



Teesside University Excellence Case Studies

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Beyond the Horizon: Pioneering AI Integration in Academic Excellence



Planning
your
module



Structuring
your
content



Formative:
Putting learning
into application

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Introduction and Background

Simon Patterson joined Teesside University three years ago after a fifteen-year tenure as a Computing Lecturer in a local Further Education college. Joining as a Digital Learning Specialist within the Digital Transformation team, his primary focus is on supporting academic staff in enhancing digital pedagogy across various teaching and learning initiatives. This project came about due to the release of generative AI tools like Chatbot starting in November 2022, which saw the growing recognition of Generative Artificial Intelligence (GenAI) to transform teaching and learning practices at Teesside University and the broader Education and Higher Education sector.

The initiative involved developing an innovative “Exploring AI in Education” workshop to support university staff in understanding and adopting GenAI in their roles. The purpose was to bridge the knowledge gap and empower staff to leverage AI effectively in their teaching, learning, and support services. This initiative addressed the mixed levels of understanding of GenAI among staff and aligned with Teesside University’s commitment to innovation and digital transformation. Previously, learning activities did not incorporate GenAI, and there was a general lack of awareness of its potential applications in education. Challenges included misconceptions about GenAI, concerns about job security, and the need for ethical considerations regarding data privacy and academic integrity.

Recognising the need to stay current and improve his ability to support staff, Simon chose to undertake a new teaching qualification. His previous qualification was over fifteen years old, and updating his credentials was essential to enhance his effectiveness in guiding and supporting the academic staff at Teesside University

Approach

The primary goal of the project was to enhance staff understanding and application of Generative AI to improve teaching, learning, and support services, benefiting student experiences, their academic outcomes and ultimately the NSS results. This goal aligned with several areas of Teesside University’s Academic Enhancement Framework requirements, including innovation in teaching and learning practices, digital transformation, and the professional development and upskilling of staff.

To achieve these objectives, the project employed a multifaceted approach. Monthly workshop sessions were conducted, incorporating the latest developments in GenAI. These sessions included training on the ethical and effective integration of GenAI, covering aspects such as prompt design and engineering, as well as the use of Teesside University approved third-party AI-enabled tools like Quizizz and PanQuiz. Interactive tools such as Slido, Padlet, and Microsoft Forms were utilised for feedback and engagement, and new assessment approaches were developed to provide insights into the benefits of GenAI.

Collaboration was a key component of the project and Simon worked with various university departments and external stakeholders, such as Anthology, Adobe and Quizizz. Through the delivery of these sessions, Simon identified staff members who were particularly interested in incorporating AI into their roles and worked closely with these individuals to explore ways they could help prepare their learners for a world mediated by AI. This collaboration resulted in the creation of several Digital Excellence Impact case studies that highlighted the positive impact of the work undertaken by the staff..



“All content from the ‘Exploring AI in education’ sessions is added to the Teesside University Unity page.”

Simon Patterson



[SLAR: AI in Education Unity page](#)

The project faced several challenges, including misconceptions and fears about GenAI among staff, particularly concerns about job losses due to the perceived capabilities of generative AI. There was also variability in staff’s technological proficiency and inconsistent attendance at sessions. These challenges were addressed through evidence-based information and practical examples, hands-on training, ongoing support, and the development of a community for continuous learning and collaboration.

Outcomes

The project yielded significant outcomes, including increased awareness and understanding of GenAI among staff. Positive feedback was received regarding the practical applications of GenAI tools, and there was enhanced student engagement and learning outcomes using AI-enabled tools. Qualitative feedback from staff evaluations and testimonials provided evidence of these improvements, along with examples of practical applications and enhancements in teaching practices.

This project has empowered staff with the knowledge and skills to use GenAI effectively, leading to improved teaching and learning experiences and enhanced student engagement and outcomes. Unexpected benefits included the development of new working relationships with GenAI companies and opportunities to influence the development of GenAI tools based on staff feedback. New ideas for integrating GenAI into various educational contexts also emerged from these collaborations.

The value of creating a supportive community for ongoing learning was also emphasised. Future iterations of the project will focus on more specific GenAI applications and enhanced accessibility for staff with varying levels of technological proficiency.

Continued development and updating of CPD content, tailored sessions for specific university departments, and the establishment of a feedback loop for continuous improvement are planned. Additionally, shared resources, such as a prompt repository for teaching staff, will be created to support ongoing learning and application of GenAI. Content from these sessions is added to the Teesside University Unity page that all staff have access to.

Future Plans

Simon is already thinking about what’s next for the ‘Exploring AI in Education’ project including:

- Focused Sessions on Specific GenAI Applications.
- Setting up a place to create a ‘Supportive Community for Ongoing Learning’.
- Tailored Sessions for Specific Departments.

These plans aim to build on the success of the current initiative and further enhance the support available to Teesside University staff.

Conclusion

The project has and continues to successfully enhanced staff understanding and application of GenAI, leading to improved teaching and learning practices. The initiative aligned with Teesside University’s commitment to innovation and digital transformation, positioning the institution at the forefront of AI integration in higher education.

Contact Information

For more information on using AI in Teaching, Learning and Assessments, please contact Digital Transformation (DX) in SLAR.