# Transcript for the ILOTA Things - Episode 10 – Study Buddies, AI and Learner Agency.

**Announcer:** Welcome to ILOTA Things, the ADCET podcast where we explore Inclusive Learning Opportunities through AI. In this series, we'll explore the exciting convergence of universal design for learning, UDL, artificial intelligence, AI, and accessibility, and examine ways in which we can utilise emerging technologies to enhance learning opportunities for educational designers, educators, and students. Now, here are your hosts, Darren, Elizabeth, and Joe.

**Darren:** Hello and welcome from whenever, wherever and however you're joining us and thank you for your time once again as we investigate a lot of things that is inclusive learning opportunities through AI. My name is Darren Britten and joining me once again on our Artificial intelligence, Universal design and accessibility AI Powered hovercraft and my co hosts, Elizabeth Hitches,

**Elizabeth:** Hi there.

**Darren:** and Joe Houghton,

**Joe:** Hi from Dublin.

**Darren:** Today's episode is titled Study Buddies, AI and Learner Agency and we're going to take a look at how and where AI might be useful in supporting students in their learning endeavours and how new technologies are opening up avenues for students who traditionally may have been excluded from many of the standard study practices. So as we filter through just a few of the many tools currently available to aid students in their learning, we want to come at today's episode with our Universal Design for Learning lens clearly focused on learner agency and multiple means of engagement and representation. So, Elizabeth, you're probably the best candidate to start with on this. Could you give us a brief overview of why learner agency is so central to UDL thinking and why tools that encourage this are so crucial?

**Elizabeth:** Thanks so much, Darren. Definitely. If anyone's explored the UDL 3.0 guidelines, you would have noticed at the very top of those guidelines, really acting as an umbrella over that framework is the idea that learner agency is central. So let me read out that goal for anyone who may not be familiar with it. For anyone who wants to follow along with me, I've just gone to the website [www.udlguidelines.cast.org](http://www.udlguidelines.cast.org) and on that page you can access the UDL guidelines straight from there. So that main goal that really overarches that whole framework is that the goal of UDL is learner agency that is purposeful and reflective, resourceful and authentic, strategic and action oriented.

Now, if you haven't explored those guidelines that you might be used to previous guidelines, you would have heard the terms like expert learners. And the idea is really the same, how do we get our learners to really be knowledgeable and understanding of the ways that they can best learn and really be able to empower themselves in that learning journey and get the most out of that learning experience? So how can they approach learning in that really purposeful and reflective way? How can they use resources well? How can they be really strategic in those actions in learning? So when we come to look at using AI or drawing on AI, we don't want students just to use this aimlessly, so I think one of the really critical roles for educators is going to be how do we make sure that we're really supporting learner agency in that use of AI? How, how can we support students to be really strategic in the way that they use it and to really experience AI in the way that's going to get the most for them out of that experience? How can it really support them in their studies? And so what I'd love to do now is throw to Joe for a bit of an overview and to break down some of the functions of AI that can really assist students with their learning and assist them with this.

**Joe:** Okay. Well, I mean, looking at that diagram for the UDL 3 guidelines, you know, if you just kind of scan across those, those 12 boxes, you know, we've got, we've got the stuff that we all kind of probably know, multiple means of engagement, representation and action expression at the top three columns. But you know, if you look down the side, we've got things like executive function. We've got the ability in strategy development to kind of organize information and resources and you know, executive function is like teaching people who might not know how to do that, they may not know quite how to assemble information, to access information, or then to kind of gather that information and present it. So this is kind of executive function. How do we design our learning for interaction? And I think interaction is a really key one that's in the top right hand corner of the UDL kind of guidelines.

And this takes us to what, two, three thousand years ago? Yeah, you can tell I'm not a history major, can't you? Yeah, there was an old beardy guy. Yeah. In Greece called, it wasn't called Darren, yeah, he was called Socrates. And we're still using this thing called the Socratic method today because it's such a powerful learning tool and it's fundamentally based around interaction because the Socratic method is dialogic. So we're having a conversation, but the teacher doesn't give you the answers. What? Well, what use is the teacher then? Yeah, if the teacher's not going to give me any answers, you know, I don't need the teacher, do I? But the Socratic method is all about the teacher asking you questions that will help you process information that you've gathered or realize that there is information perhaps out there that you haven't yet become aware of, yeah, because the question might be, you know, well, you know, tell me about X. And you're scratching your head and thinking, I've never even heard of X, let alone can I tell you anything about it? Yeah, but if you're asking me about it, it must be something, yeah. So maybe I've got to go off and find some information out about X. So this, this, this, you know, ancient application of learning design is absolutely bang up to date with the current UDL stuff. And I mean, we haven't even talked about AI yet, have we? So Darren's kind of frowning now and saying, come on Joe, get on with it. (NOTE: Not True, Darren may be beardy, but was not frowning 😊)

So a lot of the AI tools now are becoming very good at spitting answers out. They know all the information out there on the Internet, yeah, and we can type in a question or a series of prompts and have a conversation with them. So I mean, immediately, you know, the AI over the last 18 months has moved us from the old single prompt, ask a question in the Google search bar and we get a set of links. And the chatbots are now far better at this dialogic interaction. Ask me a question, I'll give you some answers or whatever and then ask me some more questions, and we can go down, you know, different avenues and stuff. And we were talking just before we started recording today, you know, that, that can be a blessing and a curse because those follow up questions that quite often, you know, come up at the bottom can sometimes take you down rabbit holes. Very interesting rabbit holes, but nothing to do with what you're actually trying to find out. And you know, I was saying, I was saying to Elizabeth, sometimes actually I have an Alice in Wonderland day, you know, and I will just, just consciously go down rabbit holes just to see where it takes me. Because sometimes that takes you somewhere wonderful, you know, that takes you to a wonderland. So you don't always have to be completely, you know, focused on this. So I think that is one key way that we can use AI and you know, all the tools will, will have this dialogic thing. Now I'm going to come back to what changed last week a little bit later on. Yeah, but you know, this is one of the things that we, we should be thinking about is how do we, how do we interact with the tools and what tools are there out there, you know, that we can access? And many of these are free now. Yeah. So they've got 24 by 7, availability, they're democratizing the access to this type of learning. You know, you might not have an expert teacher on history or on quantum mechanics or whatever it is that you want to learn about, but you have now because you can fire up ChatGPT and say, right, I want you to be, you know, a fourth grade teacher, yeah, of history, yeah, and you know, tell me, you know, have a conversation with me about the French Revolution or whatever it is, and, and force me to kind of, you know, show you what I know about the French Revolution, but don't give me direct answers. And if you set a chatbot up like that, it won't give you direct answers, but it'll start asking you questions and it'll start giving you little nudges and prompts and stuff. And it's amazing what you can, what can happen, you, you end of almost in the storytelling mode. And, you know, story is so powerful. Story is, is an amazing, is amazing kind of tool for unconscious learning, if you like, because so often as educators, aren't we, aren't we forcing conscious learning? Aren't we kind of saying, I've got these three facts and I want to give them to you and I want you to write them down and learn them. And nobody ever learns anything that way, do they, I mean, it’s kind of like. But if we tell those, if we put those three facts in a story, we remember the story because it's rich and there's this tapestry and all the rest of it, and we, we kind of, it's sparking our imagination and the facts are woven in. So we get the learning by default. Okay. Elizabeth's got something on, something on that, that, that struck a chord.

**Elizabeth:** I did straight away, I was thinking, you know, it, it's because we get those links to prior learning. We get the links to what is really relevant and authentic. So when you're mentioning about really building that learning into the narrative, we're really hitting some of those UDL components, that authentic and relevant learning in a way that's engaging and making those links and connections, making those really explicit.

**Joe:** And I mean, language and symbols, you know, because, I mean, you're talking in the language that perhaps the learner already understands or wants to understand, you know, and I mean, if you want to learn French, my son Danny is starting to learn French now. Now I lost a lot of my French a long time ago, but it's amazing how fast it starts to come back when you start to hear the words again and you start to help with the homework and all the rest of it. So, you know, I showed Danny the other day, I said, you do know you can ask ChatGPT to talk to you in French, don't you? And he was absolutely amazed, it hadn't even occurred to him yet. So you know, I said, I said, right, so you've got your, you've got your 10 words for French homework and stuff. Yeah, you know, ask ChatGPT how to pronounce them properly. And he was saying, you know, how do you pronounce fenetra? You know, and yeah, and ChatGPT was fenestra (French accent), you know, and my French accent is miserable. But you know, I don't know whether the ChatGPT one is good or not, but it brings it to life in a way perhaps that, you know, we can't maybe because we haven't got those capabilities. And then sustaining effort and persistence, you know, I mean, you know, Danny, Danny has problems with attention span. So do I. I get bored very easily, you know, so does he. But if we make it more interesting, if we make it richer, if we connect in different ways, if we use multiple means of representation, if we present the information in different ways so people can engage with it in different ways, whether that's written, whether that's aural, whether that's visual or a combination of all three, I mean that helps the sustaining of effort and persistence because all of a sudden half an hour's gone by and you didn't realize, you know, that you've been studying for half an hour. What do you think about all this, Darren?

**Darren:** I'm a big fan of self discovery and I think that's something that the tools are starting to do well. You know, we went from, as you said, that almost search engine, here's the answer you're after kind of thing into here it is in some dialogue. What's the question? What have you got? Even though it's prompting some follow up questions, you know, and there's nothing better, speaking of old men with beards, but going way back in my days doing some audio engineering and this notion of why, why do I like this song but nobody else does. A teacher that we had at the time was telling us, you know, you can't push your discovery onto somebody else. What you like about it? Everyone has to come out from their own thing. And it's no different people going, that movie's brilliant, you've got to go and see it. You never have the same takeaway that they do from it because it’s already been implied that this is brilliant, and everything else. So it's almost like a little bit of resistance for I'm not one of the sheep and I'm not going to. You know, all of those things happen. But when you go and see something yourself or you discover it yourself, you're making all these different connections to get to that point. So it embeds it in a richer form. Which is part of that conversation that you're talking about, Joe, you know, when you come up with something from listening to others or from reading stuff from others and you get your own ideas from that.

**Joe:** Yeah. Little tip for the educators in the audience. And I mean, this is something that I tend to do at the end of most of my online sessions. You know, maybe if it's a, if it's a, you know, a half day or whatever, at the end of the half, the last quarter of an hour, I'll stop and I'll say, right, let's just go around the room. Yeah. What's your key takeaway from this session? And there's 10 or 12 people in the, in the Zoom room or whatever. Yeah. And we go around the room, and almost always everybody's got a different takeaway. Everybody's got a different kind of light bulb moment. Yeah. Which is exactly what you're saying, isn't it, Darren? You know, we've gone through the same experience, we've had the same conversation, we've looked at the same material or whatever, but we all bring our own history, we all bring our own bias, we all bring our own interests and agendas to whatever it is that we're experiencing and learning about. So we make different connections and different things kind of spark us up.

**Darren:** And we're all. We're all at that different point on that learning curve as well. And quite often that's forgotten about from the education and that threshold concepts. I don't know how I know this, I just do now. I got there somehow, but it's just embedded now. It's core knowledge that I have, and everybody else will get to that moment when it makes sense to them where these three other things converge. And you (gasp), that's why this is what this is. And I've seen that with some of these AI tools, with some students playing with it, and they're like, it can do this, can do this. And suddenly it's like I'm at the power I now have to, you know, review my own work. And we've been over this in some of the previous episodes to ask some questions to get it to quiz my understanding, and not sure if I've relayed this story before, but, you know, a student that was saying, oh, they were surprised about how often they were reinforcing what they already knew. And having this ask them questions which were beyond their scope was actually quite surprising. They went, oh, I wouldn't have thought of asking that, that's a really good question. And that's probably why I only ever get about 60% of my exams, because I studied the stuff I already know and I reinforce what I already know. I'm not asking myself outside of that box. So there's this dawning moment of this tool's asking me something different than I would.

The practical applications, I think for some of this technology, in particular for students to start using, particularly students with a disability, is giving them the ability to play with some of these tools that they couldn't do previously or they wouldn't have had access to easily.

**Joe:** And that word play is so important. I did a class recently and we were looking at a particular point and then what I did was I split them into groups and I said, okay, I want you all to be the manager of a different department in the company. So with this group, you're the HR manager. Yeah. And this group's the engineering manager, and this group's the finance manager and whatever. Now go off and kind of think about this problem. But wearing your hat as the finance. It's like de Bono six thinking hats, the same kind of, you know, thing, isn't it? But come at this from different angles and then, you know, use, use the GPTs if you like, go and have a play there, go and have just a discussion in your groups or whatever, but come back and present your thoughts as the department head. And then we came back and we had a kind of a company meeting, if you like. And it was amazing the different takes that people were bringing to this because now they were the finance manager, you know, and they were, they were worried about the money or the, the PR guy was not worried about the money, he was worried about kind of what the perception would be of this new product on the market and all the rest of it. Absolutely wonderful, from, from an expression and communication point of view, from an interaction point of view, from the, I mean, top left hand corner of those, those CAST guidelines. Welcoming, welcoming interests and identities and allowing students to explore different identities. This is one of the things the AIs do really, really well as well at the moment. Yeah. What do you think, Elizabeth?

**Elizabeth:** I think that's a really, a really interesting point to think about, all the different capabilities and that it is really in how we use AI, how we actually use it as a partner in that learning experience. And, what I'd love to know. Thinking about that, I'd love to know for students, but also for educators, really focusing in on that, that area of strategy development, being really strategic, being really goal oriented. What would you suggest for educators? How would you go about this? Or how would you support students to go about this? To use AI as a study buddy? What would you suggest?

**Joe:** Actively play in the classroom. Yeah. So have kind of supervised sessions where you. You do stuff like this. You set. Set groups up or individuals up and say, you know, ask the. Ask the AI to be something. Yeah. You know, ask the AI to be Louis XIV or, you know, whoever it is that you want to talk to or whatever. Yeah. And it's incredible that all of a sudden you've got this Persona that is now interacting with you and you can ask and you're getting completely different information back because it's framed and it's couched in, you know, whatever the subject is that you've taught. And it can be magic. It really can. And it can also, when it's not magic, it's really interesting to hear the students then say, it wasn't very convincing, this didn't work very well, you know, or, oh, this was amazing, you know, it was. It was like I was talking to a real person and stuff like that. Darren, you go, yeah.

**Darren: Look,** and getting students, you know, particularly in group work, you know, and using some of these tools which people think they're very much individual tools, they can well be used in group work. But for individuals to bring out their own strengths, you know, within the UDL framework that's there, and this team has, you know, their challenge, part of that, this person, one person's role is bring out the cultural aspects that they can identify with and what they can bring to the table. There might be neurodiverse student that say, well, you're the new ideas person. You need to come up with some new ideas that we're marketing or whatever it might be with this. This other person is very much the leadership role and Persona and everything else, you're the one that's going to do this. Then there's a marketer that sits or whatever it might be. They're all off doing their own things, but then they still all come back together to do the group work thing. So they've all explored in their safe space with some of these tools, gotten some ideas to generate around that. But then it's still a combination of multiple people putting that together. And again, that's that, that dialogue, that conversation, that storytelling that comes through that group work from individuals, you know, the sum is greater than it’s parts. For some students that haven't had access to these things, I've seen that be a real game changer where they can participate in a conversation or a conversation with the bot that's a safe space to go and chat. And they've been very honest to say, I have X condition. I'm really struggling with this. And it can start breaking it down, have you thought of this thing? I've tried. That doesn't work for me. Don't give up. And there's other things look at. There's other methods, like I want some feedback on my essay. I want some presentation I'm doing. Can you give me some feedback on this? Which would have relied on human intervention in the past quite often, not saying it should replace it by any means, and that's something we'll get to, but it's a space for people to play with, a safe space as well, to ask some of those questions to, am I even asking the right questions? Am I going down the right path? And those kind of things where again, that framing that needs to be there, that, you know, the parameters you put around it, showing them how we want you to play in this space as well. You know that it's not just giving it to you, if you're just giving the answers, you're not learning anything from this. I've had that same conversation with students you can put in your lecture from last week, you can get it to summarize and do all of those things, but if you haven't listened to the lecture, the summary is not enough on its own. If you're just expecting, you know, give me a couple of dot points and I know everything that was discussed last week and I haven't done any of the readings or any of those things, you're doing yourself a great disservice. You know, the tool's there to assist you with this. You can prompt you, it can get things and speed up that whole process for you.

**Elizabeth:** So, yeah, I think that's a really great point that you're bringing it back to that learner agency, really supporting students to know how to use these tools. So, you know, go through that process of engaging with that lecture. When did you know AI can actually summarize it and then you can have that summary as a prompt for when you go to the next lecture, to remind you what was covered last time. Or, you know, maybe you've got really complex material and you're wondering if your study notes actually have captured that material. Perhaps you could get AI to create study notes as well and compare the difference between the two and see if you've got gaps. You know, really supporting our learners to know how to use this technology best, because, no, some learners can really go down those rabbit holes and maybe not know the most effective way to use it. So, you know, as Joe was mentioning before, how can we showcase this in our classes? How can we show the most effective or strategic ways to use this so that we can really support students to maximize the benefits of it?

**Joe:** And it's all students. Yeah, I mean, you know, you might be sitting here listening to this and thinking about school students or university students or whatever. I'm running a course at the moment for the Royal Photographic Society on photography, on different kind of types of photography, and specifically post processing in this tool called Lightroom. And we record the session, and at the end of the recording Zoom gives me an AI summary. So I also save the transcript. So what I do before a session is I use AI and I create a kind of 10 to 15 page, normally kind of just summary overview of what we're going to cover in the session. So I have this document with this in that's taken me maybe an hour to produce, because I know Lightroom really well, so I can ask Claude or Perplexity or whatever, you know, summarize the functions in this particular part of Lightroom for me, and it'll write down what I know, but it'll do it really quick. And then I can take the bits out that it gets wrong and all the rest of it. So I can generate something like that, and then I can tag on the end of it when we've done our session, what we actually talked about, and we get that, the transcript and the AI summary. And I asked them the other day, we're two or three sessions in now, and I said, is anybody actually reading this? This handout? You know, is it any use? Like, the chorus around the room was absolutely. You know, everybody said, oh, yeah, it's really good. Yeah, it's really good. You know, it's great to listen when you do the thing live, but it's really good to have that ability to read it afterwards. Yeah. And it's a different way of taking the information in. And I was amazed because I was thinking, like, am I doing all this work for nothing? You know, is it kind of like, and it's not a huge amount of work, but it's another, it's another hour or so's work, say on top of the two hours of the presentation.

So I think as educators we sometimes think we're setting ourselves up for a lot of extra work by trying to engage with multiple means of, you know, representing the material that we're doing. But the tools that we have available to us now allow us to do that, and then that leads to greater student agency because now they can watch the video, they can listen to the audio recording, or now they can read the transcript or the summary of the transcript. And these things all give people agency, don't they, Darren?

**Darren:** Yeah, particularly that, you know, the summarizing, the, you know, a very quick summary that signposting that we can add in to assist students that have, you know, been busy the whole week. You know, your lecture was the Monday, the week before, they've had three other classes. They've got life, they've got kids, they've got work, all those other things coming between. And here's a quick little two minute summary of what we did last week. Just, that's right, now I'm back on track to where we are, rather than spending the first 20 minutes in your next class going, hang on, how does this relate to what did we do last? You know, all of those things, and hang on, now I'm getting confused between my subjects and other things that have happened, et cetera. So, you know, it's giving that little look, at least we're starting from the same place. We may not have all had a chance to catch up on everything from last week, and one thing I found really surprising with a couple of the tools you can ask it, give me enough text for 90 seconds worth of spoken dialogue and it will give you just enough that you convert that into some of the video tools or audio tools and it's 90 seconds worth at a standard normal speed.

So it can do some of these things I've been really surprised about in the background by exploring and experimenting. How far can you actually go in getting the outputs you're after? And they're the questions I get from students as well, where they're asking, can it do this? Can it do this? And the first response from me now is, ask it, don't ask me, ask it. And often it's a few more minutes down the track where it's, I'll just leave you two alone, shall I? Leave you in the bot alone and off you go and explore, get back to me if you've some further questions, once they're in that space and they're aware that it's a safe space to play and they're not going to break anything, et cetera. But again, that note of caution, be careful about what it's giving you. It may hallucinate, it may be doing that. But more and more the tools, and you can probably speak to this, Joe, with developments and things, the tools are getting really good at refining it to the sources you give it. And some of those we can say do it from these sources, not trail the Internet and you know, all the blogs and everything else. I want it based on these documents. So these learning materials for this subject, or my notes from last week and along with the slides and all of those things.

**Joe:** Yeah, I mean, I must admit my go to search tool now is Perplexity as opposed to ChatGPT, because ChatGPT isn't good at giving you sources. You know, it's leading edge in a lot of things, but that's not one of the things it's good at. Perplexity just gives you good sources. And if you've used Perplexity, just underneath where you type in your prompts, there's a little button called Focus. And if you click on that, you can change the focus and change the sources that it uses, and one of the focuses is academic sources, for instance. And then it goes off and it uses. I can't remember one of the academic search engines, I can't remember quite which one it was. But basically, all the sources that it references are now, you know, academic, peer reviewed sources, which is, which is absolutely wonderful. Another tool that came out of Stanford University and they've got lots of kind of interesting stuff going on. Yeah. And it's called Storm. Okay. So we'll put a link in the show notes to it. I'm actually, as we speak, posting it in the chat so Darren can grab it. Yeah, there we are, Darren. So he'll put that in the show notes. But what this does, it kind of will create an article for you. And it's amazing because as it creates the article, you can see it finding the sources and it's using good sources and then it lists them all, you know, at the end as well. So you've got a full reference list and all the rest of it. So Storm is. Storm is a useful one. And then Claude is also pretty good for this, for giving you sources and stuff. And I think we need to train our students to, you know, not just accept what they see straight away, but then to check the sources and to evaluate the sources. You know, I mean, I always say at master's level, you know, with my master's level students, I do not want to see Wikipedia in your reference list. Now, Wikipedia is fantastic as a general resource, but, you know, to some extent anybody can write anything in there. So, it's not really kind of something from an academic perspective that's really very solid. But very often I will jump to a Wikipedia page and it'll get me started and it'll say, the people who, you know, wrote about this first were X and Y and Z. And now I'll go and search in Google Scholar or in Consensus or Illicit or whatever for those authors and find the stuff that they've written me about. But Google's a fantastic jumping off point because somebody's bothered to write a little article as a primer on it.

So being able to evaluate your sources and taking students through that process as well. You know, I do a session on AI for research and it's showing students how to go from nothing to, you know, simple referencing to then deep digging in deeper and, you know, website citation webs and things using research rabbit and, you know, tools like this. So again, it's all this thing about learner agency, about equipping our learners with the skill sets and showing them that there are tools that can aid them in doing this. And I mean, Elizabeth, you're in the middle of your PhD, I mean, has this changed your study over the last two years? Are you referencing, are you researching, are you studying in a different way than you were when you started your studies? Or, or are you trying to just stay away from all this horrible AI stuff and, you know, kind of like.

**Elizabeth:** This is probably going to be a disappointing no. The way I've developed my research skills, my learning skills so far, I definitely grew up in a world where AI wasn't a part of me developing those skills. So I feel like I've developed my own learner agency and I know what works for me. Currently that doesn't involve AI in the research process. But what I am hearing about and what I am seeing is more conversation around where AI might be used in research. I'm starting to see boxes pop up around how to use AI to, you know, get you prompted in writing, and so I'm listening to those and I'm thinking about those. I haven't actually used them in my research yet. But I think that's also where it comes down to learner agency, even for ourselves. You know, if we haven't used them in particular ways, then how do you even know how to go about it or where it would be relevant? You know, I've definitely looked at it in that teaching and learning capacity, but yeah, yet to explore it or think about it deeply in that research capacity. But it's a great question. So for anyone out there who hasn't actually played with AI in a particular aspect. Yeah, there are many of us who have explored it in some aspects and not others. So you're amongst friends.

**Darren:** Look, I think that's an important thing to note. You know, the tools aren't for everybody and everybody will use them in different ways. And that's what I think is transformational around some of this. It's not one size fits all and not everybody will get the same response. You won't get the same response even if the same prompt in twice, it'll be some variation of. But the way some of these technologies are being added to existing technologies, it's not just all new technologies either, we're seeing it get built into learning management systems, we're seeing it built into the back end of marking, all of those things, you know, and they're being looked at and studied quite carefully by institutions. Anything that can save some time, save some money, that's there, or take some of that impost off academic workload is a great thing. But is it accurate? Is it, you know, again, is it that authentic even, what feedback is it going to give somebody? Is it going to get genuine feedback or just a generated response to something?

I've seen certainly the emergence in the last 12 months into standard tools or some of the assistive technologies that are out there to support students with disability, in particular some of those which are for note taking or for memory retention and other study aids, et cetera, especially with text to speech or speech to text. The improvements that AI has added into there and the way they've added on, like even some of the note taking tools, like Glean, for instance, which is a very popular and common note taking tool that gives a transcript at the end of the lecture along with the notes that you've made and bits that you've highlighted that are there. But then you can, and it's now got functions in there that can summarize that transcript and ask you some quiz questions. So they've capitalized on, you know, what some of this technology can add that students wouldn't have had that ability before to necessarily go and do that. So, you know, we're seeing new technologies emerge, but we're seeing bits pulled out of those and added to tools which are really useful, just enhancing their ability to get students to engage in different ways. So more agency.

**Joe:** And you were, you were talking earlier on Darren about Google released a new tool, tell us about that which is.

**Darren:** Which is in Google Notebook LM. So it's the experimental feature you can put your sources in, it's a note taking kind of app and get some ideas. It uses some AI to generate some questions out of that for you to add study notes, for you to break things down but against the sources that you add. Now the new feature that they've introduced into this experimental version is their audio overview. So what that does, it takes those sources and turns it into a conversation between two virtual hosts that sit there and have a talk about the notes that are there. And look, it's not a subjective look. It doesn't dive in. It makes it very positive and reflective that this is good and what's great about this and have you thought about this? And so you know, these two hosts have this conversation and it's very real like in terms of, you know, human speech that's there. It's like listening to, you know, American other audience, I suppose the NPR, you know, national, you know, public radio, it's like Australia Radio National. It's that type of tone that's there. It's very safe space but it gets you thinking in a different way. You know, I was talking with a student about putting their essay in and getting it to do an audio overview of it and it talks about their essay differently than what they're thinking about it and the content they've got, or trying that for like your three minute thesis, you know, to throw that in and see what it's going to give back about your thesis that you go, I hadn't thought about presenting it that way. That's a really good idea of how somebody else is looking at this or analyzing critically in my work. Elizabeth.

**Elizabeth:** Elizabeth, I was thinking, I know that we've, we could probably talk about this for many, many hours, but if someone wanted just an overview of what is actually possible in terms of AI study buddies, I wonder if between the three of us we could throw together just a really quick list. So for me I can think about if I was a student and I had a set of notes I could go to AI and I could get it to create me some questions based on those notes. And I've seen some really great examples from Darren around, you know, do I want them to be close ended questions? Do I want them to be open ended questions. Being able to adjust those prompts or you know, as Darren's just mentioned, with this new technology, maybe turning those study notes into a mini podcast and being able to listen to those notes in a new way and kind of reabsorb what you've created. So I'd love to throw over to the two of you. If you had to just generate a quick list of how AI can be a study buddy, what would you say?

**Darren:** Look, I'm a big fan of going with the free stuff, so I get students to go back to ChatGPT or even Copilot. That digital divide is very real. A lot of the tools I played with previously have disappeared off the scene or they've been subsumed into another tool that they've been bought out and now they're behind a paywall. When I showcase things, I only use the free side of it, and quite often, even with ChatGPT go ‘well, there's my limit till next 18 hours’. You know, with X, sorry, I've done my six functions that I can do and I don't have ability to even add files anymore. But I think that's crucial in demonstrating some of these tools as well, that we don't just expect it there, it's on tap and that our students are going to have access to these tools as well.

So my go to is probably just the open free ones. But certainly in terms of some of the assistive technologies, you know, there's I recommend to students where those have been certainly integrated. Look at another favorite in terms of text to speech, Natural Reader, which has been around for a long time, but they've got AI plus voices, they've now called it in there, and they're very human sounding voices for reading out dialogue in a lot of different languages and a lot of different dialects. And having, you know, an American paper read out in an American voice certainly can have a different impact. Having a British paper read out in a British sounding voice, having, you know, those kind of things make things a little bit more authentic in terms of the listening, and we know hearing something versus reading it can give you a different thing. So it's a little bit more conversational even though it's still one way somebody's reading something out. But the voices have come along in leaps and bounds and into some of the technologies and some of those capitalizing on that are making the most out of it at the moment as well.

**Joe:** It's been interesting over the last year or so. I mean, you know, I have my toolbar at the top of my browser and the tools that I use all the time are in that and you know, I'm always changing that list, you know, as I get tools and I'm just looking now at my browser. So the first one is Perplexity and I've actually gone in and made Perplexity my default search engine now. So I've actually gone into the settings of, you know, my browser and changed it now, so Perplexity is at the center now of most of my interactions with the web and with AI and stuff. Next is Claude and then I've got ChatGPT, Copilot and Gemini. And I mean I suppose the other big one that I use all the time now is Notion. So I use Notion as my kind of collection point because I can, it's got AI built in and it's back ended I believe into Claude. It's a really, really easy way of structuring and then publishing material, and you know, I'm finding that using, using that as the, as the place where I put everything and I can update it on the fly and then if that's published as a web page, the web page is updated on the fly. So a lot of my course sessions now are almost kind of co created learning sessions where we're building our learning material in real time, you know, and students are giving me information in the chat or whatever. I haven't yet gone to the point because I'm not sure whether I can do it without paying extra of kind of just sharing the, the source document and making it almost like a common collaborative document. I get people to put stuff in the chat and then if it's appropriate I'll pull it into Notion. But I mean I suppose that would be a step even better, wouldn't it? And you could do that very easily with a Google Doc or something like that. So I think that collaboration fosters user agency. It encourages different modes of kind of communication and expression. It's certainly helping interaction and it's a welcoming, you know, if we're trying to welcome identities and stuff like that, again it's saying to everybody I'm not the sage on the stage here. I'm not the one with all the answers you contribute. And, and you know, and when I do take something in and I put it in that student kind of feels kind of what, you know, kind of that's in the class notes now kind of thing, you know, and I got that and, and I mean that's great, isn't it? Because now you're, you're making people feel good as well.

**Darren:** Yeah, it's like I've, I've been heard, I'm acknowledged. There's a sense of belonging that comes from that as well. Look, I also want to just touch on and I know we're getting very short of time here because we get excited about these topics. The notion that some of these tools are really simple and there's really simple variants of them as well that are out there. There's a lot of browser plugins, you know, and Chrome extensions and those kind of things that just do one task and some of those that always point some students to are ones that just summarize. That's all they do, they can quickly give a summary of a web page that's there give you a quick overview in one paragraph, two paragraphs. It can just quickly change it into plain English for you or it's how long will this take me to read? It says this will take you 5 minutes to read through this. Okay, I've got that time versus how long am I going to be on this page and how long am I scrolling? So gives people a little bit of where am I at? How much time have I got to do things? So look, the tools come in many shape and forms. Again like I encourage everybody to do, you know, play with these tools. There's not just one tool, there's multiple ones. You'll end up with your own AI/study toolkit. And the same thing with academics. Not everybody's going to use the same tools in the same way. Play to your strengths, work out what works with your students, come up with solutions that work for that and ask questions. Don't assume the biggest problem we have is assuming everybody's on the same page when we're certainly not.

**Joe:** Yeah, I can see a new newsletter on my kind of toolbar, the apps on my toolbar. But I mean, yeah, I mean my shortcuts, you know the add ins to your browser as you were just saying there Zotero saved to Zotero. Yeah, straight in. So a citation open source citation manager which is brilliant, Scribe, Notion, Perplexity and then a summarizer, Echoes is one that I use quite a lot and then Brisk I've also got installed so they're the ones sitting on the left hand end of my toolbar at the moment.

**Darren:** Not everybody will have access as we're saying to all these tools, et cetera. So equity is really important. And I know there was a report came out recently Elizabeth, I don't know whether you want to expand on that, that really highlights why this is an important thing to think about.

**Elizabeth:** Yeah, it's a really great point. There was a report that came out really recently from UNESCO from their Global Education Monitoring project. And something they noted was that when we had remote learning happening during the height of that COVID pandemic, half a billion students couldn't be reached by that online learning. So, if we think about how much that access may have changed today, we can really think that there's still going to be a very, very large amount of students who won't have access to the technology required to access AI in those home environments. And so if we do want our students to be prepared for the future workforce or even using these tools in future, then what we do in our schools and institutions, how we set up those learning experiences, may become really important for many students. That may be the only experience or the only access they have to that software. And so I think if we think about accessibility and we think about inclusion, we think about what we need to do to really support students to reach their capabilities in these skills, then how do we make that as equitable as possible? Something to ponder, and as Darren and Joe often mention, you know, really encourage the use of those free and open tools. Find ways to do that. Have those conversations around ethics and security and keeping your own information safe, how to play safely and really support our students to do this in the best way possible. Really support their agency in using those tools.

**Darren:** Exactly. And look, and even asking students, what are you using? And Joe brings that up all the time. What have you used? What are you using? And I ask students the same thing and I'm constantly surprised because there's so many things out there. You know, having that time, as Jo said, that Alice in Wonderland moment, where you can go and play with these tools is rare and far between. So finding out what other people are using and how they're using it could be really beneficial as well.

But look, before we wrap up for this episode, because we are going way over time, I just wanted to give a shout out to everybody that has reached out and contacted us, us, and thank you for your kind words and positive messages. We really do appreciate it. But I also wanted to put a big shout out to Emma all the way over in New Zealand, who sent through a series of AI generated pictures of curb cuts, which was in response to a call that we had in episode five for listeners to generate their own curb cut images. Let's just say they weren't accurate, but these images will add to the episode 5 information. For future reference you can go to the website, have a look at those. It's great to know that listeners are exploring these new and emerging tools just like we are and sharing your experiences, we do appreciate it.

And as always we encourage you to go and play for yourself and you can find links to the tools and the text prompts and even some of the toolbar things that we've spoken about today in the episode notes on the ADCET website at [www.adset.edu.au/ilotathings](http://www.adset.edu.au/ilotathings) or you can get in touch with us via email at [feedback@ilotathings.com](mailto:feedback@ilotathings.com).

**Elizabeth: O**kay, well that's our time for this episode, so I hope we've given you an insight into how AI can help you deliver your learning and resources in multiple ways, giving that flexibility and agency to your students. So thank you all so much for listening, we really hope you can join us again next episode as we continue to explore ILOTA things and please do reach out we'd how you're using these tools, how students are using them because we really love to engage with that. So till then, take care and keep on learning.

**Darren: Bye.**

**Joe:** Bye for now.

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