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Disciplina	150
Soggetti	Psychology Social sciences - Data processing Education Cognitive science Teaching Artificial intelligence Behavioral Sciences and Psychology Computer Application in Social and Behavioral Sciences Cognitive Science Pedagogy Artificial Intelligence
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	1.Introduction to AI in Learning – Designing the Future -- Part I: AI expanding learning and wellbeing throughout life -- 2.Artificial Intelligence Innovations for Multimodal Learning, Interfaces, and Analytics -- 3.Curiosity and Interactive Learning in Artificial Systems -- 4.Assessing and Tracking Students' Wellbeing through an Automated Scoring System: Schoolday Wellbeing Model -- 5.Learning from Intelligent Social Agents as Social and Intellectual Mirrors -- 6.An AI-Powered Teacher Assistant for Student Problem Behavior Diagnosis -- 7.Analysis and Improvement of Classroom Teaching Based on Artificial Intelligence -- Part II. AI in Games and Simulations -- 8.Perspectives

and Metaphors of Learning: A Commentary on James Lester's Narrative-centered AI-based Environments -- 9.Learning Career Knowledge: Can AI Simulation and Machine Learning Improve Career Plans and Educational Expectations? -- 10.Learning clinical reasoning through gaming in nursing education – Future scenarios of game metrics and AI -- 11.AI-Supported Simulation-Based Learning: Learners' Emotional Experiences and Self-Regulation in Challenging Situations -- Part III. AI Technologies for education and Intelligent Tutoring Systems -- 12.Training Hard Skills in Virtual Reality: Developing a Theoretical Framework for AI-based Immersive Learning. -13.Multiple users' experiences of an AI-aided educational platform for teaching and learning. 14.Deep Learning in Automatic Math Word Problem Solvers. 15.Recent Advances in Intelligent Textbooks for Better Learning -- Part IV. AI and Ethical Challenges in New Learning Environments -- 16.Ethical Guidelines for Artificial Intelligence-based Learning: A Transnational Study between in China and Finland -- 17. Artificial Intelligence Ethics from the Perspective of Educational Technology Companies and Schools -- 18.Artificial Intelligence in Education as a Rawlsian Massively Multiplayer Game: A thought experiment on AI Ethics -- 19.Four surveillance technologies creating challenges for education -- 20.Reflections on the contributions and future scenarios in AI-based learning.

Sommario/riassunto

AI (Artificial Intelligence) is predicted to radically change teaching and learning in both schools and industry causing radical disruption of work. AI can support well-being initiatives and lifelong learning but educational institutions and companies need to take the changing technology into account. Moving towards AI supported by digital tools requires a dramatic shift in the concept of learning, expertise and the businesses built off of it. Based on the latest research on AI and how it is changing learning and education, this book will focus on the enormous opportunities to expand educational settings with AI for learning in and beyond the traditional classroom. This open access book also introduces ethical challenges related to learning and education, while connecting human learning and machine learning. This book will be of use to a variety of readers, including researchers, AI users, companies and policy makers.
