Contents

Foreword	v
Acknowledgements	х
Supplementary Material Available via the Internet	xi
Game-Based Learning	
Affective Gaming: Advancing the Argument for Game-Based Learning Jonathan Sykes	3
Didactic Analysis of Digital Games and Game-Based Learning Matthias Bopp	8
Immersive Environments: What Can We Learn from Commercial Computer Games? Paul R. Kearney	38
What Is a Game Ego? (or How the Embodied Mind Plays a Role in Computer Game Environments) Ulf Wilhelmsson	45
Multiple Motivations Framework Hakan Tüzün	59
An Instructional Design/Development Model for the Creation of Game-Like Learning Environments: The FIDGE Model Göknur Kaplan Akilli and Kürsat Cagiltay	93
Learning when Using Commercial Computer Games as Simulations: A Case Study Using a Simulation Game Preston P. Parker	113
Serious Games and 'Simulation Based E-Learning' for Infrastructure Management Igor Mayer and Geertje Bekebrede	136
Motivation and Learning	
Learning and Motivation with Virtual Tutors. Does It Matter if the Tutor Is Visible on the Net? Manuela Paechter and Karin Schweizer	155
Achievement Motivation, Performance Structure, and Adaptive Hypertext Learning Jürgen Heller, Dietrich Albert, Michael Kickmeier-Rust and Markus Kertz	165

An Interactive Dictionary of Concepts: An Exploratory Platform for Enhancing Communication Between the Concepts Which Form and Inform Us Ania Lian	178
Human-Computer Interaction: Sharing of Intergenerational Wisdom and Cross-Cultural Knowledge Elspeth McKay	207
Designing the Stimulation Aspect of Hedonic Quality – An Exploratory Study Michael Burmester and Annely Dufner	217
Emotions and Emotional Agents	
On the Role of Self Esteem, Empathy and Narrative in the Development of Intelligent Learning Environments Paul Brna	237
Empathic Characters in Computer-Based Personal and Social Education João Dias, Ana Paiva, Marco Vala, Ruth Aylett, Sarah Woods, Carsten Zoll and Lynne Hall	246
Using Machine-Learning Techniques to Recognize Emotions for On-Line Learning Systems Mohammed A. Razek, Soumaya Chaffar, Claude Frasson and Magalie Ochs	255
A Framework for Emotional Agents as Tutoring Entities Bogdan Florin Marin, Axel Hunger and Stefan Werner	266
A Haptic Computing Logic – Agent Planning, Models, and Virtual Trees <i>Cyrus F. Nourani</i>	286
ESF SCSS Exploratory Workshop on Affective and Emotional Aspects of Human-Computer Interaction: Emphasis on Game-Based and Innovative Learning Approaches	312
Author Index	317