

Introduction to Sensory Awareness Cynthia Miller-Lautman, OT

Hi, everyone. I'm so glad that you're here with me today to share this online version of a sensory awareness training. My name is Cynthia Miller-Lautman and I'm an Occupational Therapist and intervention team leader at the Cree Health Board in Disability Programs Specialized Services. So I'm so happy you're here to share with me today. And I wanted you to know that this is part one of a three part series.

So if you would like the full in-person version of this training, you can request it through our disability programs team with Arnaituk Gagnon-Auclaire. But this version today is a one hour and 15 minute talk on sensory awareness. And the part two in part three that are done in person are involved with teaching you all the different equipment that I'm going to talk about today.

And also hands on experience to teach classroom teachers, daycare workers, educators, how to make a sensory diet. So if you're interested in that other part two and three, and you would request an in-person training. So as mentioned, my name is Cynthia Miller-Lautman and I'm an occupational therapist. And my personal story is that I have worked with disabilities for over 20 years.

But I also have three neurodivergent people in my family. So I have a husband with ADHD, and two of my children have ADHD. And it's always been very important for me to explain sensory awareness to the general public and all people that are working with kids and adults with disabilities. So every single day, many children, teens, adults, are being diagnosed with autism.

Other disorders such as attention deficit disorder, fetal alcohol syndrome disorder, learning disabilities, language delays, language disorders. So approximately in the United States, the stat is that five to 15% of these children, typically developing children, are not the ones being diagnosed, have difficulty processing their senses. So although senses that we talked about when we were in kindergarten and learning about the five senses but we also know that the minute that a diagnosis happens, those kids are much more likely to express and have sensory difficulties.

That number skyrockets to as much as 70%. So I need you to keep those numbers in mind. If you're thinking of children or teens and adults with disabilities, you can pretty much assume that a good bunch of those will also have sensory awareness difficulties. And that's why I want to bring you here today and talk about this subject before we can do that.

I need you to go through an experience because I need to go through your senses and test your own senses today. So I really encourage you to take part in this next activity. OK, so before we start, I'm going to explain the activity, and I want you, if you're online, to really take this time to get out a piece of paper and a pen, because we're going to play a game called Scategories.

So get your pen and pencil ready. And I want you to watch the screen and I'll explain the game. The game is to as fast as you can write down a name, a word that matches what you see on the screen. So I'll give you an example. Let's say I give you the letter B and all the words you must write down must start with the letter B.

So first type of meat you would write bear meat. Items to buy a book. A world leader or politician. You could say Biden. Joe Biden. School subject, biology. So you get the idea of the game. So I'm going to give you a minute to make yourself collected. And then we're going to start the activity So I want you to do the best you can during this activity.

Try to get as many words down as you can. On your marks, get set. Actually, I forgot to give you the word. So the sorry, the letter the letter today is going to be the letter T so I want you to find a word that matches all of these categories with the letter T. On your marks, get set.

Go OK. I'm going to get you all to put down your pencil. And I would just like to ask you a few questions to reflect on. I know you're home watching this on your own, or if you're in a group, a small group, maybe pause this and just have a little discussion. About what that felt like So when I give this live a lot of people will tell me what it felt like and how they felt and how stressed they felt from that activity.

Even though they knew it was a game. It was a fun game, you thought maybe you were going to do well. So I want you to think about what bothered you the most What sense was bothering you? Was it the words dancing across the screen that made you overwhelmed and not able to concentrate? Was it the noises Was it watching me being popping on the microphone and making distraction?

What bothered you? And then I want to remind you, imagine that this is what I asked you to do all day. Imagine that you had to sit in a classroom room or in an office or in a program that you were part of, that the world sounded like this and looked like this. Well, I want to remind you, that 70%, up to 70% of children with disabilities feel overwhelmed and can't regulate the noises and the sounds and the visual distractions coming into them every day.

Many of them can't tolerate the touch and cold and temperature differences. So it's really important that we remember how we felt during this activity, because then we can help our clients. And I also want to remind you, if there are some of you that are joining this and work with people with disabilities. Well, we remember that the stat I told you that about up to five to 15% of children may just have sensory regulation difficulties without a diagnosis.

We're also understanding that people with mental health difficulties people who are aging and our elders who are losing control of their sensations also may feel overwhelmed and not able to regulate. Now, why it was really important for me to do that activity with you is I wanted to show you right now, when I'm looking at all of you

and I've done this with my colleagues and other teachers and educators, when I watch the room after that activity, I truly see how people in the room can get back to just right.

Like right now, you might be being able to listen to me again. You've calmed yourself down. You were a little bit on high at the beginning of that activity. And now you're on just right and you're ready to listen to me. So that was an exact example of what I call sensory regulation. You were on high and you could bring yourself to just right so that you can go on listening.

Now, some of you might have been saying I'm not on just right yet, and maybe you're doing some strategies or some activities to try to get yourself to just right. Maybe you're twisting in your chair. Maybe you're fiddling with your pencil. Maybe you're tapping your foot but you're trying to get yourself back to just right. So this is a normal thing.

It's not that any of us are expected to be on just right all the time. It's that we can go up and down through our day, but get to just right when we need to be. That is called sensory regulation. So you can see the story of an here in the morning. She might not be on just right, but she does some tools and strategies to get herself maybe a cup of coffee, maybe a walk, maybe her children wake her up and get her on just right.

But then around ten times she needs a coffee again because she's feeling tired. The point is, is that an on her own can go get those tools and do what she needs to regulate herself. And she goes on and off throughout the day, even at the end of the day, she has to figure out a way to get herself actually on low because she needs to be able to fall asleep at night.

So you can have someone that is able to regulate for parts of their day but then has trouble at the end of their day, getting on to just low to go from just right sorry to low and fall asleep. You know who you are. If you're those people. So sometimes you might have someone in your life, a child or an adult, you know, that is stuck on high.

They seem to never be able to get to just right. They're always talking. They're always moving. They're always fidgeting, trying to keep themselves in enough attention so that they can learn. But often these kids and adults seem very disruptive to programs. And you probably have some of them in your classroom or maybe you work with some of them in your office.

But being on high can be overwhelming and catchy to a whole bunch of other people. When someone has too much energy and can't sit still in class, it can be very disruptive for everyone else, including the teacher.

Then you might have a pattern of a child that is stuck on low that can't seem to ever wake up enough to get to just right. These are the kind of kids that I worry about because they often go unnoticed. And I would even say that in our elders homes, I would say that with our elderly population or any group home, it's these people that end up stuck in low.

They don't cause any problems. They don't cause a behavior problem. But they aren't able to learn because they're stuck on low and they're not able to attend and listen to what's going on. They maybe don't participate in group settings or activities because they're stuck on low So if you see this classroom, this is a group of students, a very old picture, but they all seem ready to learn.

I would say that they're unjust right? They're all looking at their teacher. They seem excited and they're attentive. I can't tell you, though, that there's not one that's maybe self-regulating themselves by tapping their foot while waiting for their teacher. But in this picture, I would say this is a just right moment. OK, so before we can go on further, I need to tell you, how do we if we want to learn how to get to just right and to help our clients and ourselves when to get stay on just right, we need to understand the sensory systems.

And so many of us learned them in kindergarten and we studied the five senses. Our taste or touch or smell. But I need to go into the eight sensory systems that you actually need to know about because they're the key and the clues for how we help people get to just right when they can't do it themselves.

So the first one I want to tell you about is the touch system. So the touch system is the earliest system to develop it's developing while the child is inside the mother. So it's the largest organ. Our skin covers so much. All of our body surface But if that system if that touch system is not on just right, it might feel too much or too little.

So someone that feels too much, might not want to wear their socks, might not be able to stand having their teeth brushed, their hair brushed or their mother or father touch them. That's on the extreme. But there are kids that just won't wear certain clothing because they're bothered too much. They feel too much from their touch system. And then you'll have the opposite.

You'll have children. And I had a daughter like this that didn't feel enough. Her touch system constantly needed to be. She was always trying to touch things so that she could get to just right. So she was leaning on things. She was touching things. She was always fiddling with things to kind of keep herself up to just right.

So I want you to watch this video of this little boy and see what if you can see what would be bothering him. He keeps telling his mom what's bothering him. Take a look. So you can guess if I had to guess. His touch system is feeling too much. That buckle hurts him. He looks almost in physical pain and he keeps saying, take it off, take it off.

And then his shoe comes off. And then he's bothered by probably having one shoe on and one shoe off because he feels too much. For all we know, he also might get sick in the car. This little boy is on high. He's feeling too much to touch. So you can see how this is very hard on a family and on this little boy.

Imagine this going on in the car every time you put your child in the car. He cannot get himself to just right. He needs some help. And we will go into some ideas after. Right now, I just want you to see how what could happen with a touch system that is not working on just right. OK, this next one is called vestibular sense.

It's really our balance and movement sense. And before we continue, I want you to stand up. I'd like you to stand up, and I would like you to spin until you feel dizzy. So I'm going to give you a moment. I have some colleagues that I've been watching, so I know that they get dizzy or not. So stand up and spin. Keep spinning until you feel dizzy.

When you feel dizzy, you can sit down. Keep spinning. That's great. OK, you can sit down. And I can already see from all the times I give this live. I know exactly that. There's some of you that were dizzy right away, and you sat down, and then there's some other ones that could keep going, and they could spin more until they felt dizzy.

So some people in this audience right here needed more spinning to activate their vestibular system. And then there's some of you that had to sit down right away. And there's probably one of you in the room says, I'm not spinning. I'm not going to spin at all. And you sat down right away and gave up on me. That's OK.

You know yourself. You know your system. And you know what it takes for you to stay on just right. But unfortunately, some kids with sensory regulation difficulties and then therefore, adults and elders who are also having trouble with their sensations do not know when they feel dizzy or not. Sometimes they can't even guess when they're going to feel dizzy.

So some of them will try to activate their vestibular system by spinning and spinning and spinning, try to get themselves to feel and be on just right. These little circular canals sit in your inner ear. They're called semicircular canals and two of them sit like this and two of them sit like this. And those canals sense if you're off balance and if you're dizzy.

And some people feel too little, they don't feel enough. So they have to spin more and move more and turn their heads and bodies around more to feel on just right. And then there's people that if you spin them at all, even if they put their head upside down, they can feel dizzy. So there's stories of babies who are born premature before, you know, the 33 week age of gestation.

And they might feel too much from vestibular. So parents will report that when they're giving them a bath, their children are screaming because they can have their head put backwards. There's babies that don't like to be on their back for on the change table because they feel dizzy too quickly. My son as a baby had a very poorly developed vestibular system and he got sick in the car and he was dizzy.

He wouldn't go in a baby swing. He was completely not on just right. He felt too much from vestibular. So, again, we often see kids trying to go get what they need or not

doing something because they feel too much. But those kids that are trying to go get all that movement and spin and they need to move a lot.

We often see them as behavior problems, but really they just need to move. The next sense. So we just did the touch system, we did the vestibular system. And now I really want to talk about another very important system that nobody knows about. And that's called the proprioceptive system. It's a big word and it's not my favorite word, but it is so important and this is our sense of our bodies without the use of our eyes.

It's our muscles and joints reacting quickly and feeling something without our eyes. So I'm going to get you all to close your eyes, OK? And I want you to draw a teepee in the air. Please draw a teepee as best you can.

Great. Good. You can open your eyes. Now you can watch me OK? So I don't think I've actually ever drawn a teepee before, and I'm not sure if you have, but we all seem to have a sense of being able to draw. I've watched my colleagues and educators do the same activity, and everybody seems to know how to do it, whether they've done it a lot in their life or not.

What you have is an internal body picture, and you can control your fingers and your muscles to do what you want. Well, when there's a problem with the proprioceptive sense, when your body doesn't actually feel where it is in space, those kids and adults seem really clumsy. They're the kids that you call awkward or they seem to be poor at sports, and it's hard for them to learn to tie their shoes and do up buttons.

It's because their sense of proprioception is not developed. So sorry, I'm going to go back for a second. I started with those three senses because they are the most important for helping children and adults with sensory regulation difficulties later on. So I'm going to repeat them again because I really want you to remember this touch, vestibular and proprioception. These are the three most important senses that often go unnoticed with kids with disabilities.

And therefore but they are the things we have to do to help them get to just right. So these other senses can be important, too, but they're not nearly as important as those first three. So get really good at trying to be a detective and seeing if you can pick out kids and adults that you're working with that may have some difficulty to get just right on touch, vestibular and proprioception.

So our sense of sight. So this is one of the ones we did learn in kindergarten, right about our eyes. Well, imagine someone who is on high that feels too much from their eyes. These are kids that might be closing in, squinting and hiding away. They're the adult that might not be able to tolerate bright lights anymore or too much screen time.

They're the elder that their sense of vision is becoming less regulated, and they get overwhelmed by too much things going around the room. We know this is part of people's decline in dementia. They do get overwhelmed by their sight system. They feel

too much. And if someone who feels too much from their visual system is constantly bombarded by too much visual, like in a classroom or by your eye contact, when you force them to look at you when you're asking them to talk, it can increase anxiety and stress.

Actually, 12 seconds of looking at someone straight in the eye can increase their heart rate. They can begin to sweat. And this time goes down to 2 seconds in people with invisible disabilities. So someone with autism, ADHD, your face can be the greatest trigger for someone who's on high to visual and sight. So I need you to keep that really in mind when you're working with these clients that all the visual going on that might be OK for you may not be OK.

For someone who feels too much to their visual system. And again, put on your detective hat. What are you noticing? They're squinting they're hiding. They want to wear sunglasses. They like to face in and have something to work out that is like a board that protects their work area. So they don't see anything around them. Be a detective. Now, there are kids that are on low to visual or that they go in between.

They go from high to low. And I've seen students, some of them with autism spectrum disorder that really need to stimulate their visual sense. And they will do that through watching videos over and over and really looking interest and like trying to get from low to just right or even to high on their visual system. So they'll watch computer shows or show over and over a certain part and their eyes are there trying to stimulate their eyes to go from low to just right. So we need to be careful of taking too much away from kids or adults that are seeking this stuff because they might need it. And our job is not to take it away. Our job is maybe to find something that is more appropriate or more acceptable in the school environment or in the office environment. But it's not to take it away.

Remember, a lot of these kids that are on low or high to any of these sense are doing their best to try to regulate. But their best just might not be good enough and they might need more help from you. And we'll talk about that as we go on. Another sense that can be affected by sensory regulation problems is the sense of smell.

So I've seen different clients depending on their disability that are either on low and need to smell things all the time. They try to stimulate and get to just right in their bodies on just right by activating their sense of smell. So I was just in Waskaganish and I had the privilege of working with some educators in the Snoezelen room in the elementary school, and they have what's called the smell machine in that room.

So it's nice. One room is a sensory room. And the first picture on this presentation and showed one of our clients in the sensory room, Snoezelen, with the bubble tube that you might have seen on the front page. Anyway, it's a sensory room and in that room is a machine that has smells and you can press the button and it releases different smells.

So some kids absolutely love that kind of thing and they're smelling all different things for their day. And then there's kids that the smell of anything bothers them perfume, shampoo smells. And you can imagine that when you have a child that is feeling on high to smells, that it's already gets them hyper. Not feeling good. Not on just right.

So again, the smell system can be affected in people with regulation difficulties. And again, we have to be sensitive. Sometimes as parents, we're like, that doesn't smell bad. But for our kids, that food might smell terrible. And to kids that feel too much smell of food can be really disruptive and actually make it that they don't want to eat it.

What's interesting and the next slide is going to be about the taste system because as I mentioned with smells, the taste system is directly affected by our smell system. So kids that are on high to smells often feel too much in their mouth for their taste buds. So, for example, a kid who is super on high to smell might know that you've eaten a banana 2 hours before because their sense of smell is so much more on high than someone else.

So I could talk and give a whole talk on the taste system and how it affects kids and eating and actually elders that are in neurodegenerative diseases and how it affects their taste system. But in a nutshell, taste is so important to families because sharing food is so important to many, many cultures. And when you have someone who what we call is a picky eater, they feel too much from their taste system.

It can create havoc at your dinner table. It can create havoc and stress for the child and the families all through the meal. If you have a child that is a very, very picky eater. I know many of the communities have nutritionists who have taken courses talking about picky eating. So I encourage you to not wait. It's very stressful for families if you know that a family is going through that.

You can refer to the local nutritionist. Sometimes occupational therapists also will work on this and we'll talk about how. We don't tend to work on the taste system. What we often do is work on getting the whole body to just right so that they can tolerate a little bit more. So one of the things, though, I have to say and is a practice that is not looked well on anymore, we should never force kids to eat certain tastes.

Our job is to put the food out and have choices available. But our job is not to force children to eat, it creates a whole other amount of stress and anxiety for kids that feel too much. So if you force a child to eat, the table and all around eating will be very negative and put them in a stress response.

So you've got to think of other ways. And if you need help, please do reach out to someone, because it's a very complex. Eating is complex but simply no forcing, have lots of different choices. Eat with your child and they will eventually, hopefully try the foods. If they don't it's important to refer early to it to get some help. So, again, if you can take a look at this picture.

This little boy is enjoying the taste of his food. I would say he isn't just right. And the last system I want to teach you about. So we've just gone over seven senses, three most important being touch, vestibular and proprioception. But I want you to watch this little video on the interoceptive system because she explains it much better than I could.

By the way, this woman has autism spectrum disorder and she is sharing this video via her TikTok feed. So if you like this video, you can go see her feed. I put it up there and link to it.

So really, the interoceptive system is your internal sense of your body; hunger, bathroom urges, how you're feeling. Are you full? These feelings are what's called the interoceptive system. And again, many people with disabilities describe having difficulties or their families will describe that their children aren't toilet trained. They don't they can't sense when they're full, they eat too much or they don't eat enough.

So there's a trouble. They're either on high or low and they can't get to just right. So again, some of the ways we help with this later on is to actually focus on the three first senses we talked about. So the touch, vestibular and proprioceptive sense can help with the interoceptive sense. So I want you to put your detective hats on and I want as workers, as parents, as friends, as grandparents of working with people with difficulties.

You may you want to try to figure out what you're looking for. So what I look for, if I want to see if someone has sensory awareness or regulation difficulties, they often will not be on just right. So right away, if you have a child or a person in your life that is having trouble on being on just right there, either on high on low or a mixed profile, always on high, then on low high, then low, you have a really good indication that they have a sensory regulation problem.

And that's where I want you to start. Usually you'll get reports from teachers or daycare saying they're really difficult. They're having behavior problems. And when you dig into these behavior problems, it's they're moving too much, they're touching too much, they're throwing things in the classroom. They're always sleepy. They're lazy. When you're hearing things like that. My first thing is before labelling a behavior difficulty, let's think about sensory regulation.

On a more technical level, if you're a parent or an early childhood worker, I would think about are you will have seen signs of like delayed crawling. Are you seeing signs of awkwardness and clumsiness? Are they not able to swing or are they having trouble at sports? Are they picky eaters? Kind of all the things I talked about in the sensory system.

So just keep in mind that you have your own detective hat on and you don't need to be a professional or a trained worker to do this. A lot of people can figure out it's just you often don't have the words to say they're having a sensory regulation problem. They're stuck in high or they're stuck in low. All right.

For this slide, I'd like us to watch an eight year old girl on video who is doing some tests on an occupational therapy test called the BOT-2. And I want you to also watch her while she's doing these tests because she's doing things that might indicate that she's awkward or having trouble with her eyes open or eyes closed.

So watch very closely the difference of her movements with her eyes open and with her eyes closed.

Her eyes are open right now.

OK, so her eyes are closed here and she's walking with her feet one after the other. Watch her balance now. Her eyes are open so she's trying to do a sit up and actually these are kind of hard for her. If you notice, her feet can't stay down. It's like she's not sure which muscle to contract in her body to get up there.

And it's really hard for her. You can see her tongue sticking out. Same thing with push ups. It's like she doesn't know how to hold herself up.

OK so before we go on, I want you to think of that little girl. She's eight. We talked about these three main senses. Which one was the sense that you saw here when she closed her eyes and she had more trouble? Which sense was that was it touch, proprioception or vestibular? If you guessed proprioception, you're right, because the sense of proprioception is our sense of our body when we're not looking. So when she couldn't see, when she was holding her leg up, she was more off balance. When she had her eyes closed trying to walk foot after foot, she had to hit her foot, one after the other on the ground. Really hard to give herself some other feedback.

It was her sense of proprioception that was not working well enough. It wasn't just right. It wasn't not working at all, but it wasn't working optimally. And if you saw her doing her sit ups when she couldn't see which muscles do I contract in my stomach, she had a lot of trouble. So then it looks like she has strength problems, but she's able and strong enough.

Her muscles do not have a problem. It's that her sense of proprioception does. So she doesn't practice sit ups so she gets weaker. The same thing happens in sports with this kind of child. They have trouble with the sport, so they don't practice in practice and they fall behind. So it's not that kids with proprioceptive difficulties cannot do sports.

It's that they need a little more help and practice and repetition to be able to do those sports. They may need it slowed down and they may need someone to help them through those activities. So again, you pick proprioception. You're right.

So I just wanted to do a summary slide of some things I might see. Again, we talked about putting your detective hat on and what you might see in a child with sensory regulation difficulties. You may see balance and strength problems. You'll probably see

coordination problems. They might be awkward, they might be sensitive like to their tags, and they're close to noises, or they might overreact to a lot of these sensations.

So if you try to spin them, they might hit you, you try to touch them, they might lash out. You put too loud music or too much talking in the classroom, they might run away from you. So just put your detective hat on and start thinking about the people you're working with. They may be having things that are indicating they have sensory regulation problems and a lot of people want to know, OK, what do I do?

What do I do? I know their sensory regulation problems. I have kids stuck on high. Well, the last thing to do is just start at the top of this pyramid and expect kids to learn when their basic senses are not regulated. It wouldn't be fair to ask you today to be running a marathon, then come in here and listen to me.

You'd be on high and not listening. You'd be tired. We can't. We don't expect adults to do it. We really cannot expect people with disabilities to do that. Their basic senses need to be as close to just right as possible. And if you can't get it to just right from just being, you need to add tools on top of that.

And that's what we're going to talk about as we go on here. So we need to focus on proprioception, vestibular and the touch system first. We can help with taste, smell, hearing and sight, but usually by addressing proprioception vestibular and touch, it's going to help those other senses get to just right. So we're at the next part and this is how can we help?

How can you help your clients or your children or your family members? Well, you've got to think about those first three senses. First, the touch system. Think about that with your client. Are they on high? Do they feel too much or are they on low? And they need more touch experiences in their day. So watch this father, the next little boy he is on the way to the dentist and he feels too much in his mouth, so much so that he would usually have to take and be put under to get his dental visit and cleaning.

So the dad is trying to use touch to get him calm and on just right before he goes in to his dentist appointment. He's giving him touch on the shoulders and proprioception pressure on his head where all the stuff is going to get done. In his mouth.

So this next slide I'm going to add, these are techniques that if you haven't been shown in person how to do them, I don't want you to try them. But if you're watching this, I want you to know what these techniques are, because you may have an occupational therapist, a physiotherapist, or another worker, like a psycho-educator in your community that are using these techniques and they're really can can be really helpful so it might look a little strange, but you can see I'm holding in my hand, that's me holding what's called like a massage brush in my hand.

And I am doing something called the Wilbarger Brushing Protocol. And the next activity after that you'll see is a massager, a really big massager that I'm going to hold in my

hands. These techniques can really help kids that are feeling too much in their sensory touch system. So we call it do we do it to kind of desensitize them so that their skin and their bodies don't feel so much from the touch experiences in their life?

And actually, at first, a lot of kids don't want this because they feel too much from that little brush but as they get more exposure to it, they actually often really like it and ask for it. So watch how I'm doing it all over her body.

So I must I'm pressing quite hard on that brush. So it's not like a scratchy massage it's a deep massage to the muscle. And on kids that are nervous the first time, I might just try their hand and just do their fingers and see if they like it. I would never jump to their whole body right away unless they were asking for it.

And normally I would always do it right on the skin.

It really should be again done directly on the skin.

So again, she's had this before, so she's comfortable with it. I would never start that quickly with a child that had never done it before. She loves this machine. So it gives deep vibration to the muscles and joints. It's called a Jeanie Rub massager and many, many, many of the clients I've worked with have really, really benefited and enjoyed this machine.

And again, so again, I just want to remind you that these are techniques that you probably need to have tried with someone who's done it before. I really encourage that. Either your local occupational therapist, maybe a psycho educator or a physiotherapist, sometimes heads of special needs are familiar in the schools with these materials but they should be on an intervention plan at school, they should be on an IEP.

You should let parents know that you're going to use these tools with the clients, and you just need to add it to the IEP. Because it does look kind of strange. And I think parents have the right to be aware of this. And the same thing, if you're using an older client, you would just make sure it's on their intervention plan and so that their family members are aware. Now if you don't have this equipment and you want to give touch experiences to your client, you can give a massage, you can use something called, this is a sensory tube and it's a vibrating tube.

And I wish we were here with me because you could put it around your neck and feel it, but you turn this on, you wrap it around your neck or put it on your lap and it gives deep vibration to your body. So this is a really neat tool. And then there's also handheld little vibrating massagers, and they also can be used in a classroom or in a in a more of a group setting.

I really encourage this piece of material to have around. You should if you're a worker and you would have these kind of things in your office, if you're a community worker working with people with disabilities, if you're working at the MSDC with elders or other

adults with disabilities, these are some really neat tools to have. OK, so we talked about we have to focus on those basic senses.

Remember that pyramid we need to focus on touch, vestibular and proprioception to help our clients get to just right. So many clients. If I go back to the touch those activities, I did the brushing, the massage the Jeanie Rub massager people can feel on just right after that. So my daughter wasn't feeling enough touch when she did those activities.

And by doing them she can get to just right and feel her body better and she might have better results on testing or sport activities.

So the next one that we need to look at is our vestibular sense. So kids that have vestibular difficulties, balance and movement, we can't not address this. We we have to those are the kids that are often on high. They're feeling too much. They're overwhelmed in the classroom. But we still need to give them opportunities that are calm and can give them to just right.

So these kind of kids might just really start sitting on a little ball. They feel too much, they get too dizzy. This could be the same people that have had an injury or post injury, they might not have a developed vestibular system anymore. They might have lost some of that. So you would get these clients maybe just sitting on a little ball and bouncing just gently.

You would never not help them because the less we use our balance and movement sense, the less it'll work for us. So we want to encourage it gently, but never so much like you're not going to set these children on a on a chair and start spinning them. But you may do that for a child that's on low to vestibular.

They don't feel enough so they need more stimulation. So these kids, you would make sure you have tools that are available for them to use that can stimulate their vestibular system.

You could have a scooter board and I just had the privilege again of being in Waskaganish with one of the classrooms there. And the family gave us consent to use these pictures and he is doing his own vestibular movement break. So he is on a scooter board and he is getting his morning dose of vestibular to help him get to just right. So these are interesting.

I found this online, but it's it's really just an office chair. These are specialized ones. But you could use an office chair in the classroom. Many of the seats could have office chairs, because they allow kids to move and wiggle and stimulate their vestibular system while they're learning. Many adults are probably if you're sitting watching this in your office right now, you might be moving and rocking in your chair like I am I'm giving myself vestibular to keep myself on just right other activities you can do easily, wheelbarrow walk.

So I've seen classrooms just move one or two desks and they can do it right there in the classroom. You don't need a ton of room to do wheelbarrow walk, but it puts your head upside down and the children or adults can actually get some vestibular stimulation and have fun at the same time.

Same thing here. So this is a little ball. This is just like a corner of a classroom you can do and you can have a ball and you could be close by. So no one's with this girl. She seems very stable, but if I was with this child, I wouldn't have left her side and I would be there just in case and I would be helping rock her on that ball.

So that her vestibular sense, her sense of movement was stimulated here's another example that you can use. This is a doorway swing, so it's easy because you can take it down. And I think these are rated up to 200 plus pounds. But this is a way to give vestibular, which many kids with disabilities love to be in a swing and if they're feeling too little and they need more stimulation, it's a way they can get stimulation more often.

But if you also see with that swing, it's giving touch and a little bit of proprioception, too, all in one because it's a stretchy Lycra material. So I really like this activity. And here's one you can do by yourself at home. If you're in a tight space, you're sitting on a chair you can do this activity OK?

So she's asking for on not only vestibular but more proprioception, more squeezing. Now again, I was just in Waskaganish community and I watched some of the educators with some of the special needs students doing this on their own. They had them on their laps and they were rocking them. And these weren't babies. These were seven, eight, ten year old students.

And they found a way to give them their vestibular and proprioception by holding them close and rocking them. And that's fantastic. So it doesn't need to be fancy. You just need to give the kids what they need. If they can't go get it on their own, then you need to help them along to get to just right. And vestibular is a great one.

OK, so I mentioned a few tricks of proprioception. We did the touch, we did vestibular. How are you going to help the proprioceptive system? Well, actually that Jeanie Rub massager, that big massager can also help the proprioceptive system. It helps both in one the touch and the proprioception because it gives touch to the skin, but it gives vibration deep to the muscles and joints and that's more stimulation to the muscles and joints increases your proprioceptive sense.

So it becomes more on just right. So for the proprioceptive sense, you want to do a lot of activities in repetition. You want to keep doing them. They have trouble holding that fork. You want to practice holding that fork over and over, but you can add weights to things to add more weight increase is the resistance, which makes the proprioceptive system have to work harder and therefore it helps memory. So here's one that you can do with kids.

You can squeeze them between some mats or a balls, but you would never leave them with this. You really need to be present for these activities because you never want to put their head under. You want their head free, so they are free to move and you want to be present so you can see how much you're squeezing them. Here's a picture of someone in Waskaganish doing activities with one of the children there who loves to be squeezed.

So you see he's on a nice cozy pillow and she's rolling the ball over him to give him some proprioception and touch. So very calm. He's very calm there. If you notice, she's not going on the head and he has the pillow, so he's not being squished into the floor.

And then this is called the ghost, and it's Lycra material again and it's portable. So I love it. And not all kids like this at first, but you can get into it. A child can get into it and push against the material and it becomes their own little sensory hideout. So when they're feeling too much from everything else, they can go in and calm their bodies with this ghost.

Now, if a child doesn't like it right away, never force them. But don't give up! See if they'll just put their feet into it, put their legs into it, then maybe their arms. Some kids that are really comfortable later will put their whole body in their head in it. I had one client that when he would come see me, he would get in the ghost, he would lie down, and he wanted that Jeanie Rub massager all over his body.

So he was really trying to get his proprioceptive system to just right by being in that ghost and then getting all the vibration to his body.

Another thing you can do, as I mentioned, to increase proprioceptive sense and make it better to just right is to use weighted material. So this is a weighted vest. And I should say that a weighted vest should never be worn continuously. You should wear it for periods of time where they need that extra proprioception. Maybe when they're sitting writing a test, maybe when they have to be in a really loud gym and it's hard for them to stay on just right.

You can give them some calming experience by putting some weighted vest on them. They might feel calmer. Now, you can also do this with weighted pencils. So if a child is having trouble writing and I'll show you an example of that. A weight sorry, a weighted hand mitt. There's also what's called a neoprene vest, almost it's like that same stretchy material you saw before, but it gives pressure.

So it's with Velcro, you can't see it. Well, not great picture, but it tightens around the body and gives proprioception for periods of time. I recommend in my practice usually only about 20 minutes to 30 minutes in a row. And then I would take it off because the kids get used to it. But I've had parents tell me that I've worked with that said, my child needs to always be in tight clothing if they're not in tight clothing, they don't feel good in their body.

So the tight clothing helps calm their touch system and activates their proprioceptive system. You may know some clients like that that like their socks really tight and up around their knee. They might have always their clothes tucked in. It's almost giving themselves proprioception. So there's an example of a weighted hand glove. And for kids that don't feel their body as well.

Right, their sense of purpose section with their eyes closed is not developed. Don't give up, try different tools, try weighted hand weights. And I've seen teachers be inventive and make their own pencil weights. So they put little nuts and bolts on the end of a pencil with two erasers like pencil erasers. And the kid has a heavy pencil and the heavy pencil increases the use of the receptive system and more practice.

It doesn't mean they can't learn. It means that they just need more practice and help along the way.

So again, the three main senses, all of these activities, if you have a child who's not on just right don't start by talking to them and trying to teach them. You need to start at the basic senses touch, vestibular and proprioception.

I want you to watch this video. And this young man has autism spectrum disorder and his mom is helping to calm him down in the car. Right. Watch. At the beginning, he is hitting himself and providing himself proprioception. But he's going to get a big bruise on his chest. So his mom's trying to find a different way around of him getting that proprioception watch.

So did you watch that young man? He, like, came alive? He came to just right in the car. You could watch it. He was upset before and he was pounding himself and he might not have been able to speak with his words. It seems so his mom had to guess some of the things that he might need, but she didn't she couldn't take away the chest hitting without replacing it.

And that's my message to you. Now, when a kid is showing you that they're not on just right and they're doing something about it, it might not work for your classroom or for your office or at the MSDC, but they need to do it. And if they can't do that activity, you got to find something to replace it.

So the mom took the sensory tube and was using that as vibration. And if you notice, she had music in his ear. So she was listening to his favorite music, it seems. So that's really interesting to see. So she used replacement tools to help him. So we just went over the three senses. But in general, if you want to calm someone down, you've got to do some simple calming activities so that mom calmed him down by using vibration.

She used music. Other people use rocking, vestibular. I watched an educator, as I mentioned, in Waskaganish, a child was on high and she scooped him onto her lap and was rocking him gently while she was sitting there on her chair. She didn't even have a rocking chair, so you can do it with your own body. But rocking chairs are great.

Deep hugs, deep pressure and hugs can really help calm someone down. The same thing of having a mouth tool. So this little girl you see in here is sucking on a lollipop, but sucking on something or chewing on something can help calm us down. You also see the beanbag. So this little boy has a calming sensory place to be.

Maybe the classroom is too overwhelming for him. So he's sitting on that beanbag to get some time out and calm his system. And that girl is wearing the blue pressure vest. Pressure can help calm the system when they're feeling too much. So these are just some general tools for you if you want to take a picture of them just to remember. And then what do you do if you have a child that is on low and needs to wake up, let's say your classroom or the kids you're working with are not really responding. You need to wake them up. They need to have recess time. They need to maybe get outside, maybe they need to dance, listening to loud music, maybe they just need to get up and do a movement break.

But it should be rich in touch, proprioception and vestibular. So this girl is swinging. Swings are great for alerting the body and giving the vestibular right. The music is dealing with the auditory system, but if they're dancing, it's also their vestibular system. Having something to drink on the kids desks or anyone you're working with can help keep you stay alert.

Many of us use our mouths to regulate ourselves. And then, of course, running, recess, moving, walking. These can help us get back to just right. So it's important, though, with all these activities that we understand when a child or client is on overload. So a client goes on overload when the sorry, the signs that they're going on overload is that they might show silliness, giddiness, they might start making noises that they normally don't make and then they start aimlessly running like almost like around the room.

These are all signs that this client is not on just right. And they might be heading on high and they may end up in a crisis if you don't take action. You've got to take action right here before it goes into crisis.

I want you to watch this video again. This is a woman with autism spectrum disorder, and she's going to explain why she might run away when she's on overload.

So I think she says it well. The point is, all of these ideas that I've shown you in these last slides are to be done before the crisis. When you start to see the early signs of overload or not on just right, if you miss this window, you are going to need someone involved that is much more trained in something like CPI, which is crisis prevention.

So I really advise you to notice and become a detective for the people you're working with for your children and make sure you catch this stuff before they go in overload. OK, so let's pretend you are a detective and you did figure it out. You realize that you're the child or adult you're working with is about to go on overload, so you could immediately start to do what's called proprioceptive or heavy work.

So often when a client is in crisis, I've seen educators are great, hey, no time to go on a walk and they'll walk the client. The way you can add even more calmness is maybe if that client could have something heavy to carry while they're walking can help calm them down. If they can do a walk in the snow, which requires more heavy work than just walking inside.

Great activity. Maybe you can have them carrying something to the front office but if you can't get them to do that, just get them to move and walk. You can see that many teachers are becoming very inventive and part of their classroom has an area especially if they have different types of children learning different ways in their classroom, they'll have beanbags right in their classroom or pillows that they can use so that the client can go and calm down. Proprioception they can lie under the beanbag.

They can squeeze one on top of themselves. Just the feeling of being in the beanbag can help calm them down. I have a video to share for you, and it was written from children's perspective to their teachers. So I think that video captures it. And the message I also want to say is when you have your detective hat on, notice what the kids and what your clients are telling you.

They often have some of the answers. They just might need your help to get them there.

So this next last 15 minutes or so, we're just going to talk about some other strategies that you can implement in your classroom, in your office, in your practice if you're a parent joining us today. So before that, I want to make sure that we do a little quiz to make sure you remember what I've been seeing this time.

So the quiz is I want you to pick the three most important senses to focus on. So while you're watching, I'm going to name them. So this is the taste system, which three of these are the most important to focus on when you have clients that are not on just right. That's the hearing sense, the visual sense, the proprioceptive sense.

The vestibular sense, the touch sense and the sense of smell. So of those which are the three most important? Write them down. So if you guessed purpose, action, vestibular and touch, so those three bottom pictures, you're right. Those are the most important to focus on when you're developing activities for people who are having trouble being on just right. So one of the other strategies that I always encourage people to remember about our movement breaks when someone is not on just right.

Moving their bodies often helps. Now what helps is different for different people. But when in doubt, walk, walking can help relax you. But I'm going to share with you actually before that movement breaks. I want to go into that a little bit more. I think people forget that we tend to take away recess like those kids said, when we think the classrooms being bad and they're not listening. But what they need most of all, what are they telling you when they're not listening anymore and they're talking too much?

They're not on just right. They probably only need to move and change up what's going on. So instead of taking away recess, you can double recess or add in five more minutes of movement some way you may have a more regulated classroom. So again, another story from my trip to Waskaganish. I was working with a child and we had done a whole bunch of activities, vestibular perception and touch in one of the sensory rooms.

And when that child went back to their classroom, the teacher shared with me that they couldn't believe. So they went from the sensory program of vestibular activities and proprioception to recess. And then the child went back to their classroom and the teacher said, the child was so calm. Normally they're on high by the end of the day.

And after those two intense periods of recess and then vestibular, touch and proprioceptive activities, so calm, so calm in the classroom. So that's an indication of how it can work. You can add a few activities that can make a big difference for the rest of the child's afternoon, and then they're more ready to learn because they're on just right. So here's where I'd like you to get up and do a movement break.

And you can watch me doing the little movement break, and I encourage you to do it with me. So I really encourage you to do this movement break with me.

OK, now that I've gotten you all moving, hopefully you did it. And if you haven't, I want you to stop right now and do that activity that you watched me do. So, right, you're going to spin. You're going to put your head upside down, you're going to jump, you're going to rub your hands together. I really want you to try that just feel how your heart rate is more elevated and you're probably giggling a little bit and you're just more awake after that activity.

So that was a very rich proprioceptive, touch, and vestibular movement break. And those are more important than all those other senses and can really make a difference for kids or people in your life that you're working with. OK, so this next one, I often recommend it in classrooms. It's called Chair Moves and it's just changing up the position of your chair.

So if you have a regular chair right now, I'd like you to get up and I'd like you to turn it around and I'd like you to sit like this on it with the back of the chair right here. OK, try that. You're going to use a whole bunch of different muscle groups and it can help keep you awake. So you can see there's side sitting on the chair, if you look at the second picture and there's kneeling on the chair. Often we get mad when kids are sitting like this on chairs, especially the kneeling one sit down in your chair. But actually the kids are using strategies to stay alert and doesn't matter as long as they're still doing their work. It shouldn't matter. So there's a kneeling one where it's on a little bench, the laptop, but it could be the paper.

So some other strategies I'd like you to think about are classroom and office workstations. So I call these sensory safe spaces spaces within your classroom, within

your office that a client can relax in and get on just right. So you see, this teacher has a chair, a rocking chair right there in the classroom, and kids can sign out when it's their turn to use that chair.

Another teacher has a little tent right in their classroom with some pillows, and it gives a calm timeout time for kids that are getting on high and that might need to self-regulate. Other teachers are being creative with workstations that are standing with all of us, a lot of us working from home or teleworking sometimes we also are putting in place these things and having standing stations or standing desks to work at.

They help keep us alert and on just right, so we're ready to learn and do the work. And it really doesn't need to be complicated. It could be a carpet on the floor with three little pillows can just make a sensory safe space. You see, this little guy has two bean bags and he's having a great time just relaxing in those bean bags.

What's nice about those is you can move them. So if they're in the way you can put them out. Please don't underestimate how much it can change your session with the client if they are seated comfortably. So there's kids that come in with poor body control and adults that don't have good motor control and they do better when they're sitting, supported and comfy in a chair or in a beanbag. So this next thing I wanted to share with you is what's called a sensory diet.

Some of us may have been on diets in our life where maybe you're on a low sugar diet, or maybe you've been on a diet for other things. But this is called a sensory diet, and occupational therapist talk about this a lot. It's a scheduled activities, sensory activities, throughout a child's or client's day. And you can see this paper here.

There's a sensory what do you do when the child wakes up or the adult wakes up? Do they need any help? You can slide in activities at every point of their day. But the point is, if it's planned and scheduled and it's not based on whether the child is good. "Oh, you were good. You get to do this activity of jumping on a beanbag."

No, that activity is in them like a diet, like you would take your medication this is their sensory medication.

So one of the things that I will show in part three. So if you ever take the in person version, we teach the group how to make a visual sensory diet. So having pictures, not just words to share with the clients, all the activities they can do throughout their day I wanted to share with you some more sensory diets that I had written out for clients in the past.

So because it was just at school that we were doing the sensory diet, the parents had their own at home. This is what we had arrival at school that the child would sit on the class therapy ball because she had extra energy after being on the bus or going about her day. She was in grade two. Mid-morning, we had made sure she had a water bottle and straw on her desk so she could drink because that helped her stay on just right. At

lunch time, so she has an educator with her at all times, and that educator helped her make sure to run around at lunch. She, Tanya, didn't like to run very much, but she needed that movement to get to just right. So we're educator helped her walk and run around the school yard. And then in mid-afternoon they had put in some exercises with the educator to use a Thera-Band like a stretchy material to move and did some arm stretches.

So these were this was a sensory diet for Tanya. You can do the same thing in high school. You can have a sensory diet. It could be music, calm down time, massage. It could be vibration equipment. It depends if they do it in the classroom or you want them to leave the classroom. The greatest success is when I see things done right in the classroom because it's easier for everyone.

But if you have a client that that doesn't work, you may have to arrange that it's done somewhere else.

And this is what I'm talking about, about visual sensory diets. So you don't always have to use words. Actually, using pictures can really help a whole bunch of different learning styles in your classroom. So you could have a classroom sensory diet because you know that at 9 a.m. your students are not on just right. They're on high and they need to move.

So maybe you'll pick an activity that you start your day off and you could draw it out and you could have this visual sensory diet schedule on your wall that you follow. Some other programs that I just wanted to draw to your attention if you were in the school setting the zones of regulation is a popular tool and there's a training that goes along with it, but it teaches all your teachers about the zones of regulation.

So for example, the green zone is when you're on just right, and the orange zone is when you're getting on high. I think it's sorry, the yellow zone is when you're on before the crisis and red is like, oh, I'm on high. It's almost too late. So it's it's a program that teaches the kids about the different zones and teaches them activities they can do to get themselves to just right.

So this requires a training. But if you are a school interested in the program, there are a few schools that have taken the training in the North. There's also what's called the Sensory Diet Board game. And I consider this for clients that can have the the skills to to play a board game. So if they don't have that ability to play a board game, this wouldn't be for them.

But if they can follow basic rules of a board game, this is really fun. It also helps for verbal clients, but it can be done with clients that are not verbal if they can follow a board game. So what it is, is the game is about, it shows a picture of a kid on high, for example, and it asks the player what activity could they choose to get that person to just right.

So it's teaching self-regulation through a board game. One of my favorite books that talks in much more detail about what I'm talking about today is called Building Bridges, and I really think it should be on the bookshelves of every daycare, every therapist's office and in schools. You need to read this book. Parents need to read it. It's simple.

It's easily explained, and it really explains the senses and the importance of what I'm talking about today. So if you'd like a reference book for what I've been talking about, this is the one to get building bridges. So this book also has more descriptions of severe behaviors that are actually sensory things going on, like biting and hitting. And it talks about some ideas that you can do to deal with those specific situations.

So before we conclude today, I wanted you to have a slide of a summary, and you can take a picture of this slide. You can have this printed out in your classroom or in your office. The message I want you to take is if your client or yourself is not on right, you need to try something before the crisis, before the crisis becomes a behavior.

So the things we talked about is sensory, safe space and a visual sensory diet. So you can take a picture, if you like, of this. Now, once you realize your client is not on just right and you're going to use your sensory safe space and your sensory diet, make sure that there are some activities that are in touch, proprioception and vestibular. Those activities give more much more benefit to getting a child or adult to just right then all the other things you can try. And the last message I want you to keep in mind and you can take a picture of this slide also: Try and try again. Keep being a detective. If something doesn't work and you've come up with an activity that you think is going to work on their touch sensitivity and it doesn't work, try something else. Try again. If the vestibular activity of spinning in an office chair doesn't work, try on a scooter board. If that doesn't work because they're too sensitive try them on your lap.

Try it in a more safe environment and safe space where they don't feel off balance maybe like they would on a on a chair. If they don't like the activity you chose for proprioception the first time, try it again, see if tomorrow they'll be OK with it, sometimes a few times and then the client really likes it. If they don't like it after multiple times, then yes, please do.

Never force, never, never force. So that comes to the end of our virtual training today. And I did want to remind you that we do give this in person and the next parts would be a practice part where all the group members can practice using the tools and feel what they're like and learn the techniques and try out all that equipment like the ghost and the the beanbags and a whole bunch of the other stuff.

And then the next part, the part three is as a group we would build a sensory diet together for a specific need of a classroom or a client. So that's the part two and three that we do in person. If you would like to have a live version of this presentation with part two and part three, you can reach out to Disability Programs Specialized Services and we have a form to request for a training in your community.

So please do reach out if you would like this training in person.

So thank you very much. Meegwetch. Thank you.