Discoveries in Gaming and Computer-Mediated Simulations: New Interdisciplinary Applications

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Recent advancements have put Gaming and Computer-Mediated Simulations at the forefront of technology and learning. A closer look at these topic areas opens the door for development and innovation and the implications that go with it.

Discoveries in Gaming and Computer-Mediated Simulations: New Interdisciplinary Applications explores and promotes a deep conceptual and empirical understanding of the roles of electronic games and computer-mediated simulations across multiple disciplines. This book helps build a significant bridge between research and practice on electronic gaming and simulations, supporting the work of researchers, practitioners, and policymakers. Drawing on history allows this publication to help move this field forward.

Topics Covered:

- Cognitive, social, and emotional impact of games and simulations
- Critical reviews and meta-analyses of existing game and simulation literature
- Current and future trends, technologies, and strategies related to game, simulation development, and implementation
- Electronic games and simulations in government, business, and the workforce
- Electronic games and simulations in teaching and learning
- Frameworks to understand the societal and cultural impacts of games and simulations
- Impact of game and simulation development use on race and gender game and simulation design
- Innovative and current research methods and methodologies to study electronic games and simulations
- Psychological aspects of gaming
- Teaching of games and simulations at multiple age and grade levels

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.
Section 1: Design of Games and Simulations

Chapter 1
Lessons Learned about Designing Augmented Realities
O'Shea Patrick (Harvard University, US)
Mitchell Rebecca (Harvard University, US)
Johnston Catherine (Harvard University, US)
Dede Chris (Harvard University, US)

Chapter 2
Design Factors for Effective Science Simulations:
Plass Jan L. (New York University, USA)
Homer Bruce D. (CUNY, USA)
Milne Catherine (New York University, USA)
Jordan Trace (New York University, USA)
Kahyaga Slava (University of New South Wales, Australia)
Kim Minchi (Purdue University, USA)
Lee Hyunjeong (University of Seoul, Korea)

Chapter 3
Beyond Choices:

Chapter 4
Game Design and the Challenge-Avoiding, Self-Validator Player Type
Heeter Carrie (Michigan State University, USA)
Magerko Brian (Georgia Tech University, USA)
Medler Ben (Georgia Tech University, USA)
Fitzgerald Joe (Michigan State University, USA)

Chapter 5
Using Recommendation Systems to Adapt Gameplay
Medler Ben (Georgia Institute of Technology, USA)

Chapter 6
Leveraging Open Source Technology in 3D Game Engine Development
Stowell Tim (Utah State University, USA)
Scoresby Jon (Utah State University, USA)
Coars K. Chad (Utah State University, USA)
Capell Michael (Utah State University, USA)
Shelton Brett (Utah State University, USA)

Section 2: Learning Outcomes of Games and Simulations

Chapter 7
Promoting Civic Thinking through Epistemic Game Play
Bagley Elizabeth A. S. (University of Wisconsin-Madison)
Shaffer David Williamson (University of Wisconsin-Madison)

Chapter 8
Learning as Becoming:
San Chee Yam (Nanyang Technological University, Singapore)
Loke Swee Kin (University of Otago, New Zealand)
Tan Ek Ming (Nanyang Technological University, Singapore)

Chapter 9
Rush of Engagement:
Gajadhar B. J. (Eindhoven University of Technology, The Netherlands)
deKort V. A. W. (Eindhoven University of Technology, The Netherlands)
Ijsselsteijn W. A. (Eindhoven University of Technology, The Netherlands)

Chapter 10
Game-Based Representations as Cases for Collaboration and Learning
Sharrett Matthew J. (University of Hawaii) at Manoa, USA
Suthers Daniel D. (University of Hawaii at Manoa, USA)

Chapter 11
Designing Learning Activities for Sustained Engagement
Dubels Brock (University of Minnesota, USA)

Section 3: New Theoretical Considerations of Games and Simulations

Chapter 12
COMPUTATIONAL LITERACY IN ONLINE GAMES:
Steinkuehler Constance (University of Wisconsin-Madison, US)
Johnson Barbara Z. (University of Minnesota-Duluth, US)

Chapter 13
What Players Like About Video Games:
Weber Rene (University of California Santa Barbara, USA)
Shaw Patrick (Scientifically Proven Entertainment)

Chapter 14
The Play of Persuasion: Why “Serious” Isn’t the Opposite of Fun by Nicholas Fortugno
Fortugno Nicholas (Rebel Monkey, US)

Chapter 15
Researching and Developing Serious Games as Interactive Learning Instructions
Loh Christian Sebastian (Southern Illinois University-Carbondale, USA)

Section 4: Creating and Living in Virtual Worlds

Chapter 16
Virtual analysis of the creation of avatars
Black Erik W. (University of Florida, USA)
Ferdig Richard E. (University of Florida, USA)
DiPietro Joseph C. (University of Florida, USA)
Liu Feng (University of Florida, USA)
Whalen Baird (University of Florida, USA)

Chapter 17
A Test of the Law of Demand in a Virtual World:
Castronova Edward (Indiana University, USA)
Ross Travis L. (Indiana University, USA)
Bell Mark (Indiana University, USA)
Gumming James J. (Indiana University, USA)
Full Matthew (Indiana University, USA)

Chapter 18
Virtual Worlds for Teaching:
Norton-Barker Catherine (Cornell University, USA)
Corbit Margaret (Cornell University, USA)
Bernstein Richard (Cornell University, USA)

Chapter 19
Playing Myself or Playing to Win?
Trepte Sabine (Hamburg Media School, Germany)
Reincke Leonard (Hamburg Media School, Germany)
Behr Katharina-Maria (Hamburg Media School, Germany)

Chapter 20
Investigating Perceptions of Avatar Creation for Use in Educational MUVEs
DiPietro Joseph (University of Florida, USA)