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Research Paper

AI in Education and Social Science

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Introduction: AI (Artificial Intelligence) :-

Intelligence has always been a term which intrigues people all over the world. Artificial Intelligence refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision making. While exploring the possibilities to integrate subjects with AI, it was felt that it can be a two-way process. The teacher may select a topic from the subject that easily lends itself to any one of the AI concepts. Artificial intelligence is not just a technology tool; it is a conceptual framework transforming how knowledge is created, delivered and analyzed in education and social sciences. AI refers to the ability of machines and computer systems to perform tasks that normally require human intelligence, such as learning, reasoning, problem-solving and decision-making.

AI has become a transformative force in both education and social sciences. Developing social science learning in accordance with developments in AI technology and ensuring that teachers and students have an adequate understanding of this technology is crucial. Apart from opportunities, in using AI there are also several challenges such as the availability of information and communication technology infrastructure resources in many schools, the security of students' personal data and the ability of teachers to adopt AI technology into learning. Thus, it is necessary to identify opportunities and challenges for using AI comprehensively, especially for learning in social sciences subjects.Social disciplines subject field Economics is the study of production relations that arise between

people in the processes of production, distribution, exchange, and consumption of material goods and services, governed by economic laws of societal development. Basic categories and notions in economics are property, resources, value, profit, price, costs, income, transactions, labour force.

Employment, production, distribution, consumption, the analysis of the set data in tables makes it possible to identify common features of social disciplines that allow to generalize approaches to the use of AI tools in their teaching.

Impact of AI in Education and Social Science :-

Almost AI impacts every area of our life in the future and out of all those education sector will be impacted hugely because teaching and learning is a major part of life and the current education system has a lot of changes to be desired. The schooling in modern days are not as flexible as what the future AI in education will present. The learners that play the most important role in education system are not scalable.

(AIED) – Artificial Intelligence in Education Society is an interdisciplinary community at the frontiers of the field of computer science, education and psychology. The International (AIED) Society was launched on 1

AI in Education: Challenges, Benefits and Future :-

High cost of AI tools

Risk of over-dependence on technology

Teachers and students need training

Data privacy concerns

Benefits:

Saves time for teachers and students

Improves accessibility for differently-abled students

Learning experience for each student

Future:

Smarter assessment systems

AI-powered classrooms

Multilingual AI tutors for global access

AI is reshaping education, making learning more personalized, efficient and inclusive. Needs careful use to avoid disadvantages.

Future of Education = AI + Teachers together

Artificial Intelligence (AI) in Education Scope in India :-

The scope of AI in India is huge. Artificial Intelligence technology in India has the potential to make the country a global leader in AI. One can find effective application of AI in various sectors.

Artificial intelligence technology in India in almost every sector – Education, Manufacturing, Agriculture, Infrastructure, Health, Retail and Transportation. According to a 2018 discussion by NITI Aayog, the think tank of India, AI has the potential to add USD 1 trillion to the Indian economy by 2035. To overcome the physical limitation of capital and labour, open up new sources of value and growth, artificial intelligence technology in India has the ability to automate both complex and mundane tasks that can in turn result in optimal utilization of human resources by enabling them to concentrate their efforts in places where they add the most value, thus improving their overall efficiency.

AI in education in India is also going to play an important role in achieving the targets that the country has set to achieve by 2030 in line with UN Sustainable Development Goals. One of these targets is to substantially increase the number of qualified teachers. As this article states, AI in education can help increase the efficiency of our education system.

Teachers through various AI applications such as real-time text to speech and text translation systems, automating mundane and repetitive tasks such as taking attendance, automating grading personalizing the learning journey based on experience skill and understanding etc.

Social Sciences Education in AI :-

Artificial Intelligence applications make it easier to search for and create various products but I also don't forget manual applications for creating work such as corel draw for creating graphic media, filmora and capcut for creating videos and don't forget the ms family office for work needs whose types will enable us to think more critically and not always rely on AI as the answer to these problem Because when the brain becomes dependent on this AI feature we will be lazy to think more critically and that will affect here we will gradually become weaker in critical thinking less creative and innovative. The use of AI application has been widely used by undergraduate students of social sciences Education, Sukhana sai State university to support.

Learning activities, some frequently used platforms are Canva, ChatGPT and Gemini. However, students consider the contribution of AI in their learning activities to be largely neutral. AI is still considered immature in providing answers and

information, so it needs a lot of scrutiny before being used for lecture assignments. The opportunities for AI are huge in optimizing social studies learning assignments.

AI in World Economic Forum and NITI Aayog :-

AI is the software engine that drives the Fourth Industrial Revolution. Its impact can already be seen in homes, businesses and political processes, in its embodied form of robots. It will soon be driving cars, stocking warehouses and caring for the young and elderly. It holds the promise of solving some of the most pressing issues facing society, but also presents challenges such as inscrutable black box algorithms, unethical use of data and potential job displacement. As rapid advances in machine learning increase the scope and scale of AI deployment across all aspects of daily life and as the technology itself can learn and change on its own, collaboration is required to optimize accountability.

National Strategy for AI refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision making. Initially conceived as a technology that could mimic human intelligence, AI has evolved in ways that far exceed its original conception. With incredible advances made in data collection, processing and computation power, intelligent systems can now be deployed to take over a variety of tasks, enable connectivity and enhance productivity.

Artificial Intelligence (AI) Objectives :-

Application across key disciplines.

Applying communication skills.

Learning vocational ethics.

Developing interaction and learning to be.

Assuming social responsibilities and application.

Innovativeness and taking initiative.

Acquiring subject knowledge using AI as a tool.

Learning problem solving.

The use of AI in teaching social disciplines requires adherence to certain principles that ensure the effectiveness and ethics of the educational process, including:

Collaborative learning, which is implemented through teamwork and cooperation between students using AI tools.

Professional development of teachers, who should be able to learn how to use AI technologies to improve their teaching practices.

Innovation that is the active introduction of new technologies and methods in the educational process to improve the quality of education.

AI in Education and Social Science:-

• Monitoring and evaluation of the effectiveness of AI tools and their improvement based on user feedback.

• Adaptability of AI tools to the individual needs and learning styles of students.

• Availability of individual feedback from teachers to students based on the analysis of data on students' academic achievements.

Conclusion:-

AI in Education and Social Science is transforming both education and social science by enhancing efficiency, accessibility, and analytical capacity. In education, AI enables personalized learning, intelligent tutoring systems, automated assessment, and data-driven decision making. AI supports large-scale data analysis, predictive modeling, behavioral studies, economic forecasting, and policy research. It allows researchers to analyze complex social patterns and public opinion trends.

In conclusion, AI is not a replacement for human intelligence but a powerful supportive tool. When used ethically and strategically, AI can significantly improve educational outcomes and strengthen research and policy-making in social sciences, contributing to sustainable social and economic development.

References :-

Lin, P. (2021). Computers and Education: Artificial Intelligence modeling the structured relationship among primary students.

Shevchenko, L. (2005). Economics Theory Textbook. Kharkiv: Pravo.

Ouyang, F., & Jiao, P. (2021). Computers and Education: Artificial Intelligence in Education – The Three Paradigms.

Rahal, C., Veshagen, M., & Kirk, D. (2024). The Rise of Machine Learning in the Academic Social Sciences. AI and Society.

Nilsson, Nils J. (2010). The Quest for Artificial Intelligence. Cambridge University Press.

World Economic Forum (2023). The Future of Jobs Report 2023. World Economic Forum.

OECD (2021). OECD Digital Education Outlook 2021. OECD Publishing.