

Speaker: Damien Maguire

So my name is Damian Maguire and I am Associate Dean for External Engagement for the Faculty of Education and Social Sciences at Liverpool Hope University. And honestly, that's not a joke. That's actually the job title that I have to remember every time I introduce myself.

My day job is to come out and speak to people about the university and the work that we do in Liverpool Hope. And hopefully everybody in the room will know of our reputation. But additional to that, I train teachers as well. So I work in the Faculty of Education and train teachers. And since September last year, I have personally trained 500 teachers in how to ethically, responsibly and human centered use artificial intelligence to challenge their workloads with my own goal of challenging retention that we have in teaching. And our first speaker this afternoon when I was here mentioned about how long their own personal digital journey has been.

My personal digital journey, I told some people who are now at university as freshers who were born in 2007, for anybody. Oh, yeah, absolutely. And that I remember the first conversation that somebody had with me when they said, have you heard about the Internet? So that is the journey that the last 25 years or so have taken me on. And I am seeing AI as the next iteration of that with all of the positives and with all of the negatives.

So I was a primary school teacher for 10 years where I got to enjoy teaching and leading computing across my own school, but also advising other schools on curriculum. And also development of hardware where they should be investing, etc, etc. And the first time that I sat down and I used ChatGPT, I said to my wife at the kitchen table, everybody's going to think this is a technological problem, but it's actually an opinions and attitudes problem. Because we're going to have challenges with this technology that people are going to have cognitive dissonance around and meaning that we know we should be doing something about it, but we don't quite know what to do.

So over the last two years, I have been undertaking a master's action research project where I've been going external to the university and working with key organisations around the region to offer our help, expertise and support in this particular area. On not what we should be doing, but how we actually do it. So we'll be looking today at our planning policy development and the current landscape, which Gavin has so accurately already pointed out.

The first thing that I wanted to do was I wanted to know more. We're very lucky in the university and that we have got a computing science department. So I went to the computing, the science department and I was quickly informed that Professor David Reid is our global expert in AI. So I went to David and said, can we be friends, please? Thankfully, he said yes. And we have worked really, really closely in lockstep over the last two years. David's been researching in AI for 30 years and has and has researched through the previous two winter's that we have experienced. I have hung on to the coattails, as

everybody else has done, and been effectively on a two year one to one apprenticeship with David in artificial intelligence.

But I'm really interested in how we benefit education with this, because as I often tell my students, I don't believe I was put on this planet to necessarily lecture on AI or have a master's in AI or even be an associate dean. But because somebody sat me down in front of a computer when I was probably 12 and said, have a go, then one step after the next, after the next, after the next, led to this. So I went out to the organisations as a teacher that I knew would be looking for our assistance and that would get us into as many schools as possible.

So we launched a strategic partnership on AI education with School Improvement Liverpool, and that partnership is currently live and we are running a number of events that I will tell you more about. It's specifically aimed initially at school leadership and then moving to helping you develop your schools through the path of least resistance based upon the research that is out there and in with regards this.

So this is where I'm currently at the moment. I'm just finishing the last references of my dissertation and we have a problem in relation to AI. We have lots of AI in education literature. We have lots of change management literature. We have lots of digital development literature. We do not have the literature on AI in organisations yet. The main challenge that we've got is the pace at which AI is changing whilst we are trying to upskill our staff while we're working with them.

Our current collaborators include Sefton Council. Liverpool, obviously, we're driving the change there. Liverpool City Region, we've been working with their executive team for the last two years. School Improvement Liverpool, Wirral Met College. My particular one that I'm proud of is Alder Hey and supporting their excellent work that they do for our region and Knowsley Council as well, where we come in and we advise those organisations on the path of least resistance of interacting with and training their staff on usage cases for artificial intelligence.

What's happening out there at the moment? We initially seen these technologies boom and then we didn't know whether there was what was going to happen next. I can assure you that I support what Gavin said. It's not going away. Nvidia, the company who owns effectively the architecture of which this technology is built on, is the first company globally to have a market share of four trillion dollars. The first ever. The other three top companies are all worth three trillion and they are Google or Alphabet who own Google, Microsoft and Apple. They have spent hundreds of billions on this technology and now they want a return of investment. What that means for us, my four year old through to my mom, who I'm not going to tell her age because there's cameras on me and she may find out. I said that they want to return on this investment. So in effect, they are going to try and build the society that they want, which means this technology will already start to see it move from where you had to go and work with the technology and find it to it now becoming integrated in all of your devices and Copilot, etc, etc. So it's key that we know the positives, the negatives, the

strengths, the weaknesses and the realities of this technology so that we can inform the young people that we are working with.

The prime minister is out there banging the drum. It was amazing to see Keir Starmer announce in the media that you could use a to support planning for that's amazing care. You're only 24 months to leave with that technology. So any educators in the room, we are running about 18 months to two years behind where the technology is in terms of the advice that we're getting from these these organisations. So that's the gap that we're trying to support.

Teachers can use AI to save time, reports are telling us it's anything from 40 to 60%. Certainly the case, my first lesson that I ever planned when completing the PGCE took me hours and hours and hours. I can now get those students that I'm working with to plan a lesson in four minutes. Is it any good or not, though? Do they know if it's any good or not?

Can I just get you, Jennifer, just very quickly? Could you just open up? We can write your bank details into it for me, please.

No. Yeah, good answer. OK, we know not to do that.

We know not to do that because we've been taught about it. We've been educated. We know the risks that are involved. The problems are that we don't know. And we are seeing a lot of organisations who don't know that in relation to artificial intelligence.

When DeepSeek R1 launched, everybody got very, very excited about the model, especially when it crashed the US tech economy. Great, great news. US Navy almost immediately contacted every single one of their members of staff and said, under no circumstances, should you use DeepSeek R1? Why did they do that? Because there are geopolitical significances for where our data is going. And when that data goes to those places, we cannot get it back. The people who have written the algorithms and the codes to run these machines cannot go in and get your specific data back in relation to those. So we need to train as many people as we possibly can and inform as many people as we possibly can to not write their details into that book if they are uncertain about it.

In relation to education for the people who are education leaders in the room, if you think your employees are not using artificial intelligence to get some of their work done, I can assure you that some of them are. That is definitely happening.

Are they informed about what they should be using the technology for or not use the technology for?

There is a huge amount of funding coming in now to education in relation to this particular technology. And we're also finding that people want to use this technology, but they are also feeling overwhelmed about the technology. They're not quite sure they're looking for support with regards to that. Any educators again in the room, we know if you are not

actively setting the context within your room, somebody else is setting the context in your room. And that's the case in relation to artificial intelligence.

So our next event coming up with School Improvement Liverpool is our AI in Education Conference. It's our second conference that we're running and aimed predominantly at head teachers, school leadership, educational establishment leadership and also digital champions within particular organizations. If anybody would like to. I'll hang around at the end of this talk. If anybody would like to learn a little bit more about that, and that is promoted and run through School Improvement Liverpool, where we look very closely at the government guidance and what we are recommending in terms of horizon scanning for these particular types of technology.

Our conference looks at policy and strategy planning workshops. So when you leave that day, you will have a framework of how to move AI forward in your organization, including the best way research informed to work with your staff and your staff teams and your current management structures to allow you to do that. And we look, as I said, at the latest AI guidance from the Department for Education and that leading literature and practical application workshops where we give you the tools and show you how to use those tools safely, specifically to whether you are using Google or whether you're using Microsoft products or different products. And very importantly, as well for both David and myself, is that we'll advise you were not to spend money just at this moment in time because you could spend money and very, very quickly it will be free.

And as an ex computing lead who had to run into those contracts where why are we still doing this? Because somebody signed a contract five years ago and we're still doing this. So we have to be really careful of spending our money wisely in this particular area and advising and on horizon scanning.

There's any questions at all. I'm more than happy to take take a few questions if anybody would would do that.

Hello. How are you?

Audience member 1:

Hi, I have a question about AI and marking. We've got a system and we use an AI marking system We put the piece of work in and it works but I have heard of this piece of work wouldn't be yours. So if I put my Intellectual property into AI Surely no one would need permission to reuse it is taking everybody intellectual property. So I have stopped using this and gone back to manual marking instead.

But it kind of made me question actually, if we are gonna do this, there is a lot of ethical questions we need to start answering could be starting with put put people intellectual property putting into AI.

Damien Maguire:

These machines have effectively scraped the internet, so they understand the internet, but the challenges are that that is very biased information. So what you've got is a machine that could be marking somebody down because it thinks that a different version of their answer is better. And these biases are inbuilt within these machines. So that is something in terms of marking, it's not there.

For example, if you've got students with English as an additional language, those machines will not do well with marking and will give those students lesser marks. Personally, it's a slightly bigger challenge if we're going a little bit larger.

I've been walking around the university for two years whispering and the essay is dead as a form of assessment. So if we're still looking at essays as the only way to assess, we've got a challenge because we can't, you know, there have always been people out there who would write an essay for you, do your homework for you or anything like that. But it's a very easy sell to say to somebody in education, I can get something to write your essay three and a half thousand words and it'll do it in 10 seconds. It's a very hard sell to tell them what the benefits are of learning how to do that yourself. That's a fundamental challenge for us in relation to artificial intelligence.

I would say personally the technology is not there yet to use it for marking, but it is really good at co-intelligence or as we refer to as augmented intelligence, where you are using it at the same time as you. And if I've got time for one example, if that's okay. So in our university, we recently reset to modular teaching systems and I went into a meeting, there was four professors of education in the meeting. We had to come up with some ideas for new modules and what would be the content within them. Two of the professors went to a different room and started working on this. We had a half an hour. I stayed in the room with the other two professors and we utilised artificial intelligence. We used different parts of our brains because we could prompt in the room that I was in. So we were prompting using the technology. The guys who went to the other room, the other two professors, they were creating from white pages. When they came back, they had a fifth of the work we had because we weren't creating, we were sorting and using the expertise within the room. So I'd strongly advise co-intelligence as a way. So for your planning, for helping people to writing and critically evaluating the outputs of these machines. And the very last point on critical evaluation.

For education, we do that really well. We show our learners how to critically evaluate. It's my own personal view that critical evaluation of these machines will be a currency in the future. It will be a very valuable currency in the future because we want to avoid computer says yes, computer says no.

Gavin Sherratt (previous speaker, contributing from the audience):

I have a point on the IP.

Damien Maguire:

Of course.

Gavin Sherratt:

So obviously your question was about the IP, the content.

Do you know what the user terms and conditions of the software you're using and where it goes?

Audience member 1: I have a person who has an app and she says, the manager said that it isn't shared. It stays within...

Gavin Sherratt: Yeah, because a lot of niche systems are closed large language models. Yeah, that's what she said. Well, you've got to look at what the vendors terms and conditions are. But again, you could summarise those by putting their terms and conditions into Gemini or ChatGPT and interrogate it and saying, is the work safe? What's going in there? Because we are going to get this thing of people going, you shouldn't be doing that.

Damien Maguire: I think just I think one of the big, big issues that we're seeing in terms of the organisations that we're working with is people coming in to sell you a product and saying, look at this incredible product.

Now, I could probably make a lot more money if I just designed a few different products and came in and said, look, here's products that are going to solve specific problems for you. But I don't have a hundred billion pounds, unfortunately, in the background to build one of these systems. So I'm effectively putting a wrapper or a skin on top of ChatGPT, for example.

And that's what's happening in education an awful lot at the moment, where I'm not going to mention call out specific companies, but they are coming in and saying, look at this phenomenal product that we've got. And if you use this, it will do this, this and this and this for you. But actually, it's just ChatGPT and what you're paying for is the pre-prompting.

Audience member 1:

... but she says that 'it doesn't feed in ChatGPT'

Damien Maguire:

It has to because it is using the network structure of ChatGPT.

Audience member 1:

I actually think that she is worried that I would stop using it completely and I thought, I'd rather use ChatGPT itself and know exactly what I am doing but only use it for certain things.

Damien Maguire:

Absolutely. So what I'd say, if people want to, thanks very much.

If people want to know, are there any more questions? Just go ahead.

Audience member 2:

(inaudible question about marking)

Damien Maguire:

We're moving towards a lot more of recorded videos of students. And we're moving to a model that I've designed for the university myself about where we can use artificial intelligence and where we can't. And at which point does it become your authentic work?

So last night, I asked Elicit AI to provide a systematic review of AI in education reports. And it came back, it took 12 minutes, which in computing, modern computing is a lifetime, but it came back with a review of 167 papers, academic papers, and produced an academic report, which was also referenced that if I was reading it from a postgraduate student, I'd be more than happy to be passing that. When I actually dived into the resources, some of them had zero citations, you know, I didn't have that weight. So that technology is not there at the moment.

But when we look at where ChatGPT was three years ago, and where this technology is likely to be in five years, we've got massive questions around those type of questions, which I don't want to commit to video.

But I'd love to see you at some of our events or just continue a conversation afterwards. Thank you very much. Thank you.