DARREN BRITTEN: Welcome, everybody. Thank you very much for joining us today. My name is Darren Britten and I am the National Assistive Technology Officer with the Australian Disability Clearinghouse on Education and Training, that's ADCET for short.

This webinar is being live captioned, and to activate the captions click on the CC button at the tool bar, which is either located at the top or bottom of your screen. We also have captions available via a browser which will now be added to the chat box so you can click on that link.

I am coming to you virtually today from the lands of the Wurundjeri people in Victoria along with colleagues on lutruwita, that's Tasmanian Aboriginal land. In the spirit of reconciliation, ADCET respectfully acknowledges both the lutruwita and Kulin nations. It also recognises the Aboriginal history and culture of the land and I pay my respects to Elders past, present and emerging and to the many Aboriginal people that did not make Elder status.

I'd also like to acknowledge all countries and any Aboriginal and Torres Strait Islander Peoples participating in this webinar today, and acknowledge their Elders and ancestors and their legacy to us. If you'd like to share where you are coming from, the lands which you're on, that would be most welcome in the chat.

Today's webinar, Digital Maths The Future of Inclusion and How We Get There is presented by Rachel Coathup from Texthelp. Rachel will provide an overview and a demonstration of Texthelp's Equatio and discuss how we can support learners when it comes to creating digital maths.

Before we begin, a couple more housekeeping details. This webinar is being live captioned by Sharon from Bradley Reporting thank you, Sharon and the transcript captions and today's video recording of today's webinar will be available on ADCET in the coming days. If you have any technical difficulties, please email admin@adcet.edu.au.

This presentation will run for around 45 to 50 minutes. At the end there will be time for any questions you may have. Throughout the presentation please feel free to use the chat box to chat with each other and with us but please remember to choose all panellists and attendees so that we can all read what you have to say.

Rachel is happy to answer any questions you may have at the end, and if you have those you'd like to be asked, please use the Q&A box for those questions rather than the chat box. So that's it from me for now. Enjoy today's webinar and over to you, Rachel.

RACHEL COATHUP: Amazing. Thank you. So hi everyone. My name is Rachel. I'm the Customer Success Director at Texthelp. And before I start, I'd like to start with an acknowledgment of country. I'd like to acknowledge the traditional custodians of this land and pay my respects to the Elders, both past and present. I extend that respect to First Nations Peoples here today.

So as we start, I want you to think about inclusion. The practice or policy of providing equal access to opportunities and resources for people who might otherwise be excluded or marginalised, such as those who may have physical or intellectual disabilities and members of other minority groups.

This is the direct definition that's come from Gemini in Google. The reason that I wanted to start with this is that when we work with universities and TAFEs, a lot of the questions and conversations that come up around how we can provide support to learners based on a request process. This provides that inclusive support for those that we know need that extra little bit of support.

But actually, what about those learners that don't disclose to us? With 1 in 5 people with neurodiversity, we know that this number is actually greater than that on its own and, actually, if we think about only providing that scaffold and support to those we can see or that we do know about, that visible versus invisible, we need to think about what that might mean for the future of inclusion and being able to provide access for everyone.

So I wanted to start with a quick thought. In the chat, if you can please share how you feel about maths. Now, it might be just a single word or a phrase. I'd just like to get a bit of an understanding of those who are on the session today, how you're feeling about maths? Amazing. So we're getting nervous, love it, comfortable, lots of hate.

So it is really important that we express this and we know where we feel going into maths and supporting learners when it comes to maths. And so often this phrase comes up, "I'm not good at maths". We hear this all the time from learners, from colleagues and from ourselves. And so why is this problematic? Well, if I asked you all the exact same question when it comes to how you feel about literacy, be that reading, writing academically, many of you may not feel as comfortable to say that you're maybe not so good at that.

But actually, within society there is this big push around people need to be literate. They need to have those literacy skills because we know that that transfers across every area of life.

But we don't have that same feeling about maths, and you've all just expressed that in the chat, which is fantastic, and it's important that we recognise that before we can go in and actually support learners when it comes to maths directly.

So I've got a quote here for you to have a bit of a think about: "Mathematics is a discipline that is often misunderstood. You will hear people say repeatedly that there is always a right or a wrong answer. And often this is the case but there is rarely a single correct solution".

Now, I'm not here today to answer this but I'd like you to consider this thought and what this actually means for our learners. There's this idea around maths, over engagement and motivation is equal to success. But actually, that's not the case. And so when we think about maths, we need to think about what impact does that have on their education and their employment. What do the skills that we learn in maths provide us with to be able to help support future education and future employment?

So when we think about maths skills that are associated with a range of benefits, from employment to socioeconomic status, to mental and physical health, this has a great impact on us. So actually what does that look like and why is that important?

Well, what we know is that learners who persist with maths problems are 13% less likely to sorry, I need to rephrase that. Sorry. Learners who struggle or have those persistent maths problems in school are 13% less likely to graduate high school and are 29% less likely to attend university. I should say that all of the sources for the data that I mentioned are linked into the slides so you'll be able to go back to this on the ADCET website directly.

So when it says, kids, we think learners, everyone, but actually a lot of the learners that are coming through and entering into TAFE and university don't actually understand the importance of STEM until it's too late. Actually, if we look at the way the world is changing, STEM jobs are growing at 1.5 times the rate of non-STEM based jobs. And so future workers are going to spend more than twice as much time on jobs that require science, maths and critical thinking than previously before.

This is an image of several different maths equations and problems with a learner standing in front of that chalkboard drawing these out. So it's important to remember that actually maths is broader than just simply a number. And so what do we mean by that?

Well, actually, if we think about the idea of maths and science textbooks, these are sort of designed for the average learner. Many textbooks that are written are above the grade level for which they are intended. Why is this problematic? Well, if we go back to that idea of maths being more than just a number, we know that textbooks contain more concepts per sentence and paragraph than any other type of text.

So learners, not only need to understand the words, but also the numeric and non-numeric symbols to decode. And they need to understand those graphics to be able to make sense of that text directly. So when we think about categories of maths vocabulary and there's a quick example on the left-hand side of a word cloud with different mathematical terms directly. So we can think about specific maths-based vocabulary. So, for example, the hypotenuse. We can think about the multiple meanings according to context, so difference, cardinal, take away. And then we can think about that confusion that can come with homophones, pi and pie.

So actually, are we getting learners to do maths or read maths? And when we think about the future of digital maths and making that inclusive for learners, we really need to think about that context and what we're providing our learners with that when it comes to that directly.

Dyslexia is a big part of this. We know that 60% of individuals with dyslexia will have difficulties with maths. Why is this important? Well, if we know that that number is so high and we put those supports in place for those learners with dyslexia when it comes to reading and writing and literacy, what are we actually doing to support those learners when it comes to those maths and STEM based courses?

Interestingly, if we look at that number, 6% of learners with dyslexia are often presented will have dyscalculia. Now, dyscalculia is around those difficulties when it comes to the recognition of maths and maths-based concepts directly. So that number is really important for us to consider when we know that actually 60% of learners with dyslexia will struggle with maths. And often it's that misunderstanding of not recognising that there may be those further challenges when it comes to understanding and being able to engage with that maths concepts.

And when we think about those challenges, we think about their struggles in being able to read word problems, and also being able to comprehend them. It's not just looking at the number and a numerical, but also the word problems that goes alongside that directly. There's those written calculations, the memory and processing, and just their overall confidence. Many of you already expressed in the chat earlier that actually you're not so confident when it comes to maths. So actually what impact does that have on those learners when it comes to their maths facts that they need to know when they're trying to do rote learning, following sequential steps and that digit interpretation as well.

Actually, for those learners that do present with dyscalculia we know that actually they bring through several strengths, from that spatial awareness, thinking outside the box, multiple routes to get to that answer, not just it being that there's one possible solution, those higher order thinking skills and that big picture thinking.

All of this is important because when we think about the talents that the different learners and thinkers bring, this far outweighs the learning challenges that many will experience. And actually, if we provide the right tools and support, many of those challenges can be overcome.

So if we consider all of those little ideas, how can we make maths more accessible and support all students and all learners? If anyone is on here and has ever tried to create digital maths, many of you will understand that it can be something that often is considered to be quite a painful task. And that's because we have had maths educators or lecturers that have come to us and they've recorded exactly how long it takes to use the various different tools out there to be able to create that digital maths.

What we heard back from them was that it can take anywhere from three minutes to construct and set up a problem to 15 minutes. So we're looking at that three minutes to 15 minutes to be able to insert maths into a document or into a course that we're starting to put together and to share with our learners.

So we can help to alleviate some of this directly through Equatio, Texthelp's maths and STEM based tool bar. And so whilst we know that there are tools available that are built into the programs that we commonly use, not all of these tools are very user friendly. They take a lot of time, as I just mentioned, and they don't often make that content accessible. They're simply accessing a pop out keyboard with several different icons that they need to try and find and locate and keep going back and forth to be able to access that directly.

We know that in TAFE and in university, being able to make content accessible is something that's really important, and this is something that you can easily do with Equatio. Whether you are a learner or a Lecturer, Equatio works across the board directly, allowing us to take maths beyond that paper and pen.

So we can actually quickly and easily create that digital maths using the tool bar and it allows us to use multiple different input options. So from a universal design for learning perspective, we're providing those different ways to represent that content and for learners to engage with that directly. So often we get asked what courses Equatio can be useful for. So we can think about maths from statistics, to algebra, to calculus. And from a science perspective, we might be looking at chemistry and physics, engineering, business based courses, and also not to forget education because we know that they are ultimately the future learners that are going into that classroom to be able to support a wider group of learners in being able to use that.

So where does Equatio work? Equatio works over Chrome, Windows and on Apple as well. It also has a direct integration within Canvas, if this is one of the learning management systems that you are utilising directly. Equatio is both a Chrome Edge extension, so you can use it on either, as well as a downloadable software which means you can use it within any application if you choose to go down that software route directly.

So this gives you a bit of an overview and I'm not going to jump into it, but it will be part of the slides just to highlight some of the key features that sit within Equatio, but I'm actually going to switch over now from my slides and actually jump in and show you what Equatio actually looks like.

So with Equatio, we can access this directly in a Word document. And you can see here that I've got a sample problem and I've got my Equatio tool bar sitting at the bottom of my screen here. What I'm able to do is I can actually pull out and have any maths read aloud to me, whether that's on a Word doc or website using this screenshot reader. I can draw a box across that maths like so.

[COMPUTER] F of x equals negative 3x cubed plus px squared minus 9x + 10.

RACHEL: This will then read that maths aloud to me. We're instantly being able to create that accessible format for our learners in being able to access that.

They've got that ability that with that maths they can either copy it in what's referred to as latex, so those of you who are confident in maths may have heard of that before. It is actually the way the maths is written to keep it in that correct formatting.

Equally, we can also do this within MathML, and I can talk a little bit about those differences in a moment, but just hold that thought if you do have any questions about the differences between them.

Then I've also got that ability to simply edit with Equatio. So I then don't need to start writing this out. I can actually pull it through to my tool bar and I can then start to actually edit that directly like so. So I have that functionality just simply using my keyboard to input all of those details directly.

Now, often if I get asked, "Well, how do I actually write squared or to the power of?" We all know that it's one of those complex challenges that we can have on our keyboard. So actually, all I need to do is to write if I wanted to write squared, I can start to write that sq. That will then give me that ability to quickly enter that in like so and I then have that ability to obviously continue to go through and solve that problem directly.

So what does that look like if we're to jump over into a Google doc? So I've got a problem here that I've actually just copied in from a website. So just to show you how this works. If I go on to a website here, I can see that there are different equations that are set up on that website. Now, this could be within a PDF. It could be on a website. So I'm going to show you a couple of different places that we can do that.

Again, just like before, I can use that screenshot reader. Draw a box around that maths that's sitting there.

[COMPUTER] I equals the integral of d to the d power x

RACHEL: I'm going to pause that there. I then have the ability, just like that before, to copy that. Now, I'm going to copy that in that latex format just so you can see what happens. And so now when I come back into my Google doc here, I'm just going to delete that, I can actually come into that latex button, paste that in just simply using command V or control v on my keyboard. That's going to allow me to insert that directly into my document wherever I'm working.

With this, it will then have that alt text available. So when Equatio is inserted in, this does insert with your alt text so you can simply right click on that alt text. And what you can see with that little description is it keeps it within that MathML format which is just simply that it's going to be able to read that out using that correct formatting and you have the advanced options as well when it comes to the alt text directly and being able to use this with an external screen reader from there as well.

So when it comes to our equation editor, you saw a little glimpse before of that ability to actually start typing directly. And so with other maths-based input options you'd have to go through and try and find the correct symbol that you're looking for. But with this, I can just simply use the keys on my keyboard, so 3 x + 2 y equals 10, and I can add that in and I can then go through and insert that into my document like so.

You've always got the ability that even if I was to close this down and I was to come back to this same document, I could click on to that maths and I'll just make this a little bit bigger so you can see that I can then go through and press "edit maths", and that will actually pull it through so I can go through and start to edit it out directly.

So let's have a look at another example. What happens if we were to go in and try and write the square root. So all I need to do is use my word, so sq on my keyboard, will then give me that option. I don't need to try and find and navigate where the square root symbol is. It's not on my keyboard. I can go through. Equally, I've got my squared, my cosine is available. I've can get the square metre squared.

You'll start to see it also pulls through your formulas as well. So if I wanted to work out the area of something I have that ability to do that. Now, what happens if we wanted to get, say, the quadratic formula? So again, all I need to do is start typing those first couple of letters and that's going to insert that, and I can either use my mouse to be able to click or I can simply use my arrow keys on my keyboard to be able to go through and substitute out any of those numbers and letters directly. And I can then insert that into my document.

But I've also got that ability, with any maths as I start to create that, to copy this. And this will give me several different options. So I can download this as an image file, I can access it as a URL, I can have the spoken text, I can also keep it in that MathML latex or image, which means I can copy and paste this into wherever I need to be able to use that directly.

Within Equatio, as I mentioned before, you have various different input options. So I've also got handwritten recognition. So if I'm using a touch screen device, I'm able to go through, I can actually make that larger to give me greater surface space to be able to use this little graphing paper on here. So say, for example, I wanted to write the square root. Now I'm using my mouse today so we'll see how we go. So I can then simply go through like that. And if I went, "Do you know what, that's not what I want", I can simply draw a line through that and I can then start to go in and start to solve, start to write.

This will also work for multiline problems as well. So if I needed to, I can come down and I can do that, and you'll see that it starts to line those up for me within here. But I've also got that ability to actually just simply come over and add or make any changes to any of that directly. So if I wanted to change that from an "x" to an "a", I can go through and do that, and I can insert that into my document.

I've also got speech input. So this means that I can simply use my voice to dictate and have that created as that digital maths directly. So as an example, if I wanted to go in. "3 x cubed minus 2 y squared equals 8". That's going to then generate that, and at any point I can pause that speech input, I can come over and use either my mouse or my arrow keys on that keyboard to be able to make any changes to that, and I can, again, just simply insert that directly into that document from there.

One of the things and I'll just close that for a second so that you can see. One of the other things that I wanted to mention is that with that prediction editor, I've also got all of my chemistry formulas so I can actually start searching for. So if I wanted to be able to quickly pull through those element formulas, I can easily go in and simply access those and insert that as I'm either creating resources for my learners or just simply being able to have those in that correct format, rather than trying to find how I do that directly within there as well.

You've also got access to our Desmos graphing calculator. What this allows you to do many of you will know Desmos directly this allows you to actually go through. If I want to go through and show the sin of x, I can go in and add that in directly onto my graph. If I wanted to go in and show 3x, 3x plus 3, 3x plus 8, I can actually start to enter all of that into my graph and I then have the ability to insert it in directly into my document or into a PDF, if that's what I'm using. So, again, you have those different input options that you're able to go through and do directly.

Now, one of the things when it comes to accessibility of content, I showed before that ability to take maths from a website or from a document and have that read aloud. What about YouTube videos? Because we know that a lot of people use videos as a way to be able to learn and to be able to actually capture that idea. And this works, obviously, because you'll notice that it's actually handwritten maths that's being used.

Again, what I can actually do is I can use that screenshot reader, draw a box around the maths like so. That will then scan that maths.

[COMPUTER] x line 1, x plus 2 years equals 3, line 2.

RACHEL: And that's going to then go through and read that aloud to me giving me that same ability to actually edit that directly within Equatio. And I'll make that bigger so you can see there. Like with anything, if that was incorrect and maybe something to pull through, I always have the ability to edit those numbers and change any of that directly within Equatio and I can copy that and enter it into my document. So we have the ability to do that with images, with video directly wherever we're working.

So what about PDFs? So I know that PDFs tend to be the main way that a lot of resources are shared when it comes to the maths input option. So again, just like before, we want that ability to be able to go through, use that screenshot reader to pull out the equation that we want read aloud, and then we want to be able to edit.

[COMPUTER] 3x squared plus 10x plus 5 equals 7.

RACHEL: And so what I'm then able to do is I can then obviously go through and start to figure out and start to solve this problem directly. But what I'm going to do is just simply insert that. Now, the reason for this is because I want to show you that you have that ability as a learner, as a Lecturer that might be developing that content, in creating that accessible content for your learners, is we have that ability and you'll notice that you then have that instant ability to have that maths read aloud to you directly wherever you are within that PDF using all that note to open it up and then simply enable that directly through Equatio from there.

A couple of the other things that I wanted to show you that you can do within Equatio is that when we are in a document or wherever we are, it doesn't matter where that is, but just to come back here so you can see, you've also got your STEM tools available. Now, I know the purpose of today is particularly around maths, so what I did want to focus on is obviously you've got your Desmos scientific calculator. In a similar way you have the graphing calculator, you also have the scientific calculator that's going to allow you to pull through your functions, as well as your alphabet keyboard and all of your symbols when you go through and access that directly.

You've also got your various STEM tools. So you have a pop out periodic table which will allow you to select any element that sits, and it will give you a little bit of an overview of what that element is, as well as being able to add the actual element number directly into that equation editor. So if I was to go through and create a certain way of being able to show that, I can do that directly.

You also have your molecular viewer as well. So this will actually enable you to go through and look at certain molecules. So, for example, if I wanted to take caffeine, which many of us always run on, we can go through and show this in a different way. So it's just to mention that obviously from a maths and STEM perspective, there's so much available within Equatio directly.

The last little thing that I wanted to jump in and show you before I go back to my slides is just to talk about handwritten maths. So a lot of learners still want to be able to complete their own handwritten maths, but they want that input option to be able to then share that with their lecturers, or to be able to have that digital record of their notes directly. And as a Lecturer, they might actually want to go through and convert paper that has that handwritten maths into that digital format.

We can do that using the Equatio mobile icon which is this one here. Now, when we click on to it, it will open up in a new tab. Now, I'm currently on a Mac and so I can actually go through if I had my camera turned on, you would see my camera appear here, and I can actually hold up a piece of maths on a piece of paper in front of my camera on my device and it would be able to take that photo of it.

The other benefit of that Equatio mobile is if I just come back just in here just to show you, sorry is that little QR code, when I tap on the mobile icon, will actually allow me to scan that QR code and that will simply open that short URL and "dot equate dot io", and you can then simply take a photo using your phone, iPad, whatever device you want. But I wanted to show you that even if you had the photo of that maths directly on your computer, you'd be able to go through and do that.

So as an example, I've got some handwritten maths in here. So I can actually go through and I'm just simply going to download that, and so that I've got it ready for me to use. And then I can simply go in, use that image icon, and then I can just simply drag and drop that in like so. What this will then do is actually give me the ability to draw a box around the particular problem that I want to capture. Now, I don't want the entire page. I just want the first problem in the top section here.

This will then allow me to press "tick" and it will give me two options. I can either choose to save this or convert this to digital maths or I can actually keep it as that image. So if I need to be able to prove, as I often get asked, can I prove that actually the learner has done it themselves? Then you might ask them to actually save it as the maths option so that you've got it in that format. But what we tend to find is that lecturers and learners want that ability to be able to quickly convert that handwritten maths that they've spent time doing. And for whatever reason that's timed out for me, so apologies for that. I will try once more. I'm just going to see if this is actually going to allow me to go through and do it. Perfect. It's gone through. Twice is the charm.

I now have that handwritten maths that's been quickly converted into that digital format and I now have the ability to insert directly into my document directly. So I can now go back to that and I'm going to have that maths be created straight away. So you can see there the same document we've just been working in has now generated the maths for me to be able to go and use directly.

So I'm now going to switch back to my slides here and just run you through a couple of those key features that I've gone through and highlighted for you today. So that ability to use the screenshot reader to have any maths read aloud wherever that is, whether it's a website, whether it's a PDF, a document, a YouTube video or an image, we can extract that, have it read aloud to make that accessible and to help those learners that look at those symbols and numbers and are unsure what it actually says, this is going to be really supportive for them directly.

That maths-based prediction. So that ability to be able to use words to be able to actually generate those mathematical symbols and formulas. Often we get asked a question, and I'll hopefully jump you all to the result, of that and that is that, yes, you do have the ability to go into your settings and turn that prediction off, both from a maths input, both from a formula input, as well as the science based input of that prediction as well. So there's three ways that you can turn off that prediction so that you can still use it depending on your purpose for there as well.

That ability to use speech to digital maths is really important and being able to provide those different inputs so that you can use your mouse, you can use your keyboard to be able to stop and pause as you use your voice in being able to create that. We do have a resource that highlights the different and I've blanked on the word, sorry the different ways that you can say the same thing when it comes to mathematical terms. So whether you use "to the power of" or "squared", we have a whole document that runs through those different examples from there.

That handwritten input that we went through, as well as the STEM tools from your molecular viewer, to the Desmos graphing calculator and the scientific calculator as well.

So bringing this all back to from where it started, I think that important solve of actually before we can approach and support learners, we need to understand if we have our own fears, our own doubts or concerns, or we don't love it ourselves, we need to recognise that for many learners they're going to have those several steps to climb up and feel like they'll never get to the point of being able to understand that directly.

So what we want to be able to do is to create that experience that is more accessible, whereby they have those tools and supports to help them when they're navigating those challenges directly. So when it comes to Equatio, we talk a lot about universal design for learning, being able to give those different ways to represent that content, as well as for learners to be able to engage and express themselves, either through that speech, handwritten recognition, or that text based or keyboard based prediction directly.

Ultimately at Texthelp we talk a lot about this idea of what's necessary for some. Yes, we put those supports in place when it comes to assistive technology and accessibility, but actually if we provide those tools just for some, so many more can benefit. And when we think about our learners being able to use that way to be able to create that digital maths, we know just as much that many of you who may be lecturers or may be creating more accessible content as part of course development, really need access to those same tools as well. So it's that idea around what's necessary for some is useful for everyone.

So I'm going to stop there and just open up to any questions. So thanks, Darren.

DARREN: Excellent. Thank you very much, Rachel. A lot to go through there, as there is with maths, and I think from people's information that they put into chat early on when you asked that question about how they feel about that. I'm not sure if people feel more bewildered or less bewildered, I think depending on where you're coming from. We've had some questions come through. A good question here from Marion: does Equatio require internet access? Two parts to this. And are there customisable options for exam compliance?

RACHEL: Of course. So there are two components to Equatio. So you could either choose to use as it as an extension, which is obviously what I've shown you today. That does require internet access. There is also the downloadable software of Equatio. There are some limitations when it comes to internet access for that software but we do have all of that detailed on our website, so if you have any more questions, obviously feel free to contact us directly.

And then from an assessment perspective, the one thing I'd say is, yes, there is the ability to restrict access but we'd always say that we know that that's a wider conversation to happen from an assessment perspective, just in terms of lockdown browsers, how a learner might access their computer or device and whether they're using that extension or desktop version for the purpose of an assessment or an exam.

DARREN: Excellent. Thank you. There's another question here anonymous question: is Equatio available in other languages for those where English may be their second or third language?

RACHEL: Yes. So if I just jump back into my document directly in here, you have your different options when it comes to language. So I can put it into Spanish, French, Italian, Norsk or Dansk, and I've got "my speech options", so I can actually change that voice that's used to be able to read that maths aloud directly from there as well.

DARREN: And those voices come with Equatio, the ones that you've got there?

RACHEL: Yes, that's correct.

DARREN: Okay. I'll follow on from that. Does that also pick up on system voices that a user may have installed?

RACHEL: I believe the system voices is mainly to do with the desktop software rather than the extension itself.

DARREN: Okay. Some desktop users will be able to take advantage of that. The obligatory question: how do people access Equatio and is this a paid product?

RACHEL: Yeah, of course. So the best way to get on to and I there we go. That's just loading up now. The best way to get started with Equatio is just to simply visit Texthelp.com. Navigate to products and select Equatio and then you can simply tap "Try Equatio". So if you're keen to start using it right now, you can jump in, press Google Chrome. That will give you a 30 day free trial. Otherwise, if you do want to know pricing, the pricing tab is available here. Otherwise, please do get in touch after the session and we'd be happy to discuss that with you.

DARREN: Just a quick follow up for that. Someone is asking, is it still free for teachers?

RACHEL: Equatio is no longer free for teachers. So that was a change that was made before. However, in saying that, it's only for primary or secondary teachers, and that's for read and write, not for Equatio.

DARREN: Okay. Thank you. Atkins asked: what are the features for low vision users in there? Is there a high contrast option in the tool bar?

RACHEL: In terms of that, there isn't that availability within Equatio, but you would be able to use that if you're using read and write alongside. You could continue using those supports within Equatio directly.

DARREN: Thank you. Just looking through. Here we go, another question: how can Equatio assist in solving word problems? Will it actually solve problems for you? That's a question as well.

RACHEL: Yeah. So it won't solve the problem for you, unlike other maths-based tools that are there to solve. This is there to actually create those problems or to be able to have that maths read aloud and making that accessible directly. So it's not going to solve that for you from there.

DARREN: Yep. In terms of the tools thank you, Rachel in terms of the tools and the various options that are available, as you're saying from extension, through to the app, through to Canvas integration, are all options available across all of those or is Canvas integration the same as the tool bar? Would all the options that you demonstrated today be available in Canvas?

RACHEL: Yes, that's correct. So within Canvas, essentially what would happen and I can't show this to you, unfortunately but we do have videos that will show you what our Canvas integration will look like. But imagine when you go into your Canvas course, when your learners go in to be able to access a course module, they'll have the full Equatio tool bar appearing within the bottom section of the pop out when they're in Canvas directly.

DARREN: There's a follow up from Helen around when it was free for teachers. If somebody had downloaded Equatio when it was free, does that have a lifetime licence?

RACHEL: No. That will expire in June. So an email did go out to all of the people that had signed up for Equatio free for teachers, just to let you know that happened last year. Come June 30th this year that access will be turned off and it will revert to free features.

DARREN: Excellent. I've probably got a question in terms of the internet access, I'm assuming is needed for the OCR or maths recognition as opposed to tapping when you do the screen reps, if an internet connection is needed certainly for that function to happen? And how accurate is it, because it seemed pretty accurate from the grabs you were grabbing today, even the ones from the video?

RACHEL: Yeah. So we always say when it comes to OCR scanning and accessibility of content, obviously, you know, there will be some times for example, if I go back to my video, obviously the pen that was across the top of it, it still actually managed to decode it and pick out that number, although I think it replaced it with a 1 rather than a 9 in that case. But it's quite a clear pen that's writing on the whiteboard there. In some cases it may be harder, so depending on the actual accessibility of the content. We always like to say when it comes to accessibility, we can start from the ground up. It's obviously going to be greater than if we try and just simply access content that may have been scanned several times and try and use that directly from there.

DARREN: Excellent. Is there anymore questions from anybody? It looks like we might have wrapped early, given the number of slides that were there. We had a little bit of concern at the beginning we might run through these very quickly because there was lots of slides.

It seems very quiet in chat. All good. Thumbs up from people if you're happy with stuff or you're just more confused.

Thank you very much, Rachel. That was a very clear and concise, I think, overview of a very detailed tool that can do many, many things that are there but certainly in support of assisting students in understanding maths and getting that maths read out to them in various ways, shapes and forms, and making that accessible, and creating accessible maths as well. I think it's a fantastic tool that's there. So thank you very much for that.

RACHEL: The one thing can I just jump in and mention briefly? Just on our website, I wanted to mention for anyone that is already using Equatio, because I know there's been a couple of questions from our Equatio users, in the top right-hand corner of our website, so Texthelp.com, is our Texthelp academy. If you go into products and select Equatio there are quick introduction videos. So if you want to show a member of staff or a learner what Equatio is all about in five minutes rather than the hour that we've spent today, this is a really good introduction.

And there's also a feature tool which will guide you through every tool that sits on the tool bar. These videos are all, sort of, two minutes or less, so a perfect starting point for anyone.

DARREN: Excellent. That's very good. Thank you. Everybody join me in thanking Rachel for the presentation today and an insight into all the workings of Equatio. Thank you very much. An email will be sent out to everybody for the recording, when this recording of this webinar will be available on the ADCET website, and we'd ask you to share this with your colleagues.

We'd also ask you to complete a short survey on this webinar, and if you haven't already signed up to our ADCET newsletter, and these links have been made available in chat.

Two upcoming webinars to make you aware of. Please save the date for these. They're available on our website, but Applying Artificial Intelligence and Universal Design for Learning for Inclusive Learning, Perceptibility, Flexibility and Accessibility and Autistic Students' Experiences at Universities in Australia. More details of those are in chat. As you can see, they're very long links that are there, or long information with links to those, but they are available on the ADCET website.

Thank you, everybody, for joining us today. Thank you, Rachel. Thank you, Sharon, for captioning today, and to the ADCET crew in the background for keeping things ticking along. And please enjoy the rest of your day. Thank you, all.