

The Artificial Intelligence: An Intelligent Decision Making System in Education

Prof. Md. Tanwir Yunus

Head, University Deptt.of Education, Vinoba Bhave University, Hazaribagh, Jharkhand
mdtanwiryunus786@gmail.com

ABSTRACT

Artificial Intelligence can help to restore some of the lost glory, one is that now research is advancing into convergence domains. A lot of technologies that are there, we can realize the benefits of potential management as a whole. So which are coming from different technologies he combined to have an intelligent decision making system, The AI provide the viewer scholars the information and knowledge of day - to - day events. It enhance the boundary of knowledge. It help scholars to over come barriers of many talented persons with useful ideas, moulding attitudes, correct information and different skills. The AI presentation helps the scholars to acquire authentic information and real knowledge and great deal. It has become authentic and attractive because of its reliability and accuracy are associated with real happening. It promote certain regulated, specific, systematic and timely non - formal educational programs for students and adult learners.

Keywords :- Restore, Glory, Convergence, Domain, Intelligent Decision- Making, Reliability, Reality.

Received : 15/7/2025

Acceptance : 10/8/2025

Introduction:

Artificial intelligence (AI) is rapidly reshaping educational processes, offering prospects for personalization, automated feedback, scalable tutoring, and enhanced decision-making through data. Researchers have examined AI's pedagogical potential, technological affordances, and social implications across K-12, higher education, and lifelong learning contexts. This review organizes the literature into core themes and highlights notable findings and gaps relevant to scholars and practitioners.

AI can help to restore some of the last glory, one is that now research is advancing into convergence domains. This means something traditional is converging with something which is not traditional, a lot of Technologies that are there, we can realize the benefit of potential management as a whole. So the potential data, patient systems and some other managements which are coming from different technologies be combined to have an intelligent decision - making system.

Review of Literature

Cabero-Almenara et al. (2024): Explored teachers' digital competencies for AI and the relationships between cognition, capacity, vision, ethics, and job satisfaction. Bond et al. (2024): Conducted a meta-systematic review of AI in higher education, highlighting the need for increased ethics, collaboration, and rigor. Farrokhnia et al. (2023): Conducted a SWOT analysis of ChatGPT, identifying strengths, weaknesses, opportunities, and threats associated with its use in education.

Research Gaps

1. Long-term Impact: Limited understanding of AI's long-term effects on student learning outcomes and educational systems.
2. Contextual Factors: Insufficient research on AI adoption in diverse cultural, linguistic, and socio-economic contexts.
3. Teacher-AI Collaboration: More studies are needed to explore effective collaboration between teachers and AI systems.
4. Bias and Fairness: Further investigation is required to mitigate biases in AI models and ensure

- fairness in AI-driven decision-making.
5. Self-Regulated Learning: Research gaps exist in understanding how AI can support students' self-regulated learning skills.
 6. AI Literacy for Educators: There's a need for more research on AI literacy and training for educators to effectively integrate AI into their teaching practices.
 7. Assessment and Evaluation: Limited understanding of AI's role in assessing student learning outcomes and evaluating educational programs.

Research Questions:

How can AI be designed to support diverse learning needs and abilities? What are the most effective ways to integrate AI into teacher education and professional development? How can AI-driven systems be developed to prioritize transparency, accountability, and fairness in educational decision-making? What are the implications of AI on the role of teachers and the teacher-student relationship?

Methodology:

The present paper is based on secondary data collected from different research journal, conferences papers, Newspapers, books and websites.

Objectives:

1. Enhancing Learning Experiences- Personalized Learning: Tailor learning experiences to individual students' needs, abilities, and learning styles.
2. Adaptive Assessments: Develop assessments that adjust to students' knowledge and skill levels.
3. Improving Efficiency and Effectiveness- Automated Administrative Tasks: Free educators from routine tasks, allowing them to focus on teaching and student support.
4. Intelligent Tutoring Systems: Provide real-time feedback and guidance to students.
5. Increasing Accessibility and Inclusion- Language Translation: Offer language translation services to support students with diverse linguistic backgrounds.
6. Support for Students with Disabilities: Provide assistive technologies, such as text-to-speech and speech-to-text systems.

7. Enhancing Teacher Support- Teacher Training: Provide educators with training and support to effectively integrate AI tools into their teaching practices.

Results and Discussion

Those who can engage with AI tools efficiently who can prompt well, iterate and interperate machine responses will gain a serious productivity edge. That edge increasingly belongs to those proficient in various different languages. This raises a difficult but necessary question is AI silently widening the gap between the different languages speaking in India vernacular population. The digital divide we feared two decades ago is morphing into linguistic divide. But when users attempt to interact with AI tools, the experience is often more valuable and encouraging. What makes this more concerning is that it is entirely preventable. India has the talent the tech - infrastructure and the data to build AI models that that can understand and respond fluently in Indian scenario. It has been seen and released that the efforts are promising and encouraging.

The National Language Translation Mission aims to harness AI and National Language Processing to make public digital content available in all major Indian Languages. Equally important is the role of India's tech - ecosystem. There is start-up of artificial intelligence which refers to the capability of a machine to intimate intelligence of human behaviour. The future of AI ethics is about ensuring that is AI Technology evolves, it continues to be used in ways that are fair, respectful and beneficial for everyone. As AI becomes more powerful, it will be able to make more decision and influence more aspects of our lives. This means that we need to think carefully about how these Technology are designed and used to make sure they are aligned with ethical principles. The AI, in combination for outdoor and indoor scenarios, proved to be most advantageous for the companies and organization to efficiently monitor and control their day - to - day process such as design, production, transformation, maintenance, implementation and distribution of their products. AI is currently being applied in a variety of fields ranging from playing chess and music to making complex decisions, creating models, predicting patterns and even self - driving cars. (1yer - 2018)

The Artificial Intelligence provides the viewer students the information and knowledge of day - to - day events. It enhance the boundary of knowledge of the seekers. It help students to overcome barriers of many talented persons present useful ideas, moulding attitudes , correct information and different skills. The AI Presentation helps the students to acquire authentic information and real knowledge a great deal. Students are made much informative about latest knowledge. It has become authentic and attractive because of its reliability and accuracy are associated with real happening scene. It promote certain regulated, specific, systematic and timely non - formal educational programs for students and adult learners. The industry refers to artificial intelligence as the fourth industrial revolution in all walks of life, the first three being the advent of stem, electricity and computers. New advanced in the field of information and technology have changed the way we live, what was unthinkable till yesterday has become reality today.

The coming days will be even more dramatic with "far reaching" advances expected in AI and machine learning (ML) as AI rapidly transforms economies , the govt.of India has been quick in responding to the emerging scenario, several initiative are being taken to integrate AI in higher education in institutions. The technology creates great disruptions in societies, we should remain concerned about its impact on the marginalize sections. The great opportunities being created should be available to all , the great transformations being brought about should be house fit all. AI and automation are not only changing how business operate but also altering the roles and responsibilities of management professionals. Tasks that were once annual, respective and time consuming are now being automated, allowing leaders to focus on strategic decision - making innovation and leadership. As a result, there is a growing demanding for managers who are skilled in AI and automation technologies, as well as in managing teams that work alongside AI systems.

AI from being an experimental technology to something people are depending on. At the sometime no body knows whether this will affect how individuals spend money on a slew of subscriptions that we engage with from streaming platforms to gaming services. After all one's monthly income remain the same.

Traditional paths alone no longer guarantee success, and with evolving industries, automation and global connectivity, to - days scholars need more than just marks to thrive. The need of the hour is a clear understanding of career direction paired with a solid foundation in core 21st century skills.

Gone are the days when career choices were limited to engineering, medical, or civil services, students to - day have access to a spectrum of careers in fields like data science, design, digital marketing, biotechnology, sustainability and artificial intelligence. However, with more choices comes more confusion. Career clarity must begin with self discovery. Students should explore their interests, strength, ambition and passion through career counseling, aptitude test and mentoring. Institutions and parents can play a critical role by facilitating exposure different fields of interests.

The Artificial Intelligence (AI) is not going to replace humans , but it supplement human abilities to say that can be performed better. As AI is supplements human abilities to say that can be performed better. As AI is entirely different from humans, they ought to perceive things differently and can easily visualize the relationship and patterns that can not be seen by humans. Thus the human - AI partnership can offer many opportunities.

For over two decades - almost a generation, we have been used to searching for information on google in a certain way. There is a search box where a query is keyed in , and google shows an index of pages that may answer the query, allowing us to move from one result to another. Earlier this decade , google introduced AI mode as an experiment in the US and now it has been rolled out in India (as an experiment in labs). AI mode allows people to ask long - tail queries like, what are the best plants to put in a shaded area that can also be dry and what food did Elvis Presley eat when he lived in Memphis and when is the best time to visit the where he ate ; the answer are comprehensive. Artificial Intelligence is good at searches are common on platforms.

Limitations of Artificial Intelligence (AI) in education

1. **Technical Limitations-** Data Quality and Availability: AI requires high-quality, diverse, and well-annotated data to function effectively.
2. **Algorithmic Bias:** AI systems can perpetuate

existing biases if trained on biased data or designed with a narrow perspective.

3. **Technical Infrastructure:** AI implementation requires robust technical infrastructure, including hardware, software, and network connectivity.
4. **Pedagogical Limitations-** Limited Contextual Understanding: AI may struggle to understand the nuances of human context, leading to misinterpretation or oversimplification.
5. **Lack of Human Touch:** AI-powered systems may lack the empathy, emotional support, and social interaction that human teachers provide.
6. **Over-Reliance on Technology:** Over-reliance on AI can lead to diminished critical thinking and problem-solving skills.
7. **Ethical Limitations-** Data Privacy and Security: AI systems require access to sensitive student data, raising concerns about data protection and security.
8. **Transparency and Accountability:** AI decision-making processes can be opaque, making it challenging to understand how conclusions are reached.
9. **Equity and Access:** AI may exacerbate existing inequalities if not designed with equity and access in mind.
10. **Human Limitations-** Teacher Training and Support: Educators need training and support to effectively integrate AI tools into their teaching practices.
11. **Student Engagement:** AI-powered systems may not be engaging or motivating for all students, particularly those who prefer human interaction.
12. **Contextual Factors:** AI may not account for

contextual factors, such as socio-economic status, cultural background, or individual learning needs.

13. **Future Directions-** Addressing Limitations: Ongoing research and development aim to address these limitations and improve AI's effectiveness in education.

14. **Human-Centered Design:** Designing AI systems with human needs and values in mind can help mitigate limitations and ensure AI supports, rather than replaces, human educators

Conclusion:

AI has the potential to revolutionize education by providing personalized learning experiences, enhancing efficiency, and improving accessibility. As AI continues to evolve, it's essential to prioritize responsible development, address challenges, and ensure that AI serves as a tool to support educators and students, rather than replacing them.

References:

1. B.K. Nayak ; Textbook on Foundation of Education , Kitab Mahal , Cuttack V Ed. 2017.
2. Jagannath Mohanty ; Development of Educational Technology at the Emerging scenario in the Field ; Neel kamal Publications Pvt. LTD. Hyderabad . 2016.
3. Jayasimha , Sqr. Lr ; Train your Brain , A guide to creative Memory Techniques ; Neel Kamal Publications , Hyderabad A.P.
4. K. Harton ; W. Horton ; H. Learning tools and Techniques : A consumers guide for Trainers Teacher Educators and Instructional designers. 1st Edition ; Wiley Technology publishing ; 2017.
5. Vernal L ; policy M.U. , ICT in Teacher Education ; A case study. University News , Punjab University , Chandigarh , Vol.42 , 2015.

