

# Exploring the Impact of AI on Student Learning

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**Abstract:** *Artificial Intelligence (AI) transforms student learning through adaptive and personalized learning. AI-based systems learn about a person's learning style to provide customized content for better understanding and memorization. Intelligent tutoring systems assist students with real-time feedback and adaptive assessment. AI-based chatbots and virtual assistants facilitate question answering and self-learning assistance. Moreover, AI-based language models simplify research, summarizing, and content generation to facilitate students' coursework. Automated evaluation reduces the time Teachers spend, enabling them to engage with students. AI improves access by providing learning assistance for disabled students. Student performance predictions are made through machine learning algorithms, hence enabling early intervention. Simulations and virtual reality, based on AI, provide interactive learning. The use of AI enables critical thinking, problem-solving, and creativity. As much as AI poses ethical issues, appropriate use of AI can have the ability to transform education into a more efficient and inclusive mechanism. The potential for world education is full of immense possibilities with the future use of AI. The present study explores the impact of AI on student learning.*

**Keywords:** Artificial Intelligence in Education, Student Learning Improvement, AI-driven Learning Tools, Personalized Learning, Intelligent Tutoring Systems (ITS), Adaptive Learning

