

Use of Artificial Intelligence as a Tool for the Advancement of Pedagogy for Teachers

A B Sarowar Sarif

M.A. Student, Department of Education

Chhatrapati Shahu Ji Maharaj University, Kanpur, UP, India

saroar.sarif@gmail.com

Abstract: *Artificial Intelligence is increasingly becoming a significant technological innovation that is transforming modern educational practices. It offers new possibilities for enhancing pedagogical practices and improving the overall teaching–learning process. AI-based tools support teachers in various academic activities such as lesson planning, student assessment, classroom management, and personalized instruction. By analyzing learning patterns and performance data, AI enables educators to identify students’ strengths and weaknesses and adopt more effective teaching strategies. In addition, AI can automate routine tasks such as grading and providing feedback, allowing teachers to devote more time to interactive teaching and student engagement. However, the integration of AI in education also presents several challenges, including inadequate infrastructure, limited teacher training, and concerns related to data privacy and ethical use. Therefore, careful planning, professional development for teachers, and clear ethical guidelines are essential for the effective implementation of AI in pedagogy. This paper examines the role, opportunities, challenges, and possible solutions associated with the use of Artificial Intelligence for the advancement of teaching practices.*

Keywords: Artificial Intelligence, Pedagogy, Educational Technology, Teaching–Learning Process, Teacher Development

