Contents

Part I  Cognitive Approaches to Learning and Instruction (Spector)

1  Learning and Instruction in the Digital Age  ..................  3
   Dirk Ifenthaler

2  Cognition and Student-Centered, Web-Based Learning:
   Issues and Implications for Research and Theory  .............  11
   Michael J. Hannafin and Kathleen M. Hannafin

3  Testing as Feedback to Inform Teaching  ........................  25
   J.C. Powell

4  Enhancing Learning from Informatics Texts  ....................  51
   Alexandra Gasparinatou, Grammatiki Tsaganou,
   and Maria Grigoriadou

Part II  Knowledge Representation and Mental Models (Ifenthaler)

5  Model-Based Knowledge Mapping  ...............................  69
   Andreas Lachner and Pablo Pirnay-Dummer

6  Prototype for the Knowledge Representation Supporting
   Inter-institutional Knowledge Flow Analysis  ...................  87
   Ieva Zeltmate, Marite Kirikova, and Janis Grundspenkis

7  The Role of Supportive Information in the Development
   and Progression of Mental Models  .............................  101
   A. Aubteen Darabi, David W. Nelson, and Norbert M. Seel

8  The Qualitative Study on Contents Analysis/Construction
   Method for e-Learning  ........................................  117
   Naomi Nagata and Toshio Okamoto

Part III  Technology–Facilitated Tools and Techniques (Isaíñas)

9  VideoClipQuests as a New Setup for Learning  .................  145
   Axel M. Blessing and Ulrich Kortenkamp
## Contents

10 Research on Computer-Supported Collaborative Learning in Transdisciplinary Groups ........................................ 159
    Edita Butrime, Rita Marciulyniene, and Rita Valteryte

11 Improving Teacher Performance Using an Enhanced Digital Video Reflection Technique .......................... 175
    Geoffrey A. Wright

12 Experiencing and Learning with 3D Virtual Worlds ................................................................. 191
    Laura Benvenuti, Elbert-Jan Hennipman, Evert-Jan R.G. Oppelaar, Gerrit C. van der Veer, R.P.M. (Bob) Cruijsberg, and Geeske Bakker

### Part IV Communications and Methods (Kinshuk)

13 CARTE: An Observation Station to Regulate Activity in a Learning Context ........................................ 207
    Christophe Courtin

14 Acceptance of Model-Based Instruction Among Students in Spanish and Mathematics .......................... 225
    Ulrike Hanke and Elke Huber

15 Communities of Learners ................................................................. 237
    Pat Gannon-Leary and Elsa Fontainha

16 Supporting the Implementation of Case Activities Using e-Learning Technologies ................................ 259
    Maria Boubouka, Ilias Verginis, and Maria Grigoriadou

17 Practices in Old Age ICT Education ........................................... 273
    Minnamari Naumanen and Markku Tukiainen

### Part V Integrative Methods and Online Learning (Sampson)

18 Cultural Features of e-Learning ................................................................. 291
    Fredric William Swierczek and Clemens Bechter

19 Case Study on Student Blogs in a Blended Learning Course .................................................. 309
    Michael Derntl and Thomas Mazzurana

20 Self-Assessment: An Important Process in e-Training ...................................................... 327
    Paola Nicolini, Tamara Lapucci, and Chiara Moroni

21 A Design Framework for an Online English Writing Course .................................................. 345
    ChanMin Kim, Anne Mendenhall, and Tristan E. Johnson

22 Catering for Different Learning Styles in e-Learning ...................................................... 361
    Vatcharaporn Esichaikul and Clemens Bechter

23 Learning and Instruction in the Digital Age .................................................. 375
    J. Michael Spector

Index ................................................................................. 381
Learning and Instruction in the Digital Age
Spector, M.; Ifenthaler, D.; Kinshuk (Eds.)
2010, XVI, 404 p., Hardcover
ISBN: 978-1-4419-1550-4