



## Role of Artificial Intelligence in Modern Education System

Mrs. Alivia Basu

Principal, SSMTT College, Siliguri

### Abstract:

*Artificial Intelligence enhances learning experiences, automate grading and enable learners to focus on individualized instruction. It aims to put inference, prediction, judgement in computer system and giving feedback to students for better learning outcomes. This study shows the significant difference between artificial intelligence and modern system of education, in relation to data privacy. AI can also adapt assistive technologies to build students conduct. This study also discusses the fidelity between artificial intelligence and modern system generated education in relation to students' performance.*

**Keywords:** *Artificial Intelligence, Modern Education, Virtual Learning.*

### Introduction:

Artificial intelligence is a technology that build human life easier. It is a branch of Computer Science. It makes our study easily accessible. Nowadays we are using AI in various fields like business, healthcare, robotics, customer service, education. It is a capacity given by humans to machines, so that it can memorize and learn and also it can create, speak, judge and overall make decisions. AI helps us to enhance our education and provides insightful learning. It also facilitates our decision-making capacity. It aims to put inference, prediction, judgement in computer system to provide feedback to students.

AI gives real life education to learners which makes them more empowered to achieve their goal. It makes learning possible for 24×7. AI provides inclusive learning and bridges the gap between children with special needs. Due to AI, modern education system becomes so much accessible and flexible for in and every corner of the world. It also supports students where they have skill gaps. Moreover, it also makes teachers work easier by evaluating, grading and individualising of students.

### Review of related literature:

Len (2022) LMS like Docebo had the ability to support learner related works like administration and content related creation. Chiu (2023) There could be a considerable body of work which generates different applications. Sadiku (2021) explained it as the capability of a technology which could easily operate human

work. Joshi (2021) AI had the ability that modified our sociological interaction. It would also develop into new solutions.

### **Rationale of the study:**

AI is important in modern education system as it improved our personal experiences, enhance our learning, improve administrative procedures. AI tools make education system accessible as well. For e.g. Visual recognition text and audio speeches make our task burden free. By the use of AI, plagiarism in work can easily be detected. AI fosters collaborative learning. It not only encourages students but also help teachers to delimit errors in true sense. Some key roles in AI include:

Personalized learning – AI makes personalized learning feasible according to the individual needs, interest, motivation and learning styles.

Automated grading – AI help educators by freeing their time through automated grading so that the instructors can only focus on their teaching.

Virtual learning environment – Virtual learning environment can only be possible because of AI. It stimulates real life situation in education by making learners interactive and engaging.

Accessibility – Education nowadays is very much accessible only because of AI.

Research and development – AI can help researchers in solving large number of datasheets in a second and make learning developed.

### **Research Questions:**

Is there any relationship between Artificial Intelligence and modern system of education?

Is there any significant difference between Artificial Intelligence and modern system of education in relation to data privacy?

Is there any fidelity between modern system of education and AI generated education in relation to students' performance?

### **Objectives:**

To study the significant difference if any between AI and modern system of education in relation to data privacy.

To study the significant relation if any between AI and modern system of education.

To study the fidelity, if any, between the modern system of education and AI generated education in relation to students' performance.

Problems related to role of Artificial Intelligence in modern education system.

**Lack of trained teachers:**

There are few teachers now who are not till now well trained. Teachers are not even ready to accept new knowledge and skills which is need of the hour. Some teachers are not even ready to use ICT tools for classroom learning.

Poor technical support:

Another important barrier in using AI in modern education system is lack of technical support. Due to poor skills of teachers' educational institutions are not getting good technical support.

Insufficient funds:

Educational institution requires good fund to operate their infrastructure. But government are not providing good fund for it.

High cost of AI tools:

The most important challenge is successful use of AI in modern education system is high cost of ICT tools. It is really impossible for educational institutions to purchase the tools for implementation of AI in modern education system.

**Future Directions:**

Developing AI literacy:

We can spread awareness of how to use AI in modern system. We need to educate our new generation about the uses of AI.

Continuous improvement:

We need to evaluate the effectiveness of AI powered tools for regular assessment.

Teacher training programme:

More teacher training programmes need to be implemented in order to make the teachers acquainted with AI powered tools.

Integrating AI with emerging technologies:

We need to combine AI with new technologies in order to enhance education.

**Conclusion:**

Artificial Intelligence (AI) is transforming the education sector by enhancing teaching, learning and administrative processes. AI powered tools and systems offer personalized learning experiences, automate grading, and provide real time feedback. While AI presents opportunities for improved education outcomes, it also raises important questions about equity, bias, and the role of human teachers. As AI continues to

evolve it's crucial to address this concern and ensure that AI is used in ways that support and augment human teaching, rather than replacing it.

**References:**

1. Len, J (2022). innovations for learning professionals, Retrieved from talent learning.com
2. Chiu, T.K.F (2023). computers and education: artificial intelligence, Article 100118.
3. Sadiku, M.N Ashaolu, T.J., Ajayi – Majebi, A Musa, S.M(2021). Artificial intelligence in education; International journal of scientific advances (IJSCIA), 2(1), 5-11.
4. Joshi, S., Rambola, R.K., Churi, P (2021). Evaluating artificial intelligence in education for next generation. In journal of Physics: conference series (vol.1714, No. 1, p. 012039). IOP publishing.

**Citation:** Basu. Mrs. A., (2025) “Role of Artificial Intelligence in Modern Education System”, *Bharati International Journal of Multidisciplinary Research & Development (BIJMRD)*, Vol-3, Issue-05.1, May-2025 (Special).