Artificial intelligence in education: An indication

1. DR. Shweta singh
2. Anuradha

1. Department of Education, 2. M.Ed. 2024-26, Institute of Teacher Education Kadrabad, Modinagar, (U.P.) India

Abstract: Artificial Intelligence (AI) refers to the ability of technology, particularly computer systems to simulate human intelligence processes. AI is a rapidly developing field of technology that has the potential to significantly transform all social relationships. To develop innovative teaching and learning strategies in the field of education, artificial intelligence is now being made an effort in a variety of educational settings. AI is being applied to examine enormous quantities of data to find trends and insights that might guide the creation of new educational policies and plans. The main aim of this paper is to study the need of AI in the field of education and find out the different challenges therein. An attempt has also been made to explore AI from the perspective of NEP 2020. The study is qualitatively done by reviewing various articles on Artificial Intelligence (AI).

According to National Education Policy 2020, AI should be introduced to and included in the regular education curriculum. AI is being incorporated into the curriculum to improve efficiency, personalize learning, and streamline administrative processes so that teachers have more time and freedom to impart knowledge and flexibility. NEP 2020 asserts that technology, including AI, will fundamentally alter how children learn in schools. However, this requires a significant amount of technological and academic research. The Prime Minister of India has started several initiatives in honour of NEP 2020's first anniversary. 'AI for All' is one of the major initiatives that was started. AI for All is an online course designed to give every member of the nation a fundamental understanding of artificial intelligence (AI). It is obtainable in eleven different vernacular languages. A student, a parent who stays at home, a professional in any sector, or even an elderly citizen can benefit from this four-hour, self-paced, micro-learning programme

Need of Artificial Intelligence in Education- Using artificial intelligence, a personalized study schedule can be generated for each learner that takes into account any knowledge gaps. AI makes it easier to determine what a learner understands and fails to comprehend.

- AI can change the curriculum and content, making it more interesting and relevant for students. AI is able to recommend and create content that interacts with learners by analysing enormous amounts of data regarding student preferences, interests and learning outcomes.

- AI has the potential to expand and increase the educational experience for students by giving unique methods of accessibility as well as personalized learning catered to each student.

- To provide personalized and flexible learning experiences for students, AI involves combining systems with intelligence, computations and data analysis techniques. The purpose of AI in education is to enhance learning results, encourage student involvement and give students the support they need.

- It can improve teaching and learning by using multimedia tools to bring abstract concepts to reality. Conventional responsibilities can be undertaken by it, and allowing teachers to concentrate more on teaching and the specific requirements of each student.

NEP 2020 and Artificial Intelligence- The National Education Policy 2020 incorporates all the technological components, with a strong emphasis on artificial intelligence (AI). The policy promises to develop instructional software based on artificial intelligence that will be made available in all local or regional languages. These software or programs will be widely accessible and beneficial to students, even those who attend school in extremely rural areas or have special needs. The NEP 2020 recognizes that children have a range of learning styles, interests, and aptitudes, which focus on the need for individualized learning. By analysing data about each student's learning styles, interests, and aptitudes, AI is enabling individualized learning. The NEP 2020 also states that AI technology will help in the development of smart classrooms that will permit online interactions and collaborations with students from various schools across the world, online exams, applications with quizzes, and information that can develop the students. The NEP 2020 acknowledges the value of experiential learning and skill development in preparing students for employment opportunities of the twenty-first century.

Challenges of AI in Education- Need for technical expertise: It may be challenging for teachers who are unfamiliar with AI to incorporate this technology into their teaching practices, and they may require assistance and training to get started.

- Cost of AI tools and applications: Most of educational institutions lack the funds to purchase and maintain the equipment required to implement AI in the classroom.
- Ethical concerns associated with incorporating AI into the classroom: Concerns have been raised regarding the implications of AI on privacy, security, and the job economy as it gets more sophisticated. Teachers must be aware of these problems and work to protect their students as they experiment with rapidly growing technology.
- Ensuring inclusion and equity for AI in education: With the development of AI, the least developed nations run the risk of experiencing new technological, economic, and societal gaps. To create the fundamental circumstances for putting novel tactics that make use of AI to enhance learning into practice, some major challenges including the fundamental technological infrastructure must be overcome.

Conclusion- In conclusion, it can be said that the educational system is being revolutionized worldwide by artificial intelligence (AI). The way AI is transforming how students learn and teachers teach is having an immense effect on higher education in India. AI and other cutting-edge technology will become more and more crucial as the Indian education system develops to ensure that all students receive a high-quality education. UNESCO is committed to assisting Member States in implementing AI technologies in educational contexts while supporting the fundamental values of inclusion and equity. AI technologies have the potential to help Member States achieve the Education 2030 Agenda. AI has begun to transform how teachers and students interact with one another, from providing customized learning experiences to curriculum optimization. It seems beyond saying that implementing this technology will enable educational institutions to save time, money and resources. Therefore, it should be enthusiastically embraced so that educational institutions and their local communities may benefit from these results, as they undoubtedly help mould the next generation into well-rounded individuals

REFERENCE

1. Aggarwal, A. 2020. National Education Policy 2020 and Artificial Intelligence. Retrieved from https://anubudh.com/national-education-policy-2020-and-artificial-intelligence/
2. Chen, L., Chen, P. & Lin, Z. 2020. Artificial Intelligence in Education: A Review. IEEE, 8: 75264 – 75278. Retrieved from https://ieeexplore.ieee.org/document/9069875
3. Jain, S. & Jain, R. 2019. Role of Artificial Intelligence in Higher Education- An Empirical Investigation. International Journal of Research and Analytical Reviews, 6(2): 144-150. Retrieved from http://ijrar.com/upload_issue/ijrar_issue_20544069.pdf
4. Kengam, J. 2020. Artificial Intelligence in Education. ResearchGate. Retrieved from https://www.researchgate.net/publication/347448363_ARTIFICIAL_INTELLIGENCE_IN_EDUCATION
5. Khan, M. A. 2021. Artificial Intelligence (AI) & Education Developing Adaptable Learning Opportunities among Teachers & Learners. Edutracks, 20(9): 39-44
6. Khan, M. A. 2023. Artificial Intelligence (AI) in Education: Need of the Hour. Edutracks, 22(10): 15-20
7. National Education Policy 2020: AI for all. Retrieved from https://www.ict360.com/blog/National-EducationPolicy-NEP-2020-AI-for-All
8. Pujari, N. A. 2023. Role of Artificial Intelligence in Enhancing Education. Edutracks, 22(7): 17-18
9. Kandula, N. (2020). Role of Artificial Intelligence in Education. Alochana Chakra Journal, 9 (9): 305-309.Retrievedfrohttps://www.researchgate.net/publication/351082272_Role_of_Artificial_Intelligence_in_Educations

*****