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Impact of AI on Higher Education

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Abstract

AI is a relatively new area of technological development, which has attracted global interest in academic and higher education sector. Increased awareness and benefits of AI in the education circle and the integration of high-performance computing systems in administrative work have accelerated the pace of transformation in the field (Fengchun et al., 2021). UNESCO is committed to supporting Member States to harness the potential of AI technologies for achieving the Education 2030 Agenda, while ensuring that its application in educational contexts is guided by the core principles of inclusion and equity. AI can inform educators of student's engagement, learning progress, and well-being. It also has built digital apps and tools that allow for teacher interaction and individual progress monitoring.

This paper we'll explore the impact of AI on the higher education system seeks to find out the advantage and disadvantage of artificial intelligence on the higher education sector from the perspectives of learners.

Keywords: Artificial Intelligence, Higher Education Sector.

INTRODUCTION: artificial intelligence is the ability of a digital application or computer-controlled robot to perform a task commonly associated with intelligent beings.1950 Alain Turing publish "computer machinery and intelligence" which proposed a test of machine intelligence called as the imitation game. AI as a machine learning enabled technologies is used in customer service, science, transportation, entertainment, medicine, education, military, robotics, finance, agriculture, and manufacturing. Engineers, scientists advance discovery and smart technology influence to our daily live. AI are used today to enhance communication skills, personalised recommendations, and improve decision- making.

There are lots of on-going AI developments, most of them divided into different types. these classifications reveal more of a storyline than a taxonomy one that can tell us how far AI has come where it's going and what the future holds. These are the seven main types of AI to known as - narrow AI, Artificial general intelligence, artificial super intelligence, reactive machine AI, limited memory AI, Theory of mind AI, Self-aware AI.

AI has become an effective tool for addressing challenges in education and accelerating progress towards SDG's 4th Goal is quality education. With its ability to collect and analyse data. Today, some of the events and impact of AI on the education sector are concentrated in the fields of online learning, task automation, and personalization learning (Chen, Chen and Lin, 2020). By identifying strengths and weaknesses of each student. AI can tailor educational materials to suit individual needs better.

Objective:

The main objective of our paper is to know what are the -

1. ADVANTAGE OF AI IN HEIGHER EDUCATION
2. DISADVANTAGE OF AI IN HEIGHER EDUCATION

IMPACT OF ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION

Artificial intelligence for academic is to automating administrative tasks to grading assignments, tracking attendance and creating schedules is time consuming. besides reducing workload and in education also helps to improve the efficiency of the curriculum using data from student learning patterns and to prepare individuals for success in an increasing digital and interconnected world.

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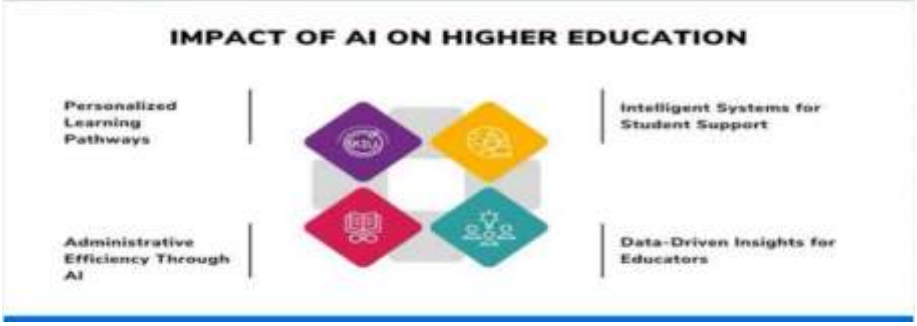

AI has brought continuous innovation to higher education with generative AI tools boosting instructor productivity by focus on creative innovative, complex student focused on goals as well as research and that introduced methodologies, digital e-libraries, Grammer checking and plagiarism trackers software. It acts as a catalyst for scientific breakthrough a key instrument in the scientific process. Higher education researcher is already using AI to prediction of student outcomes, to analyse the quality of data, conduct review of literature, edit and finding research gap and to makes faster, cheaper and more automated.

AI is automating scheduled gradings, report generation, significantly reducing work load on education. AI education system enable teachers to focus on what do they best by providing guidance, emotional support and faster creativity skill and critical thinking in students.

AI in higher education can significantly impact on researcher by offering personalized learning experiences, providing immediate feedback on assignments, enhancing access to an educational resource to allowing more targeted to support researcher, ultimately leads to improving learners' outcomes and more engaging educational experiences.

AI holds the promise to develop personalized learning scale by customizing tools and features of learning a contemporary education system. Personalized learning offers several benefits to higher education learner, increased levels of engagement with professors including a reduction learning time, improved knowledge retention, and increase motivation to study AI shares the promise of expanding educational opportunities for people who would have been otherwise unable to access learning opportunities. As an example, disabled learner is unable to access the same quality of education as ordinary students do.

ADVANTAGE OF AI IN HEIGHER EDUCATION:

As AI technologies permit higher education institutions are they revolutionizing the traditional learning landscape. The way for more dynamic, personalized and efficient education system. AI influence academic is multifaceted, encompassing student learning, administrative processes, and faculty support. There by making a profound impact on all over the college institutions.

AI-powered tools are reshaping: the student learning journey and streamlining administrative tasks. Some key benefits of AI in education include a Facilitating the creation of personalized learning pathways, enhancing learners' success on go through intelligent systems, bolstering efficiency in administrative tasks, improving learner retention, AI technologies, including machine learning and predictive analytics, is revolutionizing education and paving the way for a more effective and personalized learning experience.

AI as a Collaborative Tool in Research: AI is to be a valuable collaborative tool in research. It is fostering unprecedented levels of collaboration in academic research Automating repetitive tasks, researchers from various disciplines, Analyse extensive data sets. AI tools like Word vice, ChatGPT, and Typeset are revolutionizing the way research is conducted, power point presentation PPT, enhancing the team collaboration, explanation of data analysis and accuracy, improving knowledge searching area and identification, and evaluating the research quality and

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efficiency. As a result, we are witness of a surge of interdisciplinary work and new discoveries unlock new frontiers in academic centre.

AI can assist your interview preparation: AI in higher education institute particularly in courses such as MBA and other managerial programs are paramount communication skills. Effective communication is a key determinant of success in these fields, AI is making the assessment of student's communication abilities a critical component of the admission and training processes. The generative AI has introduced advanced techniques of interviewing, that can significantly enhance the assessment process. For interview preparation provide a unique and effective platform for learners to practice and refine their communication skills. These interviews simulate real-life interactions to allowing to receive learner constructive feedback on their performance. Through AI-driven interactions, learner can identify their strengths and weakness, enabling them to better prepare for actual interviews.

Assess Communication Skills using AI Tools: AI has Assess multiple skills with detailed feedback and rating. Conduct interviews & group discussions virtually or online platform at your convenience. Record responses and evaluate them later as per your time. Eliminate bias and errors in assessing candidate skills. This AI-driven approach is not only beneficial for learners' preparation but also offers higher education institutions a scalable solution for candidate career selection during admissions. AI-driven career path planning tools like SPSS Statistics software and H2O Driverless AI provide personalized recommendations for academic paths and future careers, ensuring learners are well-prepared for employment and positioned for leadership roles.

The Ethical Dimension of AI in Education: As we continue access AI in higher education, it's crucial to acknowledge the ethical dimension of technology revolution. Key ethical considerations include addressing biases in AI algorithms and promote fairness in all area, along with protecting researcher data privacy. The discussion on ethics is not just a theoretical it has a real-world implication on the learning experience of learners and the teaching methods as well as teaching strategies of faculty. Now, we'll delved into the ethical considerations of AI in higher education more thoroughly.

DISADVANTAGE OF AI IN HEIGHER EDUCATION:

One of the major disadvantages of AI in education institution is the issue of bias. AI systems are designed to learn from large amounts of data, but if that data is biased, the AI system will also be biased in its analysis and recommendations.

Another disadvantage is the biggest fear of AI replacing human teachers. While AI can certainly assist and complement the work of educators, it cannot fully replace the human touch and expertise that teachers bring to the classroom. The role of educators is not just to transmit knowledge, but also to foster critical thinking, empathy, and creativity and human teacher

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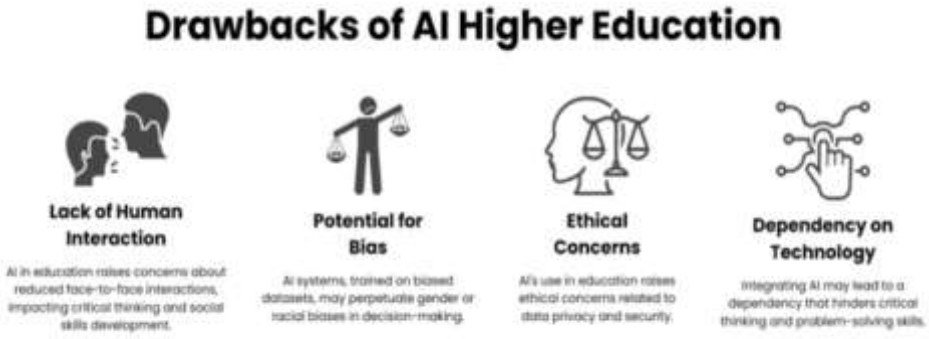
qualities that cannot be replicated by AI.



Lack of Emotional Connection: One major disadvantage of AI in education is the lack of emotional connection. While AI can provide many advantages in terms of data analysis, privacy, and efficiency, it falls short when it comes to emotional intelligence. AI systems are not capable of understanding and responding to human emotions in the same way that a human teacher can. Emotional connection plays a crucial role in education, as it helps students feel supported, motivated, and engaged. Human teachers are able to provide emotional support, empathy, and personal attention to their students, which can greatly enhance the learning experience.

Potential Job Displacement: One of the potential disadvantages of AI in education is the potential for job displacement. As AI technology advances, there is a concern that teachers and other education professionals may be replaced by AI systems and robots. While AI can provide many advantages in terms of data analysis and personalized learning, it cannot fully replace the human element of teaching. Teachers bring a unique perspective, empathy, and understanding to the classroom that AI systems may struggle to replicate.

Job and Personalization Bias: One specific concern is the possibility of job and personalization bias. AI algorithms often make decisions based on data patterns, and if the training data is biased, the AI system may unknowingly perpetuate that bias. This can negatively impact on students by limited educational sector and job opportunities based on factors such as gender, ethnicity, or socio-economic background. Additionally, AI systems that has personalize learning experiences may inadvertently reinforce stereotypes by offering biased content or excluding certain perspectives.

Limited Adaptability: One of the disadvantages of AI in education centre and its limited adaptability. While AI has the potential to revolutionize the learning experience, it is not without its limitations. AI systems are designed to automating certain tasks and processes, but they cannot fully replace human teachers. One of the limitations of AI in education sector is its inability to effectively adapt to unique learning styles and needs of individual students. AI systems are often programmed with fits in all approach, which may not be suitable for all learner. This can result in a lack of personalized learning experiences and hinder the progress of students who require individualized attention and support.

Loss of Creativity: One of the potential disadvantages of using AI in higher education sector is the loss of creativity. AI relies on data and algorithms to analyse and process information, but it lacks the ability to think creatively and come up with original ideas. In a traditional educational setting, creativity is often encouraged and fostered through hands-on projects, group discussions, and open-ended assignments. the increasing use of AI in academic sector, there is a risk that to creative aspects of learning may be diminished. AI systems are designed to provide personalized learning experiences by analysing a student's performance and

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providing relevant content and resources. While this personalized approach can be beneficial for students in all terms of efficiency and effectiveness, it can also limit their mind focus to limit bound on all kind of academic exposure to diverse perspectives and ideas.

Educational Inequality: Artificial Intelligence (AI) has the potential to transforming education and provide equal opportunities to every learner. It also brings limitations and challenges that can perpetuate educational inequality. Job Replacement One of the concerns that AI technologies may replace human educators, leading to job loss and widening up the gap between educators and learners. Bias in Data the AI algorithms rely on data to making decisions and recommendations. If the data are used in biased way, it can perpetuate existing educational inequalities by favouring certain groups all over others. In Privacy Concerns AI systems collect and analyse vast amounts of personal data about learners. This raises concerns about privacy and the potential misuse of sensitive information.

Inaccurate Assessments: Another limitation or disadvantage of AI in education centre is the potential for inaccurate assessments. While AI systems can analyse vast amounts of data entry to assess student performance, they are not always accurate in their evaluations. AI algorithms may not be able to accurately assess the creativity or critical thinking skills of learner, as these skills can be difficult to measure objectively. Additionally, AI systems may not take into account of the personal circumstances or context of researcher, leading to inaccurate assessments or data collection. For an example, AI system may not consider a learner's language proficiency or cultural background when evaluate their performance, which can result in unfair evaluations. Furthermore, privacy is a major concern with the use of AI in assessments and project. AI systems collect and analyse large amounts of data about learners, including personal information and performance data. This raises concerns about the security and privacy of student data, as well as the potential for misuse of their information entry data.

Technical Issues and Glitches: While artificial intelligence (AI) in education offers numerous advantages such as improved data analysis, increased efficiency, and personalized learning experiences, it is not without its limitations and potential drawbacks. One significant concern with the occurrence of technical issues and glitches within AI systems.AI systems rely heavily on complex algorithms and machine learning models to process and analyse data. However, these systems are not immune to errors or malfunctions. Technical issues can arise from coding errors, hardware malfunctions, application update or even connectivity problems. These issues can disrupt the smooth functioning of AI-powered educational tools, leading to delays, hiccups, or even complete system failures.

Difficulty in Measuring Soft Skills: While artificial intelligence (AI) has numerous advantages in education, it also has its limitations, we saw One of the challenges is the difficulty in measuring soft skills using AI technologies. Soft skills, such as communication, teamwork, problem-solving, and creativity, are essential for success in the workforce. However, these skills are subjective and harder to qualitative compared to hard technical skills. AI algorithms are primarily designed to analyse and evaluation of quantitative data, such as test scores and academic achievements. They struggle to accurately measure and assess soft skills, as they are more abstractive and contextual in nature.

Limitations of AI in Personalization: Another disadvantage of AI may not have the capability to understand the emotions and motivations of students, which can impact the effectiveness of their learning experience. AI may struggle to customize content and teaching methods to match the diverse learning styles and preferences of students. There is a risk of the learning experience becoming standardized and monotonous due to the lack of human interaction and adaptability.

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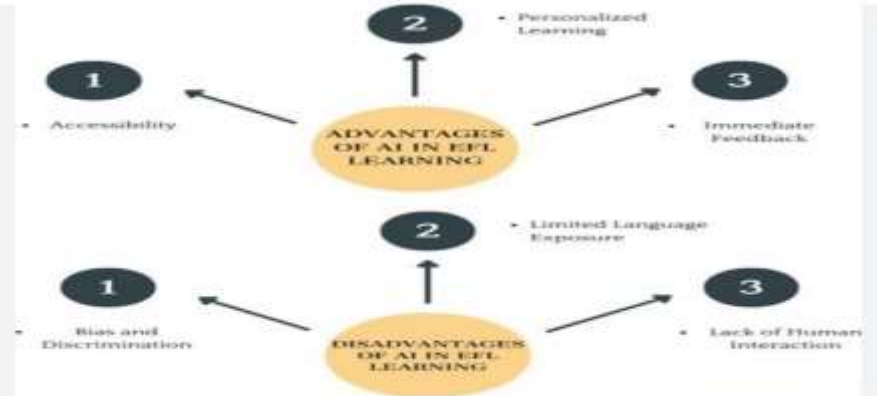

CONSLUSION:

AI holds immense potential to revolution in higher education by offering personalized learning experiences , automating administrative tasks and providing real time feedback, its implementation must be carefully managed to mitigate potential downsides like overreliance on technology , ethical concerns regarding data privacy and potential biases in algorithms, ensuring a balanced approach that leverages AI's strengths while preserving the crucial human element in the learning process is key to maximizing its positive impact on learners outcomes and all-over the educational experiences.

while AI has its advantages in education, there are several disadvantages that can hinder the development of critical thinking skills in learners. The potential lack of creativity and problem-solving abilities, the limitations of personalized learning, privacy concerns, bias, and the inherent limitations of AI systems are all factors that need to be carefully considered and addressed to ensure that AI is effectively integrated into education without compromising critical thinking skills.

In conclusion, the integration of AI in higher education is not just a trend it is a revolution that reshaping the way we learn and teach. From personalized learning pathways and intelligent learner support systems to data-driven insights for teachers and streamlined administrative processes, AI is transforming every aspect of the educational academic journey. As we move forward to the higher education centre or institutions must navigate the ethical considerations of AI, adaption to the growing influence of AI, and embrace the opportunities it presents for the future of education institutes.

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