



AI-Based Education-The Future of Learning

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1. Introduction

The traditional educational model has often struggled to cater to the diverse needs and learning styles of every student. In a traditional classroom setting, teachers typically teach at a fixed pace, assuming that all students learn in the same way and at the same speed. This one-size-fits-all approach often leaves behind students who may need additional support or who learn at a different pace. However, artificial intelligence (AI) offers a transformative solution to this challenge. By harnessing the power of AI, education can become more inclusive and effective.

AI solves several modern education challenges, such as closing the technology gap between students and teachers, keeping the learning system ethical and transparent, allowing remote learning, and developing quality data and information solutions for the modern education process.

One of the key advantages of AI in inclusive education is its ability to adapt to each student's unique pace and style. AI algorithms can analyze students' performance data and identify areas where they may need additional support or different instructional approaches.

AI can be used to create interactive games and other teaching tools that can teach young children academic or social skills. Artificial intelligence can also be used to power monitoring systems to help track children's behavior to glean insights into their development.

The tools create a better understanding of complex data and conceptual subjects. Help students improve their emotional intelligence and awareness.

Another way that AI is transforming education is by making it more accessible. AI-powered translation tools can help students who are learning a new language to access educational materials and participate in classroom discussions. AI-powered text-to-speech tools can help students with visual impairments to access written materials.

Overall, AI has the potential to revolutionize education. By personalizing learning, making it more accessible, and creating immersive learning experiences, AI can help all students to reach their full potential.

2. How AI is transforming the Education and Learning?

1. Automated Assessment and Grading Tasks

A significant amount of time that could be spent on class preparation or educating students is spent grading their homework and assignments. While it is clear that Artificial Intelligence cannot fully replace a teacher, it can however be used to assess student performance on multiple-choice or fill-in-the-blanks tests and provide grades.

2. AI –Based Intelligent Assistants

Students can now have access to educational resources without contacting teachers, thanks to AI-powered assistants. As an example, Amazon Alexa

3. Smart Content

An AI-based custom eLearning solution can effectively manage and analyze massive data (like different online learning resources) to gather the necessary information for students. With their custom cloud platforms, organizations like Byju's, Netex Learning, Jaro Education, etc. help students by delivering special lectures, conducting conferences, virtual training sessions, and other educational services.

4. Personalized Education

AI can assist teachers in providing personalized teaching so that students can learn at their own speed. Some well-known educational platforms, like Carnegie Learning, currently provide customized courses using Artificial Intelligence. The use of AI technology can also be beneficial in delivering personalized instructions.

5. AI-Powered Tools for Constructive Feedback

Colleges, schools, and other educational institutions that already provide online programs use AI-based tools to monitor student development and notify teachers about student performance.

6. Keeping Track of Student's Performance

Teachers can monitor student performance using AI-based teaching tools and determine where or how much improvement is needed.

7. Creating Courses

Artificial Intelligence also powers custom eLearning solutions which can assist professors in bridging the knowledge gap between their lectures and the study materials. Such software can help them to create personalized courses and figure out how to make them better so they can educate better. For instance, Coursera, a well-known provider of online courses, already uses this technology to notify teachers whenever students submit the wrong response to a question.

8. Greater Involvement

Students can now discuss the difficulties they are having in learning a certain subject or understanding a topic on different AI-based platforms. These platforms are a good technical approach to interacting with peers and exchanging ideas and knowledge, which eventually boosts student engagement.

9. Enhanced Teaching and Learning

Teachers can help students in understanding a concept better by using a variety of AI-powered technologies. To explain how things operate, they can utilize real-life examples and demonstrate them to the students.

3. Conclusion

The field of education is gradually being transformed by Artificial Intelligence. It has the potential to revolutionize how students learn and modify how teachers and educational institutions carry out their duties. You are now familiar with some of the best applications of Artificial Intelligence in the educational sector.

References

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