Table of Contents

International Journal of Information and Communication Technology Education

Volume 14 • Issue 4 • October-December-2018 • ISSN: 1550-1876 • eISSN: 1550-1337 An official publication of the Information Resources Management Association

RESEARCH ARTICLES

Exploring the Usage of MOOCs in Higher Education Institutions: Characterization of the Most Used Platforms

Carolina Costa, DEGEIT - University of Aveiro, Aveiro, Portugal Leonor Teixeira, DEGEIT / IEETA - University of Aveiro, Aveiro, Portugal Helena Alvelos, DEGEIT / CIDMA - University of Aveiro, Aveiro, Portugal

18 A New Approach for Assessing Learners in an Online Problem Based Learning Environment

Houda Tadjer, Computer Science Department, University Badji Mokhtar, Annaba, LabSTIC Laboratory, University 8 May 1945 Guelma, Guelma, Algeria

Yacine Lafifi, LabSTIC Laboratory, University 8 May 1945 Guelma, Guelma, Algeria Hassina Seridi-Bouchelaghem, LabGED Laboratory, University Badji Mokhtar, Annaba, Algeria

34 Application of the Cognitive Walkthrough Method to Evaluate the Usability of PhET Simulations Package to Teach Physics

Gustavo de Oliveira Almeida, PPGAd - Federal Fluminense University, Niteroi, Brazil Cesar Augusto Rangel Bastos, Federal University of the State of Rio de Janeiro (UNIRIO), Rio de Janeiro, Brazil

49 Computer Assisted Evaluation Using Rubrics for Reduction of Errors and Inter and Intra Examiner Heterogeneity

Kissan G. Gauns Dessai, Govt. College of Arts, Science and Commerce, Quepem-Goa, India Venkatesh V. Kamat, Goa University, Goa, India

66 Development of Interactive Multimedia Learning Materials for Improving Critical Thinking Skills

Djusmaini Djamas, Universitas Negeri Padang, Padang, Indonesia Vonny Tinedi, Universitas Negeri Padang, Padang, Indonesia Yohandri, Universitas Negeri Padang, Padang, Indonesia

85 A Gaming Perspective on Mathematics Education

Su-Ting Yong, The University of Nottingham, Semenyih, Malaysia Peter Gates, The University of Nottingham, UK Andy Tak-Yee Chan, The University of Nottingham, Semenyih, Malaysia

99 The Influence of Proliferation of Technology on Social Interactions Among Undergraduate Students at Selected Universities in Nigeria

Florence F. Folami, Department of Nursing Science, Faculty of Clinical Science, University of Lagos, Lagos, Nigeria Blessing F. Adeoye, The Riley College School of Education and Professional Licensure, Walden University, Minneapolis, USA

107 Independent Learning of Digital Animation

May-Chan Yuen, Universiti Tunku Abdul Rahman, Kajang, Malaysia Ah-Choo Koo, Multimedia University, Cyberjaya, Malaysia Peter C. Woods, Multimedia University, Cyberjaya, Malaysia

BOOK REVIEW

121 Developing Effective Educational Experiences Through Learning Analytics

Chia-Wen Tsai, Department of Information Management, Ming Chuan University, Taiwan

Copyright

The International Journal of Information and Communication Technology Education (IJICTE) (ISSN 1550-1876; eISSN 1550-1337), Copyright © 2018 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The International Journal of Information and Communication Technology Education is indexed or listed in the following: ACM Digital Library; Australian Business Deans Council (ABDC); Bacon's Media Directory; Burrelle's Media Directory; Cabell's Directories; Compendex (Elsevier Engineering Index); CSA Illumina; DBLP; DEST Register of Refereed Journals; EBSCOhost's Library/Information Science & Technology Abstracts with FullTEXT; Gale Directory of Publications & Broadcast Media; GetCited; Google Scholar; INSPEC; JournalTOCs; Library & Information Science Abstracts (LISA); MediaFinder; Norwegian Social Science Data Services (NSD); PsycINFO®; SCOPUS; The Index of Information Systems Journals; The Standard Periodical Directory; Ulrich's Periodicals Directory; Web of Science; Web of Science Emerging Sources Citation Index (ESCI)