

Transforming the world of education through ai-enabled learning – a new normal

Padmakali Banerjee
Debasis Bhattacharya
IILM University Gurugram, India

Keywords

Artificial Intelligence, Education, Tools, Institutions, Technology, Learning

Abstract

In the contemporary era marked by rapid internationalization in higher education, strategizing effective means to leveraging the power of Artificial Intelligence in knowledge paradigm has taken center-stage in universities and higher educational institutions worldwide. Development and diffusion of AI techniques in conjunction with adaptation of best practices and their efficient reinforcement are enabling factors for resource optimization and purpose-driven outcome based learning in an inclusive and sustainable manner. Incorporating AI applications in higher education has multipronged advantages encompassing enhanced performance prediction, resource mobilization, assessment and evaluation, user-friendly learning management system, intelligent tutoring systems, and improvement of learning experiences for students inclusive of psychometric profiling of students. AI-powered tools, chatbots and similar techniques assist in personalized self-paced learning for students while preparing customized resources for collaborative student learning and engagement. Concurrently, adoption of AI applications have remarkable imprints in developing predictive analytics to improve retention management, intelligent analytics, assistive technology, and automatic content analysis. Ai-powered techniques such as Natural Language Processing (NLP) also enhance the efficacy of collaborative research in virtual space especially in areas of big data analytics, clinical assessment, high impact publications, patents, trademarks, etc. Higher educational institutions can leverage AI techniques for administrative decision efficiency and devising superior models of CRM. Interestingly, AI techniques is being increasingly leveraged by students of humanities, arts, management and commerce for knowledge creation, dissemination and better employability. This research paper evaluates the implications of AI techniques on outcome-based learning, action deliverables, and adoption of best practices in higher educational landscape by analysing latest developments in AI integration as emerging new normal. While doing so the paper assesses AI efficacy in terms of capacity building of learning management system in higher educational institutions and provides recommendations for improvements in integration process.

Introduction

Technology has made great inroads into peoples' life and living in every bit of the way. Over the years the world of education has been witnessing paradigm shift in quality and deliverance because of AI-enabled interventions that have virtually transformed the experience of learning. In today's rapidly globalized educational landscape leveraging the power of AI has become imperative especially for universities and higher educational institutions worldwide. Development and diffusion of AI techniques in conjunction with adaptation of best practices and their efficient reinforcement are enabling factors for resource optimization and purpose-driven outcome based learning in an inclusive and sustainable manner. Incorporating AI applications in higher education has multipronged advantages encompassing enhanced performance prediction, resource mobilization, assessment and evaluation, user-friendly learning management system, intelligent tutoring systems, and improvement of learning experiences for students inclusive of psychometric profiling of students. In the present times AI-driven breakthroughs in educational pursuits help delivering holistic education that enables future-ready, skilled, and empowered youth graduating from universities/higher educational institutions, who are able to contribute meaningfully for global goodness.

Cutting edge AI technology with embedded sophistications enable better learning experience for students and educators. In recent times AI-powered tools, chatbots and similar techniques assist in personalized self-paced learning for students while preparing customized resources for collaborative

student learning and engagement. AI-powered learning systems provide real-time feedback, and detect potential problems early allowing for timely mitigation. AI can also help educators identify student strengths and weaknesses while enabling them to tailor their teaching pedagogy to cater to requirements.¹ Concurrently, adoption of AI applications have remarkable imprints in developing predictive analytics to improve retention management, intelligent analytics, assistive technology, and automatic content analysis. AI-powered techniques such as Natural Language Processing (NLP) also enhance the efficacy of collaborative research in virtual space especially in areas of big data analytics, clinical assessment, high impact publications, patents, trademarks, etc. Additionally, by automating routine administrative tasks AI helps streamline teacher workflows, giving them more time to mentoring students and monitoring their learning and development.²

Simultaneously, higher educational institutions can leverage AI techniques for administrative decision efficiency and devising superior models of CRM. Interestingly, AI techniques are being increasingly leveraged by students of humanities, arts, management and commerce for knowledge creation, dissemination and better employability. Innovative AI applications are already transforming educational pursuits by enhancing learning outcomes, expanding reach and extent of digital literacy, empowering educators, and making students equipped with latest skills to become future ready.³ The need of the hour is to create responsive AI-enabled learning that would propel purposeful and progressive ecosystem thereby having lasting impact through accessible, efficient, equitable, industry integrated, data-driven educational experiences in empowering youth and larger communities worldwide for a better future with a spirit of inclusivity, sustainability, and shared progress. While the promise of AI in education is compelling, only through responsible and ethical adoption can AI truly fulfil its potential and ensure equitable access to quality education for all as part of Education 4.0.⁴ This in turn will conform to the tenets of the UN Sustainable Development Goals and the Fourth Industrial Revolution.

Theoretical Exploration – Mapping the Nomenclature of AI-enabled Learning

Rapid upgradation of technology has impacted the world of education in an unprecedented manner. AI is an innovative technology that focuses on the artificial replication of human intelligence and cognitive abilities to create software or machines that are capable of performing tasks typically carried out by humans.⁵ Most reputable higher educational institutions have recognized that AI and ML have transformational impact on present and future trajectory of global educational paradigm in a progressive, inclusive and sustainable manner that complies with the essence of the Fourth Industrial Revolution.

In an era of global educational integration, AI-enabled technology has become paramount in configuring the best practices for knowledge creation and dissemination, decision making, governance and academic pursuits of universities and higher educational institutions in particular. In contemporary deliberations, the focus on AI-enabled learning has enormously enhanced the efficacy of curriculum development, teaching pedagogy, personalized learning experiences, and administrative processes. Cutting-edge learning management system enables freeing educators from routine tasks. In this way AI empowers educators to focus on building rapport with students for effective mentoring, understanding individual student needs, and customized problem mitigation thereby enhancing students' motivation. Such synergy not only improves teaching effectiveness, better learning experiences, but also promotes the indispensable human element in education. The aspect of AI-enabled learning, propelled by the Fourth Industrial Revolution, has gained exponential importance in terms of its creativity, accessibility, inclusivity, and sustainable growth in conjunction with shared progress driven by continuous technological experimentation, upgradation, and innovative breakthroughs. The terminology of Fourth Industrial Revolution was introduced by Klaus Schwab, Founder and Executive Chairman of World Economic Forum. According to Schwab, the Fourth Industrial Revolution opens up "the possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity, and access

¹ Igbokwe, I.C. 2023.

² World Economic Forum. May 01, 2023.

³ ETCIO.com. April 29, 2024.

⁴ World Economic Forum. April 28, 2024.

⁵ Kuleto, V. et al. 2021.

to knowledge and information. And these possibilities will be multiplied by emerging technology breakthroughs in fields such as artificial intelligence, robotics, the Internet of Things, energy storage, and quantum computing".⁶ Subsequently, the proliferation and penetration AI-enabled learning not only has revolutionized the efficacy and productivity of global educational landscape but also has the power and ability to integrate most comprehensively all stakeholders encompassing the world of educational establishments - private and public sectors - academicians, industry experts, policymakers, and civil society in general. It in turn conceptualizes a world where academic stakeholders comprising students, faculty, researchers, and scientists move between digital spaces and offline domain driven by connected AI technology to enable better learning experiences.⁷ The 10th BRICS Summit held in Johannesburg in July 2018 brought the paradigm of Fourth Industrial Revolution at the global centre-stage while providing a roadmap of futuristic best practices of educational deliverance among many others.⁸ The Fourth Industrial Revolution driven Education 4.0 ecosystem uniquely and perfectly synergizes the idea of reinforcing AI-driven technology in responsible manner towards shaping the trajectory of not only decision process for governance in academic pursuits but also enabling heightened efficacy and efficiency in academic teaching, assessment and evaluation, personalized learning, capacity building, interactive and advanced educational experience for student community worldwide.

Importantly, AI-enabled learning and digital literacy are complementary strategies that go beyond the mere ability to use digital tools and platforms or become tech-savvy, it also encompasses critical thinking, problem-solving, creativity and awareness of the ethical dimensions of AI among new-age students. As part of facilitating holistic education in today's unprecedented data-driven world, AI-enabled learning is also effective in enhancing students' and researchers' ability to distinguish between facts and misinformation.⁹ In that context AI-enabled learning not only equips students with the ability to recognize disinformation and misinformation but also promotes their ability to build resilient, robust, reliable, and secured AI systems in workplace. Enhancing the integration of AI applications into global education systems allows for technology play a pivotal role in educating students about responsible and equitable AI practices. Towards this the results are encouraging and shows 65 per cent of universities in the United States of America support AI-enabled learning. Moreover, these systems provide valuable assistance to teachers and lecturers in educational institutions of repute, thereby facilitating and improving learning substantively.¹⁰ In the present times, AI-enabled learning and teaching systems are increasingly allowing students to develop knowledge and skills in collaboration with lecturers, tutors, learning support tools and technological resources.¹¹ The advantages of AI-enabled learning systems include continuous availability and greater accessibility to study materials, cost optimization, collaboration amongst students and lecturers, improved performance, performance analysis, immediate feedback procurement, and effective communication.¹² AI-enabled learning has virtually invoked creative and productive learning environment wherein students are applying current technologies to configure their expectations and abilities to access, acquire, comprehend, construct, create and communicate knowledge in real time and space.¹³ The aim is to create an ecosystem of responsible AI that is sustainable and fosters global goodness. Then only the emerging future skills and education initiatives promulgated by AI-enabled learning will have a lasting impact through accessible, efficient, equitable, industry integrated data-driven educational experiences in empowering youth and larger communities for a better tomorrow. In essence AI-enabled learning ecosystem has become a new normal in achieving educational excellence constantly thriving and allowing for human values and people at the core of any development process in a manner such that use of technology has the capability to empowerment students and faculty at large by making holistic educational experience.

⁶ Schwab, K. 2016.

⁷ Top, D. 2016.

⁸ Ministry of External Affairs, Government of India. 2018.

⁹ Rand, D. et al. 2022; UNESCO, Paris 2021.

¹⁰ Chang, R. 2017.

¹¹ Gros, B. 2016.

¹² Dunn, T. J., & Kennedy, M. 2019.

¹³ Kabudi, T. et al. 2021.

Evolution of Literacy – Traversing the Historical Terrain

Literacy and its implications in knowledge and educational paradigm have enhanced peoples' curiosity for hundreds of years. Changes in the technologies of literacy impact literacy practices and communities in a manner that overtime spread the reach and extensiveness of knowledge and information. The transition from an oral culture in ancient times to a literate one reshaped human consciousness and thirst for knowledge. Thereafter, the introduction of alphabetic writing in Ancient Greece transformed Greek thought. Further down the line of evolution the invention of the printing press transformed the world of literacy, knowledge sharing, and information dissemination in an unprecedented and equally spectacular manner so much so that moved the power of orthodox scholar-priests to more democratic institutions while propelling individualism, nationalism, and secularism.¹⁴ In fact, the invention of Gutenberg printing press with movable type in Europe in 1440 AD was as ground-breaking as it in reality marked the beginning of a new age. Thereafter, printing was increasingly used for universal literacy and education. As the print legacy got traction modern and progressive times began with print media and communication. Without printing press, literacy could never have advanced so rapidly worldwide in the medieval area and our modern world would have been just inconceivable.

As a matter of fact, the invention of printing press is associated with the Renaissance, Reformation as well as the Scientific Revolution, which together propelled learning systems, enhanced literacy, and disseminated knowledge to the people.¹⁵ The printing press changed and redefined the culture of knowledge creation and dissemination through books, newspapers, pamphlets, etc. Through this the effects of printing press on scaling up literacy at the global level were enormous. Its impact on the preservation and dissemination of knowledge was commendable. Thousands of copies of a single manuscript virtually assured its survival and spread. Even if restricted primarily to the rich and affluent in initial days the sheer numbers of available books subsequently made them readily available to the general population thereby making positive impact on growth of mass literacy.¹⁶ The speedy feedback mechanism of books and print materials reversed the slow degradation of recorded thoughts while transitioning into the era of buoyancy of new thought processes upon which the superstructure of Scientific Revolution of the 18th-19th century was configured. Further down the lane of history in driving literacy, the era of networked computers further brought unprecedented improvements in preserving, updating and disseminating knowledge by establishing multiple networks of mass communication.¹⁷ From an evolutionary standpoint a well-documented book can do a commendable job of addressing all the knowledge and thoughts up to the time of its publication, but can't address the reaction to itself. Subsequent editions even if tend to correct this anomaly, they are rarely published in less than a year and hence lose relevance. The resolution to such problems was sorted out with the advent and momentum of information and communication technology since the third quarter of the 20th century. The rise of computer-based technology, internet, software development, and more remarkably in recent years the Artificial Intelligence Revolution penetration of knowledge and information deep down to global space skyrocketed leading to astronomical growth in literacy, which was virtually unimaginable earlier.

Contemporary era is the age of Artificial Intelligence. The Fourth Industrial Revolution as envisaged by the World Economic Forum and subsequently prioritized by the powerful BRICS and G-20 groupings has been catalytic force in bringing around and lightening speed of AI Revolution in every bit of life and living at the present time. "AI literacy" encompasses AI competencies that the general population should possess while making them computer technology proficient in an inclusive and sustainable manner.¹⁸ Keeping with the perspective AI literacy may be defined as "a set of competencies that enables individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace".¹⁹ The genesis of Artificial Intelligence as a science of making intelligent machines in the 1950s traversed a long way throughout several decades of the 20th century and

¹⁴ Murray, Denise E. 2000.

¹⁵ Clanchy, Michael T. 1983.

¹⁶ Dewar, James A. 1998.

¹⁷ Ibid.

¹⁸ Laupichler et al. 2022.

¹⁹ Long, D., & Magerko, B. 2020.

progressively evolved into intelligent machines and algorithms that can reason and make decisions which mimic human intelligence. A broader and more comprehensive understanding of AI is possible by its ability to perform cognitive tasks particularly configuring learning system and problem-solving mechanism encompassing rapidly evolving technological innovations such as machine learning, natural language processing, big data, and neural networks.²⁰ With greater inroads of AI in peoples' everyday life, AI literacy itself has emerged as a new skill set that everyone should acquire in response to the emerging era of intelligence. But one has to understand that AI literacy is just not merely knowing how to use AI applications, learners and users should also have sufficient knowledge about the underlying AI concepts and understand the ethical concerns in order to use AI responsibly and making it more socially responsive for enhancing community well-being. Considering the relevance of AI to individuals' life and profession, it may be well argued that apart from promoting the conceptual understanding of AI among global populace belonging to diverse backgrounds, they should be aware of the merits and demerits of the new technology and use the new knowledge prudently for global goodness and peoples' empowerment. With AI used in full potential as change agent in enhancing global literacy drive through digitization, it can create revolutionary effect on social empowerment worldwide and make paradigm shift in enhancing self-efficacy and self-engagement with flavour of innovation and entrepreneurship. When that happens the benefits of AI will have multiplier effect in knowledge creation and information dissemination in an inclusive and sustainable along with equity and diversity as propounded by the Fourth Industrial Revolution and UN Sustainable Development Goals.

AI-Enabled Learning – Transformational Effect

As the trajectory of Artificial Intelligence has been constantly evolving and achieving new milestones while witnessing profound dynamism, it has permeated the world of learning like never before. In educational landscape AI-enabled learning has effected paradigm shifts at all levels and has literally become new normal worldwide. Educators' and students' self-efficacy, willingness, and proficiency in learning AI tools are rising momentarily. That predicts their sense of readiness and positive attitudes towards integrating AI in learning practices wholeheartedly. In turn once they have generated sufficient interest in AI literacy, they have greater intention to learn and use AI²¹ more constructively, responsively and ethically towards evolving the best practices in learning while making AI-enabled learning more meaningful and transformational with the spirit of diversity, equity, and inclusivity.

Predictive Analytics: As stated elsewhere in this study AI-powered learning assists in enhanced predictive analyses, resource mobilization, assessment and evaluation, user-friendly learning management system, intelligent tutoring systems, and improvement of learning experiences for students inclusive of psychometric profiling of students. In recent times, AI-generated tools, chatbots, and similar techniques assist in personalized self-paced learning for students while preparing customized resources for collaborative student learning and engagement. Also AI techniques such as Natural Language Processing (NLP) also enhance the efficacy of collaborative research in virtual space especially in areas of big data analytics, clinical assessment, high impact publications, patents, trademarks. The next phase of this review paper analyses the efficacy of the evolving nature of AI-enabled learning.

Academic performance prediction is one of the most important functionalities of computer-based education, which is generally conducted to estimate students' learning performance using learning information and artificial intelligence (AI) algorithms.²² AI-powered predictive analytics models create forecasts regarding future performance of students by analysing past trends in their learning experiences.²³ This helps better understanding of projected future performance of students while allowing instructors and parents for initiating early interventions for timely resolution of the impending academic challenges students might face. Concurrently, predictive analytics contribute to the development of personalized learning methods by data-driven analysis of students' learning styles, strengths, and weaknesses. Likewise, AI applications can also be widely used in future for curriculum design based on future industry needs,

²⁰ Davy Tsz Kit Ng et al. 2021.

²¹ Kong, Siu-Cheung et al. 2022.

²² Tomasevic N. et al. 2020.

²³ Sghir, N. et al. 2023

student learning objectives, admissions and enrolment planning, graduation rate improvement, graduate enrolment ratio, etc. through analysis of academic rigor, financial constraints, and social aspects the students face.²⁴

Personalized Learning: From the student standpoint, AI holds the promise of personalizing learning during the higher education journey in unprecedented ways. AI-enabled applications can help educators customize learning pathways and tailor career counseling by analyzing student data to provide recommendations that align with their strengths, interests, career aspirations and workforce development needs. AI algorithms assess and analyse student performance data and identifies patterns of learning difficulties of students in comprehending the study materials. After assessing the strengths and weaknesses of every student's educational capacities, AI combines the details with individual needs, preferences, and learning styles to create customised learning methods.²⁵ This exercise eventually enhances efficacy and capacity of students in while encouraging collaborative student learning and engagement. Overall AI tools have been regarded indispensable to facilitate the learning process for each student experience personalized-based to satisfy specific needs and requirements of the student.

Intelligent Tutoring: On aspects of intelligent tutoring AI-powered tools are capable of providing meaningful teaching experience for students and even take the place of human tutors. AI technologies are used in intelligent tutoring process to acquire the knowledge and skills of a student in a personalized way. It can then flexibly present teaching contents according to student's profile and ability thereby giving an individualized learning experience to students.²⁶ AI-enabled intelligent tutoring system assesses each student's proficiency of a subject, matches it against its domain database that consists of learning content, and also matches it against the teaching strategies e.g. tutor database.²⁷ Moreover, AI-powered intelligent tutoring systems can incorporate gamified elements, simulation-based activities, and interactive exercises. This makes the students' learning experience more stimulating and interesting for students.²⁸ AI-enabled learning systems are capable to give quick feedback on student performance not only on academic knowledge but also in terms of proficiency in skills such as problem solving, creativity, and collaborative learning exercises. In fact, tutoring and learning deliverables can be better tailored to students' individual needs and requirements, ensuring that each student gets the educational support they need to reach their full potential.²⁹ Based on the academic outcome results, intelligent tutoring strategy provides appropriate information and mentoring based on individual student's needs at the right time and pace to allow students get wholesome and productive learning experience.

Assessment and Evaluation: In contemporary education landscape worldwide, AI-enabled approaches can be used for a variety of tasks such as monitoring student performance, grading scales, and creating models that accurately assess student's learning outcomes. Such approach has already shown impressive results when it comes to complex solutions not typically addressed by rule books, such as scoring students' written responses or analysing large, complex datasets of students' performance.³⁰ Additionally, AI-powered technology such as natural language processing can be automated as essay scoring tool to grade written essays in examinations. Many universities across the world, several testing companies such as the Education Testing Service and Pearson use natural language processing to score essays. Massive online open courses (MOOC) allowing unlimited participation through the web and run by companies such as Coursera and Udacity have also integrated AI models to assess and score essays within their courses. Additionally, vision-based AI tools also constitute an important field that can help with optical resonance assessment. A number of assessment groups have used optical systems to grade students' work.³¹ These spectacular developments brought in by AI-enabled learning systems have created

²⁴ Ivanashko, Oksana. 2024.

²⁵ Hewlett Packard. March 2024.

²⁶ Ramadhan, A. et al. 2024.

²⁷ Negoita, M. G., & Pritchard, D. 2004.

²⁸ Ivanashko, Oksana. 2024.

²⁹ Zhai, X. et al. 2021.

³⁰ Future of Testing in Education: Artificial Intelligence'. 2021.

³¹ Ibid.

solid platform for automated and data-driven learning experiences, evaluation and assessment for students as well as resource optimization.

Chatbots: AI-based technology such as Chatbots, Virtual Assistance tools, and Adaptive Learning Systems offer immersive and experiential learning engagements that allow students to discover intricate theories and solutions in a more interactive, collaborative, and meaningful manner.³² AI-driven chatbots and virtual assistants are also important in facilitating heightened student support services by providing immediate, 24/7 assistance for a range of inquiries from prospective students. They can answer questions and provide information about programs, admission requirements and campus life while contributing towards institutional development.³³ This, in turn, help students make informed and rational decisions while building up on their interests early on in their academic pursuits and improving on-time graduation rates.

Learning Management System: AI-powered LMS is designed to enhance efficacy and efficiency of students' learning process especially in higher educational institution setting. AI backed LMS is a one-stop solution for students while enhancing their learning capacity, learning style and interest generation, and adjusts and optimizes resources according to the needs and requirements of students. AI-enabled LMS provides learning resources of varied difficulty levels to cater to requirements of all categories of students while advising on content development. Concurrently, such advanced LMS conducts real-time monitoring and analysis of students' learning progress and identifies students' learning difficulties and error patterns.³⁴

Artificial Intelligence and Educational Apps

Artificial Intelligence powered apps as learning aids have the power to change students' perspectives on autonomous learning and improve their learning autonomy.³⁵ AI techniques such as Mobile Assisted Language Learning (MALL) is considered more preferable on the hands of the students because it offers affordable features, interactivity, accessibility, privacy, and multidimensional functional features.³⁶ AI technologies have developed personalized content generation tools such as language learning apps that are used to create exercises and lesson plans customized to student's individual needs and interests. Apps like Babbel and Lingodeer use AI algorithms to analyse the student's performance and create personalized lesson plans based on their strengths and weaknesses.³⁷ Additionally, language learning apps like Busuu and Babbel leverage natural language processing (NLP) to tailor instruction to individual students' needs. They assess and analyse students' proficiency levels, basic understanding of the language vocabulary, and language objectives to offer personalized feedback and guidance. This approach not only enhances efficiency but also makes language learning engaging and enjoyable for students especially in higher educational institutions.

One has to understand that AI plays a significant role in developing learning apps by enhancing personalization, interactivity, and effectiveness. AI-enabled adaptive learning apps can adjust to each student's progress in real-time, identifying gaps in knowledge, providing immediate feedback, and suggesting targeted interventions to help students master the material. It adjusts the difficulty level of content in real-time based on a student's performance. AI can also help teachers automate administrative tasks, enabling them to focus more on instruction and student mentoring. AI can create adaptive learning systems that adjust the difficulty level of content in real-time based on a student's performance. NLP enables learning apps to understand and generate human language, facilitating interactive features such as language translation, voice recognition for pronunciation feedback, and chatbots for instant student support. Additionally various AI learning apps e.g. Bit.ai, Mendeley, Turnitin, elinik.io, and Coursera tools and platforms support higher education research by analysing large data sets, generating insights and

³² Pradana, M. et al. 2023.

³³ Runte, J. 2024.

³⁴ Duan, S. et al. 2024.

³⁵ Mahendra, M. W. et al. 2023.

³⁶ Yudhiantara, R.A. et al. 2017.

³⁷ Devasena, R. 2024.

predictions, and identifying patterns of effective learning that may be difficult for human researchers to detect.³⁸

Conclusion

Over the years the role and significance of Artificial Intelligence have witnessed transcendental implications across all dimensions and disciplines. AI-enabled learning has virtually revolutionized the world of knowledge creation and dissemination so much so that in present times it has become indispensable for enhancing efficacy and efficiency of education and learning systems trans-globally. Based on the context and substantive analysis conducted in the research paper, some of the key take away aspects are enumerated below:

1) Artificial Intelligence interventions have made learning system more inclusive, sustainable, smart, impactful and flexible to fit into the requirements of diverse groups of users in global arena. This is an extremely positive feature of AI-enabled learning in contemporary era of globalized education system.

2) It is also important to recognize that AI carries baggage of disruption and apprehensions in the mind of many. Such apprehensions are creating obstacles in seamless adoption of the technology in education system worldwide.

3) Artificial Intelligence in areas of learning has to be used in a socially responsive manner while meeting all standards of ethical dimensions so that it can very well be acceptable by all sections of population as force of societal goodness worldwide.

4) Artificial Intelligence has to be ethical in all its educational pursuits that encompass knowledge creation and information dissemination.

5) The use of Artificial Intelligence has to be more proactive in enhancing transparency and accountability in making globalized education system more people centric and student friendly in its delivery mechanism.

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