

## **Webinar Transcript: Assistive Technology & Distance Learning: Developing Skills with Accessible Tools During COVID-19**

- [Lawrence] Good afternoon everyone, and welcome to a very special LD@School and LD@Home joint webinar. My name is Lawrence Barnes, and I'm the president and CEO of the Learning Disabilities Association of Ontario, and it's my pleasure to be a moderator this afternoon. If anyone is experiencing any technical difficulties at this time, please look at the message box and try to work your way through it. This is a recorded webinar, so if worse comes to worst, please just restart from the beginning, and hopefully, your access will clean up. In terms of the follow up to this webinar, you will in due course in your email see the PowerPoint slides, a link to a survey to provide us your feedback, and a recording to allow you to re-view this webinar at any time. The surveys help us to formulate our future plans, so please give us your feedback. It's always very welcome.

For your information, this webinar is being recorded, so there is no one live here to actually support you. However, GoToWebinar is a fairly robust platform, and if you do have any problems, as I said earlier on, just restart the recording and come back in and hopefully that will clarify any problems you have. LDAO would like to thank the Ministry of Education for their support of this production. They gave us the funding, but would like us to know as always that the views expressed in this webinar are the views of the presenter and do not reflect those necessarily of the ministry nor the Learning Disabilities Association of Ontario. There is a hashtag, LDwebinar, where you can follow along in social media if you choose to and share points and discussion with other educators and parents who are watching this recording today.

So with the administration done, it's my pleasure on behalf of the LD@School team to welcome our guest speaker, Chad Downes, who will present this afternoon around assistive technology and distance learning, developing schools with accessible tools during COVID-19. Chad Downes is a teacher with the London District Catholic School Board and holds the position of SEA Trainer. He's a graduate of Media Information and Technoculture from Western University, and earned a master's in

teaching by studying the impact of computer technology on literacy. Chad holds a strong commitment to universal design for learning through a strength-based approach, so that all his students can achieve. Chad was the assistive technology advisor for the Amethyst Provincial Demonstration School, a member of the Accessible Formatting Team for EQAO, and he helped rewrite the AQ courses on assistive technology for the Ontario College of Teachers. Chad is currently writing a course on educational technology for Fanshawe College. He has presented and developed capacity on 21st century learning skills with a focus on students with learning disabilities at conferences across the province, including ASET, CEC, LD@School Educators Institute. It is my pleasure to welcome Chad this afternoon to share with us, and with that I'm gonna hand you, Chad, the cyber floor, and let you take us through your presentation.

- [Chad] Wonderful, and thanks for that introduction, there, Lawrence. Hello to everyone at home. As Lawrence said, my name's Chad Downes, and we're going to be talking about assistive technology during this distance learning. What we're going to be looking at today is developing the skills with the accessible tools that your students or children already have. We're not looking at the newest and greatest. We want to make the most of the tools that we already have. So with that, we're going to jump in here. And I'm going to just be sharing with you a little about myself. First and foremost I would consider myself an inclusionist. I work with different nonprofits and charities around London to promote inclusion. As a teacher, I have wanted to be a teacher since the third grade when my desk was out in the hallway and I figured that there was better ways that schooling could be done so that everyone could be included. And for assistive technology, I've been using assistive technology now for over 25 years. My sister was diagnosed with a learning disability and was provided a lot of technology, but back in those days it was very complicated to use and she never got around to using it, but I started my career very young.

We're going to start today with a bit of a story of a student case study, and our student here's name is Biff. And Biff is a very regular student, lots of friends, he's good at sports, he enjoys arts. However, he struggles with reading and writing. And

this leads to some certain problems within the academic setting of school. There are lots of meetings. It starts off with a parent/teacher interview. It progresses and ends up at an IPRC. Once they go through the IPRC process, we see a plan of action is to get assistive technology, and everybody's very excited about this plan. He's gonna have the tools that's going to allow Biff to be successful. He gets three hours of segregated training. So a trainer comes in and is able to offer training to Biff, and probably his teacher gets to come in for about an hour of that, see the tools, and hopefully get on their way. However, after a little bit of time, the novelty wears off. He doesn't have the right coaching, and because Biff's friends don't use it, he becomes resistant to use it. This is a very common problem when we see the use of technology around the province, and we refer to this as the abandonment rate. So students begin using technology, and then they abandon it, and they abandon it for a variety of reasons. This particular statistic is of high interest to myself and other assistive technologists. How do we get students to continue to use these tools? So that's what today is going to be about. We have extra time at home through this time of COVID, and we want to make sure that everyone has the tools that they need and are able to use them.

So with today's agenda, we're going to be looking at learning the tool. We're going to talk about some habit-forming timelines. We're going to look at voice to text as well as text to voice, some mind-mapping, as well as the provincial VLE, which is known as Brightspace, or you might have heard of it as D2L. And finally we'll get to a few questions. Up at the top along the banner you're going to notice a few icons. These are some of the technologies that I will be using. So we have Read and Write by Textel, we have the Brightspace by D2L, and we have the Mindomo mind mapping software. Now, because I'm using these, these are what the tools are that are used through my school board. However, we're looking at the tool on a larger scale. What we're able to do with these tools, it's not specific to these particular tools. And as Lawrence had mentioned, this is a joint webinar between LD@school and LD@home. So let's get started here. So first of all we're going to do a little bit of analogy, looking at learning the tool. When somebody gets a power tool, the very first thing that they would want to be able to see and be able to do is to be able to build a really luxurious home or build something quite grand. This is a good end

game. This is not where we start with a tool. We might start with something a little bit more basic, like a birdhouse. We wanna try to make clean cuts, we want to be able to use our tools and get to know them and know some of the practice and learn them as we use them. Same thing, we're gonna take another look, different type of tool, using a sewing machine, probably the top end of what someone using a sewing machine would do would be to build a wedding dress. However, before we can get to the fanciness of this, we need to first be able to sew two pieces of fabric together, perhaps making a pillowcase. I hope you're getting the idea here, that we can't start with the end in mind. We want to have our tools being built. So in order to learn the tool, our end game might be able to write a science report. However, in order to get to being able to write the science report, we first are going to practice a few very basic sentences using our favourite animal. Something very basic, it allows us to practice. Very important that we do not just hand the student the tool and then expect them to produce the very high end. We need opportunities to practice these tools, and with all this time at home through our COVID isolation, there is no better time to be practicing these tools than now.

So we're gonna talk about some habit-forming practices. The external training will never be adequate all on its own. So when we have a trainer such as myself or in different school boards, somebody comes in and works with a child and your students, the training that's offered is not sufficient all on its own. The same as if you learned to play a musical instrument. If you only practice when you are with your piano teacher, you would never advance. We need time to practice and then come back to that tool and then develop more skills and develop more best practices. So when we take a look at this, on average it takes more than two months before a new behaviour becomes automatic. 66 days, to be exact, according to the science that is up at the bottom here. And how long it takes a new habit to form can vary widely depending on the behaviour, the person, and the circumstances. So we, a lot of times I work with students, and I will hear them say after one or two sessions, yeah, I don't really like this, or I'm not good at this. We need more time and more opportunities for the student to develop habits and make it become more independent with these tools. So I'm going to be showing you a few of the key

take-aways for building independence. Now there is a little bit of jargon in here for the parents at home, but I have also included some language that would work for you.

So the first thing, the first key take-away is a gradual release of responsibility. And for parents at home, you're going to be saying things like "I'll show you how." For the teachers you might be saying something along the same lines. So first of all you're going to demonstrate it, and I'm gonna have a couple opportunities to demonstrate it to you, and then hopefully you'll be able to demonstrate it to your children or students. As we go through it, the gradual release of responsibility, we kind of do it together, we give our students or children reminders on what this technology is good for, and then we hope that eventually they develop some independence and we are their biggest cheerleaders along the way to make sure that when they choose to use their assistive technology, that we acknowledge that and praise them for it.

Our second tool, or our second key take-away here, is a growth mindset. It's okay to make mistakes. I've been using assistive technology, as I'd mentioned, for about 25 years. I have made lots of mistakes along the way, and that's why I have become so good at using it. We wanna talk to students about making mistakes, and pointing out why maybe those mistakes happened when they were using their technology. So if they're not speaking in full sentences, for example, okay, let's try that again. The one that always gets me when using voice to text is a lot of students, the first time they put on the headset they want to talk like a leprechaun, and I always just allow them to do it, and then I say, okay, did that work very well? No, well let's try it another way, and you'll see how much better it can work.

Our final take-away from here is building on prior knowledge. What do you already know? So we want to focus on, when we're building capacity with our students and with our children, we want to allow them to use areas of high interest. What are things that they know about? Do they know their favorite song? Maybe they can just dictate the lyrics to that. The other thing is, with these technologies nowadays, there are a lot of transferrable skills. So when I talk about transferrable skills, many people

have a Google Home in the house or they have Alexa. That is a good example of voice to text where it's voice recognition software, and they are able to build on those skills that they need to use clear language. So these are some of the key take-aways that we're going to ensure that students are able to do over time. Now we're gonna talk about using areas of interest. So when we do this, one of the most common, or a couple of the common ones that I have, are students oftentimes, when I ask them to pick something that they really like, they talk about tacos, or unicorns. Video games are a very popular topic, as well as space, and definitely sports, and with our younger students, I get a lot of requests about Lego, and I also try to build off of that and we'll use, we'll build Lego together before we actually go to practice so that they have some sentences already in their head. One like tacos is a really good one, because it allows them to say first, next, then, first put the ground beef at the bottom of the taco shell. Next add the vegetables. Finally, add the cheese.

So there's a lot of different things. We want them to be comfortable, we want them to be having fun when learning the tool. It is not supposed to just be science reports and other academic areas, because their ability to get comfortable with assistive technology is going to go beyond the classroom and make them more independent in all areas. So we're going to move on here, and the first tool we're going to take a look at is our voice to text that I've been making most of my references to. So the first thing that I want to do is go through a list of the key features and key take-aways for you as both teachers and parents at home to be making sure that students do as best practices. So the first one here is to speak in full sentences. Having an idea in your head and then saying it rather than trying to write as you're thinking is going to make the accuracy rate much higher.

The next one is to speak in a clear voice. I'll go back to my example of some of my younger students who always like to speak like leprechauns when they first put on the microphone, because it's fun and they're experimenting and maybe perhaps even a little bit nervous. The next key take-away here is avoid touching the microphone. A lot of students, they're covering it up, or they're trying to whisper, so they touch their microphone. This causes a vibration in the microphone, so it's a lot

like talking through a paper towel roll, and you'll get a bit of an echo, which will reduce the accuracy rate of their voice to text. So we want, and sometimes I need to ask them to sit on their hands or I will ask them to put their hands on top of their head so that they are not touching the microphone until they develop the habit of not touching that microphone.

The next take-away here is practicing punctuation. So when they go to practice punctuation, they wanna be able to say their sentence and already have in their head have the period at the end. It's not the same as just talking, so we do wanna make sure that that punctuation is put in. And I'm going to be demoing some of this in just a moment. The final point here is always listen back. So just like when we write something with a pen and paper, we want the opportunity and then we read it back, we want the opportunity for the students to write it with their voice and then listen back. It allows them to hear any errors that are made with their voice as well. My final note here is for new users. Practice your sentence out loud prior to dictating. And avoid telling about hockey. Talking about hockey is a really hard one for students here in Ontario, because for a lot of our students, this is a very big part of their identity. The reason why I ask students when they are a new user to avoid talking about hockey is because if they say in the first period, I went on the ice. Well, when they say period, it is going to put the punctuation mark in. So in the beginning stages, I do ask that students avoid talking about their own personal hockey, and rather I suggest to them to speak about maybe their favorite player and other parts of hockey, just not their own hockey.

The other one that will not work is there are some key phrases such as "new line," so when they say "The coach put on a new line," it will actually, it'll do the same as pressing enter, and it will move the cursor down to a new line. So what I'm going to do now is I'm going to pop out of here and I'm going to share with you a couple of examples of how we're going to use our voice to text. So I'm here in my Google Docs here. And I'll just up the size here a little bit for ya. And I'm using the Read and Write toolbar that you'll see dangling right here, but in order to use this, we actually also have the tool for everyone using Google Docs. It does come under voice typing right

here. I'm going to practice a couple sentences here with you. Good afternoon, comma. I'm very excited to be sharing my knowledge with you. Exclamation mark. New paragraph. It is very important that students always speak in full sentences when talking to their computer so that the computer knows what to write in the right way. Period. Stop listening. And you can see over here on the left that my dictation stopped when I used that. I can also turn it on and off by clicking it and clicking it again so it will turn off. Now, in my sentence there I do wanna point out something important. I said the word write two times. Because I spoke in a full sentence, Google was able to take the context, and it was able to use the right word, even though there's two spellings for it. So it does help when students practice using full sentences.

So I'm gonna demonstrate what this may look like using our example from earlier on. So as I go down, I'm going to think about my favorite animal and I'm going to think about my punctuation. So I don't, if I have my favorite animal, which is a giraffe, I would not just say giraffe. I need to speak in full sentences, so I need to ensure that I say "My favorite animal is a giraffe," followed with my punctuation period. My favorite animal is a giraffe, period. Okay, I did quite well there. There's no errors. In my next example here, I'm going to think of something a little bit exciting. So I'm doing this purposefully to practice my punctuation, so something exciting about a giraffe. Giraffes have very long necks, exclamation mark. New line. All right, and I did make an error. I'm not gonna get too upset about that. I'll just backspace it out, I could try again, or I'll just hit enter. Part of that growth mindset is not getting too upset. We're not doing anything here other than practicing using our voice.

Next I'm going to be asking a question about my giraffes so that I can practice some more of my punctuation. Do giraffes get more sore throats, question mark. Okay, so as you can see, when I speak in a full sentence, I get better accuracy with my technology, and I want to make sure that my voice to text is putting in my punctuation so that we don't have these really long run-on sentences. Now we're going to pop back to our presentation. And I'm just going to skip ahead, and we're going to talk about a couple of voice typing prompts. So here is something that I



share with teachers in my school board as well as with parents. So you need to learn the tool before applying to your schoolwork based on personal areas of interest. So if somebody really is very musical, I would recommend dictating your favorite song lyrics. So I do this for the students with the Fresh Prince of Bel Air. Being a 90s kid I was able to grow up, and those are words that are stuck in my head forever. So I'm able to practice with those, plus it's pretty fun for the students to watch me be able to do that, and then they think of their own lyrics.

Some of the other ones are students who are verbal, this technology is very strength-based. Tell about a past or future event in your life that you are excited about. One that I get a lot of feedback from parents on is students who like to be helpful around the house. Especially because they've had challenges with reading and writing. They are now being exposed to being able to be helpful with their writing. So with this one, dictate a grocery list. So this is a good practice for them to be using some of their commands, so we would have, bananas, new line. Oreo cookies, new line. Roast beef, new line. And they would be able to be putting these things in and being able to help out. We have more time around the house right now with COVID, so this is a good opportunity for you to be purposeful in allowing them to be helpful rather than rushing to get things done.

The same goes for if they're asking for help with spelling, taking the time to be able to practice using their technology and becoming better at using it. Some of the other ones. These are just prompts. I'm not suggesting that everyone do every one of these. I'm just giving some ideas, because a lot of times both parents and teachers have some struggles with trying to find things for students to be doing. In the classroom using it or at home for your class lessons, being able to practice using it for journal writing. Again, being purposeful with your writing, using past tense, using future tense. What did you like on Easter weekend? What are you looking forward to once we can go outside again? All of these types of examples will allow them to be practicing their tenses and being able to put more of these ideas in. I'm a big fan of using this for math, because they're able to practice patterns, talking about patterns that they see. You can see we have a bunch of different examples. Going on a

nature walk right now might be a really nice idea, and then give them an opportunity to practice what they see or even take some pictures along the way so that they can have a point of reference to talk about.

All right, so just moving on. We are going to get into text to voice. So with text to voice I do have a couple of tools here. Key take-aways for you. Choose an appropriate voice. So a lot of times students are hung up on their voice that they have, and it's important that you have a voice that the student has had an opportunity to choose themselves. A lot of times students feel more comfortable with a voice of the same gender as them. It just seems to be a preference that I've picked up on.

The next piece that I've got coming up is adjusting your speaking speed to 150 words per minute. So 150 words per minute is our average conversation speed. So in order to have some information put into our heads, we want to make sure that the wording for the students is not coming out too fast or too slow. Now, when I say adjust the speed, this is for 50 percentile on a bell curve, but what I'm really getting at is if you have some auditory processing, you may want to reduce that below 150 words to adjust for that for the student. Next up we're going to set to continuous read. We want this to read on. We don't wanna have to click it for every word or every sentence, so I'm going to be demonstrating in Read and Write for Google Chrome on how we can choose all of these different voices and the continuous speed.

Finally, I'm going to talk about new users. We want to practice with familiar text. So something that the student already knows about so that they can already have assumptions moving forward. We do not want to start with a physics page. We want to be able to start with a text that they are familiar with. So again, I'm going to exit out of here and I'm going to pull up... ..my page here. Now, we have, I've pulled up the LD@Home website. And I will close down right here. Here's my Read and Write toolbar. There's different tools that your school board might be using, but we use this

one here and I am able to select the text, and then click on the play button to have it read.

- [Computer] Assistive technology, AT, is the term for specialized technology software and/or hardware that is used by people with and without disabilities to adapt how specific tasks can be performed.

- [Chad] Okay, so we have this ability. Now again, when we're using our text to speech, we do wanna use areas of interest. So I'm going to show in a new tab when we go to search something. So I'm going to search something of interest to me. I really like trekking in the mountains. One of the examples I like to use is Mount Kilimanjaro because I have high hopes of getting there sometime after we're allowed back out and traveling the world again. When you get to Google, you're going to notice on your Google toolbar, if you're in Google Chrome, there is a search by voice always right here, so again, I'm able to use my transferrable skills from using it with Read and Write to using it right here in Google. I can just click on search by voice, and I will go Mount Kilimanjaro. And it's going to bring up my website.

Now, because we're doing something that is of high interest rate, we are, I'm going to be using Wikipedia. I don't, I can feel the cringes from the educators out there in the audience. Remember that this is not an academic task at this point. We are trying to find things that are similar. And the reason why I like to use Wikipedia is Wikipedia is set up in the same way on every web page. We have a column over here. We then have content in the middle, and then there's a picture over on the right hand side. I'm going to open up my toolbar by clicking on the Read and Write one time, and I also have another way. I can select Play or I can select Hover Speech. I'm going to select Hover Speech.

- [Computer] Kilimanjaro is the fourth most topographically prominent peak on Earth. The first people known to have reached the summit were Hans Meyer and Ludwig Purtscheller in--

- [Chad] And there we go. So I was able to make that read, and I can take in that information. Now, again with using a Wikipedia page, we also have all of these words that are in blue, which can be distracting to struggling readers or even emerging readers. So one of the nice features that is also built in here for our text to speech is a simplified page tool. And that's going to take the content from this middle section and get rid of our side columns and our pictures. So I'm going to click on Simplify Page, and now I have all of these words in this format. So they're just plain text. And I also have some nice features that are new in this particular Read and Write, where I can change the font and I can change even font size to make it easier. So I can read about something that is of interest to me.

Now, when I go into my Kilimanjaro, on my toolbar I was talking about the importance of choosing voices, changing the reading speed, and setting it to continuous. So here's where I will find these tools with this particular tool. I'm going to go into my options. All right, under Speech, first of all with reading, we can see I have it checked off to continuous reading. Not speak on each word or speak on one sentence at a time. Next, my speed is set to 40. This is an arbitrary scale that was created by Read and Write, and so I had contacted the company and asked them what 150 words per minute was. So I just adjusted it there. Again, if I had a student who had auditory processing issues, I might adjust it down to 30. And finally, I have my voices, I can go to US Ava. That's the one that I find sounds the best, but we also have US Tom, and we can click on US Tom and say OK, and now when I go to read, I'll just select some text,

- [US Tom] Kilimanjaro is the fourth most topographically prominent peak on Earth. The first people known to have reached the summit were Hans Meyer and Ludwig Purtscheller in 1889.

- [Chad] So you can see how well this is able to work. We're going to go back to our presentation now. So the next tool to be examined is mind mapping. A mind map is an easy way to brainstorm thoughts without worrying about order and structure. It allows users to visually structure ideas to help them with both analysis as well as

recall. As you can see from this, a mind map is a diagram for representing tasks, words, concepts, or ideas linked and arranged around a central subject using a graphical layout, allowing the user to build an intuitive framework. A mind map can turn a long list of boring information into colorful, memorable, and highly organized visual so that work in line with your brain's natural way of doing things. Mind maps help with both expressing and consumption of information by lowering the cognitive load required for reading and writing. So this is one piece. Now, I'm going to go on and I'm going to show you some of the key take-aways for mind mapping. So the first one is to start in the center of a blank page because starting in the center gives your brain freedom to spread out in all directions and to express itself more freely and naturally.

Secondly, use an image or picture for your central idea. An image is worth a thousand words and helps you use your imagination. A central image is more interesting, keeps you focused, and helps you concentrate and gives your brain more of that buzz, okay, for more thinking. The third idea is use colors throughout.

Colours are exciting to your brain as images. They add extra vibrancy and life to your mind map. Adds energy to creative thinking and helps make connections. And that'll bring us to our fourth point, connect your main branches to the central image, and connect your second and third-level branches to the first and second levels. This is because your brain works by association and it links two or three ideas together, so it's really helpful in this format. And up next we're going to take a look at use one word per line. Single words give your mind map more power and flexibility, so you're able to build on that. As well, for our new users, practice again with familiar concepts. So I'm going to move on, and I'm gonna let you guys go back to this slide and let your mind examine this a little further, but just imagine you were asked to write down as many uses for a brick as possible. If you do that, many people would just start listing all their ideas. Building a wall, building a walkway, building a house, but if you started with a broader perspective, such as thinking about the properties of a brick, it's heavy, so you could use it as a paperweight. Or to hold down a garbage bag while raking. Or as an exercise weight. It's also thick, so you could use it to prop

up a planter, for example, or as the doorstep. It's red, it's hard, it's rectangular. There's so many different characteristics of a brick that we wouldn't think of when we first asked that question.

So that's the magic of mind mapping. Once you start, the possibilities seem endless, because you can just keep going with this. So I'm going to move on, and I'm going to show you six types of mind maps. So the program that is available in the province is called Mindomo, however, with mind mapping, for some students they just prefer to even draw it. So it's just a strategy where we're just showing the technology that helps support these strategies.

So the first one that I have here is a flow map. And this flow map here, a good one to use would be for telling a story, or telling steps, maybe a child or a student really likes cooking, so in order to make a western sandwich, first you have to fry an egg, next we need to... ..toast, to make toast, and third, and so on. So what are the steps involved, and how do we flow to get to the end where you get to eat that? So we wanna use things that the students are already familiar with, and ideas that they have. So building on their own prior knowledge and their own experiences.

The next example here is a multi flow map, the one that the kids get the most kick out of is here's the central idea in yellow, and I would use, for example, bad breath. So with bad breath, what are the causes of bad breath? We could say onions, we could say garlic. And so on. So what are the causes, they come in, that causes the bad breath, and then what do we do about it? So we might brush our teeth. We might eat a mint. We might stay away from other people for the afternoon, something like that. So these are some of the ideas, and having fun with it, the students always get a good giggle when I talk about it using bad breath.

The next one that we have over here is our tree map, clearly the most common way of doing this is a family tree. Students oftentimes, they love to share about their own families with me. They like to build this out and it helps them organize things and then we can do things in the classroom or in a school, so this is your classroom, and

we can develop their skills moving on with each idea. Circle maps, we might talk about a favorite genre, so maybe poetry would be at the center here in the yellow, and then we would have all the different other ideas around the outside, so maybe we would have Shel Silverstein, we would have acrostic poems, and students can build out all of their knowledge that they have already about poetry within a circle map.

The next one over, the next two over really are bubble maps, and these are really good for making connections to a central idea such as in a story, so if I went with bubble map and I went with the movie Shrek, I would have Shrek at the center, and around the outside, who are the other characters, or what are his characteristics going around the outside? A double bubble map is a little bit more complicated but still we would have maybe two characters, so we would have Shrek and Fiona, and then we might have Donkey and Puss in Boots. Whatever it is that your student or child is really drawn to are the ideas that we want to be able to put in while they're learning the tool, and in order to learn the tool, the end goal is for them to be able to use it for new ideas, for making connections and building out and analyzing things in science and in geography and social studies. So we do wanna make sure. So this is what we're going to talk about around Mindomo.

Now our next one is our D2L's Brightspace and Ontario's LMS. So there is a lot of terminology here that a lot of people have been struggling with, so I do wanna touch on these a little bit. So the VLE is D2L. D2L is Desire to Learn, and it is Brightspace. These are all the same thing. So when you hear VLE, D2L, Brightspace, we're talking about the same thing. Another common VLE, so a Virtual Learning Environment, is Google Classroom, and some boards have it, however, the Ontario Ministry of Education has purchased Brightspace in a multiyear contract for all the school boards in Ontario.

So going over a little bit of these acronyms, LMS is our Learning Management System, so it's like an online classroom. The VLE is a Virtual Learning Environment. They mean the same thing. D2L is the company, it's the Desire to Learn. So the last

thing I'm going to do is I'm going to be showing you a quick little idea of what you're able to do inside of Brightspace's learning platform. So again, I'm going to escape out of here, and I have an assignment set up here. For students. So if I go in here to my class list, I can mimic a student. I'm going to drop down my teams, and now that I'm impersonating a student, I can come in and I can take a look at some of our examples that we would have. So if I went in to a description here and I went to click on the, oh. Assistive technology, I would be able to come down here, and for our students that struggle with writing, we have some options built into D2L that have the record video, and record audio.

So they would be able to submit their assignments using the record video and record audio features, so I would just take something and I'd be able to submit it this way, please share a strategy that develops habits for utilizing assistive technology. One of the strategies that I think is best for utilizing technology is practicing with areas of interest. This is because students are able to have more interest and share about things that they already know about. And now I'll be able to add that in, and I would give it a title, and add. And now you can see that it's added here, so one of the things that's very important is advocating both for teachers and by parents, but that the IEP goals are still necessary for these students, and we have been forced into this time of online learning and distance learning, so it's really important that we are thinking of our students who have some challenges, and how can we best accommodate them in this time, so making sure that we talk about some of the strategies. Everything is not 100% perfect in here, but we do wanna make sure that we're following those IEPs and what the accommodations say. So having both students and parents and educators working together collaboratively. So Lawrence, I'm gonna turn it back over to you for our question time.

- [Lawrence] Thank you so much, Chad, for sharing your knowledge and expertise, and as always what shines through is your passion to get these tools into the hands of students and help them really reach for their full potential. I'm sure everyone's better equipped than they were an hour ago. I know I certainly am, and may use some of that mind mapping stuff in my own life, I think I could do with some of that.



So let's move on to Q & A, folks. From our invite panel chat, the first question is this. Amy asks, "I have a student who's had some success "with voice detects, but he is reluctant to use it "in a classroom environment because "it makes him feel different. "How can we as educators help students "feel more comfortable using this technology?" And I guess that also, Chad, to add a little bit to that, how do we use this learn at home environment we're currently in to lead us into more success in a classroom in a future which we will return to, and this will still be living on the internet, so this may be a distant memory by the time some people are getting this answer.

- [Chad] Absolutely. Thanks Lawrence, and thanks, Amy, for that question. So to answer Lawrence's part of the question first is that during this time, there's less of an expectation for academic work. So there's an opportunity to be building up on these tools, which was the idea of this webinar. So we want to be able to give the students some tasks, such as journal writing or areas of interest, telling what they do on a daily routine or dictating some other processes that they would be able to share, but it needs to be areas that they are already comfortable with, so telling stories of books that they have already read. We wanna build confidence with the tools so that when they return to the classroom that they have the necessary tools and they develop those habits with using these tools.

So talking back about in the classroom, the key to Amy's question here was that it makes him feel different. So it sounds like this student is not interested in using it around their peers. And this is a big piece in the, I mentioned earlier about an abandonment rate and about students who stop using the technology because they're around their peers. What I suggest to educators, then, is to really focus on a universal design for learning. And that using your voice to share information is just one way that you are able to do this. What's really nice about this is when I come into a classroom to show these tools, oftentimes I ask students to put up their hands, who likes writing with a pen or pencil, and I'll get about half the class put up their hand. And then I ask them, who likes typing? And some of them put up their hand. Finally, I tell them that I have a third way that they're able to share their information,

that they can do it with their voice. So really emphasizing that this is not a tool just for students who struggle with reading and writing, but this is a tool that is available for everyone.

We can see that the integration of assistive technology is making its way into all of our lives through voice typing with Siri, I certainly see people walking around the grocery store, writing out lists or writing texts with their voice, so this is, they are just on the forefront. The other thing is, in order to not make them feel different, we want to highlight that this is a strength for them. So sometimes having the students who use this technology on an ongoing basis, they are the best at using their microphones and speaker set ups. So when you're having trouble in the class, asking for their help, praising them for their knowledge, being able to show that they have these strengths outside of reading and writing, we want them to feel as a part of the class, not that they're different by setting them at the back of the class to do their reading and writing on the computer.

Another part, when I was talking about the abandonment rate, some of the research that I've been reading is talking about the fact that because their peers are shunning them, and what I have seen in the classrooms is that a lot of times it is the peer's curiosity that is the driving force. So when everyone else is writing, and one of the students is on their computer, some of the students will be asking, hey, what are you doing, or what's he doing over there, which makes the student feel very self conscious about the fact that they're being different. So exposing the technology to all students is going to help them feel less different, and giving other students the opportunity. Some of the classrooms I've had a chance to visit in my school board have voice detect set up as a learning circle. So part of your writing today, you are going to dictate this, and then somebody else is going to go over and find words, so it's just one of the many ways that we practice our writing.

- [Lawrence] So the second question comes from Barb, who's clearly a parent by the sound of this one. "How do I know what type of assistive technology "is right for my child? "Will there be any listing within the IEP?"

- [Chad] All right, great question, thanks Barb. The IEP will definitely have a section on strengths and areas of need. So this technology that we're using is to develop a strength-based approach. So when they have an area of need, we would try to match up assistive technology to be able to support that area of need, as well as build off of their strengths. So if they're a visual learner, we definitely wanna use some mind mapping. If they enjoy talking, we definitely want to encourage the use of voice to text. Different school boards will have different pieces about having the assistive technology listed directly in the IEP, but you can definitely consult with them during your IEPRC process.

- [Lawrence] Thank you for that answer. This last question is from Colin, and it's quite a long one, so I think you're gonna have to try to and interpret this a little bit just because time's ticking. It says "You mentioned 66 days to create a habit," and I'm gonna sum this question up a bit. So what Colin's trying to get at, I think, is how much AT training is the right amount, is there a recommended amount of time, how do I make sure my child is building his skills without overloading them, so I think it's a question of what would you recommend for a parent in this learn at home? Is it 15, 20 minutes a day, is it an hour every other day, what are the sort of boundaries that will produce effectively the habits we're looking for and not overload or destroy the student?

- [Chad] This is a great question. Thanks for asking it, Colin. When we're talking about building habits, absolutely daily use is going to be a key. Because we're trying to instill in them that this is a tool that they can go to on a regular amount. Now there's not really a right amount of time, so it's going to be a little challenging to answer this question in full, but what we really wanna focus on is daily use, choosing areas of interest to the student, so it might be something as simple as hey, can you help me out, I'm handing your child a cell phone or having them log on to the computer to write out a list for you. And that could be the practice for the day, or rather than if they ask you how to spell something, remind them, and this is part of that gradual release of responsibility, remind them that they have tools that they can

be independent with. So we don't want to overburden the students. We don't want them to get burnt out using the technology, and we don't want it to be a struggle, either. One of the things I see in the classroom often is students who are trying to use it, and they get frustrated, and I'll go back to voice to text again, and the more they get frustrated, the more they start talking through their teeth. Then they're speaking upset, not in a natural tone, and that's going to not make the accuracy rate as high, so now the technology's actually working against them, and they're working against it. So if they're getting frustrated using the technology, practicing with the technology, I always suggest it's time for a break. It might be time to go have a drink of water or maybe go have a walk outside, do something where then they can come back fresh and ready to tackle it and say hey, the mistakes we were making, maybe the computer just needed to be turned on and off again, and blame the computer, and remind the students of those best practices that we had listed earlier in the presentation. A couple minutes a day, I think 10, 15 minutes a day, if we do it every day, would be more than enough. The goal is obviously not to be speaking one sentence at a time, but develop that into a paragraph at a time.

- [Lawrence] Okay, that's great. Thank you, Chad. Unfortunately, folks, we've reached that time where we have no more time for questions right now. However, we do want to collect any that you may have out there, so as you can see on your screen, you can email us at [info@ldatschool.ca](mailto:info@ldatschool.ca) or you could post a tweet with a question. We will collect them and work with Chad to make sure everybody gets the answers they require. Also if you've enjoyed today or maybe it's your first visit to an LD@school webinar or one of our resources, please sign up for our newsletter. It will keep you in touch, not just through COVID but in future as we continue to develop new resources. You can also follow us on the social media account as you see there, and again, we will work towards making sure that we are staying abreast and adding new resources. This is the first parent webinar under the COVID plan, but we also have a lot of parent resources that the Ministry of Education is helping us to produce with their kind support, and they will be being posted in due course. Some will actually already be up in the site as you view this, I believe. So finally, I want to again thank Chad for his expertise and his passion, and I also wanna thank you for

attending. Please do us a big favor and share this recording around with other parents, with colleagues that you know will have an interest. We really want this resource to reach anyone and everyone it can help through Ontario, and until we see you next time at one of our events, I wish you a very good afternoon and evening. Goodbye.