

Examining the Effects of Using AI Tools on Lesson Planning: Insights from Jamaican Trainee Teachers

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Artificial Intelligence (AI) is revolutionizing the educational landscape with its transformative impact on traditional teaching approaches, particularly in lesson planning and classroom instruction. This paper explores the effects of Jamaican trainee teachers utilising AI tools for lesson planning, which relates to the conference theme "Transforming the Administration of Higher Education for Enhanced Sustainability, Inclusivity, and Technological Progress", employing a survey design. The study seeks to address crucial administrative issues such as the efficiency of lesson planning systems for trainee teachers' preparedness, the incorporation of technology in training workflows, and the institutional readiness to support AI adoption. It also examined trainee teachers' perceived challenges, such as digital literacy gaps and concerns about the accuracy and contextual relevance of AI feedback/ suggestions, as AI tools are adopted in teacher training. The primary objective of this study is to examine the administrative effects of using AI tools during the lesson planning process, focusing on how AI tools support the streamlining of planning procedures while reducing preparation time and contribute to policy-aligned professional development efforts. This study is both timely and important to this conference theme, through its investigation into the game-changing capability of AI tools in higher education administration. The research emphasizes that technological progress can facilitate more sustainable and inclusive educational practices by rethinking the management and support structures of teaching training programmes. The findings intend to inform curriculum development and education policy decisions that facilitate educators and administrators becoming equipped with the skillsets to employ and navigate AI tools effectively. The study anticipates the following outcomes: improved organizational support for instructional planning and enhanced efficiency in teacher development processes. Acceptance of AI in teacher training can give rise to more technologically proficient trainees and in-service teachers' workforce, capable of enhancing the outcomes of education, while promoting a culture of continuous growth.