Editorial: Transformative Impact of Artificial Intelligence on Higher Education

Ibrahim Sirkeci¹ and Lan Lo²

Welcome to this second issue of Transnational Education Review (TER) in 2023. In this editorial, we also would like to reflect on an emerging phenomenon: Artificial Intelligence (AI) and its impact on higher education. We invite colleagues to submit their research, commentaries, debates and viewpoints in coming issues to share views and shape the agenda regarding AI and the future of learning and teaching in higher education.

The incorporation of AI in higher education institutions has been a subject of significant debate and experimentation recently. This debate is likely to grow further. We would like to discuss the utilisation of AI in British higher education and its impact on students, educators, and the overall learning experience. There are potential benefits as well as challenges associated with AI adoption. Nevertheless, it is imperative to evaluate the role of AI in shaping the future of higher education and consider its implications for the educational landscape in the UK and beyond.

AI is increasingly becoming an integral part of the educational sector. In higher education, AI-driven technologies are employed in various capacities and forms, from administrative tasks to personalised learning experiences. In a sense, AI is redefining the landscape of higher education in several ways, and it is important to recognise the transformative role it can play.

AI algorithms analyse students’ performances and tailor content to meet individual learning needs. Thus, there is more scope for personalised learning. For example, the online learning platform FutureLearn employs AI to offer personalised recommendations to students based on their course progress, learning preferences, and outcomes. This is supposed to improve engagement and result in better learning outcomes.

The second important area of use of AI is administration activities. The efficiency it brings to universities and colleges in the UK is evident as administrative processes are easily streamlined. Chatbots and virtual assistants are employed to handle student inquiries, reducing the workload of administrative staff. The University of Glasgow, for instance, introduced a chatbot called 'AskCUG' to assist students with common queries.

A third area where AI can make a substantial impact is research. The capabilities for automating data analysis and providing valuable insights efficiently enhance research capacity and processes. Some institutions are already making serious use of AI in this fashion. Such as

¹ Prof Dr Ibrahim Sirkeci, Director of International Business School, Manchester, UK. E-mail: sirkeci@theibs.uk
² Dr Lan Lo, Associate Professor in Chinese Studies, University of Nottingham, UK. E-mail: Lan.Lo@nottingham.ac.uk
using AI to improve the drug discovery process by Imperial College London, have the potential for substantial advancements in medical research.

Nevertheless, like any other disruptive innovation, AI Integration comes with challenges. Independent learning features of AI are a concern for data privacy. The collection and analysis of student data pose challenges for universities that must ensure sensitive information is protected and that students and others have control over their data. This is part of the compliance with The General Data Protection Regulation (GDPR) too.

An indirect challenge comes from the digital divide among students. Not all students have equal access to the devices or internet connectivity needed to benefit from AI-driven education. This requires attention and investment to ensure AI initiatives are inclusive in universities.

One bigger challenge is the use of AI in admissions processes and exams. Concerns about fairness and equity are an important part of the broader ethics debate on the use of AI. These ethical implications and biases associated with AI technologies must be thoroughly reviewed, and strategies and policies to mitigate them are in place.

However, there is no reason to be shy of AI and the possible benefits yet to come out of it. Many institutions are taking a careful stance while progressing with experiments. For example, the University of Edinburgh implemented a chatbot named 'Edwin' to provide students with instant responses to queries regarding coursework, admissions, and general university information. Similar projects in many institutions are helping them to reduce the burden on administrative staff but also improving the overall student experience. Other universities, such as the University of York, integrate AI into their teaching and learning strategies to personalise students’ learning experiences. It helps to tailor content, assignments, and feedback and thus aims to make the learning process more engaging and effective.

A final area of concern is similar to other sectors. What happens to lecturers teaching staff with the inclusion of AI in higher education? Some argue that AI can never replace the invaluable human element in teaching. However, the role of educators has been shifting from content delivery to facilitation for a decade or so in the UKHE. Now, this may be accelerated and even perfected as AI can handle routine tasks, allowing educators to focus on guiding and mentoring students.

AI is rapidly changing the landscape of higher education. Its transformative impact is becoming evident in personalised learning experiences, administrative efficiency, and research acceleration. Nonetheless, challenges such as data privacy, accessibility, and ethical concerns need to be addressed.

While AI cannot replace educators, it can enhance their roles, allowing them to focus on higher-level tasks and providing more personalised guidance to students. As AI technology advances, higher education institutions must perhaps adapt and harness its potential to create a more effective, inclusive, and student-centric learning environment without ignoring the challenges. For now, AI seems not a replacement for educators; rather, it is a powerful tool to support and augment the educational experience. The challenge is to strike a balance between the capabilities of AI and the unique qualities of human educators to ensure the best outcomes for students in higher education.
In this second issue of Transnational Education Review (TER) in 2023, we have a set of interesting articles from around the world. In the opening article, Görsev Sönmez and Serkan Gürkan examine the perceptions of pre-service teachers regarding refugee students in the education faculty of a private university in Istanbul, Turkey. The second paper by Emel Kiliç explores the socio-cultural integration of Turkish-speaking migrants in Belgium. As Emel explains, migration can be a challenging but rewarding experience; in Belgium, integration courses are available to provide essential support for migrants so that they adapt to their new environment. In Betül Dilara Şeker and Ibrahim Sirkeci’s insightful article, they argue that language proficiency was the most critical variable in education and adaptation to the host culture, and their findings indicate the importance of schools in the acculturation and adaptation of the Syrian refugee students. We hope you will find these contributions useful. Finally, once again, we extend an open invitation to all researchers, practitioners and scholars to join us in this debate with their research, views, comments and reviews.