Transcript: Why Should I Read that Psychoeducational Assessment?

Speaker 1: Hello everyone, we're going to get started now.

Welcome to LD@school's second webinar! For those of you who are unfamiliar with LD@school, it is a bilingual resource designed to provide Ontario educators with meaningful information helping them to support students with learning disabilities.

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We're very excited to welcome our guest speaker, Dr. Todd Cunningham, who will be speaking to us this afternoon about *Why Should I Read that Psychoeducational Assessment?*

Just to let everyone know, all webinar participants except for the presenter have now been muted for the remainder of the presentation, although, once Dr. Cunningham has finished his presentation, we will be opening up the floor for questions.

If at any point during the presentation you experience any technical difficulties, please contact Shannon Malloch at the phone number provided on this slide, as she will be standing by to help you.

Before we get started, I'm going to help everyone acquaint themselves with the GoTo Webinar control panel that you should be seeing on the right hand side of your screen. If you don't see the full panel, you should see an arrow, which you can click on to maximize the panel. This same button will minimize the panel during the presentation.

Over the course of the presentation, if you would like to ask any of the staff or Todd a question, you may enter your text in the box at the bottom of the control panel and choose to send it to the staff from the dropdown menu underneath. Finally, the hand raise button can be used to ask Dr. Cunningham a question at the end of his talk. If you raise your hand, you will be unmuted so that you may personally ask Dr. Cunningham your question.

After the webinar, we will be sending out presentation slides, as well as a link to a survey to let us know how you feel the webinar went. In approximately two weeks, the webinar recording will be available and we will send out a link to all participants.

I'd like to introduce Dr. Todd Cunningham at this time. With his engaging presentation style, weaving together research, compelling stories, and humour, Dr. Todd Cunningham has empowered thousands of educators to support students who learn differently in their classrooms. Dr. Cunningham is a

psychologist (Supervised Practice) currently teaching at the University of Toronto and provides academic intervention services. He completed his Postdoctoral Fellowship in the Psychology Department at the Hospital for Sick Children in Toronto, and obtained his Ph.D. in Clinical Psychology at the University of Toronto. His innovative research investigates the integration of assistive technology and learning strategies for children with learning difficulties due to a variety of reasons. A sought after public speaker and consultant, Dr. Cunningham has shared his expertise with parents, students, educators, school boards, and other professionals across Canada. In addition to hundreds of workshops, Dr. Cunningham has guest lectured at universities, given keynote addresses, presented at educational and research conferences, and appeared on CBC several times. Dr. Cunningham was recently awarded a Bell "Let's Talk" mental health grant to provide academic intervention support to northern Ontario communities through telepsychology.

And now, I'm going to turn the presentation over to Dr. Cunningham.

Speaker 2: Great. Well thank you very much for, everybody, for attending today and thank you to the Ministry of Education of Ontario, to the Learning Disability Association of Ontario, and also the LD@school group for-for having me here today.

And what I want to talk about is psychoeducational assessments. Just last night I had a mother come in and she brought with her a pile of paper and sat down in front of me and said: "I know my child has this thing called a learning disability, but, but, after three different assessments and going to all kinds of professionals, there must be more than just that in all this paper. What does this all mean?"

Now being a psychologist, means working with a lot of parents here at the clinic at OISE as well as going out and working at schools. Often I hear, that this, same thing expressed: I have this documentation, I know it's important, but I don't seem to understand what's in it. And, that's what I want to talk about today. I want to talk about what is in this documentation and give some general outline, or guidelines about, about how we can go and get the information out of that documentation, and be able to apply it so we can better understand that individual who sitting in front of us.

So, I just want to begin with this simple question: "Why do we assess? Why do we do assessments on children?"

Now, I think there's many reasons why that may be jumping to your mind about why we do this, and-as I pose this question.

But for me, I really see three main areas that, four here, actually.

The first one is diagnosis. The main one, the main reasons we-we assess is to diagnose an individual. And the reason we diagnose, is to allow us to have an understanding about how is that person is doing; what is their pattern of strengths and challenges; how does the impact of an environment impact their learning; and what do we need to do to help facilitate their learning in that environment. The other thing we do with diagnosis, is it allows us to get access to additional resources, to be able to support that person. So, the first reason we assess is to-to get a diagnosis.

The second thing is to communicate to others about the way this child goes about learning. We wanted to communicate to-to the student, or— or to the client themselves, about their learning profile. We wanted to able to help parents to understand how they can support, and teachers how to support this individual, as well, other school and other professionals. So then we have a common language of understanding about how does the child go about learning.

The third thing is about prognoses. What is the future? What-what's that future going to look like? Because of all the research we've done in the area of learning disabilities over the last sixty years, we have some good indicators about what some of those key variables are, that kind of help us get a glimpse a little bit into the future. We don't have the perfect crystal ball yet, but we definitely have some indicators that kind of point towards different areas. So we want to kind of assess, to help us in understanding about how to prepare for a transition time, such as going to high school, or going off to college, university, or into the trades. We want to think about what are those goals for that person, that individual, in the future so we can start to help develop those transition plans now. So we assess to also kind of get—gather that information.

And, the fourth reason, and to me the most important reason we assess, is for recommendations; to actually understanding who—how to help this individual. For me, I really see the psychoeducational assessment as the beginning of the intervention. It is the first step in developing recommendations or interventions to be able to help out an individual. And, so therefore, the great thing about assessments are the types of recommendations we get. What are the learning profiles? What are-what types of strategies are going to help them? What types of accommodations do we need to hold on to be able to help? What's a proper placement for this individual? Are there certain remediation programs that are going to help strengthen their underlying ability? And also, are there other things we need to be looking for or assessing now or in the future to be able to monitor the individual?

Now, there's a process – this process of assessing, especially in psychology, kind of follows that of a medical model.

See, when we go about diagnosing—really when I say diagnosing leads to interventions—and if I had someone coming in with a hurt leg, the first thing you often see is a symptom. The person comes in complaining, "ouch, my leg's hurting, my leg's hurting". Now there might be, oh darn, there's a lot of reasons why a person's leg might be hurting. So what we need to do, we need to do some testing. We actually have to do some specific testing to try to understand why is that person's leg hurting. So x-rays are often a good test to be able to use, but it's not the only test to kind of identify why a person's leg might be hurting. After, a doctor examines that information, on—from those test results they're able to come up with a diagnosis specifically what is that-what specifically is wrong.

And based on that diagnosis that's what leads to selecting the right type of intervention to be able to help that individual. So the person has a broken leg, and they're just saying, "ahh, it hurts!", and we just

put a-we just wrap it with a Band-Aid or something like that. And that's probably the long intervention to be able to help that individual with the broken leg. We need to have a cast or it needs a surgery to set it properly. So we have to understand what the problem is to be able to come up with the right intervention to be able to help that individual. And, so that's where the testing comes in. The testing and the diagnosing comes in.

The same with learning disabilities, often we see some symptoms that are getting presenting. Children are frustrated at school, teachers observe the child is not reading properly, a parent complains about poor spelling or spending a lot time trying to do homework with them, and the child needs a lot of help. So we see symptoms that indicate that there's an underlying problem; the behaviours that the child is showing are showing that there's an underlying problem. And so, therefore, we have to test. We have to do a good testing to be able to differentiate what is the specific underlying difficulty; what is causing these difficulties, so that we can then target our interventions, make some diagnoses, so that we can target our interventions to be able to specifically address what the problem is.

So when the child comes in for assessment often they are referred to a psychologist because of some symptoms that either the teacher, the parent, and sometimes the child identifies. They work with a psychologist over a period of a couple days, usually around 4 to 10 hours' worth of testing, often involves being able to do a thorough assessment, but again, depending on the underlying reasons that that time can vary-vary. And at the end the psychologist will come back and convey the information. What is the diagnosis, and what are the kinds of interventions that are going to support this individual? And then they write up a wonderful report.

And in that report, it really breaks down into two areas – two key areas. The first, main part of the report is understanding of the learner. It's what – it's all information we're gathering to lead to that diagnosis, to that definition of how that person goes about learning. And then the second half, is all about the intervention. What are the remediations and compensatory programings that we can use to be able to support that student, and help facilitate their learning so that they're able to be able to show what their – what their true capacity or capability is.

And so what I'm going to walk you through these two areas now.

I'm going to start off with: understanding the learner.

So when we speak about understanding the learner, it really goes back to this idea of symptoms and looking at behaviour. And the way that we do this, is we present stuff, we're watching children because we can't actually go in and actually see really what's inside the brain, how the brain is working. We can with some, the new imaging stuff. But generally, we can't see what's going inside. So what we do, we often look for behaviours. We look what are the – what's happening in the environment, what's the stimulus that we're giving the student, and then we see what is the student's behaviour. What do they show? And when we show them-ask them what the square root of twelve they go "ahhh!", then we know that they probably don't know how to do square roots yet. Or the square root of twelve is actually a tricky square root to do. So we see the behaviours. We're always looking at the behaviours, the behavioural outputs that the students are attributing.

And, and what we have to do, is based on those behaviours what we're seeing is how to kind of move backwards to understand what's leading to those behaviours, because behaviours are a symptom. They're the symptom of something else that is going on.

It might be something in the environment that's impacting. The reason why the child is acting-up in class today is because they have not had a really good breakfast, or they may not have eaten at all, and they're really hungry, or they may just have witnessed a terrible fight happening at home. So there's something in the environment that might be impacting them. It might be something more structural. It could brain, it's impacting or senses are impacting the way the information is coming in. Or, it might be a cognitive difficulty. It might something like working memory or processing speed that we'll talk about later. And that might be leading to the behaviour that we're seeing.

So a child who acts-up in class or a child who is unable to do something, those behaviours are symptoms of something else. And so, the process then is to zero, kind of drill down, and try to figure out what are the contributing components that lead to that behaviour.

And we're looking, in a sense, we're looking at lots of behaviours. We're not just talking about overt behaviours such as hitting a child in class, talking or being off task. We're often talking about their reading behaviours. Can they decode individual words? Do they understand when they read something? We're talking about math, social skills, writing. Can they spell? Can they create an essay? Organization. Are their desks organized? Do they remember to bring home work? Kinesthetics. Can they bounce a ball? We're looking at a lot of different behaviours, when we're talking about behaviours. We're talking about a lot of the different symptoms when we're trying to understand what's going on in that individual's brain. Because really, the idea is to understand how is that individual's brain working, so that we can provide the right types of supports to maximize that one.

And we know with all these behaviours that they're all kind of on a certain level of development, some developmental progress. And we know this through years and years of research at this point looking at a lot of different behaviours and studying them over time.

So we know in general most people kind of fall in the typical development, they fall in that average development, and what their skills are here, in grades , [inaudible] age will be and will not be.

The next thing is, we know some will be above that ability, and others will be below that ability. And other ones will be progressing normally, and then something will happen in their life that will change that trajectory that they're on. So we know that all the time that we have, at this point we have lots of data that talks about how these behaviours develop.

And so, what a psychoeducational assessment is, especially that first part of the assessment, it's really a snapshot in time. It's a snapshot in time about how that person is developing. And that snapshot is going to look at what is their cognitive abilities, what is their academic skills, and what is their social-emotional profile. And the times that we take these snapshots, the times that we take these snapshots is when either we can't explain some of the symptoms that are going on. So that's usually when the child first comes in for a diagnosis. The second might be to develop, monitor their development. So there might be

an underlying condition that needs monitoring. Usually that's associated more with a medical condition that we really need to monitor, ongoing development. The third thing, that might be that something has changed. You know, things are going well for this child on the intervention plan that we had originally recommended. Suddenly the intervention plan's no longer working, or something has changed. So we need to re-evaluate what – why that change might have taken place.

And the first time we often do assessments is around transitions. As I said, often the transitions going to high school. And really, transitions if the child is thinking to go off to college or university. Because colleges and universities need an assessment that is about three years – it's up to three years old. So we're going to do an assessment at that transition period. And the reason we do the assessment around transitional periods is again helping us to plan for when that transition takes place.

So the assessment is really a snapshot in time. It's a snapshot of what is-how on the day of that testing that is taking place, how is that person's academic – their cognitive abilities, academic skills, and social-emotional profile. What does that look like?

And to get that profile, to get that diagnosis we're really going to test them for – in a whole bunch of areas.

Any teachers or parents who have gone through this process know that there's a – there's usually a lengthy interview at the beginning to get a lot of history about that child. Parents, teachers, and even the client often fill out lots of different reports trying to gather that information. Psychologists might request the child's report cards, or any other assessments that are done. And then we get into the more formal stuff, the cognitive testing, the academic testing, and then the social-emotional testing to pull all these areas together.

And again, as we're pulling all this data together we're looking at the kind of data points that we're gathering. We're comparing those data points to the normal development of how the typical developed child is developing. And comparing how is the client in front of us – what do they look like to that typical developing child.

And to be able to do that, we look at that individual in terms of what we call our normative sample. How do they fall within the norms. And a lot of the tests we use, the vast majority of the tests a psychologist use are norm referenced. Meaning that they have been used on hundreds and thousands of individuals. And so that we can be able to say: "your score on this test, when we compare it to other individual's, falls at this level".

And so, that's where we're begin to bell shape curve. So when we talk about this assessment we're really kind of looking at all the areas of development of this child in that day that we take the snapshot and compare them to the normal population. The typical developing child.

And to be able to do this, the measurement that we often report is what we call the percentile.

Now a percentile is different from the percentage. The percentage is the number, the percentage of questions you got right on a test. A percentile is: *how did I do in comparison to other individuals my*

age? So if I scored at the 65th percentile, that means I did as well or better than 65 out of a hundred kids my age. So if I'm a thirty four year old in my class, and I got a certain score and I said it was at a certain percentile, than I know I did as well or better than 65 of that 100 individuals of my normative reference.

So a percentile is a reporting of how I did to the general population.

And therefore, what we call the average range—the area that we want to see individuals fall in is between the 25th and 75th percentile. So this is the area that we want to typically want to see fall in. If it falls below then we know that the real area of weakness, a challenge for that individual, and if it falls below above then we know that's a real strength that that individual has. But typically what we see is people falling between the 25th and 75th percentiles.

And we have labels for all those—the 25th and 75th the average range—but we have other labels—we have below average, we have high average, superior, very superior. We have a lot of different labels and this slide has some of the common labels that you might see in the psych report when you are reading about the different typecasts where that person is.

Now as a psychologist, I'm taking lots of different information. I'm taking the history, I'm taking the teacher's report, the parent's report. I'm taking the information from the testing that I'm doing, I'm taking my own information and I'm putting this together to develop a learning profile in my mind. And as you can see, a learning profile is a lot more complicated than kind of just thinking of learning—I mean, of learning styles. It's much more complicated than if this person is an auditory learner or if they're a visual learner. This is looking at a lot of different areas – what is the cognitive abilities, what is the social/emotional abilities and what are their academic skills in the areas of writing, reading, math. And we're not just saying that a person isn't good at reading, we're actually breaking it down to the sub-skills that lead up to the area of reading. Is the person about to code individual words? Are they able to recognize words? Are they able to read at a good speed with accuracy? Do they understand what they're reading? So it's not just good enough to say that a student has a reading weakness. We have to break it down to really understand what are the underlying skills that might be the weakness. A student might have difficulties with decoding, but they might have really good comprehension. Or vice versa. A student might read very well and they might have very good fluency—they might sound like they are able to read well but if you ask them a question, they don't actually understand what they are reading.

So we really have to break it down into the sub-skills that we develop. The other reason that we do this – that we really break it down to all of these sub-skills and sub-abilities is we have some that are really predictive of future development. One of these is phonological processing. There's been a lot of research around phonological processing or phonological awareness of the last twenty year that is a wonderful predictor of reading ability. We know that phonological processing is the precursor of the ability to decode words which is a precursor to the ability to recognize words. We also know that phonological processing transcends languages, so if you have poor phonological processing in English then you're going to have poor phonological processing in Spanish or Arabic. So it's a specific task, a specific skill that we can go in and actually test and we can test it in the English Language Learners who have been here just for about six months or so. We can actually go in and test a specific area because if

that area is weak and it is very predictive of what their reading ability is going to be later on in life. It's also a very good screening tool back in kindergarten because again, we know that kids with poor phonological processing in kindergarten are going to have difficulties in reading in grade 1 and grade 2 and then later on. So we have these really nice kind of things—areas that we can look at that are very predictive of later development.

So as a psychologist working with an individual, I'm pulling in all this data together. I'm playing with all these things to develop what is that student's learning profile. And I'll share this through the LD@school-- as you get the slides you can get—you can look at this more.

Now one particular area I want to spend some time today is looking at the cognitive areas about the profile.

And in the cognitive—when we're thinking about the cognitive areas I often use the analogy of *the office in our head*. And what I really want to do is to take some time to really get across some common terminology that we often see in psycho-ed reports is often kind of hard to understand.

Now the way that our brain works through the office in our head analogy is we have all these senses. And all these senses are bringing in information, and that information get put onto a desk in our brain. And this desk is called working memory. And working memory is the cognitive ability or the cognitive place that we keep our current ideas and thoughts in mind. The things that we're thinking about and the thing that we're actually doing causes this reaction. Now some people have very small working memory and othe people have corporate room, big desk working memory. They vary in size. For someone who has a small working memory, and it's very hard for them to keep multiple piles of paper on their desk at any one time. So the teacher is talking to them in class they might be taking this information […inaudible…] are piling up, a pile about let's say how to do long divisions and they're looking at the first question, at the first step and they're thinking about that first step and then they hear the teacher starts talking about the next step, and then there's another step and then there's another step and suddenly within a couple of steps, paper is starting to fall on the ground and they're losing track of what the teacher is talking about. So sometimes they have a hard time paying attention to complex ideas or multi-step processes because they're unable to hold onto all of those steps at any given time.

The other often thing that we see with kids who have working memory difficulties is if you give them a list of tasks that they have to do they often remember how to do the first one or how to do the second one but they forget other steps because again, their desks are not big enough to hold all the different piles of paper on.

Now the other thing that working memory is involved in is working out the processes. Now, I'm sure many of you have learned how to drive a car. I remember when I was learning how to drive a car I was learning how to drive stick shift and the first time I sat behind the wheel of the stick shift and my dad was standing behind—or sitting beside me, and I was thinking about "okay, okay. Now I have to remember to keep both my hands on 11 and 3 o'clock. I have the gear shift here and I have to remember how much pressure to put on the petals, I have to think about the clutch, I have to look ahead". I had all these rules running through my mind. I was using a lot of working memory and having

lots of different piles of ideas that I have to keep in mind thinking about how to use this car. So when I went to start the car up and I went to drive forward and the car lurched backwards because I put it into the wrong gear and my dad screams at me, what happens here is that is became I frustrated I "AH!". I don't like doing this. And I lose all my attention. Everything falls off the desk. Learning how to drive a car can be a very complicated thing because there's a lot that you have to do. But with practice and with over time, what happens is for me, driving a car becomes a very automatic thing. It becomes automatized. So now I can be driving down the 401, changing the radio station with my daughter and wife talking to me, having no problems and not having to think about all my pressure on the gas petal, where the break is, trying to keep between the lines. All that has become automatic processing. And so therefore, my working memory is now freed up to do other things. More enjoyable things like talk to my wife.

However, if we relate that to reading, a child who has a reading difficulty often what happens is all of their energy goes into trying to understand or read the individual words and figure out what the individual word is, working memory gets totally used up. When their working memory gets totally used up, they're unable to comprehend. So this child might be trying to read the page in front of them and by the time they get to the end of the paragraph, and you ask them "so what was that about?" they don't have a clue because they are unable to hold in their working memory both the process of the decoding individual words as well as what they needed to comprehend. So working memory is a really important construct that we have to keep in mind because that's really going to dictate some of the ways that we're going to provide interventions in teaching that individual.

The next really important piece is I call the filing cabinet dude or processing speed. And what his job to do is really to take information that is important from working memory and move it back into our long-term memory both our visual and auditory long-term memory and our visual long-term memory. He's taking this information and he's storing it away. And the other thing he's involved in is going and grabbing that information and bringing it up. So individuals who have slower processing speed often it takes them a longer to learn some new information because their filing cabinet dude is having a hard time taking in the information and figuring out where to put it.

At the same time, they may have a longer time trying to recall that information. So, if you're in class and a person who has procession speed difficulties, and the teacher calls on that person to answer a question, it might look like they've almost frozen. And the reason, they're freezing, or have become overwhelmed is because they processing speed is running to filling cabinet system and is trying to find where that information is to bring it forward and be able to answer. And often what happens is they freeze and the teacher like, "uh, okay, let's move on to someone else". So a great learning strategy, to be able to help with people who have processing speed area of asking question is to come up with a kind of signal to that student so that every time I stand directly in front of the student that means that the next question I ask you is going to be, or the next question I ask the class, will be directed at you. And so therefore, they can really pay attention, you can ask that question and then you can kind of pause for a second and talk about something else and come back and go, "Okay, Johnny, can you tell us the answer to the question?" And by doing that, that allows the student to have a minute to kind of think about the answer and then be able to reflect on. So strategies like that really can help individuals

because it creates a safe environment, where they know that they're going to be able to participate, and helps them still be involved.

Another important piece is our reasoning ability. And reasoning, the problem-solver, he's kind of the entwined piece, he's the person who takes language, or visual, or non-visual language information and comes up with solutions, or be able to solve problems. It's also an area of creativity. And the definition of a learning disability, this is the area, the reasoning area, this is the part that has to be able to be average to above average. This is the piece that we kind of look at as our ability to learn. So reasoning is really important.

And the last piece, and sometimes one of the most important people in any office, is the boss-the manager. He's also known as executive functioning. And the boss really, or the executive functioning, it has some clear goals. It's going to set the goal of what the system is going to be paying attention to. What is the goal of the system? What is important to pay attention to? What is not important to pay attention to in the sensory information that coming or the thoughts that are going on in their head? It helps organizing the system to be able to ensure that it's getting the right information. It's helping organize the information in working memory so that it has the right information to help solve the problems. It's also doing, it allows us to be flexible. To be able to move from one task to the next task. And it also helps in monitoring to ensure that the system is doing what the system is supposed to be doing. So a system, or an individual that has poor executive functioning, when the boss is out to lunch, then this system is really allowed to do whatever it wants to do. These individuals are often distractible. They are, they might have a thought that just comes to their head that's a lot more interesting the teacher [inaudible]. That's a very important piece [inaudible].

So the key players are: working memory, processing speed, or long term memory, our reasoning and our executive functioning. And you'll often see these key terms coming up in psychiatric reports. [inaudible]…So what you're going to see, you're going to see all the functioning, processing speed, you know…those often key cognitive weaknesses that are going to start to help us understand the individual having difficulties that they are.

Now we take a look at all these abilities and we compare them. So I'm quickly going to go through the WISC, the WISC – the Wechsler Intelligence Scale for Children, the fourth edition is the most common cognitive ability test that we give, and we have some key areas. We have our ability to look at verbal reasoning, our ability to look at non-verbal reasoning, or perceptual reasoning. So this is language based. Using language to solve problems, is looking at using non-verbal information to help solve problems or creativity, working memory, and processing speed. So for a typical individual what we often see on these tests is their scores fall within the average range; they all kind of line up in a nice straight line.

We look at memory test, the verbal memory and the visual memory, they line in about the same area.

Now for the profile of an individual with a learning disability, that cognitive profile doesn't always going to look like that. There's often what we call "the hills and valley approach", or kind of discrepancies. We often see, maybe some really good reasoning abilities and some weaker working memory abilities. We see these discrepancies between these cognitive abilities in most case with LD individuals.

And we might see discrepancies in the area of memories. So the idea is within the profile, the cognitive profile of an individual…for some cognitive explanations of why the individuals are having difficulties within. And often that cognitive explanation is because a certain cognitive ability is lower than what we'd expect in other individuals.

And here are some common cognitive assessment tests that we use and again you can refer to these later.

Now we look at the learning profile together, we look at the academic skill profile. How are they actually doing on a specific academic task that they have to do. And again, we don't just look at reading. We're going to take reading and writing down into the sub-tasks, and often what a psychologist is testing, they might do some global test of reading, writing, and math. And if the global test indicates the area of weakness and then we're going to immediately search for, drill down, look at the specific areas. So we might not test all the underlying skill areas, but we're definitely going to test and drill down on the specific areas that we see a global-or a weakness within.

And so often we just use standardized tests. These are tests again…that we use that are Wechsler Intelligence Test, John Smith and Cognitive…and all these tests look at many different domains of learning.

But there are other stuff, we have informal measures that look at- informal measures, academic profiles and then we also have some really cool…that are these wonderful snapshots, screening tests that we can use to be able to again assess some of these underlying academic skills. And I recommend that you go and look at, especially the…website to be able to see some of these awesome…like metrics.

The other thing to see in a psychoeducational report is you might see some something called "testing the limits". So you might see that ok Johnny is having difficulties with doing, caring in subtractions. So when he has to subtract he has a hard time with caring. And when testing the limits was applied, he was able to, be able to solve the problem. What testing the limits means is after we do the test in a kind of the standardized fashion, so after we ask to subtract multiple numbers and we see that he's having a hard time borrowing, we actually go in and we give him a prompt and how does he respond to that prompt, maybe we give him multiple prompts, or we may actually teach, or we may specifically teach Johnny how to do on that….the type of questions is to see how he is able to apply it. So testing the limit goes beyond the standardized. It's to start to see what are the strategies that we can use that will allow Johnny to actually perform at a higher level.

And again, in an academic test or a language test we have a bunch of standardized test that we often use, that might be common ones, but definitely not all.

And the third area, is the social-emotional profile to kind of understand the social-emotional profile of individuals. And the reason, when we look at social-emotional profile, is again social-emotional profile is going to impact the way the student is going to be learning. We know that all students with learning disabilities have an increased anxiety. LD individuals often have 3 to 5 times more anxiety than the typical individual or a depression. And we know that when a person has anxiety or is feeling very

anxious, that impacts working memory, their executive functioning skills. So they may have poor working memory or poor executive functioning skills, and they might also be very anxious when it comes to having to do school work, and that's important for us to know because we have to start to monitor, or address that anxiety so that we can maximize the amount of cognitive…If I'm asking student when to read something, and reading itself is difficult that means that…working memory…or executive function…is high cognitive…And also, an individual who has difficulty with reading, that really going to tax the system, and we're going to see a lot of errors. So we're going to have to address the anxiety, to be able to allow the student to be engaged in that process. And often the social-emotional areas often look at the student's willingness to learning at all. So we have to make sure we address these so that…between…feeling very anxious about something than you're probably not going to be willing to even attempt to do it.

And again we have a lot of common, a lot of social-emotional tests as well as the ability of clinical interviewing to be able to pull in these types of diagnoses.

So we gather all this information and we pull it together and we have to apply this information to something. And the thing that we do once we get this kind of emotional – this profile, is we plot all this stuff, and where all these different skills, we apply it to a definition.

And the definition that we often use here in Ontario is the Learning Disabilities Association's definition. And what I really love about this definition is it gets at the key things that we often see in learning disabilities. One is that it impacts the way a person processes information, but also know that these individuals are intelligent; they have to at least have average to above average intelligence to be able to qualify for a learning disability. So kids who have LDs cannot say that they're stupid because just by definition it rules them out. They might feel stupid, but they're not stupid… Also know that a learning disability can impact more than just their academics. It can impact their friendships, work after, life. There's a lot of adults that…in their day-to-day life afterwards. And we also know that there's some awesome research at this point that they can succeed. We know that when provided with the right type of intervention, these individuals can be successful. So often, in the diagnostic report is you'll see, kind of wordings saying, "Johnny has average cognitive reasoning abilities, but because of these specific cognitive weaknesses it's making it difficult for them to be able to read, and write", and therefore they need the diagnosis about having a learning disability. And because they have a learning disability then we can aim to go about doing something.

So a typical report, what you'll see is, you'll get the background information, you'll get the behavioural observations, what a clinician has seen, you'll be able to get the statement that verifies the validity of the test. Is the test that we just did valid? You'll get the cognitive results, the social-emotional profile, and that diagnostic statement-the diagnosing – or not the diagnosing [inaudible]. And with…the last part of the report is then the recommendations, and that's my favourite part.

So what do we do? How do we go about helping out this individual?

And when we think about recommendations we're thinking about the best place for them to be. How do we help them at school, at home, in the community? What are the academic interventions, the

behavioural interventions? And also, what are the future things we're thinking about? And often these will be broken down.

When we're thinking… for interventions, we're really thinking about two clusters, two main camps. We're thinking about what is the remediation we can do or compensatory. Now remediation, this is all of the things we can do to strengthen the underlying skills. This is what we can do to be able to teach a student how to read on their own, or be able to be a better speller. And in the last 15-20 years we've had some amazing research, that has really taught us how to teach literacy and numeracy to individuals who struggle in this area. But we also know that remediation often looks a lot better when the child is younger than when they are older. So, remediation is really important. What can we do to strengthen those underlying abilities?

Now the other area that we often get to is compensatory. What can we do to compensate, or work around that area..?...that we can provide that student in time of class, such as being able to dictate the answers to a test to those with writing difficulties. Having extra time during a test to overcome some processing difficulties. Hear, to be able to read the worksheet out loud to them. It's the learning strategies that we're going to teach them to be able to know more effectively how to bring information, integrate the information, and present that information as well as assistive technology tools. Technology – the tools that can be used to help out with those areas of weaknesses.

So in the, in the recommendations, you're going to see a combination of both– remediation options, how to strengthen those underlying weaknesses, as well as the area of compensatory, how to overcome boundaries. And the number of remediation versus compensatory recommendations is going to change as the student gets older. Often… [inaudible]…than as the individual gets older.

And often, what you're going to see is a, something like this. You'll get an example of some recommendations that clearly state out what the right recommendation is. But as we're talking about this recommendation such as extra time on an exam, you'll go into what, why is this. This person needs extra time on testing because they have working memory issues and they have processing speed inconsistencies. For recommendations, accommodation is going to be tied into what are the underlying … that are going to explain those difficulties, why that recommendation is needed.

Now taking these recommendations and translating them into an IEP can be a little bit challenging because often on an IEP we really have two areas: we have accommodations and modifications. In general, remediation will, when we're talking about remediation, it often comes into modifications because the ideal here that we're going to lower the standards for a bit so that we can really intensely target an underlying weakness. What is that underlying weakness? We're going to modify the program to intensely target that and know that. So students with learning disabilities shouldn't stay in modifications forever. We should have a very clear plan of what we're going to do based on the best evidence out there and know how to target that underlying weakness and then have a projection for when we will be able to stop modifying. So if a student is in grade 4, and we say we're going to modify their reading ability down to a grade two, but by the end of the year we should have them at about a

grade 3 level. So we should have a clear kind of…where do we want them to go? How are we going to get them to that point? And, how are we monitoring it along the way?

The other thing is accommodations. Now accommodations are across all subject areas. These are the things that teachers need to be doing to be able to support a student who has a, who's in their classroom, who has a learning disability. These are things such as, you know, being able to repeat information if they have processing speed or executive functioning weaknesses in terms of instructional; it's environmental, such as preferential seating. Keep the student close to the front of the room so that they don't have other distractions going on around if they have executive functioning weaknesses. It might be an assessment, such as extra time on tests, or maybe doing the test orally than just writing it so we can work around some of the reading and writing difficulties. So we're bringing in all these accommodations that are going to be applied across all the different areas. So accommodations, we're not changing the expectations, again we're going to keep regular expectations, but we're going to provide these accommodations to be able to level the playing field. So when we're looking at those recommendations in the psychoeducational assessment, that's what we're going after. And for modifications we're going after, we're looking at the remediation, explanations, and put those in the modification area.

So again, I kind of want to close off so, why do we, why should we read that psychoeducational report? Well it comes back to this learning profile. That psychoeducational profile is going to give you a lot of really good information. It's going teach you about where are the specific academic skill weaknesses that that individual is going to have. It's going to teach you about what are the cognitive abilities that that individual has so that we can change the way that we deliver the programming or teach the student, and insure that the brain is grabbing on to the information and maximize it. And it's also going to teach us about the social-emotional pieces. What are the things that might get in the way of the engagement of that student's learning? So that we can specifically address those. And still, in the end it becomes a very rich place of understanding; it's much more than just a diagnosis. It really is a manual about how the child goes about learning.

Thank you.

Speaker 1 (Amy): Well thank you so much Todd. That was a really great presentation and extremely informative for everyone. At this point, if anyone has any questions, you can click the raise hand button on your control panel or you can type your questions into the chat box on your dashboard. We'll do our best to get to everyone's questions before we run out of time, but if we aren't able to, we'll ensure that they get answered by Todd after the presentation.

So we do have a couple of questions Todd that came in over the course of the presentation.

Speaker 2 (Todd): Great!

Speaker 1: So our first question is, as you know, oftentimes teachers are limited trying to juggle all the needs of their students in the classroom, so what areas in the psychoeducational assessment report would you recommend that a teacher access if they're limited on time?

Speaker 2: I think if you're limited on time and you can't go through the whole report, then one of the best places to flip through quickly is to that diagnostic paragraph because that's going to give you the quick overview summary of the highlights of what that report's going to be talking about. So, looking at that diagnostic paragraph or summary is really good, and then going into the recommendations. So now that I have a very brief understanding of how that student goes about learning, then what are the recommendations that are going to support that? And hopefully the recommendations are laid out in a way that it's going to continuously reference the cognitive abilities and academic skills that explain why that recommendation has been provided. So, it's kind of like the second half of the report; the diagnostic and the recommendations. That would be the key place I would go to if I had a limited amount of time.

Speaker 1: Okay, great. Thank you. Our next question is, why don't the psych reports state essential to access the curriculum for SEA equipment instead of suggesting the school prepares a SEA trial?

Speaker 2: That gets into a little bit of a clinical situation depending on what boards you're at. Now, being an expert in the area of like assistive technology, one thing that I do know is we don't have a lot of evidence necessarily to support all the types of assistive technology that we have out there. So often when we say, use the word essential, we have a lot of information to say, if this child does **not** have this technology, they will not be able to learn. However, at this point, we just don't have all of that rich information to actually make those claims, so therefore, it's a more accurate statement to say, let's try something; let's try this stuff out first. Let's try it out, and if it's working, **then** it's going to be able to be something that we need to be able to bring along for that individual. So with the area of SEA, the Specific Equipment Amount, there are areas that we just don't have the information. Other ones we do. You know, like using a word processor. If a student's able to type faster than they're able to highlight, than handwrite, then we know that typing is a better technology for them to use. So that, we can say clearly that's an essential thing; that they have a computer in the classroom to be able to write because they're going to create better work. We also have that same information about word prediction at this point. But we don't have it around stuff such as text-to-speech, voice recognition, some of the graphic organizers. There are a lot of areas that are still a little bit fuzzy but hopefully, in time, we'll be able to address those.

Speaker 1: Okay, great. Thanks Todd. Our next question comes from Christy, and she wants to know if there's a resource that you could recommend that pairs findings on the report with successful interventions.

Speaker 2: I think that's one thing that the LD@school website's going to be working towards. We also know there's like POWER-UP and Text Matrix. There's a bunch of different websites out there that indicate, what are some good evidence-based strategies or practices that we can use when we see these certain areas of weaknesses, and so I think keeping tuning back to the LD@school website is going to be a wonderful way for us to keep kind of collaborating that type of information. Now, evidence-based means that we actually have done pure systematic studies, scientific studies, to actually show this works and this doesn't work. There's other things that we have that we call informed, evidence-informed studies or practices, which means that it makes sense based on past research but we haven't actually

systematically tried it out. But we do have a really good base of stuff that we do know that, when you see these types of weaknesses, this is the type of stuff that you're going to be able to use, and that's one of the goals, I think, that the LD@school website's going to provide us.

Speaker 1: Thank you, and we did not coach Dr. Cunningham to provide that answer [laughs], but you will see a number of evidence-based and evidence-informed resources come available on LD@school over the next month in particular, as mentioned. So, our next question comes from Tania. Her question is: is there a better time as far as developmental age that would merit an assessment? Is there an age that would be considered too early to do an assessment?

Speaker 2: No, personally I think, the earlier the better in many cases! If you're seeing some difficulties; if there's some worries, then it's great to get in there to try and understand why are these symptoms presenting themselves, because as I said earlier, our remediation works better for younger children. We get better bang for our buck with younger individuals than we do with older individuals. So if we can go in there and intervene early on, then we might actually change the actual progression, that developmental progression, of that individual. So personally, I think earlier **is** better, and our tests are very good. Even in early literacy, back in or before kindergarten, we have a lot of look-fors that we can start to look at that are predictive of if the student's going to be probably in the at-risk zone or not. So, I would say, the earlier the better.

Speaker 1: Okay, great. Our next question is from Amanda and she would like to know if you could speak about the difference between a psychoeducational assessment and a developmental assessment, which would be completed by a pediatrician.

Speaker 2: I think it's just the type of information that's going into it. I think a developmental assessment's going to look at much more of both sensory development, motor development. It's going to look at, get into much more of the language. So it's going to be much more of a fine/gross motor, as well as sensory development, and then tie into some of the academic pieces. Whereas a psychoeducational assessment is really more directed at that cognitive, academic, and social emotional. That's really what it's tying into. You know, a lot of our assessments depend on who the professional is. They start to blur boundaries about what exactly we're looking at. We use different terminologies between the different professions which, you know, muddy it up for teachers because you might have a speech and language pathologist and a psychology report and they both might be talking about phonological processing but they might talk about it a little bit differently. So different professions have their own lingo and it just adds to the challenge that that teacher experiences when they're looking from different professions. But in general, the developmental report's going to look at much more of the milestones in the area of motor sensory and then general cognitive abilities.

Speaker 1: Okay, thanks for clarifying that for us. Our next question comes from Deborah. She wants to know how we can get teachers to move just beyond the standard accommodations such as extra time, preferential seating, oral testing, and really get into the nitty gritty of instructional accommodations.

Speaker 2: Ya, great question! Personally, I think that it's one of the things that as psychologists, we have done a poor job of doing, is communicating why the recommendations that we're providing

actually make sense and how to actually translate that into the classroom. So one of the things that I would love to see in the future in psyched reports is that, especially from school psychologists out there (I'll challenge my colleagues in the field), is that, when we're writing up our recommendations, we actually have the list of IEP accommodations sitting beside us that teachers have access to and that we choose from those accommodations list, and actually pull on those, and start off the recommendations by saying, you know, we need to be chunking for this individual, and here's the reason **why** we need to be chunking. So instead of just IEP, which kind of just lists all these accommodations and then some people don't really know what chunking is or how to use a graphic organizer, that in the psyched report, that's where that information's really spelled out. It's really saying, here's chunking. This is why we use chunking, and this is kind of how to execute chunking in the classroom, so that those recommendations have a nice, one-to-one translation to the IEP. I'd love in the future to see, you know, a well-developed IEP, developed by the special ed. teacher and basically having the recommendations section from the psyched report stapled to the back of that IEP, so that you can quickly look at that list of accommodations, flip to the back, and actually read why those accommodations have been recommended, so that the classroom teacher then has a better understanding of how to actually implement that in the classroom. Because otherwise, often what we do, is we do fall back onto some general accommodations that we feel most comfortable with and don't often go back to that source material of the assessment to necessarily derive some of those recommendations or some of those accommodations.

Speaker 1: Okay, next question is from Jamie and they would like to know, how do you modify for a student in secondary, for example, a grade 10 student that is working at a grade six level. So, a very specific question for you.

Speaker 2: Again, I don't think there's a common answer for this one because really, we have to understand, what is the underlying skill that's getting in the way; what is that specific academic skill that's getting in the way, and therefore we have to address that. So, just to say a student's working at a grade six level. What are they working at a grade six level in? Is it in the area literacy? Reading? Is it in their ability to do math? Numeracy? If a student in grade nine is reading at a grade six level then we might not need to modify the program. What we might need to do is be creative on what the accommodations are that we're providing them. We might need to not hand them a worksheet. We might need to give them that worksheet in a digital format so that their computer can use text-to-speech that we've allowed them. Or have a peer read that worksheet to them because, what the profile might show is, they might have really good understanding, but the barrier that they're running into with that worksheet is the ability to decode the individual words. So that's why we have to go back again to kind of that huge learning profile and really look at what is the specific weakness that is presenting itself, and only when we understand that specific weakness are we going to be able to go in and actually target that. Now if the weakness is in more of a higher order area, such as maybe comprehension, then we might have to be thinking about some possible areas to be able to modify in, but again, you'd have to look at again, all of the curriculum for that subject, and be able to start to think about, what specifically do I want to modify for. In general, in general, kind of getting a general, getting forced into learning disabilities, especially at the secondary level, we're going to be doing accommodations. That is going to

be the main thing that we're doing. We shouldn't necessarily be looking at modifications. We should be mostly looking at accommodations to be able to support that learner.

Speaker 1: Okay, so we have a live question from Judy Henderson, so Judy we're going to unmute you.

Speaker 3 (Judy): Hi.

Speaker 1: Hi. Go ahead.

Speaker 3: I can hear you. Can you hear me?

Speaker 1: Yes we can.

Speaker 2: Ya, hi Judy!

Speaker 3: Wow! My question is: dyslexia. The school board that I'm with doesn't recognize it, but so often I have students who, their writing appears backwards, upside-down. They're struggling with readings, and I'm wondering what kinds of things, in general, that I can do as a classroom teacher to help a student who is perhaps not seeing or processing visual information the way everyone else is.

Speaker 2: Good question. In general, what we know about dyslexia is, it's kind of a form of a reading disability, which has a very specific phonological processing, as well as this, what we call, rapid automatized naming. It's this weird component of processing speed that brings together auditory, or phonological, information, and orthographic, the sight words, together. It's one thing, a lot of research in the area of dyslexia and has shown, that often, another underlying feeling, is that working memory is often also problematic. So often what we see when kids are actually flipping letters upside-down or reversing those letters, it's not that they're actually processing the information differently. It's just their brains are so taxed, they're working **so** hard, that that processing speed is holding up the wrong information from the filing cabinet system. So there isn't a strong association between the sound and the visual representation of the word and that can really, really tax. That processing speed and working memory are being really taxed due to the other cognitive demands that are going on. So when we see that, often that is a symptom of a taxed system. It's not that they're actually receiving information differently. It's just when we present them a 'b' and they say 'd', it's just their system has been taxed. They haven't made that strong association between the sound and the orthographic, and so therefore we need to directly teach that to them. For young children to make those really good associations, of reading mastery and when they're older, there's really good programming to make those types of associations. There's a fantastic website called *The Balanced Literacy Diet*, you can Google *Balanced Literacy Diet,* and it's a fantastic evidence-based website that goes through all the skills that you need to kind of directly teach students who have reading weaknesses, and talks about that direct grapheme, or letter representation, to that phoneme or sound representation; how to make those associations. So, *The Balanced Literacy Diet* would be a fantastic to go and check out for more explicit details on how to help those students. And in general, dyslexia reversal is not the cause of it. It's just a symptom of a taxed cognitive system.

Speaker 1: Okay. Did that answer your question? Oh, okay, she's gone. Sorry about that Todd.

Speaker 2: That's okay.

Speaker 1: Our next question is from Jamie McCullough, who's going to ask their question directly. Jamie? Are you there? Hello?

Speaker 2: Hello, Jamie?

Speaker 1: Okay, we'll see if we can come back to Jamie in a second. For now, I'll go to a question from Emma. On rare occasions, the diagnosis in the psych report shows that there are no learning concerns, however, the student has a history of academic and social issues. What can in-school teams do next?

Speaker 2: Well again, it's trying to understand, what is making the learning difficult? So if the psyched report comes back and it says that there's no weaknesses that are actually predicting these academic concerns that are being presented, then it's going, okay, so what else is getting in the way? Is there an environmental thing that's getting in the way? Is there trauma in the past that's making this child not be able to pay attention? Is there a home life that's very disruptive that's not allowing for them to be able to learn? Have they just not had the opportunity to learn? Have they just immigrated into Canada and that's impairing that? So I think one of the best things to do for an in-school team is to go back to those curriculum baseline measures such as DIBELS. To start to take actual snapshots of what academic skill that is impaired. So sort of documenting that, and then just trying different things based on the evidence that we know that helps improve that area. So if a child's having difficulties with spelling, then let's go in and teach them morphographical spelling, which we know really helps students with their overall spelling ability. Let's teach them morphographical spelling for a period of time and then retest them, you know, every two weeks for a period of, let's say, four months and see, does that just help out. Sometimes, it's just they haven't had that opportunity, or something has impacted their ability to focus in class and be able to learn in class other than a cognitive weakness. So it's not the cognitive weakness creating that barrier. It's something external to that individual that's causing that barrier. And often, in those cases, when we provide just very good evidence-based instruction, we often see immediate gains for those individuals. So curriculum baseline measures, fantastic place to go to to kind of get that thing. Again, for literacy stuff, *Balanced Literacy Diet*, fantastic place to learn about, what are the interventions that you might be able to use to help that individual.

Speaker 1: Okay. Thank you, and we're going to try and go live again. We're going to try with Rufino.

Speaker 2: Okay.

Speaker 1: Are you there? Hello?

Speaker 4 (Rufino): Hi.

Speaker 1: Hi.

Speaker 2: Hi Rufino.

Speaker 4: My background is very noisy. I just have a reading question. It's about the balance between the needs of the learning disabled student and the general population. How do you balance those needs?

Speaker 2: Hmm. Good question. In general I think, again, I'm just going to use some broad strokes because different classroom environments, different students, a lot of variables in here. But in general, I think if we look at differentiating on ability groups. So if we're going to start creating groups in our classroom, we can start to differentiate on ability groups. We often know that our really high students in our class, they don't actually need a lot of direct teacher time. Actually, there's a fantastic study out of the Florida Institute that went in and they put cameras in classrooms and they did initial assessments with kids on a whole bunch of different academic skills and then they did an assessment again with all the kids on those skills at the end of the year, and they actually painfully went through and documented how much direct teacher time with each student occurred, and what they found was, with the top 10% of the students in the class, more teacher time spent with those top students actually led to less skill development, less growth in their ability. Teachers were actually a hindrance to their learning. It was better for the teachers to kind of do a general lesson, set the expectations, and then leave them alone. Then there was a middle group that needed some good amount of teacher time to repeat, or kind of reinforce that information, and then there's that lower group that needed a lot more intensive teacher intervention, and so I think one of the challenges, especially in the secondary level, is to try and create those different groupings so that we have different ability groupings in our class so that we know kind of those top group of students can, we give them some general instruction, we set them off and we let them go. The other groups are going to reiterate the lesson a bit more and then this bottom group are going to really spend some more time with them. I think when we create these different ability groups it will allow us to kind of give more of that needed time to that lower students, without hindering the rest of our class. And that's just one of the many possibilities. I think often we get into the feeling that we have to give the same amount of time to all students as a teacher. We feel like we have to give all students equal amount of time, and in fact, the research says that's not the case. Actually, some of the students, the more time you give them is worse off. So I think we have to just kind of get over that notion and differentiate on the back of our different ability groups and average time we spend with the groups.

Speaker 1: Okay, so we hope that answered your question Rufino. Okay, we're going to move on to our final question for this afternoon. As I said though, if we didn't get to your question, we will make sure that it gets answered to you directly following the webinar. So our last question is coming from Deborah Park. So Deborah, are you there? Hello?

Speaker 2: Hi Deborah!

Speaker 5 (Deborah): Hello.

Speaker 2: Hi!

Hi! Wow, because I thought my question was answered online. What I want to know, I just got an assessment and the student has an executive function disorder.

Speaker 2: Yes.

Speaker 5: I just want to know, that coming from the new DSM, the forthcoming. Is that, coming from the language that's changing?

Speaker 2: Ya, with the new DSM, executive functioning's not actually specifically a diagnosis in the DSM. We talk about learning disorders in the area of reading, reading comprehension, explicit writing, and also numeracy, and then we have some other language-based ones later on. So those are kind of the DSM critierias. But executive functioning is much more, again, it's part of that cognitive profile. It's that boss in our head, and we know that executive functioning is really important to learning because if that boss is not there, then it's not going to allow the student to be able to set, or necessarily go where they need to to reorganize, to organize their thoughts, their train of thoughts, to be able to easily switch between one task and another task, and also to be able to do error analysis and monitor what they're doing; is it good or not? Is it right or not correct? And so, executive functioning, though it's not in the DSM, it's definitely something that in the area of cognition, over the last 10, 15 years, we have been spending more and more time. And in fact, it's becoming one of the **essential** cognitive abilities that has to be working well to really facilitate a good academic career, and if it is an area of weakness, then we really have to go in and start to provide accommodations to be able to work around that area. We don't have any good research to say how to actually remediate executive functioning weaknesses. In fact, we don't have very good research in general to remediate any of our cognitive abilities, but we definitely have a lot of good research to talk about how we can accommodate certain things, and work around that area of challenge. So I think as we go forward and as executive functioning continues to keep getting such a high profile as one of these essential cognitive abilities that learners must have to be able to do well in school, we're going to see that comes up more and more and more in the tests that we have, and straight executive functioning disability often also means that the child's not necessarily being identified until later in life. They're often good with reading, writing, and spelling, but it's kind of when they hit grade six, grade seven, grade eight, and they're having to manage lots of different tasks, and a lot of additional cognitive load. The work's getting much more complicated; that we actually see that executive functioning weakness really coming to the forefront. So kids with executive functioning weakness often get diagnosed later in life unless they have also the ADHD cluster of symptomologies that go along with it too. Then sometimes they get diagnosed much earlier because executive functioning's also associated with ADHD. So that's a complex answer to a complex issue.

Speaker 1: Okay. Well I think hopefully that answered Deborah's question. Alright, so at this point in time, we're going to have to end our question and answer session. We will make sure, we had a few questions that didn't get answered, and we've written down your names and your questions, so we will get those answers for you, and we will send out the answers for everyone along with the questions following the webinar. If you have additional questions that you think of following the webinar or that you haven't gotten a chance to enter yet, please send us an email at info@LDatSchool.ca and we will ensure that everything gets answered.

Just before we sign off, I have a brief message for you from the LD@school Team. It's with great pride that we present the first annual Educators' Institute on Demystifying Learning Disabilities in the

Classroom. As a delegate attending the Educators' Institute, you will be provided with new perspectives and knowledge in the field of LDs, which will be based on current research and practical information on effective assessment and instructional strategies, including technology. All Ontario educators who work hands-on with students with LDs are encouraged to attend, and for more information about this event, please visit our website: www.LDatSchool.ca.

And one last message: if you enjoyed this webinar, we will be having another webinar on Wednesday, May 28th and Dr. Todd Cunningham, together with his colleague, Dr. Rhonda Martinussen, will be presenting a webinar on the topic of strengths-based IEPs. Registration information will be available at the end of this week, and in the future, if you would like more updates on what's new to LD@school, please feel free to sign up for our email newsletter, which you can do by entering your email address in the green box on our homepage.

Once again, I'd like to thank Dr. Cunningham for a wonderful presentation and I'd also like to think all of our participants for joining us today. Don't forget we'll be sending out all of the presentation slides and notes, as well as a short survey, and answers to the questions that didn't get answered following today's webinar. We would really appreciate it if you would take the time to fill out our survey as we can use this information when we're conducting our future webinars. Also, please remember that we'll send out a link to this recorded webinar, with a full transcript, in approximately two weeks. Thanks again for joining us and have a great day everyone!