Chapter 7 Generative AI and Its Implications for Higher Education Students' Creativity

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ABSTRACT

This chapter explores Generative AI (artificial intelligence) in higher education regarding students' creativity. By utilising the quantitative content analysis approach, the chapter explored the impact of generative AI in higher education to understand its transformative effects on students' creative thinking processes and its outcomes. Current literature reveals the latest thinking on how AI enables or disrupts students' creativity. Generative AI is a potent tool in higher education which generates original content like text, images, music, and videos based on input data or predefined models. The adoption of generative AI led to the need to understand how these advancements may shape the educational experience to develop essential skills like creativity. Since creativity is crucial in today's digital age, generative AI raises questions about its potential impact on the imagination. The aspect of creativity, which is fundamental in higher education, offers students opportunities to enhance critical-thinking, problem-solving, and innovation; however, a balance is necessary between the utilisation of AI tools and the human element of creativity.

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INTRODUCTION AND BACKGROUND

Konecki et al. (2023) and Vacarelu (2023) mention that AI is changing many industries and operational structures globally, thus impacting our daily lives, the workplace, and the nature of work. Its inclusion in higher education has created the possibility of revolutionising institutions of learning; but it also comes with risks and challenges. Hence, society must be conscious of the implications of AI integration to effect possible adjustments (Konecki et al., 2023; Vacarelu, 2023). Higher education has experienced significant growth since using artificial intelligence (AI), which can potentially change how institutions and students learn. However, while it offers many opportunities, it also brings several problems and risks that demand careful consideration (Saaida, 2023). One of the elements compromised through AI integration is the aspect of creativity. Importantly, creativity in higher education enhances knowledge, critical-thinking, employability, personal growth, and prepares students for the 21st century. It also connects diverse subjects and applies theoretical concepts to real-world scenarios, which promotes a richer understanding of complex issues. Moreover, employers value creativity as being critical for navigating dynamic job markets and adapting to industry demands. Encouraging creativity supports emotional and cognitive development by allowing students to express themselves accurately. It also fosters problem-solving and innovation which motivates students to overcome obstacles and push boundaries in their fields. By promoting creativity, institutions prepare students for careers that can contribute meaningfully to society. Since the utilisation of AI in the learning environment presents both challenges and prospects and given the significance of creativity in developing thinking skills, we need to be circumspect of graduate degree programmes on offer.

Previous research on artificial intelligence (AI) primarily focused on information science and technology, with limited exploration from an interdisciplinary and macro perspective (Tuo et al., 2021). More comprehensive and in-depth research is needed to investigate AI's broader implications on graduate characteristics across various disciplines and industries. The increasing reach and adoption of AI in multiple sectors have prompted the need to investigate its impact on graduate attributes (Bearman et al., 2023). As the world becomes more automated and interconnected, it is imperative to examine how AI shapes the essential skills and qualities required in the job market (Muthmainnah et al., 2022). However, to see the whole picture, there is the need to explore the negative side of generative AI pertaining to graduates' characteristics.

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