I'm a chatbot, ask me anything: building learning development for the future

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Abstract

We explored whether artificial intelligence (AI) technologies can aid learning by offering more effective and dynamic ways for students to interact with learning material. Through a survey, we assessed how students perceive and use AI tools, their impressions of the importance of these tools to their future careers and their awareness of AI policies within their universities. Results show mixed responses in terms of students' familiarity with the tools and what they believe the AI tools could and should not be used for. The results also indicated that students have a thirst to know more about AI tools and their applications. Based on these, we designed customised teaching sessions to teach students those skills that they highlighted in the survey. In addition, we designed an L4 assessment where students need to demonstrate their abilities to critique a ChatGPT output (assessment yet to be submitted by students). These teaching sessions could be rolled out at university level as they are not subject-specific. This conference session shared the design and delivery of the AI-specific teaching sessions and how these were perceived by students. In addition, it demonstrated the design of the L4 assessment with the AI element and how students performed on this. This innovative research on pedagogical methods supports a broader long-term ambition to better understand and improve our teaching, learning, and student engagement through the adoption of AI and the effective use of technology.

Keywords: AI literacy; AI policy; AI tools; students' perception.

Community response

This presentation explored a potential use of generative artificial intelligence (GenAI) in Learning Development (LD), highlighting that the use of technology should now be considered a skill students need. It also highlighted the need to engage with AI in a positive way, to anticipate and try to make use of the benefits of AI to enhance students' learning development. The positive impact this constructive approach had can be seen in how the session changed opinions of the use of GenAI in education, as shown in the following comment:

> This session made me rethink the use of AI in education. I heard many negative views on AI, its biases, its hallucinations, issues around privacy and data. This made me doubt whether I should use AI in my own practice. This session shed a positive light on using AI for teaching, learning and even assessments. I feel more positive now about using AI and I am thinking about how I can use the examples they shared in the session in my own teaching practice. I hope to be able to do this for 2024-25 academic year, and maybe reach out to the authors to help me with that.

Another attendee highlighted a wider point that was raised by the speakers in relation to assessment design:

> I was really interested in the concept of 'risk assessment for student assessment' and was hoping the presenters would talk more about it but there was no more time to ask questions. This seems like such a rich idea, but I'm not sure where it comes from or how it could be implemented.

The need to 'risk assess' university assessment may likely become even more important as the use of AI becomes more widespread.

Editorial comment

The topic of artificial intelligence has been much discussed in recent 'Journal of Learning Development in Higher Education' publications, which may further build on the discussions and ideas introduced in this paper. For example, Zhou and Schofield's (2024) opinion piece takes a similarly positive perspective on the impact AI could potentially have on

collaborative learning. Elsewhere, Manolchev et al.'s (2024) work, explores the relationship between AI and assessment, positioning AI as an 'unlikely ally'.

Next steps and additional questions

As suggested in the Community Response above, an interesting area for further discussion is the concept of a risk assessment for student assessments, and where LD may be positioned in such a concept.

Authors' reflection

After our presentation, we received numerous questions demonstrating engagement and interest in the approach we used to embed AI into teaching, learning and assessment development. Key points that stood out:

1. We engaged in reflective conversations with members of other institutions on further embedding AI into teaching and learning based on what we learnt from our study and approach taken this academic year. This led to requests to share our resources and even present to their staff/students in engaging workshops at their institutions.

2. This confirmed to us that actually teaching this content, rather than looking at the negatives of AI, brings lively discussions on further uses of AI when it comes to supporting students in their learning.

3. Finally, through the presentation, we reflected on our own practice and through the conversations we had following our talk, we have now come up with more ideas to incorporate for 2024-25.

4. Having reviewed the community's reflection, we actually did 'risk assess' the assessments in our programme to identify how AI-resistant they were. We are happy for people to reach out to us to discuss our approach further as this was not covered in the presentation.

Further Reading

Forehand, M. (2010) 'Bloom's taxonomy: original and revised', in M. Orey (ed) *Emerging perspectives on learning, teaching, and technology*. Zurich: Jacobs Foundation. pp.41-44.

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Acknowledgements

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Author details

Pauldy Otermans is a reader (Education) in Psychology at Brunel and a female tech leader in the UK. She is the Director of the Education Hub and the employability lead for the faculty. Dr Otermans' research focuses on using AI in education and authentic assessments. She believes that upskilling students and staff with AI literacy is crucial for graduate and professional development in Industrial Revolution 4.0.

Stephanie Baines is a senior lecturer (Education) in Psychology at Brunel. She is Associate Dean Quality Assurance and former Psychology UG programme lead. Dr Baines' research focuses on authentic assessments, innovation in teaching and learning in higher education and the use of AI in education. She believes that incorporating AI in teaching and learning including in assessments is crucial to equip students with the right skills for their future.

Beverley Pickard-Jones is a lecturer in Psychology at Bangor University. She is excited about integrating technology and education. Her pedagogical research focuses on leveraging AI technologies to optimise the learning experience and foster greater knowledge retention among students. By embracing AI in educational practices, she believes we can equip students with the skills they need to excel in a dynamic and swiftly changing technological landscape.

Sarah Thomson is an honorary industrial fellow at Bangor University. She works with the School of Human and Behavioural Sciences to bridge the gap between experimental psychology and applied user-centred design practices.

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