E-Education Applications: Human Factors and Innovative Approaches

Table of Contents

Preface .......................................................................................................................... viii

SECTION I: MODELS, SYSTEMS AND COURSES

Chapter I. Engineering of a Virtual Community Platform: Realization of a Socialware with Integration of the ‘User as Editor’ Concept ................................................. 1
Kerstin Röse, University of Kaiserslautern, Germany
Leon Urbas, Technische Universität Berlin, Germany
Alexander Künzer, Aachen University, Germany
Martin Christof Kindsmüller, Technische Universität Berlin, Germany
Sandro Leuchter, Technische Universität Berlin, Germany

Chapter II. Innovative Approach to Teaching Database Design through WWW: A Case Study and Usability Evaluation ................................................................. 28
Joanna Jedrzejowicz, University of Gdansk, Poland

Chapter III. A Model-Driven Approach for Synchronous Dynamic Collaborative E-Learning .... 44
Véronique Baudin, LAAS-CNRS, France
Khalil Drira, LAAS-CNRS, France
Thierry Villemur, LAAS-CNRS, France
Saïd Tazi, Université Toulouse 1, France
Chapter IV.
Smart ProFlexLearn: An Intuitive Approach to Virtual Learning Environment .......... 66
Claude Ghaoui, Liverpool John Moores University, UK
W.A. Janvier, Liverpool John Moores University, UK

Chapter V.
An Expert-Based Evaluation Concerning Human Factors in ODL Programs: A Preliminary Investigation ........................................................................................................... 84
Athanasis Karoulis, Aristotle University of Thessaloniki, Greece
Ioannis Tarnanas, Aristotle University of Thessaloniki, Greece
Andreas Pombortsis, Aristotle University of Thessaloniki, Greece

Chapter VI.
Integrated E-Learning System and Its Practice .................................................. 97
Toshio Okamoto, University of Electro-Communications, Japan
Mizue Kayama, Senshu University, Japan

Chapter VII.
SEGODON: Learning Support System that can be Applied to Various Forms .......... 132
Takashi Yoshino, Wakayama University, Japan
Jun Munemori, Wakayama University, Japan

Chapter VIII.
Creative E-Transitions ...................................................................................... 153
Lynne Hunt, Edith Cowan University, Australia

Chapter IX.
Distributed Constructionism through Participatory Design .................................. 164
Panayiotis Zaphiris, City University, UK
Giorgos Zacharia, MIT, USA
Meenakshi Sundaram Rajasekaran, City University, UK

Chapter X.
Fast Track: School Based Student Software Design ............................................. 180
Philip Duggan, The Mosslands School, UK
Claude Ghaoui, Liverpool John Moores University, UK
Mike Simco, Liverpool John Moores University, UK

Chapter XI.
E-Learning as a Catalyst for Educational Innovation ........................................... 196
Petek Askar, Hacettepe University, Turkey
Ugur Halici, Middle East Technical University, Turkey
SECTION II: MORE ON INTUITIVE, SOCIAL AND INTERNATIONAL ISSUES

Chapter XII.
Employing Intelligent and Adaptive Methods for Online Learning ....................... 208
Bernard Mark Garrett, University of British Columbia, Canada
George Roberts, Oxford Brookes University, UK

Chapter XIII.
Toward Predictive Models for E-Learning: What Have We Learned So Far? .......... 220
Maria Alexandra Rentroia-Bonito, Technical University of Lisbon, Portugal
Joaquim Armando Pires Jorge, Technical University of Lisbon, Portugal

Chapter XIV.
Supporting Informal Interaction in Online Courses .............................................. 235
Juan Contreras-Castillo, University of Colima and CICESE, Mexico
Jesús Favela, CICESE, Mexico
Carmen Pérez-Fragoso, Universidad Autónoma de Baja California, Mexico

Chapter XV.
The Orientation and Disorientation of E-Learners ........................................... 248
Bernard Mark Garrett, University of British Columbia, Canada
Richard Francis, Oxford Brookes University, UK

Chapter XVI.
Ensuring Usability in International Web-Based E-Learning Systems .................. 275
Andy Smith, University of Luton, UK

Chapter XVII.
Knowledge Spaces: Cultural Education in the Media Age ................................. 291
Wolfgang Strauss, Fraunhofer Institute for Media Communication, Germany
Monika Fleischmann, Fraunhofer Institute for Media Communication, Germany
Jochen Denzinger, Fraunhofer Institute for Media Communication, Germany
Michael Wolf, Fraunhofer Institute for Media Communication, Germany
Yinlin Li, Fraunhofer Institute for Media Communication, Germany

Chapter XVIII.
Development and Evaluation of a New HTML Browser Method of Presenting
Reading Material for Students with Low Vision ................................................. 308
Kazuhito Ujima, Matsuyama School for the Blind, Japan
Koichi Oda, Tokyo Woman’s Christian University, Japan

Chapter XIX.
A Sign Language Teaching System Using Sign Language Recognition
and Generation Methods ...................................................................................... 319
Hirohiko Sagawa, Hitachi, Ltd., Japan
Masaru Takeuchi, Hitachi, Ltd., Japan
Chapter XX.
Precursors to Web-Based Methodologies: Lessons We Can Learn
from Teaching Machines, Automatic Tutoring Devices and Learning Hierarchies .. 338
Robert S. Owen, Texas A&M University-Texarkana, USA
Bosede Aworuwa, Texas A&M University-Texarkana, USA

About the Authors ........................................................................................................ 350

Index ........................................................................................................................... 360