

What' s Next in Higher Education: The AI revolution 2030

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SHORT BIOS:

Dr. Miltiadis Lytras is a renowned expert in advanced computer science and management, serving as a Research Professor at Deree College - The American College of Greece and a Distinguished Scientist at King Abdulaziz University in Jeddah. His expertise spans Smart Cities, cognitive computing, information systems, and knowledge management, aiming to improve educational quality through collaborative efforts. Dr. Lytras has contributed over 120 high-impact papers to prestigious Q1, and Q2 Web of Science indexed journals across various subjects, including technology, education, and information management.

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Dr Tahani I. Aldosemani is an expert in the field of educational technology, currently serving as the Program Director for Skills and Lifelong Learning at the Education and Training Commission. She also holds the position of Associate Professor of Educational Technology at Prince Sattam bin Abdulaziz University, and the University's Council Member. Her previous roles include Vice Dean of Information Technology and Distance Education at the same university and a consultancy position for the Saudi Arabian Minister of Education, focusing on e-learning and international cooperation. She also served as co-chair for the G20 2020 Education group. Dr Tahani earned her PhD in Educational Technology and a Diploma in Curriculum and Instruction from the University of Wyoming, USA. She is a Certified Professional in Talent Development from the Association of Talent Development, an alumnus of the MIT Digital Transformation program, and holds a certificate in Online Learning Global Leadership from the Online Learning Consortium. Dr Tahani has received several international awards and recognitions in educational research and has many publications in educational technology and digital transformation in education. She led many successful initiatives in education presented at different conferences, seminars, and workshops.

ABSTRACT:

This chapter explores the transformative impact of artificial intelligence (AI) on higher education, particularly in the context of accelerating technological and societal changes. As higher education institutions face the need to offer more flexible, adapted, and relevant academic programmes, AI presents significant opportunities and challenges. In the first part of this chapter, we elaborated on characteristic the evolution of AI including characterizing the emerging AI landscape. One of our contributions in this concluding chapter is to conceptualise the next areas of deployment of AI in Higher Education considering the novel, innovative services that will disrupt the entire market in the next few years. Our strategic proposition for deployment of AI in Higher Education highlighted six pillars, namely: Large Language Models, Research.AI, Content Creation.AI, Personalized Learning.AI, Skills Building Assistants.AI, Education out of the Box.AI. We presented opportunities to harness AI to enhance teaching, learning, and research under each pillar, along with a detailed list of potential application areas and services. Universities are exploring innovative ways to use AI-driven solutions to improve research, teaching, and learning experiences, and we also developed indicative scenarios for the use of AI in Higher Education based on the six pillars. One of our bold contributions in this

chapter is the structured framework for understanding the evolution and use of AI in Higher Education, utilising a matrix to map the intersection of market penetration and product development. Finally, we discuss future directions and strategies for Higher Education 2030 in light of advances in AI technology.

KEYWORDS:

1. Artificial Intelligence
2. Higher Education
3. Future Education
4. OpenAI
5. Artificial General Intelligence

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