## Contents

**Part I Mobile Learning Design**

1. **Framework for Designing Mobile Learning Environments**
   Daniel Churchill, Bob Fox and Mark King
   3

2. **Conceptualising Authentic Mobile Learning**
   Kevin Burden and Matthew Kearney
   27

3. **Mobile Social Media: Redefining Professional Development and Collaborative Scholarship**
   Thomas Cochrane and Vickel Narayan
   43

4. **Interactivity and Mobile Technologies: An Activity Theory Perspective**
   Roy Rozario, Evan Ortlieb and Jennifer Rennie
   63

5. **Educational Apps Ontology**
   Michele P. Notari, Michael Hielscher and Mark King
   83

6. **Augmented Learning with Augmented Reality**
   Susan Herrington Kidd and Helen Crompton
   97

**Part II Mobile Learning Adoption and Student Perception**

7. **Mobile Technology and Interactive Lectures: The Key Adoption Factors**
   Vimala Balakrishnan and Chin Lay Gan
   111

8. **University Student Conceptions of M-learning in Bangladesh**
   Md. Shahadat Hossain Khan, Benadjih Oiriddine Abdou and Che Kum Clement
   127

9. **Mobile Learning, Student Concerns and Attitudes**
   Zoran Putnik
   139
10 Access Moodle Using Mobile Phones: Student Usage and Perceptions ............................... 155
Xiao Hu, Leon Chi Un Lei, Jinbao Li, Nathalie Iseli-Chan, Felix L.C. Siu and Samuel Kai Wah Chu

Part III Mobile Learning Analytics
11 An Effective Cloud-Based Simulator Facilitating Learning Analytics on Mobile Devices .................... 175
Vincent Tam, Alex Yi, Di Xu and Edmund Y. Lam

12 A New Wave of Innovation Using Mobile Learning Analytics for Flipped Classroom ......................... 189
Gary K.W. Wong

Part IV Mobile Learning Across Curriculum
13 Mobile Learning in K-12 Education: Personal Meets Systemic .... 221
John Turner

14 Overcoming Teachers’ Concerns—Where Are We in the Harnessing of Mobile Technology in K-12 Classrooms in Hong Kong? 239
Tianchong Wang

15 Exploring the Suitability of the Book Creator for iPad App for Early Childhood Education .................. 249
Monika Tavernier

16 Text Messaging for Out-of-Class Communication: Impact on Immediacy and Affective Learning ................ 271
Paul Hayes and Stephan Weibelzahl

17 Implementing a Mobile App as a Personal Learning Environment for Workplace Learners .................... 285
Nicole Gu

Part V Mobile Learning in Subject Domains
18 The Theory of Context-Aware Ubiquitous Learning and the Affordances of This Approach for Geometry Learners ............................... 303
Helen Crompton

19 Three Phases of Mobile Learning State of the Art and Case of Mobile Help Seeking Tool for the Health Care Sector ................................... 315
John Cook and Patricia Santos
20 Mobile-Assisted Language Learning in China’s College English Education: The Reality and Research ........................................ 335 Zhuo Wang and Yang Cui

21 Enacting App-Based Learning Activities with Viewing and Representing Skills in Preschool Mathematics Lessons ........... 351 Kay Yong Khoo

22 Effects of Prior Knowledge on Mathematics Different Order Thinking Skills in Mobile Multimedia Environments ............ 373 Thomas K.F. Chiu

23 An Investigation of the Effects of Individual Differences on Mobile-Based Augmented Reality English Vocabulary Learning ...................................................... 387 Tong-Ann Sytwu and Chien-Hwa Wang

Part VI Future Developments

24 Future Directions in Mobile Learning ........................................ 413 Mark Pegrum
Mobile Learning Design
Theories and Application
Churchill, D.; Lu, J.; Chiu, Th.K.F.; Fox, B. (Eds.)
2016, XVIII, 431 p. 67 illus., 28 illus. in color., Hardcover
ISBN: 978-981-10-0025-6