

**17th International Conference on
Cognition and Exploratory Learning in Digital Age
CELDA 2020**

CONFERENCE PROGRAM

IMPORTANT NOTICE: listed times are in **GMT+0 (Lisbon Time)**, you can check your timezone at <https://greenwichmeantime.com/time-zone/gmt-plus-0/> (you can use the provided URL to insert your location and see your time in relation to GMT+0).

Wednesday 18th, November 2020

09:45-10:00 Session O – Opening Session

OPENING SESSION

Profs. Demetrios G. Sampson, Dirk Ifenthaler and Pedro Isaías

10:00-11:00 Session KL – Keynote Presentation

“WHAT HAVE WE LEARNED FROM 6 YEARS OF IMPLEMENTING LEARNING ANALYTICS AMONGST 100.000+ STUDENTS?”

Professor Bart Rienties, Head of Academic Professional Development, Institute of Educational Technology, The Open University, UK

11:05-12:35 Session FSP 18.1

Cognition in Education // Educational Psychology

Chair: Dirk Ifenthaler

TOO MANY DULL WORDS EXCEED THE LIMITS OF VISUAL PERCEPTION: THE EFFECTS OF CLUTTER AND COLOUR ON LEARNING (F153)

Olivia Foulds

DIGITAL TWIN: DECREASING THE COGNITIVE LOAD BY USING INDUSTRY 4.0 SIMULATION (S035)

Lukas Heschl, Thomas Dilger, Reinhard Bernsteiner and Christian Ploder

A KIT OF APPS TO IMPROVE AND ASSESS EXECUTIVE FUNCTIONS AND WORKING MEMORY CAPACITY IN PRESCHOOLERS (S185)

Sabrina Panesi, Laura Freina and Lucia Ferlino

INTEGRATING MEDIA DIDACTIC COMPETENCES IN PSYCHOLOGY COURSES OF TEACHER EDUCATION (S105)

Sarah Lukas, Anna-Lisa Max and Holger Weitzel

11:05-12:35 Session FP 18.2

Collaborative Learning // Student-centered Learning

Chair: Lynette Drevin

PROBLEM-BASED PROJECTS: A CATALYST FOR ENHANCING STUDENTS' SELF-DIRECTED LEARNING IN AN INFORMATION SECURITY COURSE (F170)

Marietjie Havenga and Lynette Drevin

RELATIONSHIP BETWEEN LEARNING BEHAVIORS AND SOCIAL PRESENCE IN ONLINE COLLABORATIVE LEARNING (F182)

Yufan Xu, Yuta Taniguchi, Yoshiko Goda, Atsushi Shimada and Masanori Yamada

STUDENTS ENGAGING IN MATHEMATICAL PROBLEM-SOLVING THROUGH COMPUTATIONAL THINKING AND PROGRAMMING ACTIVITIES: A SYNTHESIS OF TWO OPPOSITE EXPERIENCES (F034)

Said Hadjerrouit and Nils Kristian Hansen

12:35-14:00 Lunch Break

14:00-16:00 Session FP 18.3

Collaborative Learning

Chair: Lynette Drevin

JIGSAW IN THE TIME OF PANDEMIC (F087)

Maria-Cristina Marinescu and Jose L. Marzo

ASPECTS ON E-LEARNING DURING THE COVID19 PANDEMIC AT THE UNIVERSITY (F121)

Vlad Drăgoi and Dorin Herlo

LONGITUDINAL CO-TEACHING PROJECTS – SCOPING REVIEW (F181)

Jaroslav Veteska, Martin Kursch, Zuzana Svobodova, Michaela Tureckiova and Lucie Paulovcakova

ON-LINE COLLABORATIVE KNOWLEDGE BUILDING IN HIGHER EDUCATION: TESTING A QUANTITATIVE MODEL (F172)

Ian S. McGowan

14:00-16:20 Session FSP 18.4

Technology, Learning and Expertise // Student-centered Learning

Chair: Carlos Capelo

TEACHER SUPPORT IN COVID-19 PANDEMIC TO DEVELOP BLENDED LEARNING DISRUPTIVE MODELS IN HIGHER EDUCATION (F166)

Francesco Floris, Alessio Genovese, Marina Marchisio, Fabio Roman and Matteo Sacchet

INTERACTIVE ONLINE PATH FOR ENGLISH REMEDIAL WORK AT SECONDARY SCHOOL (F163)

Elisa Corino, Cecilia Fissore and Marina Marchisio

DISTRIBUTED RETRIEVAL PRACTICE ENHANCES PRIMARY SCHOOL STUDENTS' RETENTION OF COMPUTATIONAL THINKING CONCEPTS (F142)

Lydia Casanova, Emily Theophilou, Marc Beardsley, Patricia Santos and Davinia Hernández-Leo

TOOL SUPPORT FOR LEARNING COMPUTER AND ROBOT PROGRAMMING (F031)

Obe O. Olumide and Tiko Iyamu

EDUCATIONAL APPROACHES TO ADDRESS FAKE NEWS – PRELIMINARY INSIGHTS FROM A SYSTEMATIC REVIEW (S041)

Christoph Eisemann and Christoph Pimmer

16:00-16:15 Coffee Break

16:15-18:35 Session FSP 18.5

Technology, Learning and Expertise

Chair: Josef Guggemos

AI PLANNING AND REASONING FOR A SOCIAL ASSISTIVE ROBOT (F204)

Bilal Hoteit, Ali Abdallah, Ahmad Faour, Imad Alex Awada, Alexandru Sorici and Adina Magda Florea

PERFORMANCE EFFECTS OF STRUCTURAL AND BEHAVIOURAL DEBRIEFINGS IN TRANSPARENT SIMULATIONS (F052)

Carlos Capelo, Renato Pereira and João Ferreira Dias

TIME TO ACCLIMATE: EXAMINING THE INFLUENCE OF COGNITIVE ABILITY ON SITUATING TO A VIDEO GAME (F187)

Michael P. McCreery, Danielle L. Head, Joseph P. Fiorentini, Sam A. Leif, S. Kathleen Krach, Le Quanda L. Cole, Catherine A. Bacos and Jeffrey Laferrriere

MOBILE AUGMENTED REALITY: DESIGN PRINCIPLES FOR THE USE IN EDUCATIONAL SETTINGS (S118)

Luca Moser

IMPACT OF PROGRAMMING WORKSHOP ON IMPRESSION REGARDING COMPUTER PROGRAMMING (F146)

Yukiko Maruyama

Thursday 19th, November 2020

08:35-10:45 Session FSP 19.1

Assessment of Exploratory Technologies

Chair: Nils Kristian Hansen

PERSONALITY TRAITS AND PERCEIVED USABILITY EVALUATION OF E-LEARNING PLATFORMS: A CASE STUDY (S165)

Prokopia Vlachogianni, Nikolaos Tselios and Michalis Xenos

WHAT IS THIS SOUND IN DECIBEL? – WE TRIED TO DETERMINE STUDENTS' COMPREHENSION OF SOUND LEVELS, ONLINE VER – (F148)

Mari Ueda and Tetsuo Tanaka

TEACHING ROBOTICS DURING COVID-19: MACHINE LEARNING, SIMULATION, AND AWS DEEPRACER (F169)

Peter Holowka

THE EFFECTS OF AUGMENTED REALITY ON LEARNING PERFORMANCE AND COGNITIVE LOAD USING THE SPATIAL CONTINUITY PRINCIPLE (F190)

Xuewang Geng and Masanori Yamada

PEPPER: A HUMANOID ROBOT WITH PERSONALITY? (S147)

Josef Guggemos, Sabine Seufert and Stefan Sonderegger

08:15-10:45 Session FP 19.2

Assessment of Exploratory Learning Approaches // Technology, Learning and Expertise

Chair: Sarah Lukas

PROTOTYPING A RETROSPECTIVE REVIEW SUPPORT FUNCTION FOR A FILL-IN WORKBOOK SYSTEM (F101)

Kousuke Abe, Tetsuo Tanaka and Kazunori Matsumoto

A GRAPHIC ORGANIZER FOR SUPPORTING SUMMARY WRITING IN WEB-BASED INVESTIGATIVE LEARNING (F160)

Oriko Harada and Akihiro Kashihara

THE ANALYSIS OF PISA TEST 2018 ON STUDENT PERCEPTION OF READING OBJECTIVE, HOW IS INDONESIAN STUDENTS? (F073)

Safari Safari, Asrijanty Asrijanty, Rahmawati Rahmawati and Bagus Hary Prakoso

LEARNING ANALYTICS TO EVALUATE THE EFFECTIVENESS OF HIGHER EDUCATION STUDENT FAILURE PREVENTION (F084)

Francesco Floris, Marina Marchisio, Matteo Sacchet and Sergio Rabellino

GEOGEBRABOOK: PRELIMINARY RESEARCH WITH PRIMARY SCHOOL STUDENTS (F112)

Sara Cruz, Marco Bento and José Alberto Lencastre

10:45-11:00 Break

11:00-13:00 Session FP 19.3

Pedagogical Issues Related with Learning Objects // Educational Psychology

Chair: Sharon Mitchell

INFORMATION SECURITY EDUCATION SYSTEM IN SECONDARY SCHOOL AND ASSESSMENT OF THE LEVEL OF ANXIETY OF SCHOOLCHILDREN (F060)

Mikhail I. Bocharov, Irina V. Simonova, Tatyana I. Bocharova and Anna Y. Zaika

LEARNING TO USE A DIGITAL WORKBENCH TO DEVELOP COMPETENCE-BASED TESTS IN VOCATIONAL EDUCATION: GUIDED OR EXPLORATIVE? (F056)

Josef Buchner, Anne-Cathrin Vonarx, Peter Pfänder and Michael Kerres

A TAGSET FOR UNIVERSITY STUDENTS' EDUCATIONAL GOALS (F082)

Felix Weber and Elen Le Foll

BECAUSE IT IS FUN: INVESTIGATING MOTIVES OF FAKE NEWS SHARING WITH EXPLORATORY GAME QUESTS (F150)

Patrick Jost

13:00 – 13:45 Break

13:45-16:00 Session FSRP 19.4

Technology, Learning and Expertise

Chair: Matteo Sacchet

NEED OF EDUCATIONAL TECHNOLOGY TOOLS FOR COGNITIVE DEVELOPMENT IN INTELLECTUALLY DISABLED CHILDREN (F108)

Savitha Korattikkara Kumaran and Renumol Vempalively Govindapillai

A HEALTHCARE SYSTEM TO SUPPORT WELL-BEING OF MIGRANTS : THE PROJECT PREVENZIONE 4.0 (S139)

Veronica Rossano, Teresa Roselli and Flora Berni

IMPLEMENTING AN ONLINE TRAINING PROGRAMME IN PRECISION MEDICINE FOR PRIMARY CARE PROFESSIONALS: A MULTI-METHOD APPROACH (S050)

Sharon Mitchell, Evrim Jaccard, Regula Cardinaux, Prune Collombet, Jacques Cornuz, Gérard Waeber, Idris Guessous and Sissel Guttormsen

APPLYING LAYERED GRAPHS TO EVIDENCE CENTERED DESIGN BASED SERIOUS GAMES ASSESSMENT (S208)

Jan K. Argasiński and Iwona Grabska-Gradzińska

CONSIDERATIONS AND REFLECTIONS ON GLOBALIZATION OF RESEARCH-SUPPORTED BEST PRACTICES AND QUALITY STANDARDS FOR ONLINE EDUCATION AND DIGITAL LEARNING (R029)

Yaping Gao

THE ROLE OF GENDER IN LEARNERS' DIGITAL INTERACTION PREFERENCES (F015)

Muhittin Şahin and Dirk Ifenthaler

16:00-16:15 Break

16:15-18:05 Session FSP 19.5

Student-centered Learning // Technology, Learning and Expertise

Chair: Said Hadjerrouit

WORK ON EXPRESSION-COMMUNICATION SKILLS AT THE UNIVERSITY BY PLAYING LORD OF THE RINGS ONLINE (S058)

Christine Bolou-Chiaravalli

IMMERSIVE LEARNING FOR TEACHER EDUCATION (S094)

Eric Tarantini

IMPLEMENTING INTERDISCIPLINARY CONTENT AND NOVEL TEACHING METHODS AT AN EGYPTIAN UNIVERSITY: A CASE REPORT (S077)

Ly Lutter, Johannes Schruppf, Felix Weber, Ahmed M. H. Abdelfattah and Stefan Schneider

MAKE USE OF SELFIE DATA TO GENERATE TARGETED RECOMMENDATIONS FOR SCHOOL TEAMS: TWO INSTRUMENTS (S103)

Irina Dvoretzkaya and Alexander Uvarov

DIGITAL SUPPORT FOR THE PRE-STUDENT PHASE IS SUCCESSFUL (F080)

Pia Drews and Alke Martens

Friday 20th, November 2020

08:45-10:45 Session FP 20.1

Educational Psychology // Pedagogical Issues Related with Learning Objects

Chair: Peter Holowka

EXPLORE FOREIGN LANGUAGE LEARNERS' EXPERIENCES UNDER A METACOGNITIVE LISTENING WEBSITE (F156)

Tao Pei and Jitpanat Suwanthep

THE MEDIATING ROLE OF OPTIMISM IN RELATION BETWEEN WISDOM & KNOWLEDGE VIRTUES AND SCHOOL WELL-BEING IN ADOLESCENCE (F071)

Bagus Hary Prakoso, Zulmi Ramdani, Asrijanty Asrijanty, Rahmawati Rahmawati, Safari Safari, Heni Waluyo Siswanto and Nina Purnamasari

THE DEVELOPMENT AND VALIDATION OF A CONCEPT MAPPING EMOTIONS SCALE(CM-ES) FOR UNIVERSITY STUDENTS (F173)

Xinyuan Li, Yanyan Duan, Tong Lu and Guoqing Zhao

DESIGN OF THE TIME MANAGEMENT SKILLS ACQUISITION SYSTEM USING LEARNING ANALYTICS (F194)

Hiroyuki Watanabe, Li Chen, Xuewang Geng, Yoshiko Goda and Atsushi Shimada

10:45-11:00 Break

11:00-12:50 Session FSP 20.2

Assessing Progress of Learning in Complex Domains // Learner Communities and Peer-support

Chair: Dirk Ifenthaler

PROMOTING FORMATIVE ASSESSMENT IN MATHEMATICS TEACHER EDUCATION: AN EXPERIENCE OF DISTANCE TEACHING (F069)

Annalisa Cusi, Francesca Morselli and Agnese Ilaria Telloni

FACTORS OF THE USE OF LEARNING ANALYTICS DASHBOARD THAT AFFECT METACOGNITION (F177)

Li Chen, Min Lu, Yoshiko Goda, Atsushi Shimada and Masanori Yamada

POST-DISASTER LEARNING MODEL: DESIGN OF DISTANCE LEARNING BASED ON LOCAL WISDOM PERSPECTIVE (F179)

Jaka Warsihna, E. Oos M. Anwas, Zulfikri Anas, Fauzy Rahman Kosasih and Zulmi Ramdani

FAKE NEWS RESILIENCE THROUGH ONLINE GAMES? TENTATIVE FINDINGS FROM A RANDOMIZED CONTROLLED TRIAL IN HIGHER EDUCATION (S039)

Christoph Pimmer, Christoph Eisemann and Mateescu Magdalena

12:50 Best Paper Awards Ceremony and Closing Session

Profs. Demetrios G. Sampson, Dirk Ifenthaler and Pedro Isaías