Table of Contents

Foreword .............................................................................................................................................xvi

Preface ................................................................................................................................................xix

Acknowledgment ..........................................................................................................................xxiv

Section 1
Architectures, Frameworks, and Platforms for Mobile Learning Systems

Chapter 1
Developing Tools that Support Effective Mobile and Game Based Learning:
The COLLAGE Platform.................................................................................................................. 1
  Evi Chryssafidou, Ellinogermaniki Agogi, Greece
  Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece
  Pavlos Koulouris, Ellinogermaniki Agogi, Greece
  Manolis Stratakis, Forthnet, Greece
  Antonis Miliarakis, Forthnet, Greece
  Mario Barajas, Universitat de Barcelona, Spain
  Marcelo Milrad, Växjö University, Sweden
  Daniel Spikol, Växjö University, Sweden

Chapter 2
Designing an Architecture to Provide Ubiquity in Mobile Learning........................................... 35
  Javier Carmona-Murillo, University of Extremadura, Spain
  David Cortés-Polo, University of Extremadura, Spain
  José Luis González-Sánchez, University of Extremadura, Spain

Chapter 3
MobiGlam: A Framework of Interoperability and Adaptivity for Mobile Learning ......................... 52
  Fatma Meawad, German University in Cairo, Egypt
  Geneen Stubbs, University of Glamorgan, UK
Chapter 4
SW-Architecture for Device Independent Mobile Learning

Andreas Christ, University of Applied Sciences Offenburg, Germany
Markus Feißt, University of Applied Sciences Offenburg, Germany

Chapter 5
A Ubiquitous and Pervasive Learning Framework: Linking the Learner, the Workplace, and the Education Institute

Rodger Carroll, Chisholm Institute and Victoria University, Australia

Chapter 6
A Mobile Service Platform for Trustworthy E-Learning Service Provisioning

Zongwei Luo, University of Hong Kong, Hong Kong, China
Tianle Zhang, Beijing University of Posts and Telecommunications, China

Section 2
Technological Advances in Support for Mobile Learning

Chapter 7
Mobile Web 2.0: Bridging Learning Contexts

Thomas Cochrane, Unitec, New Zealand

Chapter 8
Mobile Grids: An Enabling Technology for Next Generation M-Learning Applications

Vassiliki Andronikou, National Technical University of Athens, Greece
Victor Villagra, Universidad Politécnica de Madrid (UPM), Spain
Kleopatra Konstanteli, National Technical University of Athens, Greece
Antonios Litke, National Technical University of Athens, Greece
Athanasia Psychogiou, National Technical University of Athens, Greece
Theodora Varvarigou, National Technical University of Athens, Greece

Chapter 9
Intelligent M-Learning Frameworks: Information and Communication Technology Applied in a Laptop Environment

Hazel Owen, Unitec, New Zealand

Chapter 10
Integrating Ontology-Based Content Management into a Mobilized Learning Environment

Gábor Kismihók, Corvinus University of Budapest, Hungary
Barna Kovács, Corvinus University of Budapest, Hungary
Réka Vas, Corvinus University of Budapest, Hungary
Chapter 11
Context-Awareness and Distributed Events in Mobile Learning
Ivica Boticki, University of Zagreb, Croatia
Vedran Mornar, University of Zagreb, Croatia
Natasa Hoic-Bozic, University of Rijeka, Croatia

Chapter 12
‘Intelligent Context’ for Personalized Mobile Learning
Philip Moore, Birmingham City University, UK
Bin Hu, Birmingham City University, UK
Mike Jackson, Birmingham City University, UK
Jizheng Wan, Birmingham City University, UK

Section 3
Architecture Applications and Case Studies on Mobile Learning Practices

Chapter 13
Schools in Action: Pedagogical Evaluation of COLLAGE, a Case Study on Mobile and Location Game-Based Learning
Mario Barajas, University of Barcelona, Spain
Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece
Martin Owen, Medrus Learning, UK
Manfred Lohr, BG/BRG Schwechat, Austria

Chapter 14
Technical Evaluation of Wireless Communications in a Mobile Learning Architecture
Javier Carmona-Murillo, University of Extremadura, Spain
Jaime Galán-Jiménez, University of Extremadura, Spain
José-Luis González-Sánchez, University of Extremadura, Spain

Chapter 15
Supporting Mobile Access to VLE Resources through MobiGlam
Fatma Meawad, German University in Cairo, Egypt
Geneen Stubbs, University of Glamorgan, UK

Chapter 16
Using Technology to Support Quality Learning for School Activities Involving Field Studies
K.M. Stewart, Macquarie University, Australia
K. Thompson, University of Sydney, Australia
J.G. Hedberg, Macquarie University, Australia
W.Y. Wong, University of Sydney, Australia