Chapter 8
A Comprehensive Study of Advancements in Intelligent Tutoring Systems Through Artificial Intelligent Education Platforms

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ABSTRACT

Intelligent tutoring systems offer personalized, adaptive learning experiences through digital platforms, contrasting with traditional methods. The integration of AI enhances ITS capabilities, providing dynamic adaptation, real-time feedback, and optimized outcomes. Ethical considerations, including privacy and bias mitigation, are paramount. Comparative analysis reveals AI's potential to reshape education, with future directions including sophisticated algorithms, diverse educational settings, and innovative pedagogical approaches. Practical implementation and evaluation will drive advancements, empowering students and educators in personalized learning journeys. The integration of AI in ITS represents a significant advancement, enabling systems to analyze vast amounts of data and tailor educational experiences to meet the unique needs and preferences of each learner. Through a comparative analysis, this chapter highlights the distinctive features and benefits of ITS compared to traditional learning methods.