Editorial

"यद्भावो तद्भवति"

(yat bhāvo tat bhavati)

While presenting the Union Budget on 1st February 2025, the Hon'ble Finance Minister of the Government of India announced the establishment of Centre of Excellence (CoE) on Artificial Intelligence (AI) in Education with an intent to leverage AI to personalize learning, improve assessment, and enhance teacher training in the country. Aligning itself with the broad objectives of National Education Policy (NEP) 2020, which are to enhance the access of the educational opportunities to all, improve quality, bring equity into the system, make education more affordable and accountable, CoE on AI in Education too seeks to bring paradigm shift in the way instructions and assessments hitherto are being organised in the educational landscapes of the country. The perennial contradiction in the Indian classroom between the theory and praxis is sought to be bridged by the use of this new technology. Theory informs us that every learner is unique while in actuality we administer uniform instructions in class. Personalised Adaptive Learning (PAL), powered by AI, is considered to be a bridge between theory and praxis. PAL works by constantly assessing student by employing various methods such as quizzes, exercises or simply analysing the way student interacts with the learning system. Based on these feedbacks, tailor-made contents are delivered to the student, ensuring a better learning curve for the child. In PAL, students receive instant and targeted feedback on their performance, helping them to identify their mistakes and improve their learning. It can be implemented in diverse settings such as online courses, blended learning and traditional classrooms. Another area in which AI has been a huge help is in assessment. It not only helps in constructions of questions and altering the difficulty levels of questions administered to students but also helps us to analyse the way a student answer questions; is there a pattern in committing errors, is there any problem in answering questions, etc. These finally help educators to know the learning styles of the students. Besides, it help teachers in assessing subjective answers. Most importantly, AI does not get frustrated with students, if students take longer time to understand the concept. As is the nature of technology, one can always come back and re start taking feedback from AI. AI has immense potential in the continuous professional development of teachers. Teachers are key to any educational setting. AI is not to replace the teachers, especially at the school level. Peer interactions and interactions with human teachers are the keystone of children's learning. AI, like any other technology, is here to help teachers. Teachers ought to seek maximum help from AI. Just as PAL personalizes learning experiences for students, the professional development of teachers, too, can be tailor-made and personalised with an appropriate AI tool. Ethical use and the potential biases are much-talked about the concerns of AI in education. Its environmental implications are also disconcerting. While AI has been a great help in disaster preparedness, responsiveness of the various systems and sub-systems to climate change, a better resource and energy management, its reliance on increasing number of data centres has created stress on water and energy demands, rare earth elements, e-waste management. It is an opportune time to find sustainable ways of managing AI in education. AI in Education besides being smart, must be sustainable too.

In this issue of the journal, 30 manuscripts have been accepted for publication in the category of research articles, review articles and book review. IJET authors explored the benefits of social media technology, adoption and impact of digital learning, digital transformation in education, a study on ICT integration in Vocational Education, prompt engineering with ChatGPT, integrating gamification into preschool concepts, smart minds in Math, shadow education and online learning. Additionally, they examined cyber safety in schools, generative AI in Academia, digital technologies, language barriers and emerging rural-urban divide in school education, instructional design in Indian Higher Education, role of technology acceptance in developing critical thinking ability among primary level students. I hope that these articles will spark meaningful discussions among stakeholders, fostering deeper understanding of the topics.

(ABHAY KUMAR)

Academic Editor