



Editorial

We are pleased to bring you the fourth volume of the Southern Journal of Engineering Education. This is the first *volume* that will hopefully contain two *issues* of which this is the first for 2026. The transition to publishing two issues per year rather than one reflects growth in the number of articles being submitted to the SJEE. This encouraging trend is, in part, due to our accreditation by the Directory of Open Access Journals (DOAJ). This means that South Africa's Department of Higher Education and Training (DHET) recognises articles published in the SJEE which is necessary for authors to claim institutional subsidy which obviously encourages South African researchers to publish with us.

However, a look at the contributors to this issue shows significant international authorship including colleagues from the Democratic Republic of Congo (DRC), Namibia, Nigeria and the USA – which we appreciate. This is appropriate for a journal that serves an international audience and is focused, of course, on the Global South. Furthermore, we are pleased that our editorial board (we prefer calling it a 'management team') is becoming increasingly international. When the journal was launched in 2021, all the original team members were South African, but we have recently welcomed Dr Mariam Makramalla from Newgiza University in Egypt and A/Prof Carola Hernandez from Universidad de Los Andes in Colombia.

The proliferation of generative AI (artificial intelligence) in education presents many challenges to academics for both their practice and research. To this end, Dr Sally Ledwaba – one of the management team members – leads the development of the journal's AI policy. This will form part of our broader Ethics and Malpractice Statement that we are working on as we consider applying for indexing with Scopus. One of the challenges with developing an AI policy is that the technology is changing so fast that the policy needs to be framed quite broadly; we don't want to have to update it every six months! Another matter to think about is the target audience for this policy. The most obvious category is **authors** and, of course, we must think about the needs and circumstances of researchers in the Global South. Something which seems to be useful is the requirement of 'AI Disclosure Statement' at the

end of an article in which authors disclose the ways in which they have used AI in their production and writing.

We also need to think about **reviewers** to ensure that, according to our peer review policy, the colleagues who are asked to review submissions draw on their real expertise to make an independent judgement. We do not want reviewers to simply feed the manuscript into ChatGPT or another AI tool and submit the output as their review. Such a practice not only raises ethical concerns but also confidentiality and data privacy concerns. From the viewpoint of **editors**, which includes me as the Editor-in-Chief as well as the management team, we are asking ourselves questions like this: is it permissible to use AI to synthesise reviews?

As a thought experiment, I decided to upload the articles in this issue to an AI tool – Google LM – to see whether it provided any useful ideas or patterns to guide, as is customary in editorials, the overview and article summaries. To model the ethic of transparency mentioned above, I have included an AI Disclosure Statement at the end of this editorial.

As a broad theme, the various facets of the student experience are foregrounded in this issue of the SJEE. The first article by **Mbela Kalengay et al.** deals with entrepreneurial mindset of STEM students across three national contexts: Kenya, the DRC and Namibia. The article explores how self-efficacy, social learning processes, and individual goal formation influence the integration of entrepreneurship education. Drawing on social cognitive theory (Bandura) and the theory of planned behaviour (Ajzen), the authors show that an approach that integrates ‘cognitive, social, and structural components of entrepreneurship education, rather than relying solely on theoretical instruction’ (p. 19), enhances students’ entrepreneurial intentions and competencies.

The second article explores university-industry collaboration (UIC) and employs a quantitative research design—PLS-SEM (partial least squares equation modelling)—to investigate the drivers and outcomes within the built environment sector in South Africa. The authors, **John Aliu and colleagues**, conclude that technology transfer and innovation ecosystems—the variable ‘TECH’—exert the most substantial influence on UIC outcomes. Beyond innovation, they note that UIC ‘significantly enhances skills development and graduate employability by providing students with hands-on experiences that bridge the gap between theoretical learning and practical application (p. 32). Picking up on the theme of

students, the article concludes by noting that future studies should adopt a ‘more inclusive approach by capturing the voices of students to better understand how UIC translates into real-world benefits for graduates’ (p. 49).

The remaining three articles weave together the various dimensions of the student experience: **Witske Meyer and Sally Ledwaba** considers how a faculty-led wellness intervention improved student mental health which in turn had an impact on student success; **Talia da Silva Burke and Karin Wolff** explores student motivation in topic selection for a final-year project course; and **Sidd Sunil Kumar et al.** examines the different ways in which instructors implement and promote care—in the sense of Tronto’s ethics of care—in their teaching in a first-year engineering course in the United States. This last article shows how students valued behaviours of care, particularly those that fostered student motivation and engagement, that addressed ‘the sense of exclusion often experienced in engineering education’ (p. 127).

At this stage you might be wondering to what extent I used AI in this editorial and what the promised disclosure statement is going to look like. This thought experiment deviated from what was intended and I decided to get you, the reader, to reflect on your own biases about identifying AI in writing. The fact is: I did not prompt Google LM (nor use any other AI tool) for this editorial! I uploaded the articles and considered using it but wanted to tackle it myself first. As I was writing, the thread of the student experience surfaced from the last three articles and I drew this thread back into the first two articles, crafting the theme as I wrote. Did you think you were reading an AI output? Or did you think that it was at least AI-assisted? Did the bolding of the authors’ names, which is common practice in my editorials, signal AI use to you? Admittedly, I replaced the en dashes with a few of the longer em dashes(—) to throw you off course!

As we all grapple with the impact of this incredible technology on engineering education, I hope this thought experiment nudged you to think about your own biases in reading written work (particularly from students if you are an educator), inspired you to lean more on your *human* intelligence before rushing to use a chatbot, and prompted you to consider what responsible AI use looks for all stakeholders in engineering education research.

Bruce Kloot
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SJEE