## **Knowledge Management & E-Learning**



ISSN 2073-7904

#### **Editor-in-Chief**

Maggie M. Wang The University of Hong Kong, Hong Kong

#### Co-Editor-in-Chief

Stephen J. H. Yang National Central University, Taiwan

### Managing Editor

Haijing Jiang The University of Hong Kong, Hong Kong

#### **Editorial Advisory Board**

Neil Mercer University of Cambridge, UK Paul A. Kirschner (AERA Fellow; ISLS Fellow) Open University of the Netherlands, NL Jeroen J. G. van Merrienboer (AERA Fellow) Maastricht University, NL Jonathan Grudin (ACM Fellow; CHI Fellow) Microsoft Research, USA Fanny Klett (IEEE Fellow) German Workforce ADL Partnership Laboratory, DE Dr. Kinshuk University of North Texas, USA Michael J. Jacobson The University of Sydney, AU Kuldeep Kumar Florida International University, USA Tefko Saracevic (ASIS Award of Merit) Rutgers University, USA Kevin C. Desouza Arizona State University, USA Jay Liebowitz University of Maryland University College, USA

J. Michael Spector (IBSTPI Fellow) University of North Texas, USA Chin-Chung Tsai National Taiwan Normal University, TW Cher Ping Lim The Education University of Hong Kong, HK Wayne Wei Huang Ohio University, USA Toshio Okamoto University of Electro-Communications, JP Nian-Shing Chen National Sun Yat-Sen University, TW Rob Koper Open University of the Netherlands, NL Doug Vogel (AIS Fellow) City University of Hong Kong, HK Huaiqing Wang City University of Hong Kong, HK Qiang Yang (IEEE; AAAI; AAAS; IAPR Fellow) Hong Kong University of Science and Technology, HK Demetrios G. Sampson Curtin University, Australia

#### Knowledge Management & E-Learning, Vol.11, No.3. Sep 2019

#### **Associate Editors**

Patricia A. Abbott (ACMI Fellow; AAN Fellow) University of Michigan, USA Xun Ge University of Oklahoma, USA Anders Morch University of Oslo, NO Shengquan Yu Beijing Normal University, CN Xiaochun Cheng Middlesex University, UK Waltraut Ritter Knowledge Enterprises, HK Rajiv Khosla La Trobe University, AU Alexandra I. Cristea (BCS Fellow) University of Warwick, UK Michael Chau The University of Hong Kong, HK

Mark Klein Massachusetts Institute of Technology, USA Andre W. Kushniruk (ACMI Fellow; CAHS Fellow) University of Victoria, CA Jürgen Moormann Frankfurt School of Finance & Management, DE Siu Cheung Kong The Education University of Hong Kong, HK Jianwei Zhang State University of New York at Albany, USA Murali Raman Multimedia University, MY David Guralnick Kaleidoscope Learning, New York, USA Dickson K. W. Chiu The University of Hong Kong, HK Jiyou Jia Peking University, CN

#### **Editorial Board Members**

Irene Y. L. Chen National Changhua University of Education, TW Heinz Ulrich Hoppe University Duisburg-Essen, DE Juanjuan Chen The University of Hong Kong, HK Qiyun Wang Nanyang Technological University, SG Hokyin Lai Hong Kong Baptist University, HK Xiaojing Liu Indiana University, USA Kiyoshi Nakabayashi Chiba Institute of Technology, JP Mark E. Nissen Naval Postgraduate School, USA Xiaohui Zhao University of Canberra, AU Mudasser F. Wyne National University, USA Bian Wu East China Normal University, CN Wenying Zhou Michigan State University, USA Jun Peng City University of Macau, MO Ibrahim Arpaci Gaziosmanpasa University, TR

Sabine Graf Athabasca University, CA Elizabeth Borycki University of Victoria, CA Wan Ying Tay Ministry of Education, SG David M. Kennedy James Cook University, Singapore Campus, AU Chien-Sing Lee Universiti Tunku Abdul Rahman, MY Marcelo Milrad Linnaeus University, SE Eugenia M. W. NG The Education University of Hong Kong, HK Ijaz A. Qureshi The University of Lahore, PK Ming-Hsiung Ying Chung-Hua University, TW Yang-Hsueh Chen National Chengchi University, TW Sun Joo Yoo Samsung SDS, KR Jenny S. Wakefield Dallas County Community College, USA Muhammad Shujahat The University of Hong Kong, HK Md. Abul Kalam Siddike University of Dhaka, BD

Knowledge Management & E-Learning, Vol.11, No.3. Sep 2019

# Contents

281	Continuous-learning work environment: A study with developers in software development organizations Leticia Rodrigues da Fonseca, Marcelo Ribeiro Silva, Sheldon William Silva and Guilherme Marques Pereira
304	Integrating inquiry learning and knowledge management into a flipped classroom to improve students' web programming performance in higher education Krittawaya Thongkoo, Patcharin Panjaburee and Kannika Daungcharone
325	Effects of digital games on enhancing language learning in Tanzanian preschools Catherine Akoth Ongoro and Joseph W. Mwangoka
345	Impact of self-regulated learning on academic performance and satisfaction of students in the online environment Adisa Ejubović and Adis Puška
364	The effects of a new virtual learning platform on improving student skills in designing and producing online virtual laboratories Mohamed Elsayed Ahmed and Shinobu Hasegawa
378	Fostering group creativity through design thinking projects Jeongmin Lee, Yeonji Jung and Seonghye Yoon
393	<b>E-waste disposal awareness among the Malaysian community</b> Hanifah Mahat, Mohmadisa Hashim, Nasir Nayan, Yazid Saleh and Saiyidatina Balkhis Norkhaidi