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## TO THE QUESTION OF AI IN EDUCATION

Artificial intelligence becomes more common in our daily lives, in teaching English at the universities.

AI offers great opportunities for personalized learning, making administrative tasks easier and bringing new ways to teach. But there are still worries about privacy, fairness and the possibility of replacing traditional teaching jobs.

*What is artificial intelligence in education?* It refers to the use of computer systems that can perform tasks typically requiring human intelligence to enhance learning experiences, streamline administrative processes, and support educators. AI technologies include machine learning, natural language processing, which can personalize learning by adapting content and pace to individual student needs. This personalized approach helps address diverse learning styles and paces, ensuring that each student receives the attention and resources they need to succeed.

In addition to personalized learning, AI can assist educators by automating administrative tasks. By reducing the time spent on these repetitive tasks, teachers can focus more on instruction and student engagement. AI tools can also provide insights into student performance and progress, enabling early intervention for those who may be struggling and recognizing those who excel [1]. This approach allows for more informed decision-making and tailored support for students.

AI in education can facilitate innovative teaching methods and interactive learning environments. As AI continues to evolve, its potential to transform education by making it more accessible, efficient and personalized becomes increasingly evident.

*But it has its downsides too.* Concerns with AI in education include privacy and security issues, bias in algorithms that can affect educational outcomes, the potential

to rely too heavily on the technology at the expense of teacher-student interactions, and the costs associated with implementing and maintaining AI technologies in schools.

*The influence of artificial intelligence (AI) in education is a growing trend that offers both significant benefits for teachers and drawbacks for student learning.*

Generative AI tools can enhance personalized learning, streamline administrative tasks, and provide valuable insights to improve student outcomes. However, the integration of AI also raises concerns around data privacy, equity, and redefining the role of teachers in a classroom. As schools and educators explore use cases for AI, it is crucial to carefully consider both the advantages and disadvantages to ensure the effective and responsible implementation of this revolutionary technology:

- **Balanced Use:** AI should support teachers without overshadowing the essential human connection that defines effective education;
- **Data Privacy:** Secure, transparent data management is essential to protecting student information;
- **Equity Focus:** Continuous evaluation of AI tools can prevent bias and ensure all students benefit;
- **Resource Allocation:** Implement AI tools thoughtfully to avoid exacerbating educational inequalities.

*The Advantages of Using AI in Education:*

AI in Education offers personalized learning by adapting content to each student's needs, boosting efficiency through automated tasks, and supporting data-driven decision-making. These tools improve accessibility and provide real-time feedback, helping students build confidence and retain knowledge while freeing teachers to focus on impactful classroom interactions.

1) AI tools assist in customizing lesson plans based on each student's learning style, strengths, and weaknesses. AI can enhance improvement science initiative, allowing teachers to quickly identify specific areas where students need additional support and to target interventions more effectively.

2) AI tools can automate many of the repetitive tasks that consume a teacher's time, such as grading with an AI detector and attendance tracking. Automated grading, for example, is especially useful for objective assessments and can free teachers to focus on planning engaging lessons and interacting more directly with students. Increased efficiency enables a more focused approach to teaching, which contributes to increased overall teacher satisfaction.

3) AI's ability to collect and analyze data provides educators with valuable insights. AI can track patterns in student behavior, academic performance, and even

social interactions, helping teachers make data-driven decisions about teaching strategies.

4) AI tools, including speech-to-text, language translation, and text-to-speech functionalities, open doors for students with disabilities or language challenges, making content more accessible. Schools can create inclusive environments where students can engage with materials independently, contributing to a more equitable learning experience. Also, adopting new technology can help schools bridge accessibility gaps [2].

5) Virtual tutors and AI chatbots can provide immediate responses to student questions, enabling them to learn independently and receive feedback at any time. This additional support improves the quality of classroom-based learning and helps fill knowledge gaps. Students benefit from constant learning reinforcement, ultimately improving confidence and retention [3].

#### *Disadvantages of Using AI in the Classroom*

While AI in classrooms offers potential benefits, it also poses challenges like privacy risks, as handling students data requires robust security measures [4] and legal compliance. Additionally, AI can unintentionally perpetuate biases, limit teacher roles, and widen access disparities, highlighting the need for cautious, equitable, and balanced implementation to ensure that AI complements traditional teaching without compromising student learning.

1) AI relies on vast amounts of student data, raising legitimate concerns about privacy and data security. Schools must ensure compliance with data protection laws and establish robust security protocols. Adopt secure, compliant AI systems that protect student data to avoid the ethical and legal pitfalls that come with mishandling sensitive information.

2) AI systems can unintentionally reinforce existing biases if not carefully designed and tested. For example, if an AI tool is trained on data that overrepresents certain demographics, it might not serve all students equally. To address this, conduct regular evaluations and algorithm adjustments to mitigate biases and ensure student equity [5] in AI-supported learning environments.

3) There is concern that AI's efficiency in automating tasks may lead to reduced responsibilities for teachers. However, take a balanced approach where AI complements, rather than replaces, teachers. The human aspect of teaching – such as offering emotional support and building meaningful relationships with students – remains essential to student well-being and their success, something AI alone cannot replicate.

4) Implementing AI in schools can be expensive, and not all institutions have

the resources to adopt these technologies in every classroom. Without equitable access, schools in underserved districts may fall further behind. Prioritize careful, needs-based AI implementation, focusing on scalable solutions to reduce the technological divide between schools and districts.

*The integration of AI in education* presents both transformative opportunities and significant challenges. AI's potential to personalize learning, increase efficiency, and support data-driven decision-making can empower educators and enhance the student experience. However, it also brings crucial considerations around privacy, equity, and the preservation of human interaction in classrooms. As educators and administrators consider adopting AI tools, it's essential to prioritize responsible implementation that upholds ethical standards. By carefully balancing the benefits with potential risks, schools can harness AI's power to improve student outcomes while preserving the irreplaceable role of human connection in learning [1].

#### *AI benefits*

AI can streamline tasks like grading, attendance, and tracking student progress, allowing teachers more time to focus on student engagement and creative lesson planning.

#### *AI support*

AI-driven data analytics provide actionable insights, helping educators pinpoint areas needing improvement, test solutions, and scale successful strategies.

#### *Mitigation of privacy risks*

Teachers and administrators should ensure that any AI platforms used comply with privacy regulations, encrypt data, and restrict access to sensitive information.

#### *Facilitation of accessibility*

AI can facilitate accessibility by supporting assistive technologies such as text-to-speech for students with disabilities and real-time translation for non-native speakers. This helps foster an inclusive environment for all learners.

#### *Is it possible to replace teachers by AI?*

AI is designed to complement teachers, not replace them [1]. While it handles administrative tasks and offers additional student support, the unique human aspects of teaching – like relationship-building and emotional support – remain irreplaceable.

#### **References:**

1. Advantages and Disadvantages of AI in Education/ <https://wAww.schoolsthatlead.org/blog/ai-in-education-pros-cons>
2. T. Brock. The 10 Best AI Tools for Teachers That Help Optimize the Learning Process/Academic Learning. -