South Asian Journal of Marketing & Management Research (SAJMMR)
ISSN: 2249-877X Vol. 16, Issue 5-6, May-June 2026 SJIF 2022 = 7.911
A peer reviewed journal

# AN EXPLORATORY STUDY OF CHANGING PARADIGM: ROLE OF AI IN E-LEARNING

**Om Prakash*; Prof. Devendra Kumar Dhusia****

*Research Scholar,
Department of Commerce & Business Studies,
Jamia Millia Islamia, New Delhi, INDIA
Email Id: omprakashicssr@gmail.com

**Professor & Head,
Department of Commerce & Business Studies,
Jamia Millia Islamia, New Delhi, INDIA

**DOI: 10.5958/2249-877X.2026.00005.6**

## ABSTRACT

*The abstract provides a sketch of the ways that artificial intelligence (AI) is changing e-learning completely. With AI as the central technology, the text argues that learning resources have transitioned from being fixed to being alive, personalized, and powered by data. The entire story is that e-learning environments have advanced significantly; they are systems that can not only manage learning but also adjust to the needs, preferences, and pace of the student. Aside from that, the fact that AI is altering how and to what extent e-learning systems function serves as one of the study's pillars. Additionally, the study aims to identify and classify the primary barriers to AI implementation in educational environments. Descriptive and analytical research designs, primary data collection methods like surveys and interviews, and secondary data analysis through books, journals, and reports are some of the methods used. In terms of better learner participation, increased personalization, automation of some administrative tasks, and real-time performance monitoring, the results are likely to be comparable to the positive effects. Privacy concerns, inadequate technology, decreased teacher-student interaction, and widening digital divides could all have detrimental effects. There are practical ramifications for educators, students, institutions, and policy makers, the abstract concludes. It states that comprehending the paradigm shift is essential for creating technologically sophisticated learning environments in the future that also take pedagogy and ethics into account.*

**KEYWORDS:** *Artificial intelligence (AI), virtual learning environments (VLE), digital education, adaptive learning, learning management systems (LMS), e-learning, and personalized learning.*

## REFERENCES

1. Alalwan, N., Alalwan, A., &Dwivedi, Y. K. (2023). Artificial intelligence in education: A systematic review of emerging trends and future research directions. Computers & Education, 197, 104739.
2. Anderson, T. (2020). Theories for learning with emerging technologies. Athabasca University Press.

**3.** Bacca, J., Baldiris, S., Fabregat, R., Graf, S., &Kinshuk. (2022). Adaptive learning in digital education: A review of AI-based techniques and challenges. Educational Technology & Society, 25(2), 31–48.

**4.** Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. IEEE Access, 8, 75264–75278.

**5.** Chouhan, V. S., & Singh, S. (2021). E-learning adoption and digital divide in India: Challenges and opportunities. Journal of Educational Technology Systems, 50(1), 25–45.

**6.** Holmes, W., Bialik, M., &Fadel, C. (2019). Artificial Intelligence in Education: Promises and implications for teaching and learning. Center for Curriculum Redesign.

**7.** Huang, R., Spector, J. M., & Yang, J. (2019). ICT in education: A critical literature review and its implications. Springer.

**8.** Ifenthaler, D., &Yau, J. Y. (2020). Artificial intelligence and learning analytics in education: A critical review. Learning Analytics Review, 8(2), 15–35.

**9.** Johnson, L., Becker, S. A., Cummins, M., & Freeman, A. (2020). The NMC Horizon Report: 2020 Higher Education Edition. EDUCAUSE.

**10.** Kumar, P., &Uskov, V. (2022). Smart education and e-learning: AI applications and challenges. Smart Education and e-Learning, 5, 1–12.

**11.** Luckin, R., Holmes, W., Griffiths, M., &Forcier, L. B. (2016). Intelligence unleashed: An argument for AI in education. Pearson.

**12.** Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge (TPACK) framework. Teachers College Record, 108(6), 1017–1054.

**13.** OECD. (2021). AI and the future of skills. Organisation for Economic Co-operation and Development.

**14.** Pane, J. F. (2018). Strategies for implementing personalized learning. RAND Corporation.

**15.** Park, Y. (2020). A pedagogical framework for AI integration in online learning. Journal of Online Learning Research, 6(2), 155–178.

**16.** Popenici, S., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. Research and Practice in Technology Enhanced Learning, 12(1), 1–13.

**17.** Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. International Journal of Artificial Intelligence in Education, 26(2), 582–599.

**18.** Scherer, R., Siddiq, F., & Sánchez Viveros, B. (2020). The impact of AI literacy on technology adoption in education. Computers in Human Behavior, 112, 106461.

**19.** Selwyn, N. (2019). Should robots replace teachers? AI and the future of education. Polity Press.

**20.** Singh, V., & Thurman, A. (2019). How many ways can we define online learning? Journal of Online Learning, 23(2), 1–20.

**21.** UNESCO. (2022). AI and education: A guide for policymakers. United Nations Educational, Scientific and Cultural Organization.

**22.** Viberg, O., Hatakka, M., Bälter, O., &Mavroudi, A. (2020). The current landscape of learning analytics in higher education. Computers in Human Behavior, 89, 98–110.

**23.** Wang, F., & Sun, Y. (2022). Student perceptions of AI-driven learning platforms in higher education. Journal of Educational Computing Research, 60(5), 1103–1129.

**24.** Zhao, Y. (2021). The digital divide and equity challenges in AI-enabled education. Educational Technology Research & Development, 69(3), 1457–1474.