Table of Contents

Preface .................................................................................................................................................. xviii

Chapter 1
Scalable Video Streaming in Wireless Mesh Networks for Education ....................................................... 1
  Yan Liu, Swansea University, UK
  Xinheng Wang, Swansea University, UK
  Liqiang Zhao, Xidian University, China

Chapter 2
EIIS: An Educational Information Intelligent Search Engine Supported by Semantic Services ................................................. 21
  Chang-Qin Huang, Sun Yat-Sen University, China
  Ru-Lin Duan, South China Normal University, China
  Yong Tang, Sun Yat-Sen University, China
  Zhi-Ting Zhu, East China Normal University, China
  Yong-Jian Yan, South China Normal University, China
  Yu-Qing Guo, East China Normal University, China

Chapter 3
Adaptive Device Context Based Mobile Learning Systems ........................................................................ 43
  Haitao Pu, Shandong University of Science and Technology, China
  Jinjiao Lin, Shandong Economic University, China
  Yanwei Song, Shandong University, China
  Fasheng Liu, Shandong University of Science and Technology, China

Chapter 4
A Knowledge Engineering Approach to Develop Domain Ontology .......................................................... 55
  Hongyan Yun, Ocean University of China and Qingdao University, China
  Jianliang Xu, Ocean University of China, China
  Jing Xiong, Ocean University of China, China
  Moji Wei, Ocean University of China, China
Chapter 5
A Scheduling Algorithm for the Distributed Student Registration System in Transaction-Intensive Environment ........................................................................................................................................... 71
Wenhao Li, Swinburne University of Technology, Australia

Chapter 6
K-Nearest Neighbors Relevance Annotation Model for Distance Education ........................................... 85
Xiao Ke, Xiamen University, China
Shaozi Li, Xiamen University, China
Donglin Cao, Xiamen University, China

Chapter 7
Research on Key Technology in Remote Education System of Spirit Diagnosing by Eye in TCM.......................................................... 100
Feng Guo, Xiamen University, China
Shaozi Li, Xiamen University, China
Ying Dai, Iwate Prefectural University, Japan
Changle Zhou, Xiamen University, China
Ying Lin, Xiamen University, China

Chapter 8
Media Naturalness Reduction and Compensatory Channel Expansion: A Study of Online and Face-to-Face Sections of the Same Course............................................................. 112
Ned Kock, Texas A&M International University, USA
Vanessa Garza, Texas A&M International University, USA

Chapter 9
The Relationship between English Language Adoption and Global Digital Inequality: A Cross-Country Analysis of ICT Readiness and Use............................................................. 124
Hui-Wen Vivian Tang, Ming Chuan University, Taiwan
Mu-Shang Yin, Hsing-Wu Institute of Technology, Taiwan
Ru-Shuo Sheu, Hsing-Wu Institute of Technology, Taiwan

Chapter 10
A Multi-Agent Question-Answering System for E-Learning and Collaborative Learning Environment................................................................................................. 134
Tannaz Alinaghi, Tarbiat Modares University, Iran
Ardeshir Bahreininejad, University of Malaya, Malaysia

Chapter 11
Online Operation Guidance of Computer System Used in Real-Time Distance Education Environment........................................................................................................ 150
Aiguo He, The University of Aizu, Japan
Chapter 12
The Effects of Videoconferenced Distance-Learning Instruction in a Taiwanese Company
Chin-Hung Lin, Chung Chou Institute of Technology, Taiwan
Shu-Ching Yang, Aletheia University, Taiwan

Chapter 13
Open Book Examinations in a Distance (Teacher) Education Programme: South African Teacher-Learners’ Experiences
Vuyisile Msila, University of Johannesburg, South Africa

Chapter 14
Selecting and Evaluating a Learning Management System: A Moodle Evaluation Based on Instructors and Students
Andreas Konstantinidis, Aristotle University of Thessaloniki, Greece
Papadopoulos M., Apostolos, Aristotle University of Thessaloniki, Greece
Thrasyvoulos Tsiatsos, Aristotle University of Thessaloniki, Greece
Stavros Demetriadis, Aristotle University of Thessaloniki, Greece

Chapter 15
Validation of Learning Effort Algorithm for Real-Time Non-Interfering Based Diagnostic Technique
Pi-Shan Hsu, Ching Kuo Institute of Management and Health, Taiwan
Te-Jeng Chang, National Taiwan Normal University, Taiwan

Chapter 16
A FAQ-Based e-Learning Environment to Support Japanese Language Learning
Yuqin Liu, Dalian University of Technology, China
Chengjiu Yin, Kyushu University, Japan
Hiroaki Ogata, University of Tokushima and Japan Science and Technology Agency, Japan
Guojun Qiao, Dalian University of Technology, China
Yoneo Yano, University of Tokushima, Japan

Chapter 17
Improve Oral Training: The Method of Innovation Assessment on English Speaking Performance
Li-Jyu Wang, Aletheia University, Taiwan
Hung-Fan Chang, National Chiao Tung University, Taiwan

Chapter 18
Addressing Challenges in Web Accessibility for the Blind and Visually Impaired
Angela Guercio, Kent State University at Stark, USA
Kathleen A. Stirbens, Kent State University at Stark, USA
Joseph Williams, Kent State University at Stark, USA
Charles Haiber, Kent State University at Stark, USA
Chapter 19
The Development of Educational Environment Suited to the Japan-Specific Educational Service Using Requirements Engineering Techniques: Case Study of Running Sakai with PostgreSQL

Yuki Terawaki, Hosei University, Japan
Yuichi Takahashi, Foreach ltd., Japan
Yasushi Kodama, Hosei University, Japan
Kazuo Yana, Hosei University, Japan

Chapter 20
An EUD Approach to the Design of Educational Games

Carmelo Ardito, University of Bari “Aldo Moro”, Italy
Rosa Lanzilotti, University of Bari “Aldo Moro”, Italy

Chapter 21
Information Security Awareness On-Line Materials Design with Knowledge Maps

Ruey-Shiang Shaw, Tamkang University, Taiwan
Huan-Chao Keh, Tamkang University, Taiwan
Nan-Ching Huang, Tamkang University, Taiwan
Tien-Chuan Huang, National Taipei University of Nursing and Health Sciences, Taiwan

Chapter 22
A Study of the Predictive Relationships between Faculty Engagement, Learner Satisfaction and Outcomes in Multiple Learning Delivery Modes

Cherng-Jyh Yen, Old Dominion University, USA
M’hammed Abdous, Old Dominion University, USA

Compilation of References

About the Contributors

Index