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Special Issue Reprint

Recent Advances in Computer-Assisted Learning

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This edited collection brings together contemporary research capturing the rapid transformation of educational technology in the era of artificial intelligence, immersive learning, and large-scale digital platforms. The chapters show that EdTech has moved beyond merely digitizing teaching materials and delivering content online, increasingly focusing on how learning can be personalized, predicted, supported, and experienced in more intelligent, engaging, and scalable ways. A major theme is the growing role of AI and machine learning in learning and assessment. Chapters explore how learner data can predict performance, identify students at risk, and provide early interventions. Others focus on intelligent tutoring systems, conversational agents, and automated assessment, including using large language models to generate feedback and support self-explanation. These contributions show that AI is reshaping educators' work by providing decision-support, feedback tools, and new forms of interaction. Another theme is game-based and immersive pedagogies to improve motivation and engagement. Chapters on serious games, gamification, and immersive virtual reality demonstrate how learning can occur in interactive environments while highlighting that effective learning depends on careful design aligned with educational goals. The final theme examines education platforms and smart systems, including collaborative environments, e-mentoring, cloud platforms, and sustainable infrastructures supporting integrated learning ecosystems.

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