

## Strategically integrating AI within Higher Education

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**The implications of artificial intelligence (AI) on the education sector are widespread. The rise of AI is reshaping higher education (HE), offering both opportunities and challenges. Our research focuses on how AI text generators (such as ChatGPT), a cutting-edge technology, are influencing critical thinking skills development in HE across the UK's postgraduate business students.**

### About the research

Critical thinking is universally acknowledged as a vital skill, especially in HE and business. Examining how AI impacts critical thinking is both timely and significant. Although AI presents exciting possibilities for enhancing learning and fostering analytical skills, it also raises questions about its impact on traditional/conventional teaching methods. In our study, we analysed data collected from a sample of UK postgraduate business students in order to explore how AI text generators affect critical thinking skills to further understand the potential challenges of AI in education.

This research provides a comprehensive examination of AI's role in developing critical thinking skills, which is crucial in today's rapidly evolving business landscape. It also contributes to ongoing policy discussions surrounding the integration of AI in higher education. Recent policy debates highlight the need for clear, practical guidelines on AI usage in educational contexts. Our findings offer valuable insights for these discussions, aiming to shape a future where AI is integrated responsibly and effectively into learning environments.

### Policy recommendations

- **Develop national guidelines for AI integration in Education:** The DfE and educational leaders must collaborate to establish clear national guidelines that focus on ethical use, address reliability and bias issues.
- **Support educator training programs:** These national training programmes should emphasise developing both lower-level and advanced cognitive skills in students, and how to use AI for tasks such as summarisation and proofreading.
- **Promote digital literacy and AI education:** Launch nationwide initiatives to improve digital literacy and encourage HEIs to include modules/units on digital literacy and AI education in their curriculum.
- **Establish a national task force:** Bring together educational experts, ethicists, AI developers, and policymakers to oversee the implementation of these guidelines.
- **Ensure equitable access to AI technologies:** Develop policies to ensure equitable access to AI technologies across all higher educational institutions, regardless of their socioeconomic status.
- **Regular assessment and adaptation of AI policies:** Continuous evaluation of policies from DfE will help to keep pace with the rapid development of AI technologies and their changing implications in the educational sector.

## Key findings

- AI text generators (e.g., ChatGPT) show promise in enhancing critical thinking skills development in UK business school postgraduate students.
- ChatGPT aids in developing both lower-level (understanding and application) and advanced-level (analysis and evaluation) cognitive skills.
- It facilitates a personalised, student-centric approach in education, transitioning from simple aids to catalysts for deeper learning experiences.
- While effective in reinforcing foundational skills, its impact on higher-order cognitive abilities, such as critical analysis and creative problem-solving is less straightforward.
- ChatGPT serves as a cognitive amplifier, freeing mental resources for higher-level thinking by automating tasks including summarisation and proofreading.
- Challenges include reliability issues, ethical concerns, digital literacy barriers, and biases in AI text generators.
- Integration of AI-driven learning can enhance both basic and advanced levels of critical thinking, prompting educators to reconsider teaching methods for a holistic learning experience.

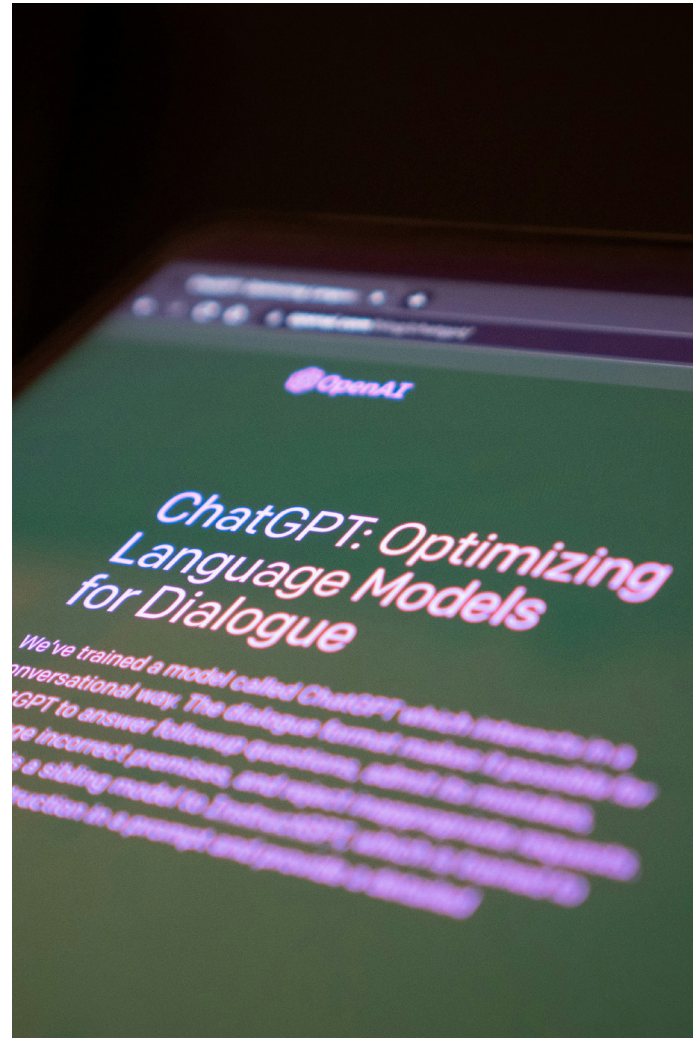


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## Further information

Aniekan Essien, Oyegoke Teslim Bukoye, Christine O’Dea & Marios Kremantzis (2024) The influence of AI text generators on critical thinking skills in UK business schools, *Studies in Higher Education*, DOI: 10.1080/03075079.2024.2316881

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