Experiences in Digital Learning Webinar

AI as a learning support

The Centre for Online and Distance Education has run four webinars in the academic year 2023-24 in a series under the banner 'Experiences in Digital Learning'. The final webinar in that series was held on July 4th and covered the exceptionally 'hot' topic of artificial intelligence (AI) in higher education. Although it was the first CODE webinar to focus on AI, it was by no means the first CODE event to do so: one recent example was the <u>Supporting Student Success</u> workshop in May, which had made a feature of the use of AI in assessment.

This webinar was chaired by CODE Fellow <u>Martin Compton</u>, who leads on AI and innovation in education at Kings College London. The two speakers, **Kerith George-Briant** from Abertay University in Dundee, Scotland and <u>Laura Brammar</u>, Associate Director of the University of London Careers Service, discussed contrasting but complementary aspects of AI – particularly generative AI – as tools for learning support. This was clearly a popular topic, as the number of people on the call remained over three figures throughout most of the session.

Kerith, who was the first to speak, discussed how generative AI can be used as and with assistive technology. Then, Laura explained how it has been integrated into careers work and employability education for University of London students based around the world.

Kerith began by introducing some of her 'drivers' as an explanation of why she believes she is qualified to discuss generative AI and learning support. She believes that higher education can help create 'independent, productive and participatory citizens' and advocates making the 'hidden curriculum' – that is, that part of a curriculum that is not explicit, but based on norms and expectations – visible. She works as a learner development advisor where she advocates for the use of assistive technology for all students, not just those with additional needs, and has been an early adopter of generative AI tools including <u>ChatGPT</u>, the generative AI components of <u>Grammarly</u>, and, now, Microsoft's <u>Copilot</u>.

She defined assistive technology as an umbrella term for technology that can enhance a person's functioning in any sphere, namely 'cognition, communication, hearing, mobility, self-care and vision'. Generative AI (or genAI) has defined itself as 'a category of AI algorithms that generate new outputs based on the data that they have been trained on'. Therefore, genAI can be used as assistive technology or in (or with) assistive technology. It can support students to build their confidence, decrease language disadvantages, and fill in the gaps in the hidden curriculum. These can be particularly useful for neurodiverse learners: she cited Evan, a podcaster from the University of Limerick in Ireland, who has discussed how genAI 'lessens the cognitive burden' for him as an autistic student.

She would like all her students to gain these advantages from genAl, but there are problems with its perception and with its adoption. However, much of universities' senior management has still to be convinced. The UK's <u>Quality Assurance Agency for Higher Education</u> (QAA) sees genAl as a threat to academic integrity, and therefore as a threat to students. A set of principles published by the Russell Group of elite universities in 2023 states that its use might be appropriate for some groups of students only, particularly those with 'specific learning needs'. If genAl is generally perceived as a threat except in particular cases then guidance will be worked on in 'silos', speaking differently to students who already have assistive tech support plans. She would like policymakers to realise that genAl can help all students and develop guidance accordingly, particularly as the technology is moving so fast. She gave the example of the commonly used grammar and spelling assistant Grammarly, which now has a premium version, Grammarly GO, that uses genAl to suggest new content. Students have sometimes used disability allowances to pay for this version, but its power, and the price plans available, are changing all the time.

The University of Abertay has produced one guide to the use of generative AI for all students. This specifically rules out prohibiting its use but asks students to consider whether their planned use is 'reasonable' or whether it might be interpreted as giving them an unfair advantage over others.

Planned new guidance will also ask students to acknowledge and describe their use of the technology so that their lecturers can give them appropriate feedback. This will apply equally to students with assistive technology support plans, but these students will be given 'digital stickers' explaining that their support plans allow for extra use. She will also be holding focus groups for staff and students and writing a student guide to enhancing writing with genAl.

In concluding, Kerith stressed that she and her colleagues 'didn't have all the answers'. She stressed the need to advocate for the use of AI as a benefit for all students, to find allies and to keep pushing. Change is possible!

Martin then introduced Laura, who introduced her talk by explaining that she and her team at the University of London Careers Service provide careers advice and employability education for about 40-45,000 online learners based all around the globe, working independently or in recognised teaching centres. Her talk would focus on how they have integrated AI into employability education and how students are using AI to find work and move on in the workplace, whatever their discipline, lived experience and career stage.

She stepped back to explain what she meant by 'employability education' (or education for employability). One definition of <u>employability</u> is '... a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy¹'. That is, it is as much about building successful careers in the long term as it is about obtaining jobs. The Advance HE <u>Embedding Employability Framework</u>, from 2015, defines it as providing students the opportunity to learn and practice these skills and attributes.

But what does this have to do with AI? The AI revolution is bound to have a dramatic impact on all our career paths – that is, our own as well as our students'. There will be impacts in three key areas:

- On ways we find work
- On ways we perform at work
- On the types of work available to us in different labour markets.

In terms of the first of these, AI is increasingly used to save time in recruitment, particularly in sectors such as engineering and in sifting CVs to produce shortlists of candidates for interview. There is a sense, however, that an over-reliance on AI can miss good candidates. Students therefore need to be aware that it won't always be a human who looks at their application first. They, too, are increasingly making use of AI in their applications, and employers have reported risks there: generative AI, used injudiciously, can produce generic, bland or even inaccurate applications.

Once that all-important first job has been obtained, graduate professionals will increasingly be encouraged, or even expected, to use genAl tools at work as 'digital assistants' to generate text or multimedia in response to prompts. These tools are being built into existing platforms such as Microsoft Office, and there are versions available to help with more specialist tasks such as building quizzes and making presentations: 'there's an Al for that'.

It has been predicted that up to 30% of current hours worked could be automated as early as 2030, so it is not surprising that the effect on the global labour market is 'game-changing'. In short, the demand for high-skilled professional workers is expected to rise significantly, while the demand for lower skilled white-collar office workers, who will be most readily 'replaced' by AI, will fall. To retain employability, students need to learn those skills that are least easily replicated by AI: critical thinking, creativity, social and emotional skills, and teaching.

We therefore need to encourage students in all countries to develop and make the most of their 'human' qualities and skills. This is true everywhere, in developing as well as developed countries, and – perhaps ironically – AI itself can help develop personalised learning tools that are appropriate for

students in resource-poor situations. Just as with automation in earlier decades, some countries are ahead of the game in developing and using AI, and we should all be aware of the need to close the gap.

So, what is the University of London Careers Service offering its worldwide body of students to help them make the most of AI in their careers? Laura listed three things:

- Supporting students in the smart use of AI tools during job searching, helping them to keep up with developments
- Offering them career-specific AI tools such as <u>CareerSet</u>, which helps with developing CVs, cover letters and LinkedIn profiles that match their career ambitions
- Using genAI to enrich the generic, cross-disciplinary and inter-cultural training activities that are offered to all students.

Under the third heading, this training encourages students to look at themselves and their career options through three different 'lenses': an academic or disciplinary lens, a cultural or lived experience lens, and a career stage lens. Under London University's Career Stage Framework, their students are divided into career starters; career developers, who are seeking promotion or new opportunities, and career changers, who are likely to be further on in one profession but would like to move sideways. Online and distance learners are more likely than face-to-face students at conventional universities to fit into the two latter categories.

The Careers Service offers students a wide variety of online training sessions, and many of these involve interactive use of genAI: the students will be asked to answer a question or prepare a strategy, run their answers through (for example) ChatGPT or Google Bard (now <u>Gemini</u>), and then critique those answers: using, reflecting on, but also questioning the algorithms. Laura suggested that this type of exercise will help students prepare for a working future that is 'transdisciplinary' rather than just multi-disciplinary: working with a range of colleagues who are both humans with a variety of disciplinary backgrounds and machines, and also across national boundaries. Through this approach, they can simultaneously prepare for AI deployment in the workplace and strengthen their most distinctly human skills.

Laura's presentation was followed by a lively general discussion, covering issues including when and how students need to disclose the use of AI in their work, many academics' lack of confidence in using it, and whether tighter regulation is needed. Finally, Martin asked Laura to give delegates one 'top recommendation' for working with AI. She encouraged us to experiment with it, and to encourage our students to experiment likewise, but to always stay critical.

¹ Yorke & Knight, 2006