



The Role of AI in Physical Education in India

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Abstract

Artificial Intelligence (AI) is transforming physical education (PE) by offering personalized, data-driven approaches to fitness, sports performance, and overall student well-being. In India, where educational disparities exist, AI has the potential to bridge gaps in physical education by tailoring programs to meet the diverse needs of students. This article examines the role of AI in enhancing PE teaching and learning, particularly in the Indian context. Key applications of AI include personalized training programs, real-time performance tracking, game analysis, and sports skill development. AI-powered wearables and apps provide students with immediate feedback, promoting better form and performance while fostering inclusivity, especially for those with disabilities or limited resources. AI also aids in health and wellness monitoring, helping identify students at risk for lifestyle-related diseases. Despite its benefits, challenges such as infrastructure barriers, data privacy concerns, and the need for teacher training must be addressed for AI's successful integration in Indian schools. Looking ahead, AI's role in PE is expected to grow, fostering a more holistic, efficient, and accessible physical education system that supports the health and development of all students.

