

Generative AI as an Initial Teacher Education Ally: Supporting Pre-Service Teachers in Work-Integrated Learning, Self-Management, and Crisis Resolution

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ABSTRACT

This study explores the integration of generative artificial intelligence (gen-AI) in supporting pre-service teachers (PSTs) during their work-integrated learning (WIL) placements, focusing on its role in lesson planning, teaching and crisis resolution. Using the Unified Theory of Acceptance and Use of Technology (UTAUT) framework, the study investigates how AI literacy, self-efficacy (SE) and social influences (SI) affect PSTs' acceptance and use of AI tools. Data collected from surveys and focus group interviews with 126 PSTs reveal that gen-AI enhances PSTs' efficiency, improves stress management, and provides timely support in managing professional relationships. Results highlight key differences in perceptions of AI across demographic groups, teaching subjects, and school contexts. The findings emphasise raising awareness of gen-AI's potential in supporting WIL students, as well as the need for discipline-specific AI training in Initial Teacher Education (ITE) programmes to foster confidence and effective application in placements.

Keywords: Generative Artificial Intelligence (gen-AI), Work-Integrated Learning (WIL), AI Literacy, Initial Teacher Education (ITE), Pre-Service Teachers (PSTs), UTAUT Framework