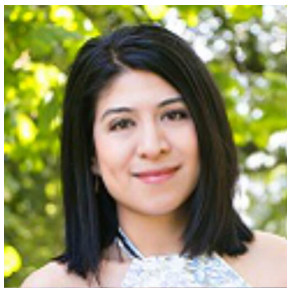
Episode 5: Higher Education – Transcript

People:

Samborne Bush - host

Frances Patrick – University student (at time of recording), artist



Itzelle Medina Perea – Lecturer in Information Systems, University of Sheffield

Mark Shand – Senior Learning Technologist, University of the West of England (UWE Bristol)

Transcript:

Samborne:

Picture the scene. It's 2022. You're sitting at the table in the kitchen of a student flat on another dark and drizzly November day.

There's dirty dishes on the side that your flatmate promised they'd wash up a few days ago now. And there's a lingering smell of uncleanliness and damp, or so people tell you.

You're used to it now.

Your flatmate stumbles into the room, probably hungover, wearing pyjamas and a dressing gown despite the fact it's coming up to 5pm.

They're carrying their laptop and have an excited smile lighting up their face. They say something like, you have to come and take a look at this.

And before you know it, the whole flat is huddled round in the gloomy room, faces illuminated by amazement and the glow coming from the laptop screen.

Introductory music

Welcome back to Patterns in Practice, Cultures of AI, where we're looking at how our beliefs, values, and feelings shape the way we engage with AI. The theme of this episode is higher education, and the story you just heard was my own experience of discovering AI, specifically chat GPT, as a student at university.

At the time, the release of this technology felt momentous, and though some of the hype has died down, AI has had a big impact on this sector. In this episode, you're going

to hear from a student, a lecturer, and a senior learning technologist, three people who are connected by their involvement in the higher education sector, but who have experienced the rise of AI from differing perspectives.

The first guest on today's episode is Frances Patrick. Frances similarly experienced the release of AI as a student at university, and at the time of recording, was undertaking a research project looking into this new technology.

To start things off, you were studying in Japan when ChatGPT was launched back in November 2022. I wonder, do you have a story about when you first came across AI?

Frances: Yeah, I do because one of my Japanese friends was a PhD student who was actually involved in a project writing that kind of AI, like he was developing it. And I didn't really know about all of this, but then my professors were saying, talking about like ChatGPT and stuff.

And I hadn't really been looking into it, but then my friend, I went to his lab and he showed me what they were capable of. And I was like, I was just amazed. And then I went home that night and I like went on to chat GPT and I asked it like the meaning of life or like these kind of questions. And it actually gave like reasoned responses. And I was like, oh, my god, like, this is crazy.

Samborne: And from a student's perspective, what was that like? Did you notice other people start to use and talk about this technology?

Frances: Yeah, I did, I did, because my Japanese professors started saying it. I guess the university had told all the staff to talk to students about it, because suddenly at the same time they all started saying in lectures, “oh, you're not really allowed to use this or...”

But actually one of my professors said he wanted us to use it, and he said there's a new technology being developed and it's really useful and it will help you. And especially for the Japanese students I was with, because they were having to write assignments in English, quite complicated assignments in English is obviously really difficult and he was saying to them, you can use it for language translation and stuff like that.

So there was a bit of a mixed response, but in general I had the impression that it was already implemented in the university because students were using it and professors were aware of it, so there was already a mediation between, okay, this is happening, how do we mediate, how people are using this software, can we test if students are using it, should they be using it, should they not.

So there definitely was a conversation around it and some of the students I was with were using it to write assignments.

Samborne: And so did you find yourself using AI for your university work?

Frances: Actually, I kind of tried not to a bit. Sometimes, sometimes if I didn't care about something, I would use it.

But there's some part of me that has been hesitant to use it that much because if I'm worried that if I outsource, it would be so easy to use it to make all your arguments and stuff. But some part of me worries if I outsource that, then I'll lose the ability myself to be synthesizing information and constructing my own arguments.

I'm not sure if that's an irrational fear or not but what I have used it for is for coding or at least I've tried to because my dissertation is in statistics.

Sometimes I don't really know what the software is or how to code something so I've looked at that because one of my housemates now, he tells me that he uses ChatGPT to do all of his coding and then he just copies it across and he says it's really useful.

So when I said “oh god I don't know how to do this, I haven't been taught how to do this, I don't know what I'm doing”, he said I'll just ask ChatGPT and I tried it but actually it didn't work, the command didn't exist so I was like, okay, it hasn't really worked but I tried.

Samborne: And you've been looking at these sort of errors in your dissertation research, that these AI models can produce output seemingly conjured from nowhere.

Frances: Yeah, yeah, yeah, yeah, yeah. This is what I found in my research is they call it hallucination. It's quite common, or it can be, for language models because, as I said, like they don't actually understand the context behind the words they use. It's not a reasoned response, it's just probability and sometimes it means that it goes wrong.

And there was an example, I mean there's been a few, but Facebook, Meta's company, they made a language model that was supposed to help with scientific research, but they had to take it down after three days because it just generated content that was a bunch of nonsense.

It didn't make any sense.

But sometimes it's not as obvious as that. The scientists at that stage were telling the company, oh, this is wrong. So then they had to take it down. But sometimes it's not always obvious.

Like for us, we could check it in Stata. Oh, the code is wrong. It doesn't make sense. But that's because we could fact check that always or immediately. But if you're using it, like some university students, for example, are using it to think of arguments or they can't really remember a concept, so like, “oh, what does this mean? Or like, can I say this?”

And if there are hallucination errors in the output that's being presented in those contexts, then it can be really hard to spot. And it means that students who are using language models to generate things for their assessments, if they don't understand that

the output can have errors and biases in it, then they're more at risk because they may be writing things that are wrong on the assumption that it's true and they might not necessarily understand that because especially generative AI language models is presented to be so considered and factual and it's presented with authority, unless you understand the mechanics of how AI works and how those how that output is generated you might not know that it's not true or it could not be true.

Samborne: If it were down to you, what would your priorities be regarding AI and introducing this technology to other students?

Frances: The priorities would be just to help students understand what it can do for them and importantly, what it can't.

Because I think it's naive to say, oh, you shouldn't use it because this is supposed to be your own work. I guess it's similar to the use of a calculator or any kind of tool that can help you. And I think that we should be teaching people how to use it, because it's available and I think if people just don't use it then they're at a disadvantage as well because it can be really helpful.

And I mean in my Japanese university it was really helpful for language translation for a lot of people and if they weren't using that software then they were at a disadvantage compared to those who were.

So if I was in a position in a university I wouldn't say something like “oh just don't use it.” I would want to teach people how to use it but also teach them how to use it effectively in a sense that recognising it can produce eris and byer [mispronounced]...bias and errors, sorry!

Samborne: So we've heard from a student, now I think it's time to hear from a lecturer. I'll let Itzelle introduce herself.

Itzelle: I'm Itzelle Medina. I am a lecturer in information systems at the Information School. Previously, I worked in the patterns in practice project. I worked as a postdoctoral researcher, and I'm still involved in the project.

Samborne: And so you say you've worked with the Patterns in Practice project, so you've kind of looked at AI within this, but I wonder, has AI affected your own experiences in the higher education sector?

Itzelle: As I mentioned, I work as a lecturer. Obviously one of the big things now is the use of generative AI. So, I've been teaching for a couple of years and this year I could definitely see a difference in the way which students not only use this technology for their work, but also how they use it for interactions with me.

So I share one thing with these students, which is, I’m a speaker of English as a second language, as they are. And now one of the things that I can see is that in my

communications with them in emails, I can see the role of Gen AI that they use it like for crafting emails and also they use it for their work.

One thing that has been interesting to see in this is that there are different views connected to the use of these tools. So some of them want to use them and they mention it very openly, but they kind of they fear that how to use it in a good way, like in a responsible way.

Some of them are like completely against that and some of them use it but simply like not mentioning at all. But yeah, I think that I can see this year like a growing use of generative AI in the students.

Samborne: That's interesting to hear how the technology seems to be so pervasive now that it's not just essays but it's also just email interactions and that also there's this kind of wide variety of reactions amongst students and how they're using these tools. So the theme of this episode is higher education. With patterns in practice you looked into one particular area of AI in higher education, learning analytics.

But what does this term mean and how are they actually used?

Itzelle: Yeah, just to give you like, uh, just the definition of what is learning analytics. So it's basically, uh, in simple words, we could say that learning analytics refers to the, the measurement collection analysis and reporting of data about students and the context in which they are learning.

So just to give you an example, learning analytics can be used to understand how a student is doing. It can be used also to understand how satisfied they are with the services that they receive from a school, but also to understand their experience. So learning analytics can also be used to understand what students think about the quality of the learning materials.

But also another way in which learning analytics can be used is to... like this data can be used as a proxy to measure or evaluate the performance of academic staff and programs and institutions, and obviously this raises some questions.

But yeah, these are some examples of in which learning analytics can be used.

And then if we think about this question of how AI comes into the picture in this area? We have predictive analytics, which are a type of learning analytics. And these are basically powered by machine learning. So they can be used, for example, to identify students at risk of failing.

So that is when the narrow form of AI comes into the picture.

Samborne: And you spoke to a lot of people who are using learning analytics as part of their job. What questions were you asking them and what did you find out?

Itzelle: Yeah, so as part of the Patterns in Practice project, I had the chance to talk with educators, I mean like teachers, but also learning technologists and also personal tutors. So people in different roles, but what they have in common is that all of them in some way interact with these learning analytics systems.

So I ask them about different things. For example, I ask them about their experiences using learning analytics, the role that these tools play in their job, but also about what are their main concerns around using these tools, and then also about the positive and the negative of using these tools.

So for example, they talk about their interest in using technology. We've heard sometimes that practitioners in higher education are a bit resistant to the use of technology because they are just because they are resistant to change things.

But something that we found in the project and that I found during the interviews is that people, practitioners are really open to use the technology, but when this is for a specific purpose, when the use of learning analytics is specifically is for solving like a real issue, like a real problem, but they don't feel so comfortable with using this technology just as a way of experimentation.

So that's one of the things that I found in the interviews.

And also another thing that I found was that this role of interaction, so how important is for people to interact with others, how important is for them the relationship with the students, they prioritise those interactions with the students over the use of a system. So that's another thing.

And finally I would say that the responsible use of the technology. I remember one of the interviews I had and one of the practitioners said, yes, we should be willing to use new technology and we should try to do it quickly, but at the same time, we should be able to stop things quickly if we see they are not working or if we see that they are causing more damage than bringing benefits.

Samborne: And that leads us to the next question, I suppose. What do you think the future of learning analytics or even AI in higher education more broadly looks like?

Itzelle: Well, I think I would like to talk here about the things I would like to see in the sector.

I would like to see responsible use of the technology. I think that we are already on that way. So being in the sector, I've heard about different initiatives coming from different places. One thing that happened in common is that they are making efforts towards making things in a responsible way. So I like that. And I would like to see that growing.

I would also like to see more people understanding what are the implications of this technology for good and for bad.

And I also would like to see things that surprise me, but not in a bad way. I think that in recent years we've heard things connected to the use of AI that have been surprising, but in a negative way, most of the time so I would like to hear things that are surprising for me but in a positive way.

Those are the things- and also like realistic expectations not going with the hype but realistic expectations about what we can do with this thing.

Musical Interlude

Samborne: It's clear from the conversation so far that whilst AI presents certain issues, such as the ethical debates Itzelle discussed, there's also some definite benefits. Both Francis and Itzelle noted the potential for this technology to increase accessibility.

Our final guest works in the library team at the University of the West of England and brings a third perspective to the conversation.

Can you introduce yourself?

Mark: Yes, my name is Mark Shand, and I am a learning technologist working in library, careers and inclusivity at the University of the West of England.

Samborne: And what does your role involve on a day-to-day basis?

Mark: Different learning technologists will give different answers depending on where they are, the time of the day, what they're actually involved in. I would broadly describe it as helping with the integration of technology in learning and teaching.

And that involves research, staff development, and scoping the functions of different tools, but also ethical implications and things like that.

Samborne: What was it like for you and your team when AI quite suddenly emerged as an issue that was going to affect higher education?

Mark: Sure, yeah. So I remember at the end of November, 2022, in a meeting looking at academic literacy, somebody raised AI, generative AI as a concern regarding essays and student work and I read around it a little bit and was very confident that it wasn't a problem, it wasn't going to be significant, it wasn't an issue.

Fast forward to during Christmas, reading more and more specifically journalism articles about it which were very much taking a negative stance. Came back to university, first thing I said was actually this is quite serious so even that short period of time my attitude had changed. And I think like a lot of people, I felt I was in catch-up.

I wasn't ahead of the curve. Wasn't apparent how you accessed it and the rules of engaging with it. And that was a bit of a barrier, but once I did, you could see that it was

capable of lots of interesting things. What those things were wasn't apparent at the beginning.

Samborne: And in terms of the people around you, their initial reactions, was it a case of fear, excitement and intrigue, or both?

Mark: Definitely both.

With these conversations around AI, AI adoption, attitudes to AI, what should be done in response, very strong views on either side, polarized views on either side of the argument for let's resist, let's push it away, or let's completely engage and integrate it as deeply as possible.

The extreme voices are always the loudest, and I think they can sway conversation. Where I, and I think a lot of us now sit, is in the middle where we're conflicted continually, which can be difficult because we're having to sometimes entertain apparently conflicting different approaches or concerns or opportunities in our headspace at the same time.

So I think it is possible to be excited about possibilities, nervousness about the ethical implications, concerned about how we speak to students, but we're not wanting to contain them too much in some of their ambitions - very much a difficult area to sort of work in.

And I've seen, I think over the past year, and I think a lot of us have seen this, those attitudes are changing. It's still quite clear that a lot of people haven't engaged with it through fear, through a sense that it's already beyond their confidence area, and they would feel nervous engaging with it now, or wouldn't know where to start, or it's such a big thing, you wouldn't know where to begin.

And I think what we can do from a library perspective is to help students and staff at least start to work their way through some of these issues, guidance and training as well.

Samborne: Now we're a little bit further down the line with AI and the hype has died down somewhat. Where are your library team at with helping staff and students getting to grips with this technology?

Mark: It is an interesting one because it has been so quick, it has been okay a year and a half which is quite a short amount of time in some of the ways that universities can approach things, especially something quite as disruptive as this canon has been.

I don't think it fits in that traditional approach to analysing technology, it's something else, it's cultural. The barriers to its use are very, very low. As a university we need to think about digital poverty and inclusivity and access and providing it for as many people as possible.

I don't think most models have that problem. You know, they are available to people for free. You know, there are certain limitations. There are paid for for tools, but you know, the free versions are incredibly powerful. So that access is there, it's ever present now. For a lot of us now, it's ever present.

So we're, as a library, we're seeing this, we're seeing this, it is being raised a lot more in public. I think it's a confidence now where staff and students are mentioning it in conversations they're using it and to be fair, a lot of academics have been using it from the very beginning in their sessions and saying it can be taken a critical approach to the use or very much focusing on using it as a tool to create writing and sort of mess around with different ideas and things like that.

We are now in a position where we're producing and going to be running some AI specific workshops for staff and students that space where actually bringing them both together in the same digital space, which we don't do a lot, I think might be quite useful.

So staff and students can see that they're all at the same level. We're going through this together. Hopefully raise confidence for both groups and that awareness that we're taking steps through this and it's changing rapidly, but we will try and support each other. Those training sessions, some online guidance, how to reference AI, how best using case studies and things like that. And that's where we are.

There's a community of practice of educators who are interested in AI, who've managed to produce a series of principles where the university is starting from and developing forward with. We've got staff development department, we've got a careers department, all engaging with different aspects of AI literacy going forward.

Samborne: Regarding AI education and AI literacy, do you think universities have a role to play in helping people outside of higher education understand and learn about what this technology can do, what it can't and maybe some of the debates going on around it?

Mark: I think that's a really good question. Universities have traditionally been quite good at engaging with ethical questions around different approaches, different schemes, different policies, different tools and I think there is a huge space for universities to step in regarding AI literacy and AI usage and the platforms that we're using and the companies and their business practices.

I think there have been pockets of quite challenging work being produced that question some of these activities and some of these approaches that the big companies are using. And I think that needs to kind of filter across everything we do. We can educate and we can explore and we can question. And I think that can be reflected back out to society.

Hopefully, like I say, some of the material, the lack of knowledge about these tools, big companies stepped in there and they filled that vacuum and haven't got that component about ethical use that is necessary.

There is a problem, I think, with the way we do talk about ethics in that it's something over there. It's something that happens in the distance. It might be what happened in the past. It might be the dates that certain tool grabbed, it might be the website, it might be the internet itself, but that's other things, that's other people.

And what we need to be doing is thinking about us, what we put into it, what is the thing we're putting our stuff in and also what we're doing with the stuff that comes out and I don't think a lot of us would engage with that process because we are not aware of it because the information isn't out there, so universities being able to actually say we are a really important part of this whole ethical dilemma I think is really important.

Samborne: To finish off, why do you think education is important in developing AI literacy across the higher education sector and beyond?

Mark: With the problems that we have with AI, education has to be the answer.

It's the one thing that we can affect with some certainty. We don't know what the platforms are going to be doing from day to day, but instilling in our staff and students a sense of confidence and a sense of being able to act on the knowledge that they have in a positive way is essential.

I described it as being the development of AI literacy is leading to access, awareness and agency.

Access being providing that access so that people can start to work in those environments with some confidence that they can make mistakes and they can get things wrong and they won't be judged.

Awareness obviously how AI works, I think is really important. A lot of us don't know that, and that has a real impact on the approaches that we might have to the outputs. You know, if we realize it's not just an, it's not an information source that type in a question, it gives you a clear answer. That is really simple. That's a really simple part of the whole piece. But just knowing that, that changes the way you look at what you get out of it, I think.

That knowledge will lead to proper engagement with ethical concerns and it might steer behaviour, it might raise other issues as well which I think as a university we have to tackle. We can do that through people knowing what we're talking about and then knowing what they're talking about and us knowing what they're talking about. That's the only way we can have that collaborative approach.

And agency, all that leads to agency being able to do things, taking responsibility for your own actions which I think is really important and having confidence as a measure of success of any sort of literacy programme.

That confidence to be able to act positively on what you know, not what you don't know, I think is really powerful.

Samborne: I want to say a big thanks to Frances, Edsel and Mark for talking to me this episode.

Our guests today have experienced the rise of AI in higher education from three different angles but despite this, all three separately highlighted the importance of discussion, understanding and education.

And it's in this spirit we bring not just today's episode but this mini-series to a close. If you've been listening along for this series, thank you so much for coming on the journey with us.

If this is your first time listening, not to worry, there's more episodes for you to explore, each with fascinating discussions on the impact of AI.

All of the music you heard was produced by Craig Scott. We've got an episode where we talk to him. Do go and check that out. You can also visit our website to access a transcript for today's episode. Link in the description.

My name is Samborne, thank you for listening.