Contents

1 Introduction: Virtual, Augmented, and Mixed Realities in Education ................................................................................................................................. 1
   Christopher J. Dede, Jeffrey Jacobson and John Richards

Part I Frameworks for the Design and Implementation of Immersive Learning

2 Implicit Learning Through Embodiment in Immersive Virtual Reality ........................................................................................................... 19
   Mel Slater

3 Authenticity in Immersive Design for Education .................................................. 35
   Jeffrey Jacobson

4 The Immersive Power of Social Interaction .......................................................... 55
   Nicole C. Krämer

5 Assessment for Learning in Immersive Environments ........................................ 71
   Valerie Shute, Seyedahmad Rahimi and Benjamin Emihovich

6 Infrastructures for Immersive Media in the Classroom ........................................ 89
   John Richards

7 The Potentials and Trends of Virtual Reality in Education ............................... 105
   Dejian Liu, Kaushal Kumar Bhagat, Yuan Gao, Ting-Wen Chang and Ronghuai Huang

Part II Case Studies of Immersive Learning

8 Virtual Reality as an Immersive Medium for Authentic Simulations ................. 133
   Chris Dede, Tina A. Grotzer, Amy Kamarainen and Shari J. Metcalf
9 Systems to Support Co-creative Collaboration in Mixed-Reality Environments ............................................ 157
Michael Robert Gardner and Warren W. Sheaffer

10 Massively Multiplayer Online Roleplaying Games and Virtual Reality Combine for Learning .............................. 179
Eric Klopfer

11 Embodied Education in Mixed and Mediated Realities ............ 193
Mina C. Johnson-Glenberg

12 Preparing Students for Future Learning with Mixed Reality Interfaces ................................................................. 219
Bertrand Schneider

13 Conclusion—Strategic Planning for R&D on Immersive Learning ................................................................. 237
Christopher J. Dede and John Richards

Glossary of Terms Related to Immersive Learning ................. 245
Virtual, Augmented, and Mixed Realities in Education
Liu, D.; Dede, C.; Huang, R.; Richards, J. (Eds.)
2017, VIII, 247 p. 63 illus., 57 illus. in color., Hardcover
ISBN: 978-981-10-5489-1