15th International Conference on
Cognition and Exploratory Learning in Digital Age
CELDA 2018
Budapest, Hungary

CONFERENCE PROGRAM

Sunday 21st, October 2018

08:15-19:20 Welcome Desk – Room Board - (closes for lunch - 13:00 to 14:15)

09:45-10:00 Session O – Opening Session
(Room Zsolnay I +II)

OPENING SESSION
Prof. Demetrios G Sampson, Dirk Ifenthaler and Pedro Isaias

10:00-11:00 Session KL1 – Keynote Presentation
(Room Zsolnay I +II)

LEARNING AS REFLECTIVE SEARCH: MODELING CONVERGENT AND DIVERGENT PROCESSES IN SOCIAL EXPLORATORY SEARCH
by Professor Tobias Ley, Professor for Learning Analytics and Educational Innovation, Head of the Center of Excellence in Educational Innovation, Tallinn University, Estonia

11:00-11:30 Coffee Break

11:30-13:00 Session FP 21.1
Technology, Learning and Expertise
(Room Zsolnay I +II)

Chair: Joan Swanson

GET OUT! - HELPING TEACHERS ORCHESTRATE OUTDOOR GAME-BASED LEARNING ACTIVITIES (F081)
Kadri Mettis and Terje Väljataga

USABILITY EVALUATION OF A VIRTUAL LEARNING ENVIRONMENT: A UNIVERSITY CASE STUDY (F173)
Attila Vertesi, Huseyin Dogan, Angelos Stefanidis, Giles Ashton and Wendy Drake

NET BENEFITS OF FACE-TO-FACE VERSUS ONLINE INSTRUCTION AT SCHOOL: A REPETITIVE FACTORIAL EXPERIMENT IN AN ECLOGICAL SETTING (F051)
Stephan Poelmans, Katie Goeman and Yves Wautelet

11:30-13:00 Session FSP 21.2
Acquisition of Expertise // Other
(Room Rákóczi I)

Chair: Jessnor Elmy Mat-jizat

RELATIONSHIP BETWEEN GOAL ORIENTATION, CONCEPTION OF LEARNING AND LEARNING BEHAVIOR (F109)
May Yokomama and Kazuhisa Mwot

DEVELOPING TRANSVERSAL COMPETENCES IN ENGINEERS (S116)
Juliana de Melo Bezerra, Cristiane Aparecida Martins, Lara Kühl Teles, Neusa Maria Franco de Oliveira, Maria Margareth da Silva, Leila Ribeiro dos Santos and Raquel Caratti Piani

START@UNITO: A SUPPORTING MODEL FOR HIGH SCHOOL STUDENTS ENROLLING TO UNIVERSITY (S193)
Barbara Braschi, Valter Cantino, Roberto Cavallo Perin, Francesca Culasso, Barbara Giors, Marina Marchisio, Carla Marello, Matteo Milani, Lorenzo Operti, Aliberto Parola, Sergio Rubellino, Matteo Sacchet and Laura Scamparin

FOSTERING STEM EDUCATION CONSIDERING FEMALE PARTICIPATION GAP (S117)
Juliana de Melo Bezerra, Lara Kühl Teles, Cristiane Aparecida Martins, Neusa Maria Franco de Oliveira, Maria Margareth da Silva, Leila Ribeiro dos Santos and Raquel Caratti Piani

13:00-14:15 Lunch Break
14:20-16:30 Session FSP 21.3
Pedagogical Issues Related With Learning Objects
(Room Zsolnay I +II)
Chair: Masanori Yamada

LANGUAGE AND ELECTRONIC MEDIUM SKILLS DEVELOPMENT THROUGH AUTONOMOUS AND IDEOLOGICAL PRACTICES (F101)
Odette Bourjaij Radi

A MODEL FOR ENRICHING AUTOMATIC ASSESSMENT RESOURCES WITH FREE-TEXTANNOTATIONS (F134)
Luigi Di Caro, Sergio Rabelino, Michele Fioravera and Marina Marchisio

SHARED COOPERATIVE ACTIVITIES IN PARENT-CHILD DYADS IN AN EDUCATIONAL ROBOTICS WORKSHOP (F083)
Katarzyna Potęga vel Żabik and Łukasz Tanaś

EXPLORING THE IMPACT OF A STEM INTEGRATION TEACHER PROFESSIONAL DEVELOPMENT PROGRAM ON EARLY CHILDHOOD TEACHER'S PEDAGOGICAL BELIEFS (S038)
Hengameh Kermani and Jale Aldemir

Pedagogical Issues Related With Learning Objects
(Room Zsolnay I +II)
Chair: Masanori Yamada

14:20-16:30 Session FSP 21.4
Technology, Learning and Expertise
(Room Rákóczi I)
Chair: William Koomson

AUTODIDACT: INTRODUCING THE CONCEPT OF MUTUAL LEARNING INTO A SMART FACTORY INDUSTRY 4.0 (F063)
Fazel Ansari, Philipp Hold, Walter Mayerhofer, Sebastian Schlund and Wilfried Sihn

IMPLEMENTATION OF AN ADAPTIVE INSTRUCTIONAL DESIGN FOR A PHYSICS MODULE IN A LEARNING MANAGEMENT SYSTEM (F131)
Christof Imhof, Per Bergamin, Ivan Moser and Matthias Holthaus

VALIDITY AND RELIABILITY OF THE TEACHER LEADERSHIP INVENTORY IN MALAYSIAN EDUCATIONAL CONTEXT (F028)
Mahaliza Mansor, Jamal Nordin Yunus and Fanny Kho Chee Yuet

APPLICATION OF SECOND LIFE IN PROMOTING COLLABORATIVE LEARNING (S188)
Amit Sharma and Salman Nazir

Technology, Learning and Expertise
(Room Rákóczi I)
Chair: William Koomson

16:30-17:00 Coffee Break

17:00-19:10 Session FSP 21.5
Assessment of Exploratory Learning Approaches // Other
(Room Zsolnay I +II)
Chair: Fazel Ansari

FLIPPING YOUR CLASSROOM: A METHODOLOGY FOR SUCCESSFUL FLIPPED CLASSROOMS (F055)
Pedro Jaisies

CLUSTERING AND ANALYSIS OF USER MOTIONS TO ENHANCE HUMAN LEARNING: A FIRST STUDY CASE WITH THE BOTTLE FLIP CHALLENGE (F108)
Quentin Couland, Ludovic Hamon and Sébastien George

ANALYSING UNIVERSITY STUDENT ACADEMIC PERFORMANCE AT THE UNIT LEVEL (F206)
Eric Parkin, Simon Huband, David Gibson and Dirk Ifenthaler

SELF-EVALUATION OF OPEN ANSWERS AS A BASIS FOR ADAPTIVE LEARNING SYSTEMS (S120)
Egon Werlen and Per Bergamin

DIGITAL QUANTITATIVE ASSESSMENT OF QUESTION-ASKING-BASED EXPLORATION (S186)
Noam Tor and Goren Gordon

Assessment of Exploratory Learning Approaches // Other
(Room Zsolnay I +II)
Chair: Fazel Ansari

17:00-19:20 Session FSP 21.6
Educational Psychology // Other
(Room Rákóczi I)
Chair: Demetrios Sampson

ATTRIBUTES OF ENGAGEMENT IN CHALLENGE-BASED DIGITAL LEARNING ENVIRONMENTS (F138)
Dirk Ifenthaler, David Gibson and Longwei Zheng

STUDY ON THE FACTORS CONTRIBUTING TO THE MOTIVATION OF MATHEMATICAL STUDIES AT THE UNIVERSITY (F168)
Anna Vintere

BR-MAP: CONCEPT MAP SYSTEM USING E-BOOK LOGS (F181)
Masanori Yamada, Atsushi Shimada, Misato Oi, Yuta Taniguchi and Shin’ichi Konomi

INSIGHTS INTO PERSUASIVE TECHNOLOGY FOR M-LEARNING USING ACTIVITY THEORY (F113)
Nihanha A. Silibanyoni and Patricia M. Alexander

AN INVESTIGATION INTO PARENTS’ CONCERNS ABOUT PROGRAMMING EDUCATION IN JAPANESE PRIMARY SCHOOLS (S189)
Yukiko Maruyama

Educational Psychology // Other
(Room Rákóczi I)
Chair: Demetrios Sampson
Monday 22\textsuperscript{nd}, October 2018

08:15-15:30 Welcome Desk – Room Board - (closes for lunch - 13:00 to 14:15)

08:50-11:00 Session FSP 22.1
Student-centered Learning
(Room Zsolnay I +II)
Chair: Ditte Kolbæk

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFFECTS OF CONTENT AND LANGUAGE INTEGRATED LEARNING CLASS DESIGN BASED ON THE FIRST PRINCIPLE OF INSTRUCTION THEORY: A CASE STUDY (F111)</td>
<td>Hao Hao, Hitoshi Sasono and Masanori Yamada</td>
</tr>
<tr>
<td>PROPOSING AND EVALUATING A MODEL OF CO-CONSTRUCTION OF THE LEARNING SCENARIO BY THE LEARNER (F122)</td>
<td>Guy Merlin Mbouchou, François Bouchet, Thibault Carron and Philippe Pernelle</td>
</tr>
<tr>
<td>GAMESONOMY VS SCRATCH: TWO DIFFERENT WAYS TO INTRODUCE PROGRAMMING (F079)</td>
<td>Cristina Rebollo Santamaría, Carlos Martín Lorí, Inmaculada Remolar Quintana and Miguel Chovér Sellés</td>
</tr>
<tr>
<td>STRENGTHEN ENTREPRENEURIAL CAPACITY IN ENTREPRENEURIAL COMPETITIONS (S040)</td>
<td>Su-Chang Chen, Hai-Chi Hsiao, Jen-Chia Chang, Chun-Mei Chou and Dyi-Cheng Chen</td>
</tr>
<tr>
<td>SCHOOL DIGITALIZATION FROM THE TEACHERS' PERSPECTIVE IN RUSSIA (S159)</td>
<td>Irina Dvoretskaya</td>
</tr>
</tbody>
</table>

11:00-11:30 Coffee Break

11:30-13:10 Session FSP 22.2
Technology and Mental Models
(Room Zsolnay I +II)
Chair: Stephan Poelmans

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIGITAL ETHNICITY (F021)</td>
<td>Nan B. Adams</td>
</tr>
<tr>
<td>SUITABLE JUDGMENT ASSISTANCE OF VISUALIZATION METHOD FOR SENSOR LOG OVERLAPPING ON DAILY VIDEO (F190)</td>
<td>Takaya Ishisaka, Naka Gotoda, Christian Alo, Takayuki Kunieda, Rihito Yaegashi and Tooshiro Hayashi</td>
</tr>
<tr>
<td>THE NARRATIVE OF THE FACEBOOK SCANDAL FROM TWEETS: NARRATIVE ANALYSIS OF #DELETEFACEBOOK (S090)</td>
<td>Yasmine Khosrowshahi and Ananda Mitra</td>
</tr>
<tr>
<td>COGNITIVE ENERGY FLOW MODEL CONCEPT FOR VIRTUAL STUDENT (S174)</td>
<td>Viktora Zagorski, Atis Kapanieks, Aleksandra Gorbunovs and Zane Kudakovska</td>
</tr>
</tbody>
</table>

11:30-13:00 Session FP 22.3
Assessment of Exploratory Technologies
(Room Palace)
Chair: Paula Hodgson

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAMIFIED MICRO-LEARNING FOR INCREASED MOTIVATION: AN EXPLORATORY STUDY (F066)</td>
<td>Till Halbach and Ivar Solheim</td>
</tr>
<tr>
<td>CODING AND COMPUTATIONAL THINKING WITH ARDUINO (F151)</td>
<td>Veronica Rossano, Teresa Roselli and Gaetano Quercia</td>
</tr>
<tr>
<td>PROBLEM-BASED LEARNING AND COMPUTER-BASED SCAFFOLDS IN DISTANCE EDUCATION (F043)</td>
<td>Mahnaz, Moudlem and Elizabeth Igoe</td>
</tr>
</tbody>
</table>

13:00-14:15 Lunch Break

14:15-15:30 Reflection Papers Session 22.4
(Room Zsolnay I +II)
Chair: Dirk Ipfenthaler

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOLOGRAPHIC REALITY IN EDUCATION: THE FUTURE OF AN INNOVATIVE CLASSROOM (R087)</td>
<td>Athanasia Maria Tsampa and Konstantina Skolariki</td>
</tr>
<tr>
<td>HOW STUDENTS-MANAGERS USE DESIGN THINKING TO COLLECT IT-PROJECT REQUIREMENTS (R136)</td>
<td>Elvira Strakhovich</td>
</tr>
<tr>
<td>INTEGRATING TECHNOLOGY AND PEDAGOGY IN UNDERGRADUATE TEACHER EDUCATION (R091)</td>
<td>Virginia Rich Lee</td>
</tr>
<tr>
<td>EMPOWERING UNIVERSITY STUDENTS WITH BLOCKCHAIN-BASED TRANSCRIPTS (R157)</td>
<td>Timothy Arndt</td>
</tr>
<tr>
<td>COMPARISON OF DEVELOPED IN “EFFICIENSEA2” PROJECT PLATFORM “BALTICWEB” WITH STANDARD ECDIS (F142)</td>
<td>Inese Barbare, Andrejs Zvaigznē and Dmitrijs Goreļiks</td>
</tr>
</tbody>
</table>
14:30-15:30 Session SP 22.5
Cognition in Education
(Room Palace)
Chair: Nan Adams
DIGITAL LIFE, MATHEMATICAL SKILLS AND COGNITIVE PROCESSES (S200)
Maria Lidia Mascia, Simona Perrone, Dianora Bardi, Mirian Agus, Maria Pietronilla Penna and Daniela Lucangeli
MIXED DIGITAL MESSAGES: THE ABILITY TO DETERMINE NEWS CREDIBILITY AMONG SWEDISH TEENAGERS (S154)
Thomas Nygren and Mona Guath
THE USE OF SPACED LEARNING AS A PEDAGOGICAL STRATEGY IN ENHANCING STUDENT LEARNING (S094)
Jessnor Elmy Mat-jizat

15:45 – Social Event - Conference Tour and Dinner

Tuesday 23rd, October 2018

08:30-13:10 Welcome Desk – Room Board

09:00-11:00 Session FP 23.1
Technology, Learning and Expertise
(Room Zsolnay I +II)
Chair: Timothy Arndt
INTEGRATION OF CHILDREN WITH SPECIAL NEEDS IN MATHEMATICS THROUGH VIRTUAL REALITY (F059)
Thomas Keller, Andreas Hebeisen and Elke Brucker-Kley
ONLINE LEARNERS’ READINESS AND LEARNING INTERACTIONS: A SEQUENTIAL ANALYSIS (F125)
Muhittin Sahin, Sinan Keskink and Halil Yardigci
MOBILE LEARNING: APPLICATION OF WHATSAPP MESSENGER AS A LEARNING TOOL IN A UNIVERSITY DISTANCE LEARNING PROGRAM IN GHANA (F145)
William Kofi ROOMSON
VIRTUAL REALITY AT SECONDARY SCHOOL – FIRST RESULTS (F068)
Thomas Keller, Philipp Glauser, Nico Ebert and Elke Brucker-Kley

11:00-11:30 Coffee Break

11:30-13:10 Session FSP 23.2
Collaborative Learning
(Room Zsolnay I +II)
Chair: Odette Bourjaili Radi
PROBLEM-BASED LEARNING IN THE DIGITAL AGE (F045)
Ditte Kolboek
BUILDING COLLABORATIVE CREATIVITY THROUGH AN ITERATIVE APPROACH (F075)
Paola Hodgson, Kristof Corolla and Wai Yee Angel Ho
EXPLORING THE RELATIONSHIP BETWEEN KINDERGARTENERS’ BUDDY READING AND INDIVIDUAL COMPREHENSION OF MULTIMODAL DIGITAL TEXTS (S098)
X. Christine Wang, Tanya Christ and Ming Ming Chiu
COLLABORATIVE TESTING STRATEGIES IN A COMPUTING COURSE (S118)
Juliana de Melo Bezerra

13:10 Best Paper Awards Ceremony and Closing Session
(Room Zsolnay I +II)

Profs. Demetrios G Sampson, Dirk Ifenthaler and Pedro Isaias