



THE ROLE OF AI IN MODERN EDUCATION

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ABSTRACT

Artificial intelligence (AI) has the potential to revolutionize the way we learn and teach, making it more personalized, engaging, and beneficial. AI in education refers to the use of artificial intelligence technologies, such as machine learning, generative AI and natural language processing to enhance the learning experience in modern education. It includes enabling educators to personalize learning for student and identify patterns to make lessons more productive and absorbing. The prospective benefits of using AI in education are significant. Personalized learning, one of the most significant advantages of AI in education, can lead to better student outcomes, as student can learn at their own pace and in a way that suits their learning style. Intelligent tutoring system, and automatic grading and assessment can increase efficiency, save teacher's time, and provide more accurate and consistent feedback in modern education. However there are also problems associated with using AI in modern education, it consists of privacy and security concerns, lack of trust, cost are some the challenges that need to be addressed. Despite these challenges, the potential of AI in modern education is immense. Because, AI can provide better data analysis, enabling educators to make data-driven decisions. In this review role of AI in management, promoting of education which shows the role and, effect of AI in modern education.

Keywords: AI, modern education, personalized learning, intelligent teaching system, better outcomes.

INTRODUCTION

In recent years, AI changed many industries in a good way, and education is one of them. From personalized learning platforms and intelligent tutoring systems to automated grading tools and virtual classrooms, AI has reshaping how students learning and how students teach in a modern way. Modern education increasingly relies on technology not just as a supplement, but as a main part of a learning process. In a modern way AI can adapt lessons to individual learning styles, provide real-time feedback, and help educators identify students' strengths and weaknesses more effectively. At the same time AI offers opportunities to make education more accessible, inclusive, and engaging. However, there are also challenges associated with using AI in education. Privacy and security concerns, lack of trust, cost are some of the challenges that most people face while using AI. In the following sections we will analyse deeply the benefits and challenges of using AI in modern education and we will explore the future of AI and opportunities it presents for innovation and growth.

METHOD RESEARCH

The research method used in the study is descriptive research method. The type of data used in this study is qualitative data, which is categorized in two types, namely primary data and secondary data. Data sources are obtained through library study techniques that refer to sources available both online and offline such as scientific journals, books and news taken from official sources. These sources are gathered based on the discussion and linked from one piece of information to another. So, the data collection techniques used in this study were observation, interview and research.

RESULT AND DISCUSSION

The use of artificial intelligence (AI) in education has personalized learning, revolutionizing the way students learn. Personalized learning is a teaching method that is able to give learning experience to each student's individual needs, strengths, weaknesses, and interests. Personalized learning uses technology to adapt instruction to each student's level and pace of learning. It plays an important role in personalized learning by using machine learning algorithms to analyze data and identify patterns in students' learning, preferences and achievements and using this data to provide tailored learning experiences. For instance, AI can recommend appropriate learning resources, suggest methods to improve and adjust the difficulty level of learning tasks. One of the main benefits of personalized learning is that it can help to ensure that each student receives support and guidance they need to reach their full potential. Personalized learning can help struggling students catch up, while advanced students can be challenged at their level. By providing a personalized learning experience, students are more engaged and motivated to learn, which can lead to better academic performance and higher results in their studies in modern education. Additionally, AI can provide customized feedback and suggestions for improvement in modern education that can enable more individualized and effective learning experience. In general, in spite of challenges that need to be addressed, the benefits of AI-based personalized learning in modern education are significant and promising. Firstly it has positive impact AI in grading and assessment process. AI can automate the grading and assessment process, providing instant feedback to students and saving educators time and effort in modern education. AI algorithms can analyze student work and provide feedback based on pre-defined criteria, enabling students to receive immediate feedback on their performance. As an example, use of automated essay grading systems in modern education.

Benefits of AI in modern education

One of the main benefit is personalized learning. AI can help personalize the learning experience for each student, allowing them to learn at their own pace and according to their individual needs and abilities. This can lead to improved learning outcomes and increased student engagement. Additionally, it increases efficiency. AI can automate repetitive tasks such as grading, data analysis, and administrative tasks, opening up time for teachers and students to focus on more meaningful tasks. Also, it helps to improve students engagement. Because AI can help to improve student engagement by providing interactive and engaging learning experience. For instance, virtual assistants can make learning more fun and interactive, and

adaptive learning technologies can help students stay engaged by presenting material at their level of understanding in modern education.

Challenges of AI in modern education:

The main challenge is privacy and security concerns. The collection and analysis of large amounts of personal data from students could pose a risk if it falls into the wrong hands. Institutions must ensure that they are taking appropriate measures to protect students' privacy and prevent data breaches. Also one of the main problem is lack of the trust. Students may be hesitant to accept grades or feedback generated by an AI system, preferring to have human input and evaluation. It is important to establish trust with students and make them feel comfortable with the technology. The next one is cost. AI systems can be expensive to implement and maintain, which can be a challenge for educational institutions that are already facing budget constraints. Institutions must carefully consider the costs and benefits of implementing AI systems in their classrooms. Also, fairness, is a type of problem most of people face in modern education while using AI. AI based education systems must be fair, ensuring that all students are treated equally and not discriminated against based on their race, gender, or other factors.

Future of AI in modern education

The future of AI in modern education is bright, with endless opportunities for innovation and growth. AI has the potential to transform the way we teach and learn, making education more personalized, efficient, and effective. In the future, we can expect to see more advanced AI systems that can understand and respond to human emotions, provide more detailed feedback, and even create personalized lesson structure for each student.

CONCLUSION

While there are many benefits to using AI in modern education, there are also challenges and concerns that need to be addressed. Institutions must carefully consider the costs and benefits of implementing AI systems in their classrooms and ensure that they are taking appropriate measures to protect students' privacy. By balancing the benefits and challenges of AI in modern education, we can create more personalized, efficient, and effective learning experience for all students.

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