

## AI'S DOUBLE-EDGED SWORD: RISKS AND REWARDS FOR STUDENTS

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With previously unheard-of benefits and difficulties, artificial intelligence (AI) has drastically changed the educational landscape. Fundamentally, artificial intelligence (AI) refers to tools and systems that can learn, reason, and adapt in order to replicate human intelligence. These tools, which range from AI-powered research assistants to personalized learning platforms, are revolutionizing the way students approach their studies by making it possible for them to acquire knowledge, finish projects, and build skills more quickly than in the past.

But there are drawbacks to incorporating AI into teaching. It raises questions about dependency, moral quandaries, and the possible deterioration of critical thinking abilities, even while it promises improved learning opportunities and reduced workloads. Teachers and society at large must consider whether we are empowering pupils or unintentionally erecting obstacles to true intellectual development as more and more students turn to AI tools for academic support.

By improving administrative effectiveness, accessibility, and customization, artificial intelligence (AI) has opened up revolutionary possibilities in education. In order to optimize teaching methods and enhance learning outcomes, artificial intelligence (AI), which is described as systems that can mimic human intelligence processes, has developed to support adaptive learning platforms, automated grading, and real-time data analysis. For example, even in areas with low educational resources, students can receive individualized training thanks to tools like AI-driven tutors. These developments

seek to bridge educational gaps and get students ready for a technologically advanced future on a global scale (Miao et al., 2021; OECD, 2021).

Immersion learning experiences that engage students in ways that traditional approaches cannot are possible with artificial intelligence. Artificial intelligence (AI)-powered technologies like virtual reality (VR) and augmented reality (AR) may replicate complicated ideas and real-world situations, increasing the interactivity and enjoyment of learning. For example, students can use AI-driven avatars to practice language skills, perform virtual science experiments, or explore historical sites—all of which offer a hands-on learning experience that improves comprehension and retention.

By making learning more dynamic and individualized, AI-generated immersive learning experiences can help increase student motivation and engagement. AI-powered gamified learning platforms use game features like leaderboards, challenges, and awards to make learning enjoyable and competitive. Artificial intelligence can also offer immediate feedback and assistance, which keeps students inspired and committed to their studies. AI sustains student attention and promotes active engagement by attending to individual needs and providing real-time support.

However, there are also issues with the use of AI in education. Particularly in low-income communities, ethical concerns including data privacy, algorithmic prejudice, and the possibility of unequal access to AI tools continue to exist. According to research, developing nations frequently lack the legislative frameworks and infrastructure necessary to use AI fairly, which exacerbates rather than reduces the digital divide (Kose, 2014; Luan et al., 2020). Locally, initiatives to employ AI for skill development are being made in nations like Thailand and the Philippines, although they are usually hampered by a lack of digital literacy and infrastructure (Limna, 2021; Miao et al., 2021).

One major drawback of AI in education is its lack of human interaction, which dehumanizes the educational process. Human interaction is a major component of

traditional education, where professors offer students not just academic instruction but also emotional support and guidance. Even while AI systems are effective, they cannot replace the human educators' empathy, comprehension, and interpersonal connection. Students' social and emotional growth, as well as their general motivation and involvement in the learning process, may be impacted by this lack of human components.

The use of AI in education also increases the possibility of cheating. Students may use sophisticated AI techniques to circumvent academic integrity regulations. For example, advanced AI-generated content that imitates authentic student work may surpass even AI-powered plagiarism detection systems. Furthermore, automated tests and AI-based tutoring programs could be rigged to offer excessive help, jeopardizing the impartiality and integrity of academic assessments. To reduce these hazards, educational institutions must constantly upgrade and modify their AI systems.

The debate over artificial intelligence's use in education emphasizes the need for comprehensive laws that balance the potential of the technology with safety measures. In order to ensure a future where technology empowers rather than limits the educational potential of all learners, it is imperative that we cultivate a balanced approach going forward, one that maximizes the advantages of AI while minimizing any possible risks.

### *References:*

Advantages and disadvantages of AI in education. (2024, July 19). University Canada West (UCW). <https://www.ucanwest.ca/blog/education-careers-tips/advantages-and-disadvantages-of-ai-in-education/>

Kose, U. (2014). Artificial intelligence applications in distance education. IGI Global.

Luan, H., Geczy, P., Lai, H., Gobert, J., et al. (2020). Challenges and future directions of big data and artificial intelligence in education. *Frontiers in Psychology*, 11, 580820. <https://doi.org/10.3389/fpsyg.2020.580820>

Miao, F., Holmes, W., Huang, R., & Zhang, H. (2021). *AI and education: A guidance for policymakers*. UNESCO Publishing.

OECD. (2021). *The potential impact of artificial intelligence on equity and inclusion in education*. OECD iLibrary. <https://doi.org/10.1787/9789264088725-en>

Limna, P. (2021). The role of big data analytics in influencing artificial intelligence adoption. *International Journal of Behavioral Analytics*, 1(2), 1-17.