504 plan. And assistive listening technology is an important accommodation in concert with many other possible accommodations to meet a student's listening needs based on the situation that they're in. And it's so important that the accommodations that we include in the IEPS and 504 plans are based on demonstrated needs and reviewed annually to make sure that we are continuing to meet a student's needs over the their educational lifespan.

Thank you for your time and attention.

I believe we.

There we go. More information for you. Thank you, Dr. Jablonski. We'll go ahead and open up the floor for any comments or questions.

We do have a couple here. We have a question from David. David asks, how often do school districts disagree with your recommendation due to their cost concerns? That is an excellent question. And it is.

It does happen. It does happen. My in my own background, I have worked for many school district as their audiologist or as a consultant. And I think that something that we bring to a school district as an educational audiologist is the ability to justify the cost of that equipment to help them understand why we're making that recommendation and how we can implement it in a way that is fiscally responsible. I have entered into certain situations where equipment was purchased by groups of people that were not educational audiologists and in fact cost the district more than really what an educational audiologist would have put in place to begin with.

And so I think if there are cost concerns, I think that they can be addressed in a way where you can bring them around and help with the understanding of why we spend the money and assist them in spending it in a fiscally responsible way. Thank you for your question, David. Here is another one. Do you receive requests for tests of auditory processing? And what is your philosophy about this disorder?

That's an excellent question. I think because the focus of this particular presentation was on unilateral hearing loss. I did not go into auditory processing as a diagnosis. I mean, if you'll notice, I did use the term auditory and processing having to do with what the brain does with sound separate from a diagnosis. So auditory processing disorder can be a large part of what an educational audiologist does.

And frankly, I could keep you here for another hour or two just delving into that subject. It's really something that can be addressed all on its own.

Such a variety of the way that clinical audiologists and educational audiologists work across the nation and even within the state of Washington, there's a variety of what we do. There are some audiologists that have booths and some that do diagnostic testing. The vast majority of the educational audiologists here actually don't. We are typically itinerants and don't have a booth. And so I do work with auditory processing.

I do not myself do the testing, but I am the person that receives those reports. And I go through the exact same process that I just walked you through for an evaluation. So it's the same process. Does the student meet the three prongs or are they a student that their needs could be met as a accommodations through a 504 plan? So it is the same process, regardless of the diagnosis.

Thank you. Dr. Jablonski, another question here. How long does a 504 plan stay in place?

A 504 plan can be. It can follow you forever because it's part of ada and ADA covers the entire lifespan. It is.

I can, I can speak to the school team. And again, you've seen the process that we would go through to craft and present a 504 plan for a student. I think if this, once the student graduates from. From high school, then there are other entities that would take that up. So perhaps they go to college.

Then it would be a different group within the college or university setting that would take on that 504 plan and work with that student. Are they going to go to a work setting? That's also applicable in a work setting. And sometimes there are entities or groups within the work setting that would support that 504 plan. But it is something that goes across the lifespan and therefore, I would say, is something that would need to be revisited often to make sure that it truly reflects the needs of the individual.

And thank you so much for your question. That will be all. For the Q and A portion of the presentation, we want to thank Dr. Jablonski. And so Dr.

Dawai from part two, part one of this presentation. Thank you so much to those at the Educational Audiology association, we hope that you found this presentation valuable and informative. Thank you so much, everyone, and have a great day.