## Episode 6 - The Innovation Paradox: Al's Dual Role in Academic Integrity

# **Carly Culver**

So obviously, it's no secret the artificial intelligence and interest in artificial intelligence has exploded over the last couple of years. I did a quick Google Trends search on the train on the way here this morning. I think last month it accounted for something like 99% of all Google searches were related to AI, coupled with numerous news articles around how generative AI and other types of AI are being used in the academic sphere.

You know, stats like 53% of UK undergraduates using generative AI to contribute towards assessments (Adams, 2024) and things like that. Hence, today we've decided to base our episode of the VICTVS podcast around this topic, and specifically the paradox that this technology presents in assessments in education and the wider world. So, joining Ben and I today to explore this topic is Professor Dr Phillip Dawson.

Phill is the co-director for the Centre of Research in Assessment and Digital Learning (CRADLE) at Deakin University in Melbourne, Australia. So welcome, Phill, thank you so much for joining us today.

## Professor Phillip Dawson

Thank you so much for having me. It's very exciting.

#### **Carly Culver**

So, I'd love it if you could just start off by telling us a little bit more about yourself and kind of how you've come to focus on this area of research.

#### **Professor Phillip Dawson**

Okay. So, I'm an assessment researcher, first and foremost, which if you'd have told me that when I was a little kid, that I'd grow up to research assessment. That sounds incredibly boring, but it's very interesting. So for me, the number one problem is how can we be sure that the people that we graduate from universities are capable of what we say they are capable of?

Now, I also did my undergrad and honours and the start of a PhD in artificial intelligence, and it just so happens that these worlds are colliding now because I did a fair bit of work into cheating and online learning and assessment. And then, you know, in sort of early 2022, I was saying AI is coming. It's going to be able to do all of these things and it's going to be all anyone's going to talk about with respect to assessment, and then here we are.

## **Carly Culver**

So, people bandy around the term artificial intelligence, AI. when we're talking about this in the context of what you do, what are we actually talking about here?

## **Professor Phillip Dawson**

Okay, So I'm focused on yeah, most focused on a pretty narrow sort of problem, which is how can we be sure people have certain capabilities? So, AI in that context, I'm really interested in, you know, are people using AI in ways that make it difficult for us to make judgments about that?

So, it's sort of computer tools that can do a lot of stuff that traditionally people might have done. Yeah, there's a whole bunch of sort of narrower things like high level machine intelligence, which is something that can do the sorts of jobs that a professional previously might have done, you know, or sort of generalisable artificial intelligence that can kind of do everything, but I'm interested in all of this stuff.

## **Carly Culver**

Have you got any kind of specific examples of interesting things you've seen recently?

## Professor Phillip Dawson

Yeah. So, I mean, I think a lot of what we tend to see is the, you know, a student left the prompting or some gotcha sort of moment where they've been caught out because the teacher put something in that the AI might struggle to do or whatever.

That's kind of possibly less interesting. What I'm seeing a lot of at the moment is teachers setting tasks for students where they are to go out and use AI as part of the assessment. So, you know, use AI, get it to go and, you know, do an analysis of a building site plan or something like that and then critique the output of the AI. I'm a little concerned with possibly doing a little bit too much of that at the moment and where we're likely to end up with degrees that are full of get the AI to do it and then the person critiques it.

## **Carly Culver**

Yeah. So, I guess that kind of represents a whole different skill set that's needed for students. But it goes beyond, just like I said, critiquing the output of something that's there already that doesn't cover the whole extent of what a student needs to do. What else would you like to see beyond that?

## Professor Phillip Dawson

Yeah. So, I'd like to see students being able to do the things that are really necessary for their degrees. There's a whole set of things people need to be able to do automatically, so they need to have this sort of automaticity. If I go to the doctors. I don't want them to be like, "you've got a lump on your leg".

I really don't want that. I want to know the specific parts of myself. I don't want them to sort of have offloaded that all to AI. However, you know, whenever you go to the doctors, they're always sitting there typing some stuff in using various resources. There's a long history of them using it, and it's about figuring out what are the things people need to be able to do, and really do really quickly, and then what are the things we can offload to AI?

## **Ben Clayson**

Yeah, so I think that's an interesting point because I would expect that you know, see our example, doctors would tell you that's the years that they put in those hard graft and hard learning, you know, making mistakes and being corrected brutally by their colleagues. That is what gives them kind of years' worth of foundational knowledge, which, you know, from which they can then continue to develop a really, really deep understanding of obviously a really, really complex sort of subject, which is what you want. So they become experts. And so it strikes me that kind of this your first response to an awkward question is to go and get a bot answer, which may very well do so incorrectly as well. Then you're kind of accidentally undermining the foundation of knowledge that you really need to be sort of learning. You know, it's an interesting one because you mentioned that you research assessment methods and so on.

It's a question of, or it becomes a question of whether there's more value in learning things the hard way, making mistakes, being corrected than there is in just getting something to tell you, an answer that maybe 70% correct. Or, you know, taking the easy way out.

## Professor Phillip Dawson

Yeah, absolutely. And I think in higher education, we often sort of conflate all learning and end all assessment and it might be useful to sort of think of what are our assessment for learning moments and what are our assessment of learning moments.

For a lot of the assessment for learning, we might say, yeah, go off and use AI because it's going to help you to learn it better. But for some of the other assessment, for learning moments, we might say absolutely, don't use AI because you need to develop this. If we continue down the line of the doctor, you know, a lot of first year anatomy and physiology classes have thousands of terms that you just need to memorise, and there's not really another option. We need those to exist. However, by the end of a degree, by the end of medical training, it's possibly not exactly what we want to focus the assessment on. We want to focus the assessment on these higher-level sort of capabilities.

Maybe we want people to use AI sometimes, maybe we don't. I think in sort of talking about you're allowed to use AI or you're not, we want to think carefully about the moments that we say it and whether, you know, it's good educationally or whatever.

But we also want to think about whether it's feasible to stop someone from using AI in particular moments, because whenever we set restrictions that aren't feasible for us to actually enforce, it just becomes a little bit of a joke.

## **Carly Culver**

Yeah, I think that's a really good point, and obviously assessment security is something that you're very interested in as well. So, talk to me more about that and where we're seeing AI. on both sides of the fence. They're both kind of being used in a negative way, but also being used to kind of combat that as well.

## **Professor Phillip Dawson**

Yeah. So, in early 2020, I released a book about this idea of assessment security, which is basically ensuring that whatever circumstance is we want a task to be done in, it's done in those circumstances.

And there's a long history of assessment security. You know, the first exams date back to sort of entry in the Chinese civil service more than a thousand years ago through to, you know, modern approaches like remote proctored exams. There are some challenges because we kind of don't know exactly what works in assessment security. We have a lot of faith that certain approaches work. But we don't have a lot of evidence of them. And I've written about things like remote proctored exams. We don't have a robust body of evidence that these things work. We don't we don't have that kind of solid foundation. And I, I think that's a great opportunity for research. AI is starting to be used sort of on both sides of the equation in assessment security.

So, it's used by people who are trying to not do tasks in the circumstances they're supposed to be done. A great example of that is, you know, a browser plug in that will complete multiple choice questions for you. So, it will use AI to interpret the multiple-choice questions and select the answer and then move on. And then on the other side, we've got AI, detectors that are themselves AI, we've got AI remote proctoring. Yeah, all sorts of technology are being used on each side.

## **Carly Culver**

And you kind of mentioned there's not a lot of academic research, at least around the efficacy of those on both sides, I'm guessing. Well, especially on the sort of combating cheating side.

## Professor Phillip Dawson

Yeah. Look, I actually really do want to do research on the efficacy of cheating approaches, but it's a hard one to get past sort of funding bodies and that sort of thing.

I have to say my research centre has bought more contract cheating assignments than anyone else in the world has because we wanted to see. Yeah. So, these are assignments that you buy online. They're bespoke, custom written things we wanted to see. Will markers detect them when we get them to just mark assignments? Will they detect these contract cheating assignments?

And I think there's definitely a need for that sort of study of how effective are different approaches to cheating. And yeah, then on the other side there is a need for particularly private industry that produces these assessment security technologies to partner with researchers to open up, to be a bit vulnerable and say, let's figure out if these things work.

In my book, I write about sort of how we handle it. If we find out that they don't work, how do we sort of deal with disclosure of that information in a responsible way? Because the last thing I want to do is tell anyone how to cheat. That's not that's not my goal.

### **Carly Culver**

So tell me more about that. I mean, I'm interested in that part of it. So, tell me more about that kind of, yeah, what you think we should disclose and what we think should and should still be kind of kept privately?

#### Professor Phillip Dawson

Yeah. So the cybersecurity literature talks about different disclosure models, and the one that I'm most partial to is something called responsible disclosure, which is you say, yes, we do need to disclose that certain cheating approaches exist or that certain anti-cheating technologies are vulnerable in certain ways.

But we don't need to do it immediately. We don't need to find the error exists and immediately publish a paper saying there's this massive problem and here's how to do it. We want to go to whoever produces the anti-cheating technology and say, hey, here's the problem. Let's work together, let's try and fix it, make it better. And then later on we are able to publish a good news story of there was this problem and we fixed it and it's not there anymore.

I think that's sort of there, the utopia now. Now there are some people who think that these technologies are unquestionably terrible, unethical things, and they might view this sort of research as partnering with the devil. But I, I think there is ethical use of technologies like remote proctoring or even artificial intelligence detection if we're confident that they work.

#### **Ben Clayson**

Do you think that higher education institutions really want to know the true extent of these types of phenomena? How there that affecting student lives and student outcomes? And then the impacts it might have on their business model?

#### **Professor Phillip Dawson**

I think there's some appetite in some quarters, but I think systemically there's not an appetite for it, and I think that's a really big problem. So, you know, if you look back to the contract cheating scandals and whatever, Australia has had some really big contract cheating scandals and these led to some tight regulation by a higher education regulator that required sort of action on behalf of providers. And now with artificial intelligence, we've got a very specific request that Australian universities have to produce credible action plans on how they're addressing artificial intelligence. And I think it works when it comes from a regulator like that. However, you have some contexts that aren't particularly well regulated, and I'd point to the USA as a really big problem area where there's not really a motivation for institutions to look carefully at problems of cheating, problems of artificial intelligence misuse, or even the bigger problem that we're routinely graduating people who can't do what we say they can do.

You have individual whistleblowers sometimes, but I've known some of those people to have a really hard time. You also have people who investigate these sorts of problems being exposed to things like death threats being followed home from work because there is a whole organised crime element to this. It's connected to things like people trafficking, sex trafficking, the industrialised cheating industries is something pretty scary to deal with.

So, yeah, I'm not sure there's the appetite to really engage with this in the way we need to, which is sad because, you know, we graduate people who are a danger to society as a result.

#### **Ben Clayson**

I think that's the kind of lowest risk or, you know, the of most innocent. And you have students who are kind of accidentally conning themselves basically by cheating that way to achieve something that says that they have knowledge they don't.

The organised criminality around, you know, academic fraud is, in my experience, totally overlooked and seems to make people incredibly uncomfortable when, you know, when it's raised as a subject. And I think that's a really strange

phenomenon that so of companies across different education and training industries is that the moment cheating is mentioned, people are so uncomfortable. And I think that what you said is exactly right. So which is that you as a kind of, you know, professional organisation employee, you come into contact with people who have qualifications, which are then not accurately represented in the quality of their work. They don't have the skills that are commensurate with the degrees they've been awarded, and that invariably ends in disaster.

## Professor Phillip Dawson

Yeah, it really does. And I want to touch on something you mentioned there, which was sort of the, you know, on one end you've got an almost naive, accidental breach of integrity all the way through to some pretty serious organised crime and quite intentional stuff. And that the ways that we might deal with these should be really different to each other.

Cath Ellis and Kane Murdoch are two of my Australian colleagues. They have a paper coming out very soon in a special issue of "Assessment and Evaluation in Higher Education" that I'm editing and in that paper they talk about sort of the need to address these things in quite different ways and have the approaches that sort of work on some people though, the sort of organised crime, the, the really severe end need to be very different to what we do to the everyday sort of accidental plagiarist type thing.

## **Carly Culver**

So Phill, you obviously reference kind of a couple of examples there. Australia, USA. Is there any in your experience in your research, do you encounter kind of quite varying attitudes towards this, across different locations, different cultures?

#### **Professor Phillip Dawson**

Yeah, absolutely. So I think probably Australia seems weirdly obsessed with this problem. And yeah, I do think it's part of our good regulatory context. We've invested a lot in it. There's been some key scholars and you know, the late great Tracey Bretag was a key scholar in this field in Australia. I think that Ireland is also working really hard on trying to address problems like contract cheating and there's been a lot of sort of Australia, Ireland collaboration and then you've got kind of pockets around the place like there's an excellent sort of academic integrity community in Canada.

Sarah Eaton's a really leading scholar there, but they don't have the same regulation that we have in sort of Australia, Ireland, UK, so it's just not taken as seriously. But even in the UK there was a great meta-analysis done of the rates of contract cheating by Phil Newton (2018), and it found that, you know, in the most recent data set, it looked at about 15 or 16% of students admitted to having paid to get some work done for them.

And then some journalists went out and asked all the institutions, what proportion of students do you actually see as having contract cheated? And less than 1% of the likely cases of contract cheating were ever caught by British universities, which is really terrible. Like, I'm hoping you don't have a significant student audience on this podcast because I want to say if you contract cheat at a British university, you probably will not get caught and that's not great.

#### **Carly Culver**

So we've obviously referenced contract cheating and talked a lot about kind of traditional uses of AI in terms of, yeah, like I said, like essay generation, multiple choice question assessment things, but I'm quite interested to hear your view on use of AI technologies, in maybe more kind of creatively focused qualifications. Also, we're not talking about, it's not life and death threatening in terms of it being a doctor or being an aviation engineer. But, you know, these people are still getting qualifications and subsequent jobs, you know, in these creative industries. What's your view on how that kind of technology's impacting both of the learning and assessment, but also just future careers in these sectors?

#### **Professor Phillip Dawson**

Yeah, So I think a lot of careers in these sectors are really undergoing change where people are using these technologies and some of them have been for a while.

So I have a friend who used to be a copy editor and he went from being a copy editor to being early adopter of AI in about sort of 2021-2022, to leading a team of copy editors who use AI and his career is going amazing because, you know, he uses this stuff and to say to people studying copy editing at the moment, yeah, you can't use AI. Well you should it's it's out there it's being used. So, I think we do need to do that sort of authentic assessment

Well, you should. It's, it's out there. It's being used. So, I think we do need to do that sort of authentic assessment piece of really figuring out what is the actual use of AI in the particular disciplines that people go into. I think that's really necessary. We still have that challenge though, of if you use the AI, but you don't know how to do the job yourself, you can end up with some pretty funky results that you don't know are wrong.

So, our research centre has a concept called evaluative judgment. So evaluative judgment is your understanding of what quality work looks like and your ability to see quality work in your own work and in the work of others. And my colleague Margaret Bearman wrote a paper with Rose Luckin from UCL that was a chapter in a book of ours a few years back where they argued that this becomes one of the key capabilities going forward.

You know, in a time of AI, knowing if work is good enough is actually the uniquely human capability.

## **Carly Culver**

Yeah, I think that's a really interesting point. It comes back to what we were referring to earlier in terms of, Yeah, AI only takes you so far and it goes beyond just critical analysis of the output of AI. But like I said, it's about judgment, judgment of the quality of the whole the whole piece that's created.

## **Ben Clayson**

It's something that training providers In the UK you talk a lot about in Further Education, so not so much Higher Education, but apprenticeships and so on, because they tend to be somewhat more practical in the content and learning that has to go on. And so they go, they tend, the students tend to go through a process of continual assessment and followed by an end point assessment.

But it will be more observational assessments seeing if they've actually developed the skills as well as the knowledge. And I think Robert Greene in his book "Mastery", kind of makes the case for old fashioned style apprenticeships that last seven years being, you know, the real Sussex way to generate really effective, meaningful knowledge which doesn't fit with universities offering three-year degrees.

But yes, it all kind of ties in together. And I think the potential for AI to provide in the long run, not now, because it's not capable right now to provide some kind of capability to provide really unbiased observation of a person's learning and sort of actual comprehension and understanding. That's very interesting. But it's also extremely complicated.

## **Professor Phillip Dawson**

Yeah, it really is. A while back, Val Shute, from I think it was Florida State University used to publish about a thing called Stealth Assessment, which might not be a great name, but the idea was that in the future we might have people just doing stuff, doing the work and I think this really works in a further ed context as well. Just doing the work and competencies and capabilities get ticked off in the background as you go, rather than there being these separate moments of assessment. It's this kind of assessment as you go.

## **Carly Culver**

Yeah, I think it's really easy to see why, you know, Enabled Technologies would support that, that model.

## **Ben Clayson**

Yeah, although I do know some doctors that say that you have to have those exams because you need to be able to demonstrate that you're capable of working under pressure and surviving that, to which I say rather them than me.

## **Carly Culver**

Exactly.

## **Professor Phillip Dawson**

It's fascinating sort of the rationales that we put forward for exams and the degree to which they actually deliver on those. So, you know, being able to work under pressure is one of them, and yes, certainly exams do that. They mightn't be the best measure of working under pressure. And if we hand on heart says working under pressure is the main thing, maybe we'd pick something else. But they're also often used because we think that they're cheat proof or secure. You know, the pen and paper exam. But there's, there's sort of interesting data when we go and talk to students and staff about that. Students report a lot of sort of third party cheating and cheating in general in exams. That is likely not seen by staff. I think we've got a bit of a blind spot about exams there.

## **Ben Clayson**

Yes, a willing one.

## **Professor Phillip Dawson**

Yeah. Yeah. Or a willing one and that's interesting too. I, I could go on quite a tangent about exams so the last I'll cut myself off but the last thing I'll say about exams is we often don't financially account for the true costs of pen and paper exams back to the person setting the exam. So, there's a lot of use of exams because they are cheap to the person setting the exam in a Higher Education context because I don't have to pay for the exam hall and the exam invigilators and all of those things. I've seen it happen at universities that when they shift to a user pays model of exams where they say, if you want to have a pen and paper exam, fine, but your department's paying for it. Many of the exams vanish overnight and are no longer as essential as we once thought.

## **Ben Clayson**

Yeah, I think that's very interesting. I think the insights from the Higher Education are very interesting for us because we tend to work mainly in professional qualifications and so the examinations that we deal with are ones that are kind of essential required for, you know, for work, for opportunities, you know, to allow you into a particular role. And so the... it's interesting because the demographic tends to be older than university students and the you see a different type of sort of pressure that comes with these types of things because, you know, you might have the option as an example, you might have the option of going back and doing the exam again, you know, in a in a short space of time if you don't make it this time.

But at the same time, everybody wants to pass the exams and so the pressure is definitely better. But as the obviously as the stakes go up, then you have to assume that the temptation to cheat and involve AI, for example, increases as well, and I don't really have a point. I'm just going along with the chat.

## **Professor Phillip Dawson**

Yeah. Look, I, I think it's a really interesting thing you mentioned about the stakes and there's sometimes a, a desire to just believe in a positive academic integrity approach as being the solution to all cheating ills, you know, get people to sign on to an honour code or something and therefore they won't cheat. But when we do have particularly high stakes things, we have a responsibility to the end users of those qualified people to be as sure as we can that they didn't cheat, that they did the assessment in the circumstances.

I've started to view those as a core part of assessment validity. So, any time someone cheats, we can't make an accurate judgment about what they're capable of. That's assessment, validity. And I think it can be really powerful to start sort of putting this concern for cheating inside of the concept of validity because it's a bit of a god term in education assessment. You have to care for validity.

#### **Ben Clayson**

I like that. That's a very nice way of capturing the concepts around not just malpractice but maladministration and other things and yeah, getting into that cover all term that nobody can really argue with, the validity of it. I like that. How do you, with the work that you're doing, how are you sort of imagining that AI and assessment design is going to impact assessment design in the near and long term future?

### **Professor Phillip Dawson**

So firstly, I think we need to look at assessment programs. So, if we have a degree or professional qualification or anything, we shouldn't focus on sort of securing every task against AI. We should zoom out and try and think across the program. How are we sure that someone's done these assessments in the circumstances We want them to be done. So, zooming out to the first thing and the next one is to not kid ourselves that we can stop people from using AI in all circumstances. So yeah, really, unless you're going to put people in a room with a Faraday cage and strip search them and whatever, we won't get absolute assurance that AI hasn't been used. But where are we sort of on that scale between a take home unsupervised task and Fort Knox, where we're somewhere between the two for most tasks.

So, it's really figuring out what sort of risk appetite we have there. And that's a that's a validity thing. I think multiple types of assessment are going to be better than any one type. And, you know, I'd point to Kiata Rundle and colleagues work on applying a Swiss cheese model to cheating as a thing. So Swiss cheese was originally by, I think it was James reason. It's this idea that if you have some sort of potential problem, catastrophe risk or whatever, and you have different interventions, none of the interventions to stop it are going to be perfect. But if you layer many different types of interventions, you're going to be more secure against the risk. So, in this context, different types of assessment, each with their own vulnerabilities together are better than any one type.

So what types? I'd be looking at interactive oral assessment. I think we're starting to see a lot more use of that, be looking at assessment of process. So really looking at sort of student production processes and there are tools to monitor student work processes online. I'd be looking at some sort of supervised work so it could be supervised, exams could be supervised practicum could be remote, proctored exams, all sorts of things. Overreliance on any one of these has problems, but a mix of these and other approaches we think are more secure is probably the future.

#### **Ben Clayson**

I have heard it suggested that the evolution of AI is going to mean that people need to spend less time learning things by rote and that this will ultimately free people up to spend time doing things other than academic learning or professional learning, because the machines will be able to take over all of the jobs and humans will be free to frolic in the meadows.

And I think that's interesting in a number of ways, not least because that then raises this really interesting question about, well, what would people do if they didn't have to work? Because the machines have taken over all of the of the work and tasks that need doing. But then if the machines are that capable and if an AI is able to, you know, work in such a way, then you know, is there actually any point in human endeavour in that sense, because the machine at that point would far exceed any capability that we might get, whether it's from a degree or a lifetime of work and study.

And I've seen that recently. NASA's switched off or pulled out of one of their quantum computing projects, presumably because they're worried about the capability that they have. And I know about the next gen of Chat GPT being extremely, you know, massive, incrementally more powerful than the current generation. And yeah, I mean, it's all very kind of philosophical and hypothetical. But again, I'm interested in your take on that and whether we're all kind of blindly wandering into a situation where all of our questions become irrelevant because the capabilities outstrip ourselves.

## **Professor Phillip Dawson**

Yeah. So I think there's very different predictions on whether things are going to keep on getting better and better in an exponential rate forever or whether we're going to hit some sort of a plateau and when that plateau is. I am of the view that it's probably going to keep getting better and better for the short term. I wouldn't be surprised if we've run up against some sort of brick walls in terms of the overall compute power that's required to do a lot of these things, because there is there is a finite sort of chip fabrication production capability that we have at the moment.

It's heavily centralised in some particular areas of the world. So I, I'm not sure if that sort of cyber utopia is incredibly soon. If we do get the sort of quantum computing situation. My concerns are actually for cyber security rather than for work, because I have my sort of other thing I started in my undergrad was cyber security. And we may be in a whole world of hurt, everything from online banking through to, you know, private communications with people. So that that's going to be really interesting. But I think, you know, these are all might happen sort of things. We do know that for now and for our graduates sort of immediate future lives, they are going to need to graduate and be able to do things.

So I think it's important we graduate with them then with that sort of critical AI literacy. So they're able to engage with it, use it, know what the problems are, but not be overly dependent on it.

## **Carly Culver**

I'm quite curious, actually, we've sort of talked about this quite theoretically, but in your actual research to use the tools to support you, in fact.

## **Professor Phillip Dawson**

Yeah, absolutely. So, I am a big user of AI. I use it to have a chat with about potential ideas. I use it to sort of I ask, I ask, it's just a bunch of stupid questions that are probably embarrassing to, to say, you know,

# **Carly Culver**

The ones you probably wouldn't put in a forum somewhere, right?

## **Professor Phillip Dawson**

Yeah. The really, really stupid sort of things that I really should know better.

I love asking things like Chat GPT to do something requiring logic or maths because then it writes it out in a little bit of computer code for me. I should say more impressive stuff. I do things like get it to help with lit reviews. I think that can be really powerful as a whole bunch of tools that are really focused on the literature review process and engaging with research. And then from a vanity perspective, there's a tool called scite.ai, and it can tell you for any given paper or for any given researcher, the papers that cite their work that agree with it and disagree with it. So I use it to find out who's disagreeing with my research.

## **Carly Culver**

So you can go block them on Twitter, right?

# **Professor Phillip Dawson**

Absolutely. Now you've got to you've got to be able to know sort of what are the potential problems? I sometimes use it to critique journal articles. So, if I read an article and I think this is pretty good, I say, hey, what do you think about this? And I sometimes get things that are pretty good, but I think it's these sort of expertise things. Within my narrow field, I think I'm better than AI is at doing the critique of the papers. But more broadly, if it's something I'd know less about, it's better than I am and I wonder for how long that'll be the case.

# **Carly Culver**

I guess that's an assumption because like I said, you're an expert in your in your field. So, you know what the AI doesn't know, so you can easily spot where the incorrect parts of it are, but it's a field you're less familiar with, then that's

exactly the problem that students come across, right? They don't know what they don't know. So, they just trust the incoming source of what's being fed out of Chat GPT, all of the other generative tools that are out there. So that's really the core problem of how people are using the tools currently, right?

## **Professor Phillip Dawson**

Yeah. Yeah. And to return back to the idea of evaluative judgment, it does really become that core capability and we're going to need to find ways to develop that that don't necessarily require, get really good at the thing, get really good at evaluating the quality of the thing might be something that we really get people to work on.

## **Ben Clayson**

You know, Carly I like going down the theoretical rabbit holes with these things and you know, I think that's yeah, I enjoy the, I think it's the sense of the sublime because this is the new sublime. You know, the Victorians were drawn to the mountains because of the sublime nature of seeing something that's so much bigger than you. And I think with AI and the danger of particularly artificial general intelligence, which keeps coming up because you know, there's a lot of, well they claim to be, whistleblowers saying that that's already in existence. And so yeah, it feels like we're kind of, you know, in that moment that we experienced in the nineties when the Internet sort of came to prevalence.

But I didn't realise it then because I was too young and stupid to realise what we were looking at. But this is different. And I think that I mean, we've already discussed the sort of phenomenon of institutions not really wanting to get into this topic around sorts of malpractice and use of AI tools to by students to help them achieve results. And Phill, you mentioned the fact that there is a lot of research globally being done into this and I think that I mean, you know, personally it just makes me feel a bit sort of sad because I kind of think that there shouldn't be this level of sensitivity around protecting your own qualifications because they are the most valuable asset for any awarding organisation.

And so, if they are effectively under attack by people who want to achieve them without really achieving them, that's not sort of, it's not a personal attack. It's just really a reflection of something that humans tend to do from a very early age, which is try and get an advantage. And I think that I'm not sure how we could possibly do this, but I do think that just having a dialog around these types of things is really important and continuing it and trying to address it in a way that isn't frightened of the reality, because it doesn't mean you've done a bad job If somebody manages to cheat their way through your assessments and qualification. And there's a lot to learn from that. And you know, it's incorporating those lessons that makes them makes the qualifications stronger in the long run.

## **Professor Phillip Dawson**

I think what's really needed is for awarding bodies to work together on this because the incentives aren't there for any one awarding body to really do anything about it. And certainly, individuals who work for awarding bodies are putting their neck out if they, you know, go and try and tackle this problem themselves, that's something good regulation can do something good. Regulators can do this, but also courageous people across awarding bodies might want to work together. So, for instance, you know, get people across the medical and surgical specialties within the particular colleges to say, hey, we want to work together on this work and address this as a problem, because otherwise we really are putting the public at risk to bury our heads in the sand is really unethical in this place.

## **Carly Culver**

So obviously you just mentioned the importance of regulators in this kind of topic. I understand you've recently done some work with the Australian Government to develop some resources around artificial intelligence. Can you tell me more about that?

## Professor Phillip Dawson

Yeah. So, there was group of us led by Jason Lodge, Sarah Howard, Margaret Bearman and myself, and we convened an expert group around this, hard challenge of how we are going to address artificial intelligence in assessment particularly.

It was really hard getting consensus, but we managed to get to consensus on a couple of high level sort of principles and five more grounded propositions. The principles that we got to were firstly that assessment and learning experiences equip students to participate ethically and actively. In a society where AI is ubiquitous. So that is the idea that, we need assessment to prepare students for an AI world. We can't sort of hide AI from assessment. It needs to be there. But then at the same time, the second principle is that forming trustworthy judgments about student learning in a time of AI requires multiple inclusive, even contextualised approaches to assessment. So that's the idea that we still do need to do assessment of learning.

We might need to look at the approaches that we used, how inclusive they are, and you know, that we kind of have multiple different types. I've talked about Swiss cheese earlier. We want to layer out the holes in the different ones, like layers of Swiss cheese. And anyone who's interested can sort of follow that up, and we've got examples and sort of further guidance on that there.

## **Carly Culver**

If you were to give one sort of core piece of practical advice to anybody that's designing an assessment or designing kind of an educational program, whether that's an awarding body for professional development or FE or HE, what kind of one piece of practical advice would you give them around kind of the impact of artificial intelligence?

## Professor Phillip Dawson

All right. So, I'm going to cheat a little bit. I'm going to provide a don't and a do. So, the don't part is don't base your assessment design. And what I can't do right now, because whatever we think I can't do right now is on some developers whiteboard and it's either on their to do list or they've recently completed list. We saw a whole bunch of, you know, set assessments that involve recent knowledge because I doesn't know about it. Sort of advice at the start of the AI boom 2022 and that lasted for weeks or months. So, we need long lasting things. The do is, really do try and build in evaluative judgment into your assessment. So really do try and develop students capability to make judgments about the quality of their own work, the work of their peers, and the work that's produced by AI. And that's an active thing. That's not just advice to people on what makes good work, that's getting students to actually do work with AI and judge the quality of the output.

## **Carly Culver**

Fantastic advice.

## **Carly Culver**

So, if people want to follow you on social media or find out more about what you're doing and what CRADLE is doing at Deakin, where can they follow you?

## **Professor Phillip Dawson**

Okay, so I am on Twitter/ X at @Phillipdawson My personal website is <u>www.phildawson.com</u>

And if you Google CRADLE Deakin blog, you get to our blog where we have a whole bunch of, you know, information about research that we're doing, information about seminars that we do and ways that people can connect with us - Blogs.deakin.edu.au

## **Carly Culver**

And for anybody in the Melbourne area as well as in addition to your academic career, you also get a bit of stand up on the side, is that right?

## **Professor Phillip Dawson**

Yes. So, we do some improv comedy. I have a monthly improv comedy show called Peer Review, and the peer review we get an academic to talk about their research and then we do improv comedy about it.



Any academic who would love us to poke gentle, gentle, fun at them or wants to come along and watch something, just Google peer review and I'm sure you'll find us.

### **Carly Culver**

Excellent. Well, thank you so much for joining us today. It's been really fascinating conversation to explore more about the research that you're doing and just generally the topic of artificial intelligence in assessments. So, thank you so much for joining us.

### **Professor Phillip Dawson**

Thank you so much. It's been really fun.



#### References

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#### **Further Reading**

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