14th European Conference on e-Learning (ECEL 2015)

Hatfield, United Kingdom 29 – 30 October 2015

Editors:

Amanda Jefferies Marija Cubric

ISBN: 978-1-5108-1431-8

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© The Authors, (2015). All Rights Reserved.

No reproduction, copy or transmission may be made without written permission from the individual authors.

Papers have been double-blind peer reviewed before final submission to the conference. Initially, paper abstracts were read and selected by the conference panel for submission as possible papers for the conference.

Many thanks to the reviewers who helped ensure the quality of the full papers.

Printed by Curran Associates, Inc. (2015)

Published by Academic Conferences and Publishing International Ltd. 33 Wood Lane Sonning Common RG4 9SJ UK

Phone: 441 189 724 148 Fax: 441 189 724 691

info@academic-conferences.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: 845-758-0400 Fax: 845-758-2634

Email: curran@proceedings.com Web: www.proceedings.com

Contents

Paper Title	Author(s)	Page no
Preface		vi
Committee		vii
Biographies		х
Research papers		
Sultan Qabous University Students' Attitudes Towards Using Smart Phone Educational Applications	Salwa El-Saeed Abdelkarim Ahmad and Samira Bakr	1
ArcForm as a Notational Foundation for e-Learning Systems	Benjamin Brink Allsopp	9
The Flipped Classroom: A Computer System to Diagnose Errors in Solving Equations	Abdullatif Almohammadi, Trevor Barker, Mariana Lilley and Vito Veneziano	18
Record of Undergraduates' Activities in Virtual Learning Environments	Paulo Alves, Luísa Miranda and Carlos Morais	25
Understanding MOOCs Through Connectivist and Social Constructivist Approaches	Lars Birch Andreasen and Mie Buhl	34
Flipped Classroom and Learning Strategies	Anders Avdic and Leif Åkerblom	41
Digital Pedagogy and the Social Construction of Knowledge in Physical Education Teachers	Wendy Barber	50
Modelling and Motivating High Quality Academic Work With Live Peer Evaluation	Steve Bennett, Trevor Barker, Peter Thomas and Mariana Lilley	57
Adaptive Guidance for Disciplinary Competencies Self-Learning Using an Educational Hypermedia	Tassadit Berkane and Farida Bouarab- Dahmani	65
Improving Student Interaction and Engagement in the Flipped Classroom	Marcus Birkenkrahe and Harald Kjellin	73
Nature or Nurture: A Case Study of ICT Competency	Margaret Brown	80
In Another Instant: Focus and Interaction in Creative Arts Learning	Barbara Brownie, Marta Rabikowska, Jayne Smith and Rebecca Thomas	87
Disrupting how we 'do' On-Line Learning Through Social Media: A Case Study of the Crowdsourcing the UK Constitution Project	Peter Bryant	93
Blended Learning Promoting new Developments for Nordic Master Programs in Visual Studies and Art Education	Mie Buhl and Stine Ejsing-Duun	100
Professional Development of Academic Workers: Creating new Open Course to Enhance English Language Competence of Academic Workers	Ivana Cechova, Jiri Dvorak, Jana Berankova and Dana Zerzanova	107
Learning English Language Through LMS: Designing a new Course	Ivana Cechova, Jana Rozsypalkova and Vit Kalvoda	114
Collaboration in Social Applications: True Story, Case-Study	Miloslava Č	129
Development of Financial and Language Competences via On- Line Games and Tests	Miloslava Černá and Libuše Svobodová	120
Working the Three T's: Teacher Education, Technology and Teacher Identities	Paula Charbonneau-Gowdy, Rosana Capredoni, Sebastian Gonzalez, María José Jayo and Pablo Raby	138

Paper Title	Author(s)	Page no
Connecting to Reading: Inspiring Young Children to Read Through the Creation of Digital Artefacts and use of Social Media	Mark Childs, Vedrana Estatiev, Janet Hetherington, Gordana Jugo, Tina Richardson and Geoff Walton	147
Learn Something new Today: Developing Students' Self- Directed Learning Capabilities Using Online Video Skills Training	Jamie Clarke, Ani Ritchie, Steve Hogg, Timos Almpanis and Julian Prior	156
Student Data: Data is Knowledge: Putting the Knowledge Back in the Students' Hands	Owen Corrigan, Mark Glynn, Aisling McKenna, Alan Smeaton and Sinead Smyth	165
Using Test Data for Successive Refinement of an Online Pre- Course in Mathematics	Katja Derr Reinhold Hübl and Mohammed Zaki Ahmed	173
Wearable Technology in the lab: A Useful new Perspective?	Tatyana Devine, Clare Gormley and Patrick Doyle	181
Preparing In-Service Teachers for K-12 Online Schools: A Case Study	Elizabeth Downs	190
Using Padlet to Increase Student Engagement in Lectures	David Ellis	195
Transforming the First Year Experience (HE) With Digital Literacy via Techno-Social Engagement and Evaluation	Rachel Fitzgerald and Hayley Henderson- Martin	
Balancing Social Dilemmas to Foster Collaborative Learning With Social Software	Gabriele Frankl	206
Reading Classic Novels Might be Supported by Wiki-Based Collaborative Activities	Vladimira Froldova	215
Blended Assessment -4- Blended Learning	David Germany	223
Evaluating the Early Adoption of Moodle at a Higher Education Institution	Indren Govender and Ilse Rootman-le Grange	230
The Affordances of Blended Learning in a Higher Education Flipped art Classroom	Janette Grenfell Deakin	238
Getting Them Fresh: How to Cultivate new Teachers Into Becoming Self-Regulated Learners in Their Role as Teachers	Inger Carin Grøndal and Anders Tveit	248
Designframework for an Adaptive, Hybrid MOOC: Personalized Curriculum in Teacher Professional Development	Karsten Gynther	255
Dynamic Models	Antonín Jančařík	264
Innovative Experience in Teaching Staff Review: Case of Nazarbayev Intellectual Schools in Kazakhstan	Aimagul Kanagatova, Kulfarida Raisova and Zhuldyz Suleimenova	272
Spatial Learning Strategies in Mobile Learning	Pavel Kapoun	279
E-Learning for the Reform and Expansion of Teacher Education in Nigeria	Olorunfemi Tola Keshinro and Bolanle Nafisat Akeusola	288
The Role of ICT in Raising Student's Motivation to Learn English as a Foreign Language: Two Case Studies	Blanka Frydrychová Klímová and Petra Poulová	293
The 21st Century Tutorial	lain Lambie and Bobby Law	299
Digital Literacy and Subject Matter Learning	Karin Tweddell Levinsen and Birgitte Holm Sørensen	305
Comparison of the Traditional With a Flipped Classroom Approach in a Psychology Module	Maria Limniou, Minna Lyons and Ian Scherm- brucker	313
Towards Active Learning Spaces and the Flipped Classroom Model	Colin Loughlin, Steven Warburton, Susan Crane and Wendy Sammels	322

Paper Title	Author(s)	Page no
Content Related Rights Transmission With MPEG-21 in the Educational Field	Joaquim Marques, Carlos Serrão and José Metrolho	329
Does an Open World Need new Pedagogies or can Existing Pedagogies Suffice?	Elizabeth Masterman	339
When Education met Innovation met Employability: The Birth of Employability Plus	Rachel Maxwell, Wray Irwin and Shirley Bennett	347
Innovating for Learning: Designing for the Future of Education	Patrick McAndrew	356
Telepresence With iPads: A Matrix for Collaboration in Lower Secondary School	Bente Meyer	364
Mobile Devices for Teaching and Learning in Higher Education	Henny Mills	372
E-Learning Using Video Game for ADHD Children	Nighat Mir and Yumna Ansari	382
A Digital Tool Supporting Goal-Oriented Teaching in Classrooms	Morten Misfeldt, Jeppe Bundsgaard, Marie Falkesgaard Slot, Thomas Illum Hansen, and Mikkel Jespersen	388
A Serious Game to Give Students Careers Advice, Awareness and Action	David Moffat, David Farrell, Beverley Gar- diner, Audrey McCulloch and Fiona Fairlie	396
Student Creativity in Serious Games for Employability Skills	David Moffat, David Farrell and Audrey McCulloch	402
Use of Electronic Resources in Content and Language Integrated Learning (CLIL): Pre-Service Teachers' Perspective	Hana Moraová and Jarmila Novotná	410
Putting the Programming hut Online; Self Learning for the Net- Generation	Peter Mozelius and Marie Olsson	417
Islamic Education in Nigeria From Rote Learning to e-Learning	Balogun Muhsin Adekunle, Hashim Shuarau Olanrewaju and Balogun ilyas Idowu	422
Analysis of Students' Behaviour in eLearning Course "Educational Technologies"	Ingrid Nagyova	428
Note-Taking Activities and Student's Reflections Upon Their Learning Efficacy During a Blended Learning Course	Minoru Nakayama, Kouichi Mutsuura and Hiroh Yamamoto	435
Assigning Problems Online and its Impact on Pupils' Choice of Solving Strategy	Jarmila Novotná, Petr Eisenmann and Jiří Přibyl	441
Simultaneous Class-Based and Live Video Streamed Teaching: Experiences and Derived Principles From the Bachelor Programme in Biomedical Laboratory Analysis	Rikke Ørngreen, Karin Levinsen, Vibe Jelsbak, Karen Louise Møller and Thomas Bendsen	451
Structured Approach to Project Based Learning using a new type of Learning Management System	David O'Sullivan and Finn Krewer	460
Challenges in Analyzing Unstructured Learner Generated Qualitative Big Data	Ozlem Ozan	470
The ups and Downs of BYOD: A Sociocultural Perspective	David Parsons and Janak Adhikari	478
Blended Learning in Practice: Tracking Students' Performance	Petra Poulova and Ivana Simonova	487
Comparing a Shorter Flexilevel Test With a Full Length Standard Computer Based Test	Andrew Pyper, Mariana Lilley, Paul Wernick and Amanda Jefferies	497
Individualized Learning Through Non-Linear use of Learning Objects: With Examples From Math and Stat	Helle Rootzén	500
The Effectiveness of Flipped Lectures in Improving Student Engagement and Satisfaction	Alaa Sadik	507

Paper Title	Author(s)	Page no
Reasons for Doing/not Doing Online Homework: Insights From EFL Students	Zuzana Šaffková	515
On Flexible Multiple Choice Questions With Parameters	Nils Schwinning, Michael Striewe, Marinko Savija and Michael Goedicke	523
Action Experiments and an Industry Partnership Influencing a Flipped Classroom Approach	Elsje Scott and Maureen Tanner	530
The Opportunities and Challenges of Working With Students	Angela Shapiro	5
75.000 Views and Growing: Creating Vidcasts for YouTube With no Budget	Nathalie Sheridan	546
E-Testing in the Czech Military	Mária Šikolová and Nataša Mocková	554
Assessment for Learning to Flipped Classroom Using Clickers	Sibongile Simelane-Mnisi and Andile Mji	560
Learning ESP in Engineering Education Through Mobile Devices	Ivana Simonova and Petra Poulova	568
Emerging Collaborative Writing Strategies in Digital Environments	Birgitte Holm Sørensen and Karin Tweddell Levinsen	57
Designing and Evaluating a Flipped Signals and Systems Course	Lennart Svensson and Tom Adawi	584
Basics of Finance and Results From Examination in Selected Groups of Students	Libuše Svobodová	592
Digital Literacy and Effective Learning in a Blended Learning Environment	Chun Meng Tang and Lee Yen Chaw	601
Mobile learning as a condition for the evolution of competencies in the alternative periods of study	Gulfarida Tulemissova	611
Encouraging Students to Learn Non-Core Subjects in Health Education	Christian Wahl, Annette Pedersen, Annegre- the Nielsen, Niels Bech Lukassen and Thomas Kjærgaard	621
Pedagogical Innovation in Teacher Teams: An Organisational Learning Design Model for Continuous Competence Development	Charlotte Lærke Weitze	629
Socail media and the Student Experience	Charles Wild and Dan Berger	639
ELCARE: A Novel Approach for Educating Caretakers of Elderly	Ibrahim Zincir, Samsun Basarici, Ahmed Rana and Fisun Senuzun	647
PHD Research Papers		651
Usability and Effectiveness Evaluation of FEAT (FEedback Automated Tool) on Undergraduates' Project Proposals	Fatema Al-Yazeedi and Annette Payne	653
What's the Matter? (Re)Considering the Materiality of Social Software in Educational Practice	Natascha Chtena	662
Is There Theory Behind Practice? Theorising University Teaching With Digital Technologies	Louise Drumm	670
Empirical Evidence to Support the Quality of Learning Experienced With the use of Web 2.0 Technologies: An Enhanced Model to Achieved Increased use of Web 2.0 Technologies for Learning Activities	Razep Echeng and Abel Usoro	677
The use of Microblogs for Organisational Learning in Small and Medium Scale Enterprises (SMEs)	Anthony Enedeh, Abel Usoro, Thomas Con- nolly and Ekene Chiedu	688

Paper Title	Author(s)	Page no
Maths and Mobile Technologies: Student Attitudes and Perceptions	Khristin Fabian	696
Teachers' Feedback to Secondary-Level Statistics Course Innovation: Computer-Based Education Pilot in Estonia	Carita Hommik and Terje Hõim	705
Practicing in Mathematics Using a Tablet	Libor Klubal and Katerina Kostolanyova	71
Exploring a Blended Learning Model to Teach First Year Mathematics Education Students Trigonometry at a UoT	Kristie Naidoo and R Naidoo	719
iPad as a Tool Used to Reduce the Time Needed for Preparing a Lesson Plan	Jan Netolička	727
Technological Changes at the University of Botswana: Academics and Blended Learning	Esther Nkhukhu-Orlando	730
In Search of new Metaphors: E-Learning as Hypertext	Anne-Mette Nortvig	737
Impact of Different Blends of Learning on Students Performance in Higher Education	Thuy Thai, Bram De Wever and Martin Valcke	744
Motivational Profiles of Adult Learners in Online and Blended Learning	Silke Vanslambrouck, Chang Zhu, Jo Tondeur and Koen Lombaerts	754
The Potential for Using Artificial Intelligence Techniques to Improve e-Learning Systems	Edward Wakelam, Amanda Jefferies, Neil Davey and Yi Sun	762
Technologies and new Teaching Methods in Science Courses at Basic School	Miroslav Zámarský and Jana Kapounová	771
Non Academic Paper		777
The LEARN Tool: Enabling Students to Self-Identify Training for Their Career Goals	Diana Buzila and Sarah Chavez	779
Work In Progress Papers		785
Your Device, Your Classroom: Creating Library Spaces That Support Teaching Innovation	Sheila Bonnand	787
Teacher and Institutional Characteristics Affecting Teaching Practices in OBL: A Self-Determination Approach	Sebastiano Cincinnato, Chang Zhu and Bram De Wever	790
Making Non-Textual Formative Feedback Useful	Fiona Fairlie and Diane Joyce	794
Enhancing the Dialogue in Simultaneous Class-Based and Live Video-Streamed Teaching	Vibe Jelsbak, Rikke Ørngreen, Jonas Thorsen and Thomas Bendsen	798
Using TPACK to Examine Teacher Professional Development for Online and Blended Learning.	Brent Philipsen, Jo Tondeur and Chang Zhu	802
Late Submission Papers		807
A Generic eLearning Tool for Radiologists and Hospital Practitioners with CBR	Souad Demigha	809
Business Simulation Software: Bridging the Gap Between Educators and Industry	Bernadette Naughton, Jennifer Mullally	819