Contents
by Volume

Volume I

Academic Guidance Model to Orient Distance Students, An / Luca Vanin, University of Milan – Bicocca, Italy; Stefano Castelli, University of Milan – Bicocca, Italy; Alessandro Pepe, University of Milan – Bicocca, Italy; and Loredana Addimando, University of Milan – Bicocca, Italy ................................. 1

Adaptation of Cognitive Walkthrough in Response to the Mobile Challenge / Chua Fang Fang, Multimedia University, Cyberjaya, Malaysia ........................................................................................................................................ 10

Adult Education and Adult Learning Processes with ICT / Y. Inoue, University of Guam, Guam .......... 14

Alternative Learning Platform to Facilitate Usability and Synchronization of Learning Resources, An / Eugenia M. W. Ng, The Hong Kong Institute of Education, Hong Kong ..................................................................................................................... 21

Ambient Intelligence / Fortunato Sorrentino, Università degli Studi di Firenze, Italy ........................................ 32

Applying Constructivist Self-Regulating Learning Approach for ICT Students / Yuk Kuen Wong, Griffith University, Australia; and Don Kerr, University of the Sunshine Coast, Australia ........................................................................... 40


BISER / Dimitar Christozov, American University in Bulgaria, Bulgaria ............................................................. 66

Blended Approach Environment Shift in Higher Education / Hanafizan Hussain, Multimedia University, Malaysia .......................................................................................................................... 69

Children and Computers / Paolo Ferri, University of Milan – Bicocca, Italy .......................................................... 75

Classics Teaching Through ICT Experience to ICT Manual for Classics Teachers / Annarella Perra, CIRD – SSIS Cagliari, Italy .............................................................................................................. 84

Collaborative Knowledge Management (CKM) and Enterprise Knowledge Management / David G. Vequist IV, University of the Incarnate Word, USA ........................................................................................................ 87

Comparison of Technologies and Methodologies in the E-Learning EXPO Experience / Giorgio Poletti, CARID, University of Ferrara, Italy ............................................................................................................. 95
Computer Communication and ICT Attitude and Anxiety Among Higher Education Students / Nwachukwu Prince Ololube, NOVENA University Ogume, Nigeria ................................. 100

Computer Simulations and Scientific Knowledge Construction / Athanassios Jimoyiannis, University of Peloponnese, Greece ................................................................. 106

Computer-Mediated Communication Learning Environments: The Social Dimension / Stefania Manca, Institute for Educational Technology, National Research Council, Italy ............ 121

Cooperative Learning Strategies for Effective Teaching and Learning Science Courses in Large Classes / I. A. Ajayi, Federal College of Education, Abeokuta, Nigeria; and O. B. Ajayi, University of Agriculture, Abeokuta, Nigeria ......................................................... 127

Cyberspace’s Ethical and Social Challenges in Knowledge Society / Maria Ranieri, University of Florence, Italy ..................................................................................... 132

Data Caching Patterns / Tony C. Shan, IBM, USA; and Winnie W. Hua, CTS Inc., USA ....................... 139

Data Flow Diagram Use to Plan Empirical Research Projects / Jens Mende, University of the Witwatersrand, South Africa ........................................................................... 150

Distance Education to E-Learning as Integrated Training, From / Emilio Lastrucci, University of Basilicata, Italy; Debora Infante, University of Basilicata, Italy; and Angela Pascale, University of Basilicata, Italy .............................................................................. 160

Distance Learning Techniques in University Courses / Paolo Frignani, University of Ferrara, Italy .......... 166

Dynamic Reconstruction of Concept Maps / Marco Pedroni, CARID Università degli Studi di Ferrara, Italy ......................................................................................... 173

E-Commerce Recommendation Systems / Konstantinos Markellos, University of Patras, Greece; Penelope Markellou, University of Patras, Greece; Aristotelis Mertis, University of Patras, Greece; and Angeliki Panayiotaki, University of Patras, Greece & Hellenic Ministry of Economy & Finance, Greece ........................................................................... 180

Education and E-Learning Evaluation and Assessment / Emilio Lastrucci, University of Basilicata, Italy; Debora Infante, University of Basilicata, Italy; and Angela Pascale, University of Basilicata, Italy .......... 189

EduOntoWiki Project for Supporting Social, Educational, and Knowledge Construction Processes with Semantic Web Paradigm, The / Corrado Petrucco, University of Padua, Italy ................................................................. 195

Edutainment Framework Implementation Case Study, An / Zarina Che Embe, Multimedia University, Malaysia; and Hanafizan Hussain, Multimedia University, Malaysia ......................................................................................... 202

E-Government Growth Barriers in Sub-Saharan Africa / Princely Ifinedo, Cape Breton University, Canada ........................................................................................................... 209

E-Knowledge / Fortunato Sorrentino, Università degli Studi di Firenze, Italy ........................................ 215
E-Learning Function Integration with Corona 2 / Marco Pedroni, CARID Università degli Studi di Ferrara, Italy ................................................................. 222

E-Learning Improve the Communication Among Students and Lecturers?, Does / Charilaos A. Karampotsios, Athens University of Economics and Business, Greece; Dimitris K. Kardaras, Athens University of Economics and Business, Greece; and Eleutherios A. Papathanassiou, Athens University of Economics and Business, Greece ................................................................. 226

E-Learning is What Kind of Learning? / Flavia Santoianni, University of Naples Federico II, Italy ............ 243

E-Learning Methodological Models and Typologies / Maria Ranieri, University of Florence, Italy ............... 249

E-Learning Project for a Basic Mathematics Course at the University, An / Anna Torriero, Catholic University of the Sacred Heart, Italy; and Immacolata Scancarello, Catholic University of the Sacred Heart, Italy ................................................................. 256

E-Learning to Games-Based E-Learning, From / Thomas M. Connolly, University of the West of Scotland, UK; and Mark Stansfield, University of the West of Scotland, UK................................................................. 268

E-Learning to T-Learning, From / Roberto Cuccu, University of Cagliari, Italy ........................................... 276

Electronic Knowledge a Plural Thought?, Is / Franco Frabboni, University of Bologna, Italy ..................... 284

Electronic Loyalty Programs Comparative Survey / Yasin Ozcelik, Fairfield University, USA .................... 286

Enhancement of Recorded Respiratory Sound Using Signal Processing Techniques / Feng Jin, Nanyang Technological University, Singapore; and Farook Sattar, Nanyang Technological University, Singapore .......................................................................................................................................................... 291

ERP Integration into Existing Courses: A Three-Step Approach / Jaideep Motwani, Grand Valley State University, USA; and Asli Y. Akbulut, Grand Valley State University, USA ................................................................. 301

E-Tutor / Maria Ranieri, University of Florence, Italy .................................................................................. 308

Evaluating Usability to Improve Efficiency in E-Learning Programs / Emilio Lastrucci, University of Basilicata, Italy; Debora Infante, University of Basilicata, Italy; and Angela Pascale, University of Basilicata, Italy .......................................................................................................................................................... 315

Factors Determining Teachers’ Beliefs and Perceptions of ICT in Education / Athanassios Jimoyiannis, University of Peloponnese, Greece .................................................................................................................................................................................................................. 321

Fostering Collaboration in CSCL / Donatella Persico, Institute for Educational Technology, National Research Council, Italy; Francesca Pozzi, Institute for Educational Technology, National Research Council, Italy; and Luigi Sarti, Institute for Educational Technology, National Research Council, Italy ........................................................................................................................................................................................................... 335

GIS Use in Landscape Archaeology / Cristina Corsi, Università di Cassino, Italy ........................................ 341
Higher Education’s New Frontier for the E-University and Virtual Campus / Antonio Cartelli,
University of Cassino, Italy .......................................................................................................................... 350

ICT and Interculture Opportunities Offered by the Web / Laura Corazza, Università di Bologna, Italy ...... 357

ICT and the Virtual Organisation / Carmen de Pablos Heredero, Rey Juan Carlos University, Spain .......... 365

ICT Investment Evaluation Practices in Large Organizations / Chad Lin, Curtin University of Technology,
Australia; and Yu-An Huang, National Chi Nan University, Taiwan; and .................................................... 371

ICT Literacy in the Information Age / Ritchie Macefield, Staffordshire University & MEFU Ltd., UK ...... 378

ICT Policies in Africa / Esharenana E. Adomi, Delta State University, Nigeria; and Stella E. Igun,
Delta State University Library, Nigeria ........................................................................................................ 384

ICT Processes for Virtual Academic Research Teams (VART) in Academia / Jason S. Lecoure,
Saint Mary’s University, Canada; and Wendy R. Carroll, Acadia University, Canada ................................. 390

ICTs and Distance Education in Nigeria / Nwachukwu Prince Olorode, NOVENA University Ogume,
Nigeria; and Andrew Egba Ugochukwu, Ahmadu Bello University Zaria, Nigeria ........................................ 396

Impact of Technological Frames on Knowledge Management Procedures, The / Chun-Tsung Chen,
Kao Yuan University, Taiwan ..................................................................................................................... 401

Implementation of Practices with ICT as a New Teaching-Learning Paradigm, The /
Antonio Cartelli, University of Cassino, Italy ............................................................................................... 413

Volume II

Inference Tree Use to Design Arguments in Expository Reports / Jens Mende, University of the
Witwatersrand, South Africa .......................................................................................................................... 419

Information Communication Technology Tools for Software Review and Verification / Yuk Kuen Wong,
Griffith University, Australia ......................................................................................................................... 429

Information Environments of Middle Managers in Higher Education / Juha Kettunen, Turku University
of Applied Sciences, Finland; Jouhi Hautala, Turku University of Applied Sciences, Finland; and
Mauri Kantola, Turku University of Applied Sciences, Finland ..................................................................... 436

Integrating Software Engineering and Costing Aspects within Project Management Tools /
Roy Gelbard, Bar-Ilan University, Israel; Jeffrey Kantor, Bar-Ilan University, Israel &
University of Windsor, Canada; and Liran Edelist, Bar-Ilan University, Israel ................................................. 443

Integrative Approach to User Interface Design, An / Vanja Kljajevic, NewHeights Software, Canada
& Carleton University, Canada ...................................................................................................................... 457

Intelligent Multi-Agent Systems / Uros Krcadinac, University of Belgrade, Serbia; Milan Stankovic,
University of Belgrade, Serbia; Vitomir Kovanovic, University of Belgrade, Serbia; and
Jelena Jovanovic, University of Belgrade, Serbia ......................................................................................... 464
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligent User Preference Mining</td>
<td>Sheng-Uei Guan, Xian Jiatong-Liverpool University, China; and Ping Cheng Tan, National University of Singapore, Singapore</td>
<td>470</td>
</tr>
<tr>
<td>Interactive Television Accessibility and Usability</td>
<td>Roberto Cuccu, University of Cagliari, Italy</td>
<td>477</td>
</tr>
<tr>
<td>Introduction to Computer Forensics in the Age of Information Warfare</td>
<td>Terry T. Kidd, University of Texas School of Public Health, USA</td>
<td>490</td>
</tr>
<tr>
<td>IT-Enabled Reengineering: Productivity Impacts</td>
<td>Yasin Ozcelik, Fairfield University, USA</td>
<td>498</td>
</tr>
<tr>
<td>Knowledge Management with Partners in a Dynamic Information Environment</td>
<td>Juha Kettunen, Turku University of Applied Sciences, Finland; Mauri Kantola, Turku University of Applied Sciences, Finland; and Jouni Hautala, Turku University of Applied Sciences, Finland</td>
<td>503</td>
</tr>
<tr>
<td>Knowledge to Personal Knowledge Management, From</td>
<td>Fortunato Sorrentino, Università degli Studi di Firenza, Italy</td>
<td>510</td>
</tr>
<tr>
<td>Learning Processes and ITC</td>
<td>Manuela Gallerani, University of Bologna, Italy</td>
<td>518</td>
</tr>
<tr>
<td>Leveraging Supply Chain Management in the Digital Economy</td>
<td>Mahesh S. Raisinghani, TWU School of Management, USA</td>
<td>526</td>
</tr>
<tr>
<td>Linking E-Assessment to Student’s Use of Online Learning Content</td>
<td>Kar-Tin Lee, Queensland University of Technology, Australia; Hitendra Pillay, Queensland University of Technology, Australia; and Vinesh Chandra, Queensland University of Technology, Australia</td>
<td>532</td>
</tr>
<tr>
<td>Management Information System in Higher Education</td>
<td>Juha Kettunen, Turku University of Applied Sciences, Finland</td>
<td>542</td>
</tr>
<tr>
<td>Mobile Learning and an Experience with Blended Mobile Learning</td>
<td>Michelle Pieri, University of Milano – Bicocca, Italy; and Davide Diamantini, University of Milano – Bicocca, Italy</td>
<td>548</td>
</tr>
<tr>
<td>Modeling Business Actions</td>
<td>Peter Rittgen, University College of Borás, Sweden</td>
<td>554</td>
</tr>
<tr>
<td>Modelling Wireless Local Area Networking in Higher Education Institutes</td>
<td>Ossi Väänänen, Turku University of Applied Sciences, Finland</td>
<td>563</td>
</tr>
<tr>
<td>Multimedia Integration in Active Online Learning Environments</td>
<td>Holim Song, Texas Southern University, USA; and Terry T. Kidd, University of Texas School of Public Health, USA</td>
<td>569</td>
</tr>
<tr>
<td>Narrative Learning Environments</td>
<td>Giuliana Dettori, Institute for Educational Technology, National Research Council, Italy</td>
<td>576</td>
</tr>
<tr>
<td>NETRIC: A Proposed System for Synthesis of Multicast Transport Protocols</td>
<td>Mihály Orosz, Budapest University of Technology and Economics, Hungary; Dávid Tegze, Budapest University of Technology and Economics, Hungary; Gábor Hosszú, Budapest University of Technology and Economics, Hungary; and Ferenc Kovács, Budapest University of Technology and Economics, Hungary</td>
<td>584</td>
</tr>
<tr>
<td>Network Management Resource Costs</td>
<td>Colin Pattinson, Leeds Metropolitan University, UK</td>
<td>592</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>New Algorithm for Minimizing Tree Pattern Queries, A</td>
<td>Yangjun Chen, University of Winnipeg, Canada</td>
<td>598</td>
</tr>
<tr>
<td>New Algorithm for Subset Matching Problem Based on Set-String Transformation, A</td>
<td>Yangjun Chen, University of Winnipeg, Canada</td>
<td>607</td>
</tr>
<tr>
<td>Novel Application of the P2P Technology for Intrusion Detection, A</td>
<td>Zoltán Czirkos, Budapest University of Technology and Economics, Hungary; and Gábor Hosszú, Budapest University of Technology and Economics, Hungary</td>
<td>616</td>
</tr>
<tr>
<td>On the Stability of Peer-to-Peer Networks in Real-World Environments</td>
<td>Zoltán Czirkos, Budapest University of Technology and Economics, Hungary; and Gábor Hosszú, Budapest University of Technology and Economics, Hungary</td>
<td>622</td>
</tr>
<tr>
<td>Online Catalogue of Manuscripts Conserved in Libraries in the Veneto Region</td>
<td>Barbara Vanin, Biblioteca del Museo Correr, Italy</td>
<td>631</td>
</tr>
<tr>
<td>Online Learning’s Future in the Workplace with Augmented Reality</td>
<td>Katherine Ira, University of Maryland, Baltimore County, USA; and Zane Berge, University of Maryland, Baltimore County, USA</td>
<td>637</td>
</tr>
<tr>
<td>Online Trust in Mobile Commerce</td>
<td>Yuk Kuen Wong, Griffith University, Australia; and C. J. Hsu, Griffith University, Australia</td>
<td>647</td>
</tr>
<tr>
<td>Open Catalogue of Manuscripts in the Malatestiana Library, The</td>
<td>Antonio Cartelli, University of Cassino, Italy; A. Daltri, Biblioteca Malatestiana, Italy; P. Errani, Biblioteca Malatestiana, Italy; M. Palma, University of Cassino, Italy; and P. Zanfini, Biblioteca Malatestiana, Italy</td>
<td>656</td>
</tr>
<tr>
<td>Overview of Online Trust Derivatives for E-Commerce Adoption, An</td>
<td>Omer Mahmood, University of Sydney, Australia</td>
<td>662</td>
</tr>
<tr>
<td>Participatory Design Project on Mobile ICT, A</td>
<td>Ursula Hyrkkänen, Turku University of Applied Sciences, Finland; Juha Kettunen, Turku University of Applied Sciences, Finland; and Ari Putkonen, Turku University of Applied Sciences, Finland</td>
<td>669</td>
</tr>
<tr>
<td>Pattern-Based Identification in P2P Systems</td>
<td>Gábor Richly, Budapest University of Technology and Economics, Hungary; and Ferenc Kovács, Budapest University of Technology and Economics, Hungary</td>
<td>676</td>
</tr>
<tr>
<td>Product Evaluation Services for E-Commerce</td>
<td>Sheng-Uei Guan, Xian Jiatong-Liverpool University, China</td>
<td>683</td>
</tr>
<tr>
<td>Quality Assurance View of a Management Information System</td>
<td>Juha Kettunen, Turku University of Applied Sciences, Finland; and Ismo Kantola, Turku University of Applied Sciences, Finland</td>
<td>691</td>
</tr>
<tr>
<td>Relationship Between Assessment and Evaluation in CSCL, The</td>
<td>Serena Alvino, Institute for Educational Technology, National Research Council, Italy; and Donatella Persico, Institute for Educational Technology, National Research Council, Italy</td>
<td>698</td>
</tr>
</tbody>
</table>
Semantic Web Adaptation / Alexander Mikroyannidis, University of Manchester, UK; and Babis Theodoulidis, University of Manchester, UK ................................. 704

Social Networking and Personal Learning Environment / Antonio Fini, University of Florence, Italy .......... 713

‘Stream of Training’ Approach in Project Management Training / David G. Vequist IV, University of the Incarnate Word, USA; and Mark S. Teachout, University of the Incarnate Word, USA ......................... 721

Strengthening the Knowledge-Base of Cities Through ICT Strategies / Tan Yigitcanlar, Queensland University of Technology, Australia; and Koray Velibeyoglu, Izmir Institute of Technology, Turkey .......... 728

Supporting Self-Regulated Learning with ICT / Giuliana Dettori, Institute for Educational Technology, National Research Council, Italy; and Donatella Persico, Institute for Educational Technology, National Research Council, Italy ................................................................. 735

Technology Enhanced Learning in Continuing Medical Education / Guglielmo Trentin, Institute for Educational Technology, Italian National Research Council, Italy ................................................................. 742

Theories and Principles for E-Learning Practices with Instructional Design / Maria Ranieri, University of Florence, Italy ........................................................................................................................................ 750

Towards a Framework for Evaluating ICT-Based Materials / Hitendra Pillay, Queensland University of Technology, Australia; and John A. Clarke, Queensland University of Technology, Australia ................. 759

Towards a New Model for Knowledge Construction and Evolution / Antonio Cartelli, University of Cassino, Italy ........................................................................................................................................ 767

Transport-Level Requirements of the Internet-Based Streaming, The / Dávid Tegze, Budapest University of Technology and Economics, Hungary; and Gábor Hosszú, Budapest University of Technology and Economics, Hungary ........................................................................................................................................ 775

Understanding RFID (Radio Frequency Identification) / Susan A. Vowels, Washington College, USA .......... 782

University Training on Communities of Practice / Giuditta Alessandrini, University of Roma, Italy; and Giovanni Rosso, University of Roma, Italy ............................................................................................................ 791

Using Dynamic Visualizations to Enhance Learning in Physical Geography / Joan Bellou, The University of Ioannina, Greece ........................................................................................................................................ 795

Video Object Segmentation / Ee Ping Ong, Institute for Infocomm Research, Singapore; and Weisi Lin, Nanyang Technological University, Singapore ............................................................................................................ 809

Virtual Communities and Collaborative Learning in a Post-Graduate Course / Maria Ranieri, University of Florence, Italy ........................................................................................................................................ 817

Virtual Identity, Digital Identity, and Virtual Residence of the Digital Citizen, The / Fortunato Sorrentino, Università degli Studi di Firenze, Italy ........................................................................................................................................ 825
Virtual Reality and Virtual Environments in Education / Nicoletta Sala, Università della Svizzera italiana, Switzerland ................................................................. 833

Web-Based Course Management Systems (WCMS) Acceptance with College Students in Estonia / Princely Ifinedo, Cape Breton University, Canada.................................................................................................................... 839

Wireless Revolution and Schools, The / Terry T. Kidd, University of Texas School of Public Health, USA .............................................................................................................................. 847