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EDITORIAL:

Moving Artificial Intelligence Scholarship: Navigating the AI Frontier in Higher Education

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Editorial Note

The swift and pervasive rise of artificial intelligence (AI), particularly Generative AI (GenAI), is reshaping the educational landscape globally. As we navigate a future shaped by developments in AI, the need for critical engagement, ethical frameworks, and innovative learning designs becomes paramount. This special issue of AJIMS, titled Moving Artificial Intelligence Scholarship, emerges at a crucial juncture. Employers today expect graduates to embody an entrepreneurial mindset, possess higher-order literacies, and demonstrate global relevance beyond discipline-specific expertise. This issue interrogates how AI intersects with these expectations, advancing conversations about the future of higher education and professional practice development, particularly navigating the perspectives from China and South Africa. The eight papers in this issue reflect the complexities of integrating AI into education, offering perspectives that span disciplinary, institutional, and cultural contexts. They collectively underscore the transformative potential of AI while highlighting the ethical, relational, and pedagogical challenges it introduces. In this editorial, we synthesise the contributions of these works and their implications for academia.

We start with **Blackie, McKenna, Kramm and Pallitt's** conceptual paper, which explores the interplay between assessment practices, knowledge-building, and GenAI in the South African context. By framing education as a relational and transformative endeavour, the authors argue for reimagining assessment strategies rooted in epistemic justice and critical AI literacies. Using the discipline of chemistry as a case study, the paper illustrates how understanding the target knowledge and competence can guide sustainable and equitable assessment practices. The authors emphasise that higher education institutions must anchor their responses to AI in a commitment to fostering meaningful relationships with knowledge. This approach resists reductive outcomes-focused education, urging universities to prioritise transformative engagement with disciplinary expertise. In doing so, the paper offers a profound challenge: to redefine what it means to be human in an age where GenAI is both a tool and a disruptor.

Ozguven, Vahed, Akhal, and Garcia delve into the ethical dilemmas of AI-generated assessments in a Sino-Foreign University context, focusing on the discipline of entrepreneurship. The research uncovers tensions around transparency, fairness, and policy development through qualitative interviews when integrating AI into student assessments. Developing a culturally sensitive curriculum matrix that promotes ethical AI use while fostering critical thinking and professional integrity is central to the discussion. The paper highlights the dual role of GenAI as an enabler of innovative learning and a potential threat to cognitive development if misused. The authors call for decisive university leadership to craft ethical guidelines and policies that align with institutional contexts. This study extends its relevance by emphasising the need for ongoing dialogue, professional development, and adaptive strategies to navigate AI's integration effectively.

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Shifting the focus to learning design, **Gachago, Huang, Immenga, Cox, Mosienyane, and Govender** advocate for co-creation to navigate the uncertainties of integrating AI in education. Grounded in collaborative autoethnography, this work presents a case study from South Africa, illustrating the co-creation process in designing a blended and online learning postgraduate diploma. The authors argue that co-creation disrupts traditional hierarchies, affirms multiple knowledge, and addresses equity and social justice issues. This paper underscores the potential of co-creation to foster inclusive and relational learning environments. Despite the obstacles presented by institutional inertia and neoliberal performance metrics, co-creation principles — acknowledging interconnectedness, understanding power dynamics, and prioritising impact — provide valuable guidance for those looking to innovate learning design in AI-driven environments.

Wang and Chen's case study examines the rapid adaptation of assessments using GenAI at a Sino-British University. This mixed-methods research demonstrates that AI-enhanced assessments can positively impact student learning, particularly in developing critical thinking and ethical awareness, while raising concerns about academic integrity and the broader implications of AI-enabled curricula. The findings suggest that embracing AI in assessments could revolutionise educational practices if ethical considerations are prioritised. Their insights encourage universities to transition from a reactive approach focused on AI detection to a proactive embrace of its potential. The need for institutions to create policies and pedagogies that prepare students for a future integrated with AI is strongly emphasised.

Delving into the responsible use of GenAI in postgraduate academic writing, **Winberg, Engel-Hills, and Winberg** explore how training impacts students' ability to use these tools ethically and effectively. The findings reveal that while structured training can encourage critical engagement with GenAI tools, many students need to spend more time using these tools and heed warnings about academic dishonesty. Participants observed that a foundational understanding of academic writing is essential before effectively incorporating GenAI tools, as such tools are best used to supplement rather than replace scholarly efforts. The study underscores that teaching responsible GenAI usage requires a nuanced approach, addressing technical skills and ethical considerations. Ultimately, the research highlights the ongoing need for structured programs that foster innovation and maintain academic integrity.

Isaac, Majeed, Moussa, and Shopido developed an innovative approach to integrating an ethical AI-based teaching assistant for security education on the Internet of Things (IoT) discipline. This initiative focuses on improving student outcomes while reducing the workload for educators. The AI system emphasises data privacy, transparency, and accountability. The initiative has shown significant impacts on student success in identifying security threats to IoT and reducing educator marking time. Ethical design was central to the project, ensuring that the AI-supported learning environment promotes critical thinking and engagement among students. The study concludes that the transformative potential of AI in education can only be realised when these systems are carefully crafted to enhance teaching and learning while also addressing key ethical concerns such as privacy and academic integrity.

Rusznyak and Ajoodhainvestigate the effectiveness of natural language processing (NLP) models, including BERT and its derivatives, in automating the labelling of semantic density in lesson observation reports written by preservice teachers. Their findings indicate that these models achieved accuracy rates of 72% and 78%, suggesting that they have the potential to manage large qualitative datasets effectively. However, they face challenges, including handling ambiguous data, reducing dataset biases, and improving model interpretability. While the study demonstrates that NLP models can enhance the efficiency of analysing extensive datasets, it stresses the importance of ensuring reliability and fairness in their application. The research points to a promising opportunity to combine qualitative depth with large-scale insights, addressing a longstanding gap in educational research.

In exploring students' acceptance and perceptions of AI-assisted PowerPoint presentations, specifically teacher-generated slides created using Microsoft PowerPoint Designer, **Georgiev and Tinsley** find that students generally approve of AI-generated slides. However, they voice concerns regarding inconsistencies in design elements, such as structure, font size, and the alignment between text and visuals. While the exploratory nature of the research, based on focus group interviews, limits the generalizability of the findings, it opens the door for future studies to use diverse methodologies and cross-cultural perspectives. The results indicate that teachers and students could benefit from improved training on effectively integrating AI tools into their presentations. Additionally, the authors

call for further research into optimising presentation design with AI to enhance the learning experience while addressing the identified limitations.

In summary, this special issue invites educators, policymakers, and stakeholders to deeply engage with AI's transformative yet complex role in higher education. The eight works collected underscore the critical importance of ethical frameworks and clarity from university leadership, innovative learning designs and relational pedagogies in unlocking AI's full potential. From South Africa's emphasis on epistemic justice to China's focus on professional integrity, these contributions illuminate a rich tapestry of diverse pathways for AI integration. As we stand at the intersection of technological innovation and educational reform, the call to action is clear: we must account for the disruption of AI in such a way that prioritises cognition, equity, transformation, and global relevance. By aligning AI advancements with the foundational values of higher education, we can empower the next generation of learners to thrive in an interconnected and rapidly evolving world.

The editors, **Anisa Vahed** (Xi'an Jiaotong-Liverpool University, Suzhou, China), **Charlie Reis** (Xi'an Jiaotong-Liverpool University, Suzhou, China), **Shalini Singh** (Durban University of Technology, Durban, South Africa), and **Louise Drumm** (Edinburgh Napier University, Scotland), extend their heartfelt gratitude to the peer reviewers for their generous contributions of time and expertise, the editorial and production teams for their continued excellence, and the contributing authors for their dedication and professionalism. Despite the challenges faced during this process, their commitment has resulted in a collection of work that inspires and informs readers worldwide. We trust you will find this special issue as enriching and thought-provoking as we did in bringing it to fruition. ***Enjoy the issue and relish the insights!***