

**Editorial: Innovative applications in teaching and learning facilitation: Current trends in research, practice, and policy****Guest Editor: Huseyin Uzunboylu** 

It is becoming widely acknowledged that creative teaching and learning methods are necessary to enhance academic performance in a variety of settings. Critical developments that impact these practices, such as the significance of collaborative relationships and the incorporation of technology into pedagogical frameworks have been brought to the fore by recent research. Ramírez-Montoya, Andrade-Vargas, Rivera-Rogel and Portuguez-Castro (2021) stress the necessity of incorporating sustainability ideas into future curricula while encouraging professional growth. This sentiment is in line with the widely held belief that teaching strategies must constantly change to meet the demands of the modern world.

Collaborative associations have shown promise in raising students' learning achievement, especially in digital situations. Nurdiana, Effendi, Ningsih, Abda and Aslan (2023) examined these connections, showing how using digital teaching methods might enhance outcomes. The results highlight the value of cooperation among educators, organisations, and communities, which can result in better teaching methods and more student involvement.

Furthermore, the emergence of generative conversational technologies offers both possibilities and difficulties for creative teaching methods. The implications of using artificial intelligence (AI) tools like ChatGPT (generative pre-trained transformer) to assist with policymaking and educational practices are covered by Dwivedi, Kshetri, Hughes, Slade, Jeyaraj, Kar, Baabdullah, Koohang, Raghavan, Ahuja, Albanna, Albashrawi, Al-Busaidi, Balakrishnan, Barlette, Basu, Bose, Brooks, Buhalis, Carter and Wright (2023). According to their investigation, while AI offers fresh opportunities to enhance educational experiences, pedagogical frameworks and ethical considerations must also be carefully taken into account.

It is crucial that instructors stay informed about these trends as education regulations continue to change in response to student needs and technology advancements. The education landscape will eventually be shaped by the interplay of innovative policies, successful implementation techniques, and research advancements. In this regard, encouraging flexibility and teamwork will be essential to maximise the benefits of creative teaching and learning strategies in a variety of educational settings.

For this special issue, numerous articles from all over the world were submitted. A sizable percentage of these essays were good enough to merit publishing. However, because of journal constraints we were only able to include 15 articles in this issue. Each article was anonymously reviewed by at least two referees from educational institutions in several countries. While adhering to impartiality, every submission was thoroughly assessed prior to acceptance.

The content of the articles may be summarised as follows:

Aydın Kılıç and Çelik Ercoşkun (2024) examined the relationship between creative thinking and problem-solving abilities and the mediating role of pre-school teacher candidates' cognitive flexibility. They found that 35% of the variation in problem-solving abilities can be explained by a combination of cognitive flexibility factors and creative thinking tendencies.

In order to improve learner outcomes, Strauss (2024) investigated the effects of professional development training on Grade 3 teachers' capacity to evaluate students' reading competency and to offer focused assistance. The primary findings show that teachers accurately recorded running records, and that assessment was impacted by students' reading speed, text fluency, comprehension, and general reading proficiency.

"Towards a taxonomy of artificial intelligence in teaching writing in a foreign language" by Laborda, Magal Royo and Madarova (2024) is another significant work. Due to its currency, a study entitled "Examination of students' success in the use of artificial intelligence", conducted in Kazakhstan (Uaidullakzy, Oralbekova, Dosbenbetova, Yerubay, Nauryzbayev & Turmanov, 2024), stands out. The majority of students reported that they enjoyed using AI and that they had some success doing so. A significant finding in a Saudi Arabian study, "Is ChatGPT reliable in education?" (Albrahim, 2024) offers startling details regarding the application of ChatGPT in the classroom.

This issue also covers topics like technology-enhanced learning (TEL), digital literacy and WhatsApp integration in school subjects, special education, inclusive education, and online teaching and learning.

Elçi (2024) focused on the relationship between digital literacy levels and lifelong learning tendencies of future teachers. It was found that the digital competencies and lifelong learning tendencies of teacher candidates differed according to gender and year of study variables. Liu, Wu, Li, Guo and Ye (2024) focused on digital literacy and online learning satisfaction among junior high school students. Although the data in this study were collected during the coronavirus disease (COVID-19) pandemic, with the increasing use of digital products in education, the findings were also helpful in understanding the underlying mechanisms of online learning outcomes for junior high school students in non-pandemic contexts. Van Rooyen and Mihai (2024) focused on digital learning

competencies as goals to address language teachers' challenges using tablets and Microsoft (MS) Teams. The results of this study indicate that MS Teams was effective in exposing teachers and learners to opportunities for the management of and engagement in creative and collaborative work, thereby mimicking learners' future workplace realities. Gcabashe (2024) focused on the integration of WhatsApp by business studies teachers to promote collaboration among learners. This imposes other challenges – learners tended to copy other students' work available on WhatsApp. Teachers are urged to create awareness among school learners about academic integrity. Yesmakhanova, Nurlan, Boranbayeva, Medeu, Rysbayeva and Omarov (2024) focused on the evaluation of students' attitudes towards blended learning. The results obtained reveal that students' attitudes towards blended learning were positive.

Valdenegro-Fuentes and González-Sanzana (2024) focused on motivational profiles for choosing special education teaching as a career. They identified three distinct groups of future teachers: the disenchanted, the highly engaged, and the conventional. These groups differed significantly regarding their motivation, such as the value they placed on helping others, personal growth and social recognition. Ledwaba and Sefotho (2024) focused on curriculum adaptation for learners with diverse learning needs. Learning barriers, such as disabilities, languages and socio-economic status lead to some not achieving standard educational outcomes. Uzunboylu, Akcamete, Sarp and Demirok (2024) focused on the evaluation of primary school teachers' attitudes towards gifted children and their education. They determined that teachers' attitudes towards gifted children and their education differed according to their gender in some categories, but not in all.

Zulu (2024) focused on enhancing the quality of online teaching and learning of a research module through the community of inquiry framework. The findings reveal that the lecturer's use of diverse instructional strategies resulted in students experiencing a higher level of teaching presence, a varied range of social presence, and a high level of cognitive presence. The high levels of cognitive and teaching presences could suggest the enhancement of online teaching and learning within a research module.

Last but not least, Kalavasonlu and Akcamete (2024) focused on developing educational communicative effectiveness of a peer relationship scale. The findings demonstrate that the peer interaction scale developed in the study was appropriate for gauging high school students' overall communicative effectiveness.

The carefully chosen articles in this special edition are expected to significantly advance the fields of science and education application.

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