

- And welcome everyone to the webinar today.

Thanks for joining us.

I know this is kind of a crazy busy time of year.

So I appreciate you making time for education that hopefully will be helpful to you and helpful to the clients that we serve.

So today we're going to talk about a case.

Now, this is the third case study that we've delved into this year with AbleNet.

This one is going to focus on a child that or young adult who has plateaued.

This happens a lot with our clients.

And this client was plateauing during her younger teen years and required some intervention.

Otherwise she would've just been stuck.

It can be really challenging to know when our clients have reached a certain level of potential.

Now with children, that's a moving target.

It can continue to move upward and onward.

With some of our clients simply they're stuck and we need to re-intervene to get things moving again.

So I'm Michelle Lange.

I'm an occupational therapist in the Denver, Colorado area.

And been working in assistive technology for a lot of years.

And again, happy to be with you here today.

Feel free as we're moving along to ask questions or make comments whenever you would like.

If I don't get to them right away, I will.

It might be that that information's coming up.

So again, we're going to really dive deep into a case study of a young woman named Rachel.

She has significant visual and cognitive impairments as well as significant sensory needs.

And we are looking at multiple assistive technologies to meet her needs.

So Rachel is now 19 years old.

And she has cerebral palsy as well as hydrocephalus, seizures and optic nerve atrophy.

And this is her wonderful family.

Now, she was initially referred for evaluation by myself, by her speech language pathologist for positioning and access for her communication.

So to look at is she receiving adequate postural support and how is she going to be able to access her assistive technology, specifically a communication device.

Now, at that time, she was 12 years old.

So again, my job was looking at positioning both of Rachel and eventually of the device and of a switch and access.

But I was starting off with her wheelchair seating.

Now when you evaluate someone's wheelchair seating, a good place to start is to look at what are they seated in now if there is a current seating system, and document that and then determine if that's adequate for the client.

So she was positioned in a very common manual tilt and space chair called the Quickie IRIS.

This is a really nice tilt and space option because if you look at this big bar down here, it slides in a way that maintains the client center of gravity.

So the chair is less tippy.

That can be really helpful when you've also loaded up the back with backpacks and such.

She had a linear seating system by a company called Freedom Designs.

The seat here had some generic contours to it as well as the back.

The back looks flat, but it actually has a slight contour to it.

She had full length hip guides.

That's to provide some lateral support to the pelvis through the legs and anterior support to her trunk.

It's a vest style, you can see here.

Lateral chest pads or lateral thoracic supports.

She has foot straps.

She's not wearing them in this particular picture and a large contoured head support.

In the seating system, she was demonstrating the following concerns in terms of her positioning.

Her hips were abducted, abducted, so her knees are just a little further apart than more of a neutral alignment, and they would be much further apart if it wasn't for these lateral supports on either side of her thighs.

Her feet, you can see are turned outward.

Now that can sometimes be the case when we have abduction of the legs.

The feet are simply following that line.

Sometimes this is due to a change in the bones, in the lower leg, condition called tibial torsion where we could see actual rotation of that bone and it leads to the feet turning outward.

Her upper trunk is flex.

She's leaning forward and her neck is flexed sometimes quite a bit.

She also had a very unusual tendency when sitting in this seating system.

She would take her arm and tuck it underneath the vest form a fist with her hand, and she is propping her head on that.

You can't see that because of this kacha she's wearing to manage secretions, but this was very typical of her position in the wheelchair.

You can see she's also wearing a splint on her right hand.

So again, she's propping her head on her hand.

And then she also sometimes has a sucking movement with her mouth of the bandana or her hand seeking out some sensory input.

Now it's important when we're assessing someone's position to look at their positioning 24/7.

What are all the positions that Rachel is in during her day and even night? Well, Rachel also spent time on her stomach or her side on the floor.

She spent some time sitting cross-legged on the floor, on a couch or even in a rocking chair.

Well, that told me, hmm, Rachel doesn't really need a lot of support to sit up by herself.

And when we got her out of the chair and onto the mat table, we found that she could sit independently.

Well, to be honest, I don't see a lot of clients who can sit independently in my practice and not usually clients that have the degree of postural support in her chair that she did.

She actually needed very little support in seating and she was one of those kiddos who tended to lean into whatever support was given to her.

Now, we've all seen those clients.

That doesn't mean that just because a client takes advantage of what you've given them, that they don't truly need that support.

But in Rachel's case, she did not.

She reportedly, per mom sat with her worst posture in her wheelchair.

That's never what I want to hear.

This has been customized to meet her postural needs, but since she didn't sit in it very well, she spent little time in it at home.

She primarily used it during her school day.

So why was Rachel sitting in this very flex position? We had identified an issue in her seating, this flexed posture of her trunk and her neck, and we needed to figure out why.

If I don't know what's causing the problem, it's difficult to come up with a solution for the problem.

Well, she had no functional vision whatsoever.

Now, visual input activates certain writing responses in our brain.

So if my head starts shifting one way or the other, there's lots of info in my brain that says, hey, that's not upright and midline and corrects my position of my head.

Now she certainly has writing responses in her head, but the

visual input that's part of those writing responses was not happening.

And so she was not really given a lot of prompts cognitively sensory wise from her brain to say, you need to lift your head.

She was also withdrawing in this seating system because she had a lack of stimulation and she was seeking some sensory input by sucking on her bandana or her hand, but otherwise didn't have very much input.

Now there's a difference between I'm asleep and I'm withdrawing.

We work with some clients who really look like they're napping during their day, but they're not.

They're simply withdrawing sensory wise, they're becoming less aroused.

They have a less aroused state of awareness or arousal or state of consciousness.

And it's important to address this in a different way.

She was definitely checking out when she was in her seating system.

However, when provided with sensory input, Rachel often, not always because of her vision, but often lifted her head and was certainly more engaged.

So in her rocking chair, again, very little partial support.

She would actively rock as soon as she was in this space because she knew she could.

And that would often lead to an upright head position and increased alertness and interaction with others.

Now, although I'm looking at her positioning, overall I have a very functional bias.

It would be great if she kept her head up, but she does have very limited vision.

What I'm more concerned about is that she's not sub aroused in her seating system.

I want her alert, engaged and able to participate.

Otherwise, she's really not able to be a part of her school day at all.

So what I was excited about with this rocking motion of hers was that it kept her alert and engaged whether or not her head was up, but certainly her head came up more and you could see she certainly seems much more alert.

So we decided that Rachel would be a good candidate for dynamic seating.

Dynamic seating provides movement within the wheelchair.

And if you've join me for some other webinars in the past, you know I've probably mentioned dynamic seating before, it's an intervention that can be very helpful for a lot of the clients that we work with.

So at the time we recommended a product called the Kids Rock dynamic manual wheelchair to encourage rocking this provided movement at the hips and the knees.

She really enjoyed this.

It took her a while to figure out how this worked that she could move it.

So what we did is we were able to get one of these on trial.

Now, I should let you know this product is not made anymore.

It's been discontinued, but we have other solutions for her now.

But she trialed this for about two weeks.

We actually had to show her how it moved.

So while she was seated in it, I would grab the push handles on the back canes and move it to give her a sense of, hey, I can move.

And once I started moving it, she would join into that movement.

As soon as I let go, she often would stop, but with some practice, with some exposure, she realized, hey, I can move this on my own.

She clearly enjoyed the movement.

She demonstrated that increased alertness that we were looking for, and overall her posture was improved in her trunk and head.

Now, not all the time.

You can see in this picture, she's not looking so great with her head position, but to be fair, she's playing with an iPad in this picture.

And so she's looking towards that.

Now she really has almost no vision.

We think she does see some light and she certainly realizes the sound is coming from the level of her tray and when she touches it, things happen.

She's actually using a switch by the side of her head, but occasionally she might reach out and touch it.

And so her gaze is directed downward.

We turned our attention towards access for communication.

So again, first look to positioning.

It might sometimes seem that positioning is unrelated to access.

We know that they're very much interrelated.

In her case, the relationship between positioning and access wasn't so much that she needed enough postural support to be able to activate, let's say, a switch.

In her case, she actually needed a little less postural support, but she needed movement.

We needed to address her sensory needs so that she was able to then be at a level of arousal, where she could participate and

be engaged.

And at that point, we are ready to re-look at communication.
Excuse me.

It's a cold day here in Denver, Colorado, needs some tea.

So Rachel already had a communication device at this point.

She was using the DynaVox Maestro, I'm having trouble talking today.

And eventually she did change over to a PRC Accent 800.

At the time we first saw her with the DynaVox she had been using her left hand to activate a switch that was placed either on the left side of her tray.

The tray is not in this particular picture, and this is her in her newer chair or it was placed on her left leg.

So they would literally balance a switch, like a jellybean switch on her thigh and she would reach out and touch it.

But there was an issue.

She was perseverating on the switch, she was hitting it repeatedly.

Now we've all seen clients who tend to do this as well.

And it can be very difficult to tease out why is someone hitting the switch repeatedly? Are they getting some sensory stimulation from this activity? Are they having trouble recognizing that the switch is a tool and not the end goal, not a toy? Is it a problem with placement? I've worked with some clients who persevere in some areas and not in others.

We needed to find out why she was doing this.

Now, prior to me meeting Rachel, her speech language pathologist, Jill Tolman, who I've worked with for years and is amazing, moved the switch to the right side of Rachel's head.

And the main reason she did this was to try to encourage a more upright head position and Rachel was able to use the switch in this location.

Now it was challenging at times because she did have to lift her head to activate the switch and as her head was forward so much of the time, that took more effort and time and I think sometimes she just didn't feel it was worth the effort.

If she was a little more alert and engaged that day, it was easier for her.

So the question was, should we relocate a switch solely to improve someone's head position? Well, this is a complicated question.

And I've had to deal with this quite a bit because we do see a lot of clients whose heads are downward.

So simple answer is if switch access is compromised, then we do not wanna put a switch in a position solely to help someone keep their head up.

But in this case, her switch access was okay and so we could

keep it there.

It's also important to remember that with Rachel, she certainly could lift her head.

It was more of a visual issue.

With other clients who spend a great deal of time looking at their labs, we need to make sure that we are addressing their head position overall, and that starts with a position of the pelvis.

And we have a lot of strategies to help someone keep their head upright when vision is not as impaired.

We actually have another webinar within the university system, AbleNet University on head positioning.

So I would encourage you to check that out as well.

So along the lines of access for communication, we recommended a different head support.

We recommended a head support, which could support the AbleNet spec switch by the right side of her head.

We also had a speaker that was embedded in a pad by the left side of her head for auditory scanning.

So this is the Stealth Products Comfort Plus head support, pretty basic head support.

It's very padded and provides a generic contour for someone to encourage them to keep their head in the middle.

It's available with this behind it.

This is called a SwingAway assembly because if we pull this piece here, that entire mechanism will swing away to the side.

And on the right side here, we did mount a specs switch.

It's a good size for by the side of the head.

It also has a nice crisp click.

She really needed that auditory feedback to let her know, yep, I activated the switch.

They do make Stealth a special mount here, a little plate that fits with the spec switch.

On the left side, we just had a lateral pad that typically would provide postural support, but embedded within this was a speaker, why? Well, Rachel uses auditory scanning because she really can't see the display at all, but she can listen to her choices and then when she hears the choice she wants, she activates the switch.

Beth has asked, good question.

Why did you keep the shoulder straps on if she's an independent sitter? We really debated about this since she had such a tendency to lean forward at her trunk in her head because of her lack of vision.

And partly it was a rather habitual posture for her.

We decided to use the shoulder straps as needed.

So she did not always wear them so that it would encourage her

to approach the back.

So depending on her overall status that day, sometimes she uses them and sometimes she does not.

Now Rachel seeks out sensory input.

We know she seeks out rocking, so she's looking for that vestibular input.

And rocking sometimes can provide some proprioceptive input as well because she would contact the back or push into a moving back, a dynamic back more so as she rocked.

And we know that she is more alert and engaged when she has that stimulation.

Now she already had a bunch of sensory choices on her communication device so I was really happy to see that.

She could go to a page where she could let people know what sensory input she was looking for at the time.

And that could have been anything from a certain toy to vibration, to music, to rub my shoulders, pat me on my chest, whatever input that she desired at that time.

And so I encouraged her team, the family, speech, to continue looking at what sort of choices could we give her, what sort of things does she seek out in terms of sensory input and try them out.

And if you found after a long time that she just never chose something, we could always drop that and maybe try something else as Rachel decided what sort of input do I need at this time? And this was a great strategy for her.

You can see here that she has some bells, it's like a bracelet that holds some bells and her mom is very cleverly attached these with some links to her chair.

So Rachel could reach down with her hand and find these on her own at times and grab them and shake them.

So that was an example of some sensory input that she could seek out on her own.

So Rachel received a new seating system and a new dynamic manual wheelchair, the Kids Rock.

And she continued augmentative speech therapy to develop language and communication using this new switch by the right side of her head.

Again, her head's really down in this picture.

She's engaging with this iPad on the tray, so yay, great.

I had other people to see other reports to do emails answer and I didn't need to see Rachel on a regular basis at that point.

She also does not live very close to where I work.

So Rachel continued to use these technologies.

She loves hippotherapy and would often engage in that.

The sensory input was awesome for her.

You can see big smile, head up, lots of sensory stuff going on

at this point.

But then we saw her again.

So again, the first time we saw her, she was only 12.

And throughout our initial interventions, I probably saw her some a few times between 12, 13 years old.

I hadn't seen her for a while, but her seating needed to be replaced.

And the mobility base had been discontinued.

So after this amount of time, it's certainly reasonable to expect that we would need to go ahead and replace her seating.

She has not grown a lot during this time, but some of her positioning needs have changed and depending on the positioning system, the materials just get kind of worn out.

It's like an old couch and she needed to get these replaced.

She was also starting to have difficulty with switch access by her head.

And so we needed to look at that as well.

If you look carefully at this picture, you can see the bar that supports the switch coming off of the head support and it has been moved further and further down to accommodate her head position.

We decided it was time for change.

We needed to reengage, reassess, figure out what was going on.

This is very common in teenagers.

Things can change.

Now oftentimes I see changes because a teenager can experience quite a growth spurt and biomechanically access can often change.

With Rachel, she hadn't grown too much, but things weren't working well.

So she had been well supported by her seating system.

She had done well with the dynamic movement in the wheelchair, but the switch access had become more difficult over time and as a result she was not communicating to her potential.

Her communication had plateaued and we had to decide did she have further potential? Is this as good as her communication gets or is there something in the way? Well, we certainly didn't wanna settle for ah, she's probably just reached her maximum potential.

We always wanna assume there could be further potential and we need to explore that.

We have another question here.

Was the speaker embedded in the lateral head support purchase that way or is this something modified afterwards? If purchased that way, is this a Stealth Product? Yes, when you order a head support from Stealth, if you want, you can request that a speaker be placed in the head support either in a lateral pad or

even within the rear pad of the head support.

It is a custom option, but you can work with the supplier and let them know you'd like this speaker put in there.

Now with that said, unfortunately the speakers that Stealth uses have been breaking.

This breaks my heart.

They know about the problem and they have a solution.

But like many companies, it takes a while for them to work through their list of things that need to be addressed and hopefully they will get to that in the near future.

So I do sometimes put speaker in there with good success, but because of breakage, I also sometimes use a wireless Bluetooth speaker.

We don't have to worry about plugging it into the communication device.

And some of these are rechargeable with a little mini USB.

You can find them on Amazon and tend to be pretty durable.

Sometimes have a volume control right on them.

This is an issue with these communication devices is getting the volume loud enough.

Sometimes even if we've turned up the volume through the communication device itself, it may not be loud enough throughout in the community, especially if it has to go through a little bit of foam or upholstery in the head support.

And many of these speakers come with a big carabineer on them too.

So there's somewhere we can hook them on on the back of the chair or by the head support.

We do want it as close as possible to the ear.

So not everybody's listening to that, just the client is.

So I hope that helps.

All right, so with Rachel we need to know does she have more potential so that we can exploit that to her benefit.

So again, it's common for needs to change when we're working with complex clients, particularly children.

Growth, medical changes, interventions and more requires to follow up on our clients regularly and reassess is needed.

I try to remember when I'm working with families to let them know if you're seeing these sort of changes, make sure you reach out to me again, especially if I'm not seeing them on a regular basis.

And I do also stress to families I work with.

If you're getting a new wheelchair please contact me so we can make sure we're getting the best option.

So current positioning the Kids Rock dynamic wheelchair was over five years old.

The foam was compressed, it was worn out, it needed to be

replaced, the base had been discontinued, we needed a different solution.

But Rachel continues to rock.

And so we know we need something that moves.

We didn't wanna replace this with a non-moving system.

So we recommended a new tilt in space for her.

We went back to the Quickie IRIS, but we added on another manufacturer's dynamic back and dynamic footrest that could be retrofitted to this base.

As we know, the Kids Rock was discontinued.

We do not have another integrated dynamic wheelchair that's available in the United States.

This particular company's seating dynamics has components that can be retrofitted onto either a new chair when we order it or an existing chair.

So in her case we did recommend the dynamic back and dynamic footrest.

They also do have dynamic head support hardware, but we're lucky if we can get Rachel to just lift her head and touch the head pad, let alone move it.

So she didn't require that.

We recommended a new linear seating system with a contoured cushion.

Linear back, lateral trunk supports, lateral pelvic supports, head support and anterior trunk support again, as needed to encourage a more upright position.

The seating shown in this picture here on the left is not her seating, this is just demonstrating the chair.

Access.

Well the exact switch placement by her head had become more and more difficult because her resting head position varied.

Sometimes she was fairly upright and other times she would come forward quite a bit.

Her head still tended to remain forward a great deal of the time because of her vision despite being able to move.

But fortunately she was more alert and able to participate.

So we continue to make slight switch placement adjustments but left the switch by the side of her head at this point.

You can see that her device is at kind of an unusual angle.

You've probably noticed this earlier as well.

That's because she's not looking at it.

It's at an angle where other people can see it and where it just wasn't in the way.

Now she had been actively reaching out more and more in an attempt to touch the communication device display.

Of course she was not accurate because she couldn't see the display regardless of the position of the device and the

specific locations, the icons were very, very small.

Even if they were very large, she wouldn't be able to see them.

So we were trying to maximize real estate on the device.

So we decided to set up the communication device to respond to her touching the screen as a switch activation to see what she would do if she would reach out and touch it to make her selections as they were scanned.

So we were able to set this up so she could use either the switch by the right side of her head or touch the screen to make selections.

And she enjoyed this for a period of time.

She received a new seating system in manual tilt in space wheelchair with the dynamic seating and this worked well for her.

Now these dynamic systems come with different levels of resistance and we had to make sure it was on the softest settings to encourage her movement because dynamic settings often used with people who are using a great deal of force, they're extending against their system with so much force that sometimes the back canes or other components might actually break.

She didn't need that level of resistance.

We wanted to readily encourage her rocking.

She continued to use both the reposition switch at the right side of her head and touching the display for access at this point.

She continued to grow and this is Rachel celebrating her high school graduation.

And this was just this last year.

She still, you can kind of see in the picture here, has the switch by the right side of her head and still has a tendency to tuck this hand underneath her anterior support but does use these dynamic components and tends to be more alert and engaged.

So we then evaluated Rachel for the third time and now she was 19 years old and using an AbleNet spec switch again at her.

Well actually it had been moved so it was no longer at the right side of her head.

It was at her right side and she was using her left hand.

She was crossing over midline using her left hand to press the right switch, which was mounted by her right side.

However, we're seeing that perseveration again.

She was perseverating on the switch activating this numerous times in a row.

Much of this seemed to be a self-stimulation behavior because every time she hit the switch, the communication device would start saying something and then she would quickly hit the switch again.

So it kind of sounded like she was rapping, but it was reducing her ability to communicate.

It was reducing her function.

She had less perseveration with the switch by her head, but she was much more motivated to use the switch by her hand.

So we had a decision to make.

What do we do? Do we keep the switch by her head where there's less perseveration? Do we put the switch by her hand where she's more motivated? Now she was so focused on hitting the switch that she wasn't listening to her choices and she wasn't making intentional selections.

She liked hearing the clicking noise of the switch.

She liked hearing the communication device begin speaking and then be interrupted by a switch hit.

Now the other people around her didn't appreciate this so much.

It was driving them crazy and you know that was kind of fun for her too.

So we needed to do something about this situation.

She had used a communication device for a long time so we knew that she knows how this works.

She has the potential to be a functional communicator.

How do we convince her to stop perseverating and use the switch intentionally? Well, I could lecture her that wasn't working too well and certainly other people had been trying that already.

This behavior was significantly impacting her ability to communicate.

She was virtually not communicating anymore at all.

She had definitely plateaued.

So completely on a whim one day sitting in my home office, I went out to my garage and pulled out a Switch Latch and Timer from my collection of equipment out there, brought it in, plugged it into a tablet with a switch app and plugged in a switch and just started playing around with it.

And I found that if I set up a slight delay on the Switch Latch and Timer that my subsequent switch activations were not accepted.

I wasn't sure if that would work with the Switch Latch and Timer, but it did and I was very happy.

And so I wanted to try that out with Rachel.

So I set up the Switch Latch and Timer between the switch and the communication device.

And I just put on a slight delay, had to kind of play around with it so that those repeated switch activations were ignored.

It worked, but at least during the evaluation and I wanted to make sure it would really work once she accommodated to it.

So we loaned the Switch Latch and Timer to the family for a period of time, a couple weeks.

And it continued to work.

Rachel stopped pushing the switch to get that stimulation, that sensory input, that annoying people around me and she started using it functionally again.

Mom came up with a great setup on the side of the chair to hold this Switch Latch and Timer.

Once we knew this was working well for her, we went ahead and ordered one for her own use.

So lots of talking.

Let's take a time here to see a video.

You'll be able to see in this video her setup of the communication device.

It's actually facing outward at this time.

I'm not quite sure why they've set it up that way, but they have.

So you can see the scanning and mom will show you towards the end of the video where she's attached the Switch Latch and Timer.

Now the volume for this video seems to be very low, so you might wanna turn up your volume when we get to this video.

So again, in this video you'll see Rachel rocking in her new chair because of that dynamic back and mom will be pointing out where the Switch Latch and Timer is.

- [Automated Voice] Questions.

I need bathroom.

- So mom has put that Switch Latch and Timer down towards the bottom.

I'm gonna start this one more time.

And if you look at the top, I believe the switch is right here at the moment.

They've been kind of playing around with positions of the switch at this point.

All right, go to the next video here.

Now here you'll see Rachel reaching across with her left hand because she has more control over the left side of her body and activating the switch.

And she's doing so appropriately without this repeated banging of the switch.

She's listening to the auditory cues.

Again, you might need to turn your volume up.

I wanna point out also you can see up on her headrest here that the former switch by the side of her head is still there in case we need to use it for other things.

Also, there's this little cube here that's a speaker and it's because the speaker that was implanted embedded in a left lateral pad that pad's no longer here failed.

And so the family got this instead for those cues.

So turn up your volume.

Let's take a look at this one.

- [Automated Voice] My name is Rachel.

Home, bathroom.

I need to go to the bathroom, home.

- So you can see that she's waiting, she's listening to those cues and then activating the switch.

She cannot see where the switch is.

Despite that bright color, we do not think she can see it, but she knows where it is and she can find it readily with her hand.

Carol has asked why we decided to place the hand switch on her right side and what supported our decision.

Actually the placement of the switch in this location happened in between evaluations.

I think it was a combination of mom and Jill, her therapist trying out some different locations and she seemed to do well when the switch was placed on her left side.

She doesn't activate it as readily.

This seems to be the pattern of movement that's most efficient for her.

One advantage of this but was not the main intent is that's the hand that she often shoves underneath her vest and props on and then tends to get a little more or less engaged, more withdrawn.

And by placing the switch over here and engaging that hand, functionally she does less of that.

Melinda's asked, what is the external speaker that you use? The speaker that is not embedded in the headrest? Well, the one that you saw in the video was one that used to be all sorts of places.

Sometimes you could find it at a drug store or an office supply store or a place like Target or Walmart.

We'd just see them laying around.

I don't know if they're still made, it was just a little cube speaker.

The speaker that I've been using often if you look on a place like Amazon under wireless Bluetooth speakers, rechargeable Bluetooth speakers, you'll see these speakers that are maybe about the size of a jellybean switch actually, but they're thicker, it's like a hockey puck.

And again, these are rechargeable with a little mini USB port. They're pretty durable.

Many of them are waterproof and have a carabiner on them so you can just hook them on somewhere on the chair.

I look for ones that have their own volume control on the side as well and power on and off.

So that's where I would look.

What is the mount, Julia has asked.

This is one of my favorite mounts.

It's from Rehadapt.

It's called REH Rehadapt.

They're very small lightweight mounts though they have a variety of them.

A lot of the devices that our clients are using these days and a lot of them are tablet-based, really don't require a huge mount.

Our older mounts we're heavier than the devices that we're recommending these days.

So this is nice and lightweight.

It has a little outrigger on it.

It's a little hard to see here 'cause it's blurry.

But I'll start this video again.

And that outrigger is holding the switch.

And you can really customize these from Rehadapt.

They have a really nice program called their virtual mounting system.

Let's see here.

Yeah, you can see this little outrigger for the switch being held here, even though again it's gotten and blurry here.

Basically you just take a picture from several angles of where you want the device, where you wanna switch.

If you're gonna mount it to the mount, you don't have to.

And then of the frame itself, wheelchair frame and Rehadapt will send you a quote with a virtual picture of what they recommend is required so you don't have to figure out all the details of the mount, which can be difficult.

This does not get in the way of transfers because it is outside the width of the cushion and she is dependent for her transfers family just lifts her from the left side.

- [Automated Voice] My name is Rachel.

- Oh, here we go.

And then in this video you'll see that Rachel still has a tendency to activate the switch multiple times sometimes, but

the Switch Latch and Timer is allowing the communication device to ignore most of those extraneous hits.

If we wanted to get rid of all of those extraneous hits, the delay would be so much that she wouldn't be able to communicate functionally.

So it's kind of a balance there.

Also, we're not reinforcing the behaviors, so Rachel does not perseverate all the time.

So let's take a look.

- [Automated Voice] I need to go to the bathroom.

Home.

Hello.

Hi, my name is Rachel.

Hello.

Hi, my name is Rachel.

- So there you could see, is she hitting the switch multiple times at times, absolutely.

Is the Switch Latch and Timer helping? Absolutely.

She did say, hi, my name is Rachel twice.

But otherwise, most of those extraneous switch hits were ignored.

That does not reinforce her behavior when she starts raking at the switch.

And so as a result, most of the time she's using it in an appropriate manner, which is great.

- [Automated Voice] I want to go to the bathroom.

- So most of the time her access is very appropriate.

This has allowed her to communicate more functionally and to continue to progress.

So she's not plateaued in her communication.

So her vocabulary continues to expand.

Let's take a look at this video and then we'll answer another question.

- [Automated Voice] Greetings.

- Don't forget to turn your volume up.

- [Automated Voice] Hi.
I will say bye for now.
Hello.

- So you can see there she's using it more appropriately without that perseveration, which is great.

Someone has asked, do you have any suggestions for mounting options with everyday materials at home? We have lots of clients who are at home due to COVID with limited access to equipment.

Well, if this person still has a mobility base, if they're seated in a wheelchair, they should have their own mounting system rather than one owned by the school and can still use their device that way.

Funding of course varies by funding source, but mounts for a communication device are typically paid for.

And mounts for a tablet if the tablet is being used for communication are also typically paid for.

If someone's using a tablet for other purposes, then no, sorry, usually we can't get funding for that.

Now if you're looking at mounting something for a variety of positions such as my client spend some time in maybe an alternative adaptive seat or a standard, those sort of things, there are certainly amounts available for that.

If you're looking at something temporary because the kids are home right now with COVID, well it gets a little trickier.

If they have a tray on that adaptive seat or a standard, we could put the device on the tray.

It's important that the client does not have the ability to sweep that device off of the tray and onto the floor because it can be damaged, broken.

You could also bring a table surface up to the client depending on their position and place the device on there.

If the client's on the floor, you can place the device on the floor.

Most of our devices have some type of mechanism on the back that allows it to be propped at an angle on the floor.

Sometimes those are removed to fit onto a wheelchair mount.

So I hope that helps.

And then Carol has asked, sorry to ask, but can we see again the position of the speaker? Carol do you mean the cube speaker or the speaker that's embedded in the pad? If you can let me know that's great.

And then we also have another question.

Do you have any suggestions for mounting a larger switch voice

output device with materials that can be found at home? Oh, I think that's the one we, sorry, that was in both the chat and Q&A.

Yeah, I hope, again, I answered your question about that.

If you wanna put a follow up question in that's fine.

And Carlos said the cube.

So let's go back to the picture that had the cube in it.

I think it's this one.

Yeah, so here you can see that cube.

It has I believe a little carabiner on it and it's connected to the SwingAway assemblies.

It's just dangling from that.

And this one is Bluetooth, so it does not need to be connected with a wire to the device down here, which is also another device.

But again, these are, sometimes you can find them, sometimes you can't, it's nice and small.

I don't usually use them because they're not as robust as those are the ones I mentioned that we often use from a source like Amazon.

Okay, let me get back to my presentation here.

There we go.

So Rachel is really a fantastic communicator.

She's doing a lot of great stuff.

Here you can see her with her wonderful mom and she said, "Mom, I love you.

" And this is all the things on her mom page.

So she can quickly say lots of things to her mom and then she can go back and she has lots and lots of vocabulary, very extensive vocabulary that she is very good with.

She also loves to tell Alexa what to do.

We have a lot of clients who use their communication device to interact with Alexa.

I have a tendency to just tell Alexa to set a timer or tell me what the weather is.

But our clients, many of our clients are huge fans of music and she can direct Alexa on what she wants to do.

Control of devices in the environment is critical as we know for independence and participation.

And this is her music page.

She also interacts with Alexa in other ways.

But you can see how excited she is here.

She can tell her to go to a particular artist or song whether she wants it quieter or louder, play, stop, skip to the next one, shuffle, all sorts of commands.

And Alexa is excellent, same with Google Home.

Alexa is really great at recognizing the synthetic speech on

these communication devices.

You can see too in this picture, here's another one of those cubes.

I bet you that pink one broke.

Like I said, they're not as robust, but she has this one here instead.

Cool leopard skin covering here and it's attached to a little Carabiner.

So what is our take home message? And then we'll have lots of time for questions and discussion.

The clients we work with have one thing in common, right? Change.

It's easy to think, gosh, did I blow it? Did I not meet this client's needs? And of course that is certainly possible and happens as well.

But most often our clients' needs simply change.

And a solution that worked really, really well a number of years ago may not continue to meet someone's needs.

So changing needs can sometimes lead to a client plateauing or even regressing in their function.

We don't want that to happen.

So we need to reassess as a team so we can help our clients continue to progress and do everything we can ensure that they haven't plateaued because that they have me.

.

Gosh, they have met their potential.

If the client has not fully met their potential, we really have to keep getting in there, getting back in the game.

So thank you very much for attending our webinar here today and I'm gonna open it up for questions or comments.

So feel free to type those in.

And while you're doing so, I wanna make sure you have my contact info too.

Feel free to take a look at my website if you'd like.

There's a lot of resources there under the resources page that could be helpful and are free, feel free to use those.

And you can also email me if you have further questions.

So we're gonna go ahead and open it up for any questions or comments at this point.

So again, while people are typing with our particular situation in the world right now, we do have a lot of remote practice that we're doing, remote education, remote therapies and it makes things difficult.

I have gotten more used to it slowly, as I'm sure many of you have as well.

I often will ask families to move that screen around so I can

see what's going on.

Depending on the security requirements you have, you might only be able to use certain platforms.

I sometimes can use something as simple as FaceTime and just ask a family to show me something.

I have families that will take a quick video clip of something that they are concerned about and they'll just text it to me.

Now of course that means that a whole lot of people have my cell phone number.

Sometimes that can be a boundary issue, but it's an easy way for me to look at something and try to tease apart a problem that someone might be having.

But it's not impossible, again, just challenging.

All right I am not seeing any more questions or comments right now, so I'm trying to think of common questions people might have here.

I have another client right now who has a similar issue.

He's perseverating on the switch and he is absolutely stemming on that switch.

It's fun to hear that clicking noise and he's not paying attention at all to what is occurring when he hits the switch.

That can be really tricky to overcome.

So we're going to try this Switch Latch and Timer with him as well to see if it helps.

But I also have several courses through AbleNet on switch skill training and part of that involves clients who might have a bit of a learning curve to understand that the switch is a tool, it is not the toy, it is not the end goal.

It's actually one of the reasons that I'm not a big fan of switches that have a huge amount of sensory input to them because then the switch becomes the goal again instead of the tool to control something else.

So you might wanna check out those as well.

Carol has said, will this webinar be available to share with colleagues as your presentation was good.

Thank you very much I appreciate that with a lot of good information.

Yes, absolutely.

This will be posted as a part of AbleNet University.

They have that on YouTube now and you can search through those videos and you can just put in my name to find something.

Sometimes that can be the easiest way.

So absolutely, and that should be posted in the next few days, Deb, so we'll see when that happens.

But it'll be on there.

And then Tracy has asked, was a sensory inventory practice over time with Rachel to confirm her update her preferences? That's a

great question.

I am not sure if that happened with her treating OT.

That would've been great.

My main recommendations were definitely work with Rachel to figure out what sort of things help her to calm or to be more aroused.

And if there are things that are negative for her, let's avoid those and start building them into her communication.

But no, I did not do a formal sensory assessment myself.

Her OT might have.

So great point, that can be a great way of determining which of these strategies work.

Generally, I ask the families I work with, what sort of things do you do to wake up your child or to calm your child? What sort of things drive them crazy? Let's avoid those things.

And that begins our list.

And again, if a client has been just not choosing a certain sensory option for a long period of time, we might drop that and replace it with something else because it's a pain to have to scan through 50 choices if you're usually choosing six of them.

All right, any other questions or comments? We have a few more minutes here and so very happy to entertain any other questions, even if they're not related to this particular presentation.

If you just have a AT related question.

I'm also pretty good at home improvement projects, so if you have a question about that, let me know.

Deb has said this webinar will be available on YouTube in the next 24 hours.

Wow, very fast.

Great.

Okay.

Well we'll give it another minute here to see if anyone else has any questions or comments they're typing.

And then we'll go ahead and wrap this up.

And again, it will be available as a recording.

So if you wanted to share it with others, that's absolutely fine.

Oh, and I also would be very negligent if I didn't thank very much Rachel and her family for being so kind to share all of this information and be very gracious with sharing videos and pictures.

So very much appreciate that.

Our parents make such a huge difference, right? In the success of our recommended interventions.

Don has asked any suggestions with working with students who are blinded and deaf? That's a big, big question.

It encompasses so much and I think it's one of the most

difficult populations to work with.

I do work with a number of clients who have hearing impairments and visual impairments, but I do not generally work with clients who have absolutely no vision and no hearing.

Most of those clients are followed by very specialized programs and it's because it is such an incredibly specialized area for those clients.

There's very specific strategies that are used because now the client cannot hear those auditory cues and cannot readily scan through options.

So certainly are strategies, but those are typically handled by someone who specializes in that area.

And here, let me move this over so I can see it better.

Quin B has asked, would you please share what information you have about Switch Control Access and Eyegaze to activate video calling and computer iPad functions please.

I'm working with an individual with later stage ALS who is not able to type or speak functionally.

He wants to be able to video call his family with his computer or iPad using an AAC app.

He also wants to be able to access Gmail, Zoom, Microsoft Program, Skype, Facebook and Google, phew.

Okay, tell you what, as we only have two minutes left, that is probably a bigger question we can answer during this time.

So I will follow up with you directly.

Quin B, if you could shoot me an email, probably what I'm gonna recommend is if you can let me know in that email what area you live in, there might be a resource that's close to you that can help you.

'Cause that's a lot of things to be addressed, but very good goals.

And then real quick, Leslie has asked, can you recommend a basic training course for an SLP who would like to learn more about evaluating students with complex communication needs? Boy, that's a good question.

As an OT, I am not sure of one offhand, but I would recommend two things I'd recommend that you look at, again, AbleNet University to see there's quite a variety of courses on there, lots and lots of them and there could be some good ones there.

And Deb, if you know of a really good one that might be appropriate, you can pop that in there.

That would be great into the chat.

Another source you might wanna look at is speechpathology.com.

They have a large amount of courses and a number of those have to do with augmentative communication and they might.

.

.

I'm pretty confident they'd have a introductory course that would be a good starting place.

So speechpathology.com.

And if you've noticed in the chat box, Susan Foster has suggested in light of our previous question about the gentleman with ALS looking at the camera mouse as an option as well.

Great, well we are right at the top of the hour.

Again, thank you very much for joining us for this course here today.

And I'm going to let Deb wrap us up and this will be available online in about 24 hours.

Thanks everyone and have a great rest of your year.

Stay safe and healthy and happy holidays.

- [Deb] Thanks, Michelle.

I appreciate all of your great information.

Happy holidays to you as well.

And that concludes our webinar for today.

Thank you.