INVITED SPEAKERS

KEYNOTE SPEAKERS

The Educational Software Gold Rush - How the Learning Sciences and Advanced Technology Can Lead the Way
Bruce McLaren

New Challenges in Engineering Education
Michael E. Auer

What Is: Pedagogy, Education, Intelligence, Knowledge, Learning, Teaching, Information, Etc. and Why Do We Care about What They Are, and How Do They Interact?
Rob Reilly

Tech-Savvy Students? Maybe Not ...
Susan Zvacek

INFORMATION TECHNOLOGIES SUPPORTING LEARNING

FULL PAPERS

A Project-based Creative Product Design Course using Learning Management System
Janus S. Liang

Authoring Storyline-based Adaptive 3D Virtual Learning Environments
Ahmed Ewais and Olga De Troyer

ExperD: Web-based Support for Laboratory Class Workflow Design and Execution
Koos van der Kolk, Gerrit Beidman, Rob Hartog, Gerard Moerland and Harry Gruppen

CrowdLearn: Crowd-sourcing the Creation of Highly-structured e-Learning Content
Darya Tarasowa, Ali Khalili, Sören Auer and Jörg Unbehauen

Development of an Analysis System and Class Recordings linked to More than One Course Evaluation Data using Smartphones
Akihiro Aoyagi, Darold Davis, Takuya Kato and Akinobu Ando

Towards Linked Data in Physics
Marcin Skulimowski

SHORT PAPERS

Mathematics, Technology Interventions and Pedagogy - Seeing the Wood from the Trees
Aibhin Bray and Brendan Tangney

Interactive Lessons for Tablet-based Teaching - A Proposal for an Open Data Format
Heiko Weible and Edgar Seemann

How to Design Good Educational Blogs in LMS?
Ahmed Mohamed Fahmy Yousef and Guido Roßling

Automated Scenario Generation - Coupling Planning Techniques with Smart Objects
Gwen R. Ferdinandus, Marieke Peeters, Karel van den Bosch and John-Jules Ch. Meyer
Information Technologies for Supporting in Classroom Learning and e-Learning
José Ricardo Queiroz Franco, Mariana Hostalácio Barbosa, Roberta Oliveira Parreiras, Renata Spyer Las Casas and Augusto Maia Gonçalves

Enhancing Estimation Skills with GeoGebra - Volume Ratios of Essential Solids
Libuše Samkóva

Exploratory Study of Effects of Learning System Acceptance on Learning Program Outcomes - Fusing the Technology Acceptance and Technology Mediated Learning Models
Biswadip Ghosh and Jonathon Pries

Videogames in Education - Comparing Students', Student Teachers' and Master Teachers Opinions and Experiences
David Kaufman

A Pedagogical-based Learning Object System to Support Self-regulated Learning
Ali Alharbi, Frans Henskens and Michael Hannaford

Towards Commercial eBook Production in Small Publishing Houses
Eduardo Rodríguez López, Ángeles Saavedra Places, José Antonio Cotelo Lema, Oscar Pedreira Fernández and Nieves Rodriguez Brisaboa

Interactive Video-training for Medical Professionals
Marílsa Amoia

Exploratory Learning in the ViStA Immersive Environment
Ishbel Duncan, Janie Brooks and Alan Miller

Demonstration of Sorting Algorithms on Mobile Platforms
Robert Meolic

Crafting a Rich and Personal Blending Learning Environment - An Institutional Case Study from a STEM Perspective
Su White, Hugh Davis, Kate Dickens and Sarah Fielding

Mixing Reality and Virtual Worlds in an Educational Mobile Robotics Remote Lab
Riccardo Cassinis

Arab Learners' Cultural Values and Their Interference with e-Learning
Khalid Said Rabaya'h

REENACT: Learning about Historical Battles and Wars through Augmented Reality and Role Playing - An EXPERIMEDIA Experiment
Martin López-Nores, Yolanda Blanco-Fernández, José J. Pazos-Arias, Alberto Gil-Solla, Jorge García-Duque, Manuel Ramos-Cabrer and Manolis Wallace

FouSE: An Android Tool to Help in the Teaching of Fourier Series Expansions in Undergraduate Education
Manuel J. C. S. Reis, Salviano Soares, Simão Cardeal, Raul Morais, Emanuel Peres and Paulo J. S. G. Ferreira

Progressive Semiotic Enrichment - Designing Learning Content Metadata for Web 3.0
Lars Johnsen and Jens Jørgen Hansen

One-on-One Approach for Open Online Courses - Focusing on Large-Scale Online Courses
Masumi Hori, Seishi Ono, Kazutsuna Yamaji and Shinzo Kobayashi

A Personalised Approach in Informal and Inquiry-based Learning
Alexander Mikroyannidis
How and When Presenting a Concept Map for Learning and an Accurate Self-evaluation
A. Maillard, L. Motak, J. C. Sakdavong, C. Dupeyrat and N. Huet

Tweedback: A Live Feedback System for Large Audiences
Jonas Vetterick, Martin Garbe and Clemens Cap

Activities and Trends Analytics in a Widget based PLE using Semantic Technologies
Selver Softic, Behnam Taraghi and Laurens De Vocht

High- vs. Low-quality Video Lectures - Don't Worry, Just Put them Online!
Robert Schleicher, Tilo Westermann and Sebastian Möller

Use of Multi-touch Gestures for Capturing Solution Steps in Arithmetic Word Problems
Adewale Adesina, Roger Stone, Firat Batmaz and Ian Jones

POSTERS

Facilitating Learning and Knowledge Transfer through Mentoring
Ileana Hamburg

Bringing Tablets to Schools - Lessons Learned from High School Deployments in Germany
Heiko Weible and Edgar Seemann

Student Autonomy in Online Learning
Nataliya Serdyukova and Peter Serdyukov

Serious Games for Music Education - A Mobile Application to Learn Clef Placement on the Stave
Adriano Baratè and Luca A. Ludovico

Smart ePortfolio System - Experimental Prototype Testing in Living Lab and Further Artificial Intelligence Implementation Design within ePortfolio System
Aleksands Gorbunovs

A HackIt Framework for Security Education in Computer Science - Raising Awareness in Secondary School and at University with a Challenge-based Learning Environment
Florian Kerber, Jan Holz, Hendrik This and Ulrik Schroeder

Detection of Inconsistencies in Student Evaluations
Štefan Pero and Tomáš Horváth


A Web-based Support System for Providing Effective Monitoring, Feedback and Evaluation in Project Management Education
Ana González-Marcos, Fernando Alba-Elias and Joaquin Ordieres-Meré

Building e-Learning Content Repositories to Support Content Reusability
Jacek Marciniak

Building an Intelligent Tutoring System for Chess Endgames
Matej Guid, Martin Možina, Ciril Bohak, Aleksander Sadikov and Ivan Bratko

Evaluating Mobile Learning Adoption in Higher Education Based on New Hybrid MCDM Models
Ming-Tsang Lu, Gwo-Hshiung Tseng, Kua-Hsin Peng and Shu-Kung Hu

Master's Degree Program for Applied Informatics in Education Majoring in Instructional Design and Distance Learning
Maria Tatarinova

XVII
Remote Lab Experiments - Preliminary Results from an Introductory Electronic Engineering Module
George Hloupis, Georgios-Theodoros Malliaros, Ilias Stavrakas, Konstantinos Moutzouris and Dimos Triantis

LEARNING/TEACHING METHODOLOGIES AND ASSESSMENT

FULL PAPERS

Comparison of Two Cognitive Strategies for Learning from Illustrated Texts
Sabine Schlag and Rolf Ploetzner

Evaluation of an Augmented-Reality-based 3D User Interface to Enhance the 3D-Understanding of Molecular Chemistry
Patrick Maier and Gudrun Klinker

Effects of Mid-term Student Evaluations of Teaching as Measured by End-of-Term Evaluations - An Empirical Study of Course Evaluations
Line H. Clemmensen, Tamara Sliusarenko, Birgitte Lund Christiansen and Bjarne Kjær Ersbøll

Understanding the Challenges of Introducing Self-driven Blended Learning in a Restrictive Ecosystem - Step 1 for Change Management: Understanding Student Motivation
Kay Berkling and Armin Zundel

Learning Strategy and Students' Perception of Different Learning Options in a Blended Learning Environment - A Case Study of a First Year Engineering Course
B. Schmidt

Teaching Risk with Virtual Worlds - Experience and Lessons Learned in Second Life and Other Virtual Worlds
Marc Conrad

Identifying Learner's Engagement in Learning Games - A Qualitative Approach based on Learner's Traces of Interaction
Patrice Bouvier, Élise Lavoué, Karim Sehaba and Sébastien George

Automatic Test Item Creation in Self-Regulated Learning - Evaluating Quality of Questions in a Latin American Experience
Gudrun Wesiak, Rocael Hernandez Rizzardini, Hector Amado-Salvatierra, Christian Guetl and Mohammed Smadi

Predicting Students' Examination Performance with Discovery-embedded Assessment using a Prototype Diagnostic Tool
Kai Fan Mark, Lillian L. P. Vrijmoed and Paula Hodgson

CTSiM: A Computational Thinking Environment for Learning Science through Simulation and Modeling
Satabdi Basu, Amanda Dickes, John S. Kinnebrew, Pratim Sengupta and Gautam Biswas

SHORT PAPERS

Teaching and Learning Process of the Information and Communication Technology and Computer Science Subjects in Lower Secondary Schools in Albania in Front of International Facts and Trends
Genci Berati

The Development of an e-Portfolio for Competency based Training Assessment for a Malaysian Skills Diploma Program
Hafizan Matsom, Tim Stott and Frances Tracy

XVIII
Fostering Scientific Reasoning Skills through Interactive Learning Tasks
Immanuel Albrecht and Hermann Körndle

Self-consistent Peer Ranking for Assessing Student Work - Dealing with Large Populations
Kees van Oevereld and Tom Verhoeff

Towards Evidence-aware Learning Design for the Integration of ePortfolios in Distributed Learning Environments
Ángelica Lozano-Álvarez, Juan I. Asensio-Pérez and Guillermo Vega-Gorgojo

Balanced Scoring Method for Multiple-mark Questions
Darya Tarasowa and Sören Auer

e-Inclusion and Knowledge Flows in e-Course Delivery
Ieva Vitolina and Atis Kapenieks

Maintaining Context in a Changing (Virtual) World - Educators' Perspectives for Opensim and Second Life
Athanasios Christopoulos and Marc Conrad

Business Process Modeling and Implementation - A 3-Year Teaching Experience
Daniela Giordano and Francesco Maiorana

Fun in CS2
Amalia Duch, Jordi Petit, Enric Rodriguez-Carbonell and Salvador Roura

Research on Automatic Assessment of Transferable Skills
Jinbiao Li and Ming Gu

Towards a Support System for Course Design
Omar Talbi, Bruno Warin and Christophe Kolski

Monitoring and Evaluation Problems in Higher Education - Comprehensive Assessment Framework Development
Olga Cherednichenko, Olha Yanholenko, Iryna Liutenko and Olena Iakovleva

Breaking the Flow - Examining the Link between Flow and Learning in Computer-Mediated Learning Environments
Daniel P. Auld and Fran C. Blumberg

Exploring the Gender Effect on Cognitive Processes in Program Debugging based on Eye-movement Analysis
Ting-Yun Hou, Yu-Tzu Lin, Yu-Chih Lin, Chia-Hu Chang and Miao-Hsuan Yen

POSTERS

Blended Learning and Consulting for Resource Limited Enterprises - The Case of a Prototyping, Production and Logistics Service Centre at a Business Incubator in Brazil
J. Antão B. Moura, Marcelo A. de Barros and Francilene P. Garcia

Knowledge Controlled Mathematical Coaching - Strategies and Results of a Personalized Blended Learning Approach
Michael Schäfer

The Course “English for Biologists” and Web Page ‘APres’ - How Modern Communication Technologies Help to Promote Communicative Competence
Natalya Snytnikova
How to Equip Students with Methodologies and Tools for Capturing Rapidly Changing Environments through Computer Supported Education

Ushio Sumita and Jun Yoshii

Using Non-graded Formative Online Exercises to Increase the Students' Motivation and Performance in Classroom - A Longitudinal Study from an Undergraduate Information Systems Program in Singapore

Ilse Baumgartner

An Application for Marking and Analysis of Assessment Instruments in a Programming Course

Naseer Ahmed, Anwar M. A. and Abdurahem Mohammed Al Ameen

Three Years of Teaching using Collaborative Tools - Patterns and Lessons Learned

Andrea Trentini

Problem-based Virtual World Design for Virtual Reality Education - An Experiment with the Opensimulator Platform for Second Life-based Virtual Worlds

George Anastassakis and Themis Panayiotopoulos

“Artificial Communication”

Eberhard Grötsch, Alfredo Pina, Michael Schneider and Benno Willoweit

SOCIAL CONTEXT AND LEARNING ENVIRONMENTS

FULL PAPERS

Cultural Differences in e-Learning Behaviour and Overall Assessment

Clemens Bechter, Fredric W. Swierczek and Jeerawan Chankiew

Rule-based Automatic Adaptation of Collaborative Multiplayer Serious Games - Supporting Instructors in Game-based Learning Scenarios

Viktor Wendel, Sebastian Ahlfeld, Stefan Göbel and Ralf Steinmetz

Badge Architectures in Engineering Education - Blueprints and Challenges

Răzvan Rughinis

SHORT PAPERS

Development and Evaluation of Case Method Teaching Materials using Manga on Tablet PCs - A Trial with Pointing Type Annotations

Takafumi Daikoku, Hideo Funaoi, Fusako Kusunoki, Makiko Takenaka and Shigenori Inagaki

Text Mining in Students' Course Evaluations - Relationships between Open-ended Comments and Quantitative Scores

Tamara Sliusarenko, Line Harder Clemmensen and Bjarne Kjær Ersbøll

What Makes an LMS Effective - A Synthesis of Current Literature

Nastaran Zanjani, Shaun Nykvist and Shlomo Geva

Time as a Heuristic in Serious Games for Education

Răzvan Rughinis

POSTERS

Advanced Learning Environments 2016

Clive Holtham, Martin Rich and Leona Norris

XX
openHPI: Evolution of a MOOC Platform from LMS to SOA
Michael Totschnig, Christian Willems and Christoph Meinel

DOMAIN APPLICATIONS AND CASE STUDIES

FULL PAPERS

Using IT Education to Reveal New Horizons - A Large Scale Case Study on Digital and Social Inclusion
Marcel Vinicius Medeiros Oliveira, Jair Cavalcanti Leite, Adrião Duarte Dória Neto, Pablo Javier Alsina, José Ivonildo Rego, Izabel Hazin and Jorge Tarcísio da Rocha Falcão

Contemporary e-Learning as Panacea for Large-scale Software Training
John van der Baaren and Iwan Wopereis

SHORT PAPERS

Competences for the Music-Technology Context on the Distance Learning - A Focus in the Use of Online Digital Technologies
Fatima Weber Rosas and Patricia Alejandro Behar

Capitalize and Share Observation and Analysis Knowledge to Assist Trainers in Professional Training with Simulation - Case of Training and Skills Maintain of Nuclear Power Plant Control Room Staff
Olivier Champalle, Karim Sehaba and Alain Mille

POSTERS

Designing Workplace Learning and Knowledge Exchange - A Postgraduate Training Program for Professionals in SME
Annemarie Hilbig, Antje Proske, Gregor Damnik, Franziska Faselt and Hermann Körndle

Students' Performance Prediction by using Institutional Internal and External Open Data Sources
Farhana Sarker, Thanassis Tiropantis and Hugh Davis

User Interaction-framework for Adaptive ERP Education
Dirk Peters, Marc Petersen and Jorge Marx Gómez

Storyboarding Serious Games for Large-scale Training Applications
Sebastian Arnold, Jun Fujima and Klaus P. Janke

UBIQUITOUS LEARNING

FULL PAPER

Designing Virtual Laboratories - Decarboxylation Reactions, Vacuum Distillation and Virus Identification by PCR in the Lablife3D Second Life Laboratory
Tuomas Kangasniemi, Sebastian Olkinuora, Pekka Joensuu, Olli Natri, Pekka Qvist, Martti Ketola, Jaana Bruhin, Hanna Virtanen, Marko Närhi, Reija Jokela, Eero Palomäki, Hannu Tiitu and Katrina Nordström
SHORT PAPER

Development and Evaluation of the 'Pocket Plant Guide' to Support the Observation and Identification of Indicator Plants for Vegetation Succession
Keita Muratsu, Fusako Kusunoki, Yoshiaki Takeda, Haruka Inoue, Etsuji Yamaguchi, Shigenori Inagaki, Hiroshi Mizoguchi and Masanori Sugimoto

POSTERS

Development of a Skill Learning System using Sensors in a Smart Phone for Vocational Education
Akinobu Ando, Toshihiro Takaku, Shota Itagaki, Takashi Torii, Hidetoshi Takeno and Darold Davis

An Approach to the Electronic Textbook of Basic Chemistry Linking Chemical Experiments - CG Teaching Materials based on Quantum Chemical Calculation
Akira Ikuo, Yusuke Yoshinaga and Haruo Ogawa

Tablets (iPad) for M-Learning in the Context of Social Constructivism to Institute an Effective Learning Environment
Palmo Thinley

Understanding Pervasive Games for Purposes of Learning
Klaus P. Jantke and Sebastian Spundflasch

Utilizing Umbrello UML Modeller to Develop Students' Modelling Skills in Software Engineering
Basem Y. Alkazemi, Abdullah Baz, Grami Mohammad A. Grami and Yasir A Khayat

WORKING SESSION ON CLOUD EDUCATION ENVIRONMENTS

FULL PAPERS

Cloud-based Learning Environments: Investigating Learning Activities Experiences from Motivation, Usability and Emotional Perspective
Rocael Hernández Rizzardini, Hector Amado-Salvatierra and Christian Guetl

A Knowledge Map Tool for Supporting Learning in Information Science
Helmut Vieritz, Hans-Christian Schmitz, Effie Lai-Chong Law, Maren Scheffel, Daniel Schilberg and Sabina Jeschke

Integrating Cloud Services to Support the Formation of Informal Learning Groups
Adam Giemza, Marc Jansen and H. Ulrich Hoppe

Investigating Self-Regulated Learning in the Workplace
Alexander Mikroyannidis, Teresa Connolly and Glyn Owen

Integrating Various Cloud Computing Services in a Collaborative Geo-referenced Learning Scenario
Nelson Baloian, Gustavo Zurita and Ulrich Hoppe

AUTHOR INDEX