DARLENE MCLENNAN: All right. We will make a start. Welcome, everybody. As Joe said, we've got lots of people entering the room as we speak. We had over 500 registrations, which is absolutely fabulous. It shows what a great topic today is.

For those who are joining us for the first time, my name is Darlene McLennan, I am the Manager of the Australian Disability Clearinghouse on Education and Training, ADCET for short.

This webinar is being live captioned and you can activate those captions by clicking on the cc button in the tool bar that is located either at the top or the bottom of your screen. We also have captions available in the browser and the team will add that now to the chat box.

Before I start, I wanted to acknowledge that I'm on ‑ or ADCET is hosted on lutruwita (Tasmania aboriginal land) and in the spirit of reconciliation ADCET respectfully acknowledges the lutruwita nations, and also recognises the Aboriginal history and culture of the land. And I pay our respects to elders past and present, and to the many Aboriginal people that did not make elder status.

I also acknowledge all the countries participating in this meeting and also acknowledge their elders and ancestors and the legacy to us and any Aboriginal and Torres Strait Islander People participating in this webinar today. I invite you all to add the lands you are on in the chat. We really encourage engagement in the chat. Make sure you click on all or everybody so everybody can see.

Okay. Today's webinar, Applying AI and UDL for Inclusive Learning ‑ Perceptibility, Flexibility, Accessibility ‑ I should have read this previously because I'm going to stumble on the words. It is presented by the amazing and wonderful Elizabeth Hitches and the ever so delightful and amazing Joe Houghton.

This practical session will demonstrate a number of the ways that we make the most of technology we either already have or can access easily to make our learning materials and learner engagement more UDL friendly.

Both these presenters ‑ I follow both on LinkedIn and really enjoy reading what they do. And Joe is actually coming to us from Ireland, and it is 5 am there, so we really appreciate Joe getting up. He is sipping on his coffee now trying to wake up, so I really appreciate it, Joe.

Before we begin, a couple of other housekeeping details. This webinar is being live captioned by Helen from Bradley Reporting and it will be recorded. The recording will be available on ADCET in the coming days. If you have any technical difficulties, now or through the session, please email us at admin@adcet.edu.au.

Joe and Elizabeth will talk for around 45 to 50 minutes or so, and then we will allow some questions, 10 minutes or so for questions. Please throughout the presentation, feel free to use the chat box to talk to each other or to us. Remember, as I said, please choose everyone if you want everybody to see. But if you would like to ask Joe or Elizabeth a question at the end of the session, please put that into the Q&A box, not the chat box. That enables us to easily find the questions, but also enables you to upvote for your favourite questions so that raises to the top.

That's it from me. I will hand over to Elizabeth. So looking forward to this presentation, as I said at the beginning, so thank you, Elizabeth.

ELIZABETH HITCHES: Thank you so much. Hi everyone. Thank you for joining us for this webinar. Now, as the title suggests, we're going to focus in on increasing inclusion and doing so through UDL, so that universal design for learning framework, and through AI, artificial intelligence. Now, that particular word "artificial intelligence", Joe is going to define and explain for us further in the webinar. So if it is your first time coming across this term or you are still not sure what that means, Joe has us covered.

Specifically today we're going to be focusing on that guideline of perceptibility in the UDL framework, and we're going to be thinking about flexibility and accessibility and how we can make this a more inclusive perceptible experience for whoever is engaging with our information. Now, let me get our slides moving forward. Joe, did you want to mention the QR code on the screen at the moment?

JOE HOUGHTON: I put a QR code on top there. One of the things I'm going to show you later on is another tool called Notion which I use a lot now as a second brain almost, to dump stuff into. It is a good way of sharing information. And we've put the slide deck on to a Notion page which is available and it is a live web page. So those QR codes take you to that Notion page. We have the link for that Notion page as a URL as well and I think that's going to go in the chat at some point with other links later on.

ELIZABETH: That's right. So feel free to access that particular link. In the thought of having options for perception we also have the PowerPoint slides available as they are as well. Feel free to reach out to us if you would like a copy in that format as well.

Before we kick off, Joe and I would also like to acknowledge the traditional custodians of the various lands on which we are all joining from today, realising that we are joining in a webinar platform, which is fantastic for accessibility because we are joining from all different areas across Australia and also internationally as well. So I would like to pay our respects to their elders and ancestors and their descendants for their continued cultural and spiritual connections to country and acknowledge Aboriginal and Torres Strait Islander People joining here today or, in the scheme of perceptibility, who might also be engaging with this recording at a later date. To all of you joining live or asynchronously, welcome and thank you.

Now, as Darlene mentioned, I'm Elizabeth Hitches. My pronouns are she/her. I have shoulder length brown hair and on this chilly day on the east coast of Australia I am wearing a rather warm sweater. I'm lucky to be a sessional academic in inclusive education, so I get to talk about inclusive education all the time which works really well for me. I'm also honoured to be a member of CAST national faculty. In terms of my particular areas of research at the moment, I'm focusing on UDL and academic stress and taking an inclusive UDL approach in that space in higher education.

If you are interested in reading any of my research or getting in contact with me, we do have some links on the slide and they will also be in your chat as well. But it is my very great honour to now throw over to Joe to introduce himself.

JOE: Well, I'm a 60‑year‑old grey haired old guy with a grey beard, also wearing a nice warm sweater because at 5 o'clock in the morning in Dublin it's not very warm either. So that's me.

As you can see, I'm based in Dublin. I'm an Assistant Professor at the Business School here in Dublin, married with four children, which is probably why I've got the grey hair. And I do various things. I teach at the Business School, I write books now. I love online training. So COVID was awful in many ways but it propelled me into online training. And that's how I met Elizabeth as well on an online seminar, and we kind of, you know, became good friends, really, and it's been great. So it's fantastic to get the chance to present with Elizabeth today. So thank you, Elizabeth, for agreeing to do this.

ELIZABETH: Same back. Thanks, Joe. Now, Joe, would you like to talk us through why we should stay for an hour and introduce our concept of UDL in a moment?

JOE: Yeah. I mean, the idea of today was really just to do a primer, I suppose, or get people thinking about this idea of accessibility, but particularly when it comes to this UDL kind of concept or theme of perception. It is not difficult to incorporate accessibility into your materials. We have the tools to do it, even in the tools that we use day‑to‑day, Word and PowerPoint and stuff like that. But then there's many other tools as well.

I wrote a book on accessibility and UDL quite recently. I wrote that book because I found I didn't know about this stuff, and a way of me ‑ the way I assemble information is to start writing it down and structuring it, and these days if I'm writing and structuring, I might as well put it together in a book. So that's the idea.

And it is not just text; it's also, you know, accessibility is also representing things in multiple ways. So sometimes it's images, sometimes it might be video, it might be sound as well as text. So the idea of the session is that, really. Please do feel free to throw in questions in chat and Q&A and we will do our best to answer as many of the questions as we can.

It's fantastic to see everybody coming in. I noticed we have people from Vietnam, from Pakistan, Germany, Tasmania ‑ all over Australia. So thank you so much for joining us all today. Okay.

So this slide just talking about, you know, the imagery and AI. I put the prompt "generate me an image around accessibility perception in UDL and AI" into Microsoft CoPilot. Microsoft CoPilot is one of the better known now AI generators. And the nice thing about Copilot ‑ you have all probably heard of ChatGPT but Microsoft CoPilot is a free AI which links to the most powerful mode of ChatGPT. That if you go straight to open AI which is ChatGPT, you have to pay $20 US a month.

So if you're experimenting with AI, then maybe think about using CoPilot because it is a very powerful AI. We will put links to all these AIs and things in the deck and you will be able to access them later on and stuff.

What I'm seeing on the screen ‑ and, I mean, Tom Tobin is so good at this and I'm still trying to learn. I think somebody has got speakers on or something in the back. We are getting a bit of audio feedback. So if anybody is not muted if you could all ‑ ‑ ‑

DARLENE: It's Darlene. I think it might be you, Elizabeth. Sorry, the participants can't actually access their microphones. Thank you.

JOE: Fantastic. That seems to have fixed it, yeah. We need to remember you and me to mute each other.

ELIZABETH: Good for perception.

JOE: What we've got here is a complicated image, pillar image. The centre of the image is a human with no hair looking to the right with a kind of world in its brain. And then around it we have many, many kind of techie looking things, graphs and cog wheels and different brains and things. And then in the bottom of the slide, we've got various I think what should be students at tables with futuristic looking screens on.

So it is just an AI representation of this thing of accessibility and AI and perception. And it's quite interesting to put prompts like this into the AIs and see what it comes up with.

The bias and the stuff that it does come up with is sometimes quite strong. So that's also, from a UDL and accessibility point of view, something to look at, is when you do prompt the AI tools, you know, what assumptions are they making? What datasets and biases are they clearly drawing on? You know, we have all our students sitting at desks, sitting at tables, facing a screen. So there is nobody walking around. They're in a kind of, you know, classroom situation if you like. So there is a lot of implicit assumptions going on here. So, you know, that's just something to think about when we're looking at these types of images. Okay, we can move on, I think, Elizabeth.

So let's just do a couple of definitions. UDL ‑ universal design for learning ‑ is an approach to learning which was pioneered by CAST. I'm not sure exactly when. Elizabeth will probably tell us that because she is a CAST supremo.

ELIZABETH: 2018, but there is an updated version coming.

JOE: Well, yes, and they have yesterday or the day before published the new guidelines to that, so that's very exciting. But it basically helps educators, mainly, look at what they are putting together, and design out the need for accommodations after the fact.

So one of the key ideas of universal design for learning is that you design for everybody. You design for universal students because there is no average student. There is no standard student. Yeah? So we need to bring everybody in when we are creating learning materials, when we're creating learning environments.

And that means producing materials that can be, you know, read by screen readers, that work with deaf people, that work with dyspraxics and dyslexics, and ADHD and all these different conditions and, you know, opportunities that people have. So reducing the barriers to learning by producing materials that are either represented or capable of being represented in multiple ways with options available to all. So nobody should be precluded from getting to the information because of whatever physical or mental challenge they have. So that's the idea behind UDL and it is a very, very powerful approach to creating materials. Okay.

So this slide shows 9 main blocks in the middle and it is UDL and accessibility. So we have three columns. The first column is ‘Provide multiple means of engagement’. And then we have three blocks under that: Recruiting interest, sustaining effort and persistence and self‑regulation. The second column is ‘Provide multiple means of representation’, and the blocks in that column are perception, language and symbols, and comprehension. The third column, ‘Action and expression’, is made up of physical action, expression and communication and executive function.

And the idea of each of those columns is to produce expert learners. So the engaged learners are purposeful and motivated; the representation column creates expert learners who are resourceful and knowledgeable; and then the action and expression column produces strategic and goal‑directed learners. So we've kind of done the verticals.

But if you then split those 9 boxes up into horizontals we get ‑ they have gone so small I can barely read them. Access is recruiting interest, perception and physical action. Build is sustaining effort, language and symbols and expression, and then information is self‑regulation comprehension and executive function.

Today we're going to focus mainly on the top three boxes and Elizabeth is going to talk through a little bit more on the perception.

ELIZABETH: Sounds great. I think my internet might be slightly unstable. If I do drop out, feel free to shout out at me and let me know.

Okay. As Joe talked us through in that particular UDL framework, we know that the very top row of those guidelines is focusing us in on accessibility. But we do have a guideline in there which is specifically around perception. And what this is asking us to consider is whether the information presented is going to be comprehendible or understood by a diverse range of individuals. This includes individuals who might have a sensory or perception disability, so perhaps people who are hard of hearing or deaf, or who might have low vision or blindness, for example.

It also includes people who might be engaging with resources in different environments. So engaging with a lecture recording in a quiet library or joining a tutorial class where the children are asleep in the next room. Or who might have a bad headache and want to listen to an article rather than interacting with a bright screen.

But it is also about opening up those options so that the information we present can also be accessed and perceived by individuals who might be drawing on technology to enhance their access to that information or to enhance and personalise their access to that information. And what we're going to do is explore some examples of this throughout that webinar.

But ultimately, what we're saying here is that perception is about all individuals and we're recognising that we are all diverse, and so the information we present needs to be responsive to that diversity. So it is about all of us and not just some of us.

So let's now take a look at this UDL framework. What that framework is asking us to do is think about when we're working with that intersection of accessibility and how information is presented, think about how we can provide options for perception. So what CAST is suggesting that we do is that we can offer ways for customising the displayed information. So at the simplest level this can be adjusting our volume up and down or having the ability to adjust the brightness on our screen. But we have many, many more examples but that's a really simple example of what that customisation might look like.

Now, we also want to be offering alternatives to auditory information. For any auditory information we have we want to have a visual or text means of accessing that same information. We also want to make sure where we have visual information or text information that we also have an audible means of accessing that information. So making sure from the outset proactively we have those options available.

And the reason we're doing this, whatever information that we are putting forward, we want that to be able to be perceivable, we want it to be customisable, because ultimately, we want everybody to be having an inclusive and accessible experience.

So to get us started on this, UDL does tell us the best way to introduce new concepts is by building on what we already know. So what I'm going to do, just very briefly, is look at some of these UDL guidelines in action. We are going to have a look at some applications that we probably use quite frequently. We will look at what this might be like thinking through Zoom, Microsoft Word and PowerPoint.

Now, this will only be brief because the main attraction of today is going to be looking at AI, and Joe is going to lead us through exploring the AI side, and there are also links throughout this presentation that take you to information into greater depth if any of these particular points are of interest to you. Of course, it's being recorded so in future if you would like to follow along in real‑time and complete those actions for yourself you can do that too. Here is just a very brief introduction.

If it we start off with Zoom and we think about closed captions and audio options, we're currently on the Zoom system now. So we should have a function at the bottom of our screen which says, "show captions". Now, that "show captions" feature, there is a little arrow that opens up a menu that's right next to that "show captions" feature and that takes us to a menu that includes something called caption settings. So we want to be enabling those captions, and once we have them enabled, we can actually customise the display of those captions. So we can change the font size from smaller captions to larger captions. If we also had some translation happening, we could adjust the colour to distinguish between them.

If you haven't already got closed captions enabled in your meetings or in your presentations, I highly advise you to go into your Zoom settings, make sure they're enabled, and then also have a go yourself but let others know that you can customise that closed caption experience. So that's our customisation section of that UDL framework, and it is also making sure we have a visual or text means of offering any audible information in an accessible way.

Let's think about optimising and customising audio. Joe and I just showed that today, that making sure people are on mute while others are speaking is a really key thing to do. This is just to model what that looks like when you don't. What we can also do is go down in our settings where our mute settings are, we can open up our audio settings from there, that opens up a menu that actually says, "audio settings". And within this, you might be familiar with adjusting your speaker volume, but you can also adjust your microphone volume. So if you are giving a hybrid presentation, sometimes your volume may not be at the right level for those who are in the room. You can actually adjust that level for people in the room and those on Zoom can adjust it themselves.

Something many people haven't come across before is that there was also a section called "audio profile" ‑ it is a difficult thing to say ‑ and this enables us to actually remove background noise. It should automatically be set to remove background noise but we can also adjust that so you can adjust it to remove low level noise or to take over and cut out high level noise if it happens.

I have had an experience where I was presenting. I had a bookcase collapse behind me and I was the only one who heard it because Zoom managed to block out that noise before it was broadcast. So if we think about how we can make our presentations or our teaching experiences more perceptible, we can really look at how we can optimise and customise that audio.

What I'm going to do now is take us back to that previous slide and talk a little bit about visual introductions. So if you are presenting to a new audience who doesn't know what your visual appearance is, they haven't come across you before, it can be a really nice idea to make sure that visual information is also conveyed through a description. Joe and I gave an example of that at the beginning of the presentation and it is nice if we can weave that in quite naturally into the conversation.

For example, I could say, "Hi, my name is Elizabeth Hitches. My pronouns are she/her. On this chilly day in Australia I'm wearing" ‑ whatever I'm wearing ‑ "and I have shoulder length brown hair." So make it really natural and really seamless and build inclusion into that conversation.

We can also do something called integrating the chat. You might have been in a presentation before and the presenter might say, "Oh, that's a great point", or start laughing at a particular comment. If that chat is moving quickly or if you don't have access to that chat, you have absolutely no idea what's being responded to. So it is something to be aware of when we are the ones conveying information that we can actually integrate that chat into the conversation.

For example, let's imagine that Joe just put into the chat a reminder that accessibility is about everyone. I could say, "And thank you, Joe. Joe has just made a great point that accessibility is about everyone. So that's a really interesting point to take forward." So seamlessly integrating that into the chat so nobody misses out if I just said, "Great point."

The other way to make sure we're making our information perceptible is also to record it if it is in an online platform. The benefit of that if someone is not able to access our live presentation at the same time, they have access to that information. But in terms of customisation, people can pause that recording when they need to take a break, or if they like to rewatch a particular section and reengage with information, and you can even change the speed. So you might speed up the presentation or slow it down based on your particular needs and preferences.

So recording might seem a simple thing to do but it can be really great for offering greater means of perceptibility.

Now what I'm going to do is take us into Word and PowerPoint very briefly before I hand over to Joe. I'm going to change my share screen. So bear with me and feel free to have a quick stretch break while I'm jumping on to our next screen. Okay. Just a thumbs up from Joe. Joe, can you see my Word document open? Fantastic. Okay.

Let's now talk about what perceptibility and UDL might look like in Word. This particular document is just the text that's come from a particular blog post that I had written about why we need to think about making our headings more accessible. If you would like to engage with that blog post, we do have a link at the end of the presentation. What I would like to do right now is talk about how we can actually customise our documents and customise that experience of perception.

So if we're in a Word document, we have a tab of options or a task pane of options usually towards the top of our screen. One of those is "view". If we engage with "view" we have an option in that task pane that opens up called "immersive".

What I'm going to talk about now is a Microsoft learning tool called Immersive Reader. If I click on Immersive Reader, what we can actually do ‑ I might just adjust how large our text is zoomed in ‑ I have adjusted our text here. What we can actually do is change things like the background colour of our page. So if we click on page colour, which is the option that is opened up on our task pane now I'm inside Immersive Reader, I have a range of different colours I can actually turn my page. If I wanted to reduce that really high contrast between the black text and the white page, I can click on my colour and adjust what the background looks like.

If I found that my text was a really long page and it was very overwhelming to consume in such a large chunk, we have something called line focus. So we can click online focus and choose to see only one line at a time, so blocking out the noise above and below and focusing in on one line. We can also change it to be three lines, so we are seeing three lines of text, or we can even change it to be five lines of text. I'm going to change it back to none so I can show you the next feature.

If we found that our letters were quite densely condensed, we can do something called text spacing and we can open up the text spacing so there is a little bit more room between our letters within the words and also between the words themselves. And something that might be a really cool feature is breaking words up into syllables. If you had to do this by hand it would take you a very long time. We can actually break words up into syllables. What that means is something like "introduction", we see i‑n, a little circle in between that break the letters apart, t‑r-o, another circle, d‑u‑c, another circle, and t‑i‑o‑n.

So it breaks the word up into in‑ tro‑duction. So if someone is reading that text ‑ perhaps English is a second language and they are reading text syllables at a time, this might be a way to help that be more perceptible and accessible.

I haven't got my audio enabled today but there is also a read aloud function. What this would enable us to do would be to have that document read aloud to us even if we weren't accessing it via a screen reader.

I'm going to close Immersive Reader and just show you the particular document that is on screen at the moment. You can't visually distinguish there is a heading there. If we had this occur what we might do is select that text and then we might make it visually a heading by bolding. In terms of perceptibility, visually we would be able to distinguish that this was a heading and it was different from the rest of the text. But we have something called a styles function in Word. What this is telling me is even though visually this looks like a heading, this is actually being seen as normal text.

If somebody wasn't visually interacting with this document, if they were using a screen reader, there would be no distinction between that heading and the rest of the text. What we can do is we can select that text and tell Word that this is actually a heading. In styles we can go to heading 1. If we click on heading 1 it would make it initially a blue colour and larger text. We can right click on heading 1 and we have the option to modify that format. But if we have created it visually and we like the way it looks, we just want it to register as a heading, we can actually update heading 1 to match selection. That's going to styles, going to heading 1, and clicking update heading 1 to match selection, and now not only does my heading appear visually but it is also distinguishable for somebody using a screen reader.

If we share our Word document as a Word document, we allow these options for people to engage with the Immersive Reader, we allow them to customise this particular document to suit their needs and preferences. So when we share our information, not only is it how we're presenting it but does it have the flexibility to be customised by people as well? So you might share a PDF which is a static version, but alongside the PDF you can share the Word version. That gives people access to Immersive Reader and to various ways of customising this information.

Finally, before I hand over to Joe, I'm going to take us to PowerPoint and just show you a couple of tips in PowerPoint. Again, there is a few seconds for a stretch break if you would like while I get our PowerPoint up and running.

JOE: I don't know whether you have seen, Elizabeth, the chat is hopping. There is fantastic discussion going on in the chat and it's being well moderated by Darren I think there. Thanks, Darren, and the rest of the team.

ELIZABETH: Thanks, Darren. Okay. Let's jump into our next set of slides. Now, what I'm sharing on the screen at the moment is ‑ thanks, Joe, for the thumbs up ‑ is a PowerPoint that I have intentionally made as full of errors. If anyone is looking at the accessibility button down the bottom of the screen and seeing a big cross, that is intentional. It is meant to be very inaccessible.

What I'm going to do is move my little Zoom out of the way. I'm going to show you a couple of points here. The first one is going to be around alternative text or Alt text. What this means, I'm going to click on to a new slide ‑ I have a slide here that has text on the left side and it has an image on the right side. This image I actually got from stock images. So with stock images, sometimes attached to that image will be an Alt text description already made for us. You think okay, fantastic, then my job is done. It isn't.

When we're thinking about how our images are being described, we want to think about the context in which they're being described; what is the purpose of the image; how could we describe this image in text in a way that would make sense?

So what I'm going to do is I'm going to click on the image. I'm going to take us to in PowerPoint the review tab. Under review this then opens up the option to check accessibility.

If we click on check accessibility, we then get a large task pane of different options that are going to prompt us to check the accessibility of our document. One of the things I'm going to do is look at something called Alt text. If I click on Alt text, the Alt text actually that came with this image said, "old woman working in a kitchen". As far as perceptibility goes, when I had visually perceived this image, I saw a woman working at a laptop with a notepad beside her working at a table. I did not comprehend at all that it was a kitchen and the thought that it is a kitchen had nothing to do with the context in which that image was being used. The image was meant to convey that we can work digitally, we can work on paper and we need to think about options for accessibility. So this Alt text would not match what I want it to say.

Now, what we can do ‑ and this is a small segue into what Joe is going to show us ‑ we can actually get a generated Alt text. We do still need to check it and tweak it. What I'm going to do ‑ this is an AI function that can generate Alt text ‑ it takes a few moments for it to think through but this has automatically generated the text to say that this image instead is a person sitting at a table with a computer and a notepad. So it is a much better written description of that visual information.

So even if you do already have Alt text attached to images, go back in and check that it is accurate because we want to be sure whether people are engaging visually or whether they are having a screen reader read this information out to them, that it is an inclusive, equitable and accessible experience.

Now, if you, after this presentation, are interested in the other aspects of accessibility that PowerPoint enables us to check through, there are all different aspects here, things like making sure we have headings or slide titles. We want to think about the order in which information is going to be conveyed. We want to think about how our images are going to have that Alt text attached. There is a link at the end of this presentation that takes you through some of those things if you think of that and how to use the accessibility checker.

Now, the final point before I hand over to Joe is to think about how we actually make the visual information about that image more accessible if we're actually presenting this PowerPoint online. So let's imagine I'm presenting this PowerPoint online. We wouldn't have that access to the Alt text initially. What we want to do is integrate the visual descriptions of what's on the slide as we're presenting.

For this particular slide I might say, okay, so now talking about the challenges of accessibility Microsoft accessibility checker is telling us that there can be different errors and warnings involved. And what we can see from our image is we want to think about accessibility in different modes. So we have a woman who is working with a laptop with a notepad beside her. We want to think about not just the digital mode but also how this would be in maybe a PDF or a paper copy as well. So the accessibility of various modes.

In that way, what we've just done is integrated the description of the image quite seamlessly into the presentation, noting that where we have visual information we want to be sure that we have alternative modes for people to access and perceive that.

So without further ado, we're now going to build on these concepts. I'm going to hand over to Joe who is going to take us through exploring these further with AI.

JOE: Fantastic. Thank you, Elizabeth. Now we are going to do a swap share, aren't we, Elizabeth? Let me share my screen. There we go. Okay. Jess has her hands raised but if you could put your question in the chat that would be great or in the Q&A. That's fantastic.

DARLENE: Just be aware there is only 10 minutes ‑ sorry not a lot of time left. Thank you.

JOE: Lovely. We will just run through some of this stuff but not all of it. And then the rest will be in the slides for people to catch up on. One thing that I came across only the other day ‑ and I think it's because this has been top of mind doing this seminar ‑ and I've just lost everybody ‑ have you all moved on to my other screen ‑ there we are, yes, I have just lost my grid view of everybody. There we are.

One of the AI tools that I love to use as well as ChatGPT is an AI called Claude. Claude.AI. There is the URL is https: //Claude.ai. This is an AI set up by two of the guys who originally worked for the company who created ChatGPT and they left because they weren't actually very happy about the ethics of how ChatGPT was trained and on the data and stuff.

So Claude has been built up around slightly more ethical principles and it's also got some very good features, one of which relates to what we're talking about and that it has a setting to show a dyslexic friendly font. You can go into the settings, the chat controls up at the top, and you have got this dyslexic friendly font selection option. If you do that, it changes the font to one where parts of each letter are highlighted a bit bolder, and apparently when you are dyslexic it makes it much easier to read.

So I'm not aware of that in any of the other AI tools. It may be available in some of the browsers or in an add‑in. If anybody knows about that stuff, please put it in the chat because we will capture the chat and look at it later. But that's just something to be aware of.

Microsoft Edge is one of the popular browsers. I jumped over from Chrome to Edge when CoPilot first came out and was only available on Edge. This slide is just a slide showing a screenshot of Microsoft Edge. But if you go into the accessibility tools in Edge, so if you go in the settings and turn on the accessibility tools ‑ and the other way of doing that is when you are in Edge if you go up to the URL bar and you manually type in edge://learning/. That gets you into their learning toolkit.

We can see there is a button for Microsoft 365, there is a maths solver button. Then you also get these three other buttons. There is a PDF Reader, Immersive Reader and there is Read Aloud. So using these can be useful when you are in the Edge browser and you want Read Aloud or you want an Immersive Reader or whatever, just like Elizabeth showed you earlier on in Microsoft Office. This is available in the Edge browser. I'm sure there is something similar in Chrome. I just don't know what it is at the moment. That is just to show you that these things exist.

AI is another strand of what we're talking about. And AI, artificial intelligence, came to the fore about 18 months ago, 22 November, I think it was, 2022 when ChatGPT 3.5 was released. Ever since then we've seen this explosion of interest in the possibilities from artificial intelligence. And from the perspective of what we're discussing today, it can facilitate personalised and accessible learning by adapting educational content or creating it from scratch to diverse student needs and preferences.

But the trick here ‑ and this is where UDL comes in ‑ is do this during the content creation process. So try and build in the accessibility and the UDL knowledge, if you like, while you're creating it because it's normally easier to do that while you're creating a lesson or while you're creating a set of notes than go and retrofit it later on. So that's ‑ the AI is getting my hand gestures. Are we getting things floating up from the screen and stuff? Michelle put something in the chat there. Yeah, I know that Zoom now has this thing, doesn't it, where if you do certain hand gestures things happen on the screen and stuff. I'm not using the middle finger, Darren. Okay.

So generating images, there is this whole new thing called generative AI. So we have a form of AI which can now generate brand new images and text as well. And video is coming. There is an amazing tool called Sora that is just about to drop and that will create life‑like video from just a text prompt. So there is an image on the screen here that I created using the prompt "create me an image showing accessibility and AI in teaching". We have a kind of robotic space man in a suit in a wheelchair, we have a hand holding a tablet with a big kind of webcam sticking out of the top of it, we have a lady in a wheelchair looking at a Blackboard representation of a face looking back at her, an odd-looking set of students with plastic kind of weird looking faces standing in front of a Blackboard.

Again, this talks to the fact that a lot of these AI tools are not perfect yet. So it is very powerful technology. Lisa, you are saying the faces are quite distorted and they definitely are quite distorted. So use the AI tools with caution at the moment because they are getting better and better weekly but they are not perfect. So one of the kind of things to do, particularly as an educator, it can be quite overwhelming to say, "Create me a lesson plan on Marie Antoinette and the French revolution." ChatGPT will spit out an amazing three‑page lesson plan but you need to use your domain knowledge to assess that and see is what's been created by the AI right or is it doing what we call hallucinating? Is it putting in errors, creating stuff that isn't true? Sometimes the sources that the AI tool cite go nowhere. It just makes them up. So we've got to be very careful with that, both visually and also from a text perspective.

Now, one thing that I did with this presentation was I thought, well, as well as giving everybody the presentation as a PDF and as a PowerPoint, maybe there was another way we could represent the presentation. And I mentioned earlier on, I think, that I use another tool, and I have a tool installed called Notion. What Notion allows you to do is create pages within the Notion application. But then you can publish the pages. So this is the Notion page that I created for this seminar. All I did was I embedded ‑ I just inserted the PDF of the slides. And once you've done that, you can come up to share in the top right‑hand corner and you can publish this, and it makes up a publicly accessible web page.

So there is the web page and I can copy that to the clipboard. If I now put that in the chat to everyone, not just to Elizabeth, so in the chat now there is a link to the accessibility seminar as a web page.

Now, going back to Elizabeth's point earlier on, when you convert a document from its original format ‑ so I created this in PowerPoint and I used the heading "styles", and the slide outlines and stuff like that, so it is probably fairly good from an accessibility point of view. But when you drop it in just as a PDF, sometimes the PDF strips a lot of that out depending on how you've created the PDF. If you flatten a PDF, it kind of gets rid of any information that it can save space by getting rid of and a lot of accessibility information is stripped out.

So this gives us multiple means of representation. We can see all the slides in a different format and it's in a web format so, you know, maybe it's more accessible to some people like this. But we've probably lost a lot of the headings. If I right-click on here I'm not getting to the Alt text of any of these images and stuff like that. So swings and roundabouts. It offers some pluses but there is definitely some minuses as well. So just to be aware of that.

Let me drop back into PowerPoint. So the WCAG guidelines for accessibility ‑ and some of you mentioned the ATAG guidelines as well ‑ different tools have different levels of compliance with these guidelines. They're constantly evolving but, to be honest, a lot of the content creation tools are behind the curve on this. And I think we all know that. But the more you become aware of accessibility as a thing when you're creating material, the faster you become aware that there are severe limitations to accessibility.

Now, Microsoft, you know, I think are getting a lot better at this with those accessibility panes and it makes it much easier now to find stuff that isn't accessible to add in the Alt text, or whatever. There is an Alt text generator. I just put this in when I was creating the talk, and this is an online Alt text generator. So you can go to that website and you can upload your image and then it will generate Alt text for you. But it doesn't always work very well. When we were getting ready for the session, I put in a shot that I had taken of a bracelet that my daughter had made. It came up with some crazy Alt text, didn't it, Elizabeth? I can't remember what it said but it was nothing to do with a bracelet.

ELIZABETH: It was a sunset.

JOE: It was a sunset, that's right. It was a beautiful coloured bracelet but it was a sunset. It wasn't good. Again, just be careful when you use these tools. We're not doing audio today but there is a tool out called Krisp. And what that will do is if you've got dirty audio, if you've got noises in the background and stuff and you haven't been listening to Elizabeth and turned on the Zoom filtering and stuff, then you can run audio through Krisp and it comes out like studio quality audio. So tools are out there to help with this stuff.

I'm going to show you one more tool and then we're out of time. I can see we're running out of time and Darlene is probably champing at the bit for me to go to Q&A. I'm just going to show you Zoom ‑ not Zoom ‑ Otter.AI is an online tool and it's a free tool with a paid tier. You can have up to 600 minutes of transcription a month. This is great. Here is a workshop that I delivered to the Royal Photographic Society on using Canva recently. I checked and they said it was okay to use this in an example. I'm going to click into this. And this is the transcript of this workshop. This was a two‑hour workshop delivered like we're doing today, via Zoom, on video.

What Otter does is in the background or you can upload the video recording later and it will generate the transcript after the fact. So you can see we've got Joe Houghton talking, Melanie talking and all the rest of it and you can tag people. If it doesn't know who is talking it will say speaker 1, speaker 2. You can say speaker 1 I could click on that and I could say, right, that was Elizabeth. It wasn't but let's assume that that was Elizabeth. Now that will go through and it will find every other time that Elizabeth spoke and it will tag her name.

Next time we record a session using Otter, it will remember Elizabeth's voice and it will automatically tag her. Forever now, Elizabeth is going to keep coming up as whoever was talking on that website. Not only that, but it gives you an outline automatically. So this is the AI breaking up this text. If we want to have a look at when we were talking about photography and Christmas cards, we click on that and there we are we're straight down to that part of the image. And the other thing is it records the audio as well as the text. So you can come in here and you can press play.

You may or may not have been able to hear that ‑ I'm not sure if we have the audio turned on ‑ but the audio comes through your speakers and the words that are being spoken are highlighted. And these are editable. You can go in and edit the transcript. You can save this. You can share this with people and give them access to this so they can see that transcript and listen to it and see all the break‑ups and the AI generated summaries and stuff. You can also export the transcript either as a text file, as a Word document, but very, very usefully ‑ and this is great if you've done a video recording like this and then you want to make it available with subtitles ‑ you can generate an SRT file. And an SRT file is subtitling.

So this will break up the text into one or two line subtitles timestamped as an SRT file. If you send the SRT file along with the MP4 video file, when people get those two files on their computer and play in VLC or whatever their video player is, they have the option of turning on subtitles and then subtitles will come on, on the bottom of the screen. I use this all the time, because whenever I do a seminar I produce subtitles.

So produce a transcript, send the audio file, send the video file and the transcript SRT as well. So that's my quick round‑up. So we've got ‑ just to finish off very quickly, we've got some resources from Elizabeth, a slide of links to resources, blog posts and published articles on equity and education. There is some resources from me, there is my three books, there's ‑ I did an interview recently on Think UDL with Lillian Nave and also have an AI newsletter that I publish once a week on LinkedIn that gives you a five-minute précis of what's going on.

Elizabeth keeps telling me she reads it so I think I've got one reader on that. And then there is a couple ‑ there is a few more links to things like Immersive Readers and some good articles on accessibility tools for 2024. I don't know if we will do the Mentimeter because we are out of time. Elizabeth, last thoughts before we take a couple of questions?

ELIZABETH: Last thought from me is that key word is "options". Some people absolutely love a PDF, some people don't, and a Word document in its raw format is the best way to interact with it and use some of those learning tools. Think about options. How can we provide options for the various formats we're presenting? And if we're doing a presentation, anything visual, how can we make sure it's audio and vice versa.

JOE: Yeah, yeah. I think multiple means of representation is so powerful. And just thinking about that when you're producing material, puts you into a frame of mind where you're thinking not everybody is like me. Not everybody has my ‑ you know, we found out when we were putting this ‑ I'm colour blind and Elizabeth didn't know I was colour blind and stuff. Just think about that before we go. We've probably got time for a couple of questions.

DARLENE: No, we haven't actually. We've actually hit the mark. We haven't checked with the captioner if we can go over time so we will have to finish on time.

ELIZABETH: I'm sure I'm speaking for Joe, we would be very happy to answer questions outside of this and post responses to ADCET.

DARLENE: We've got some questions we will put towards you. We will also ‑ what great discussion in the chat. Many people added links. We will get those links out of the chat and actually add that to the website so people will receive the link with the recording and the chat links there so we can keep the conversation going.

So thank you both for a really powerful ‑ and I don't need to say it, all there in the chat, you are absolutely amazing. The presentation you have provided to us today is a game‑changer for many of us. So thank you so much.

Thank you everybody for joining us. I just wanted to acknowledge the work of the team. So thank you, team, for getting this to happen. We have quite a few webinars coming up in the next month. I won't read them out but I think the team will probably put a link into the chat, or go on to our website. We will be sending a survey. We really appreciate you undertaking the survey for us so that helps us justify our existence. So please provide that. And go well, everybody. So thank you and thank you once again Elizabeth and Joe. Wow, wow, wow. And, yeah, thank you.

ELIZABETH: Thanks so much. And thanks everyone for sharing in the chat your resources too. It is great to build a learning community.

JOE: Thank you.