

CONFERENCE PROGRAM
21st International Conference on
Cognition and Exploratory Learning in Digital Age (CELDA 2024)

Saturday 26th, October 2024

08:30-15:25 Welcome Desk (closes for lunch – 13:00-14:15)
(Room: Ban Mazuranic - 1st Floor)

09:45-10:00 Session O – Opening Session
(Room: Ban Jelacic - 1st Floor)

OPENING SESSION

Profs. Demetrios G. Sampson and Pedro Isaias

10:00-11:00 Session KL – Keynote Presentation
(Room: Ban Jelacic - 1st Floor)

“TEACHING LIKE SOCRATES: THE TIMELESS ART OF QUESTIONING FOR FOSTERING CREATIVE THINKING IN THE AI ERA”

Dr Panagiotis Kampylis, Greek National Documentation Centre, Greece

11:00-11:30 Coffee Break

11:30-13:00 Session 26.1
Assessment of Exploratory Learning Approaches
(Room: Ban Jelacic - 1st Floor)

Chair: Dirk Tempelaar

EVALUATION OF THE EFFECTIVENESS OF READING ALOUD A PROGRAM CODE IN LEARNING PROGRAMMING BASED ON BRAIN-ACTIVITY MEASUREMENTS (F047)

Tetsuo Tanaka, Ryo Horiuchi and Mari Ueda

HOW TO TEACH PRIVACY: ASSESSMENT OF INNOVATIVE LEARNING APPROACHES FOR UNDERGRADUATE STUDENTS (F155)

Renata Mekovec and Marija Kuštelega

DEVELOPMENT AND VALIDATION OF THE 3S-T E-LEARNING EDUCATIONAL MODEL TO MEASURE EDUCATIONAL ICT USAGE AND THE IMPACT OF COVID-19 PANDEMIC ON HIGHER EDUCATION. MODERATING CROSS CULTURAL TENDENCIES (F033)

Mónica Martínez Gómez, Eliseo Bustamante García and César Berna Escriche

13:00-14:15 Lunch Break

14:15-15:15 Session 26.2
Assessment of Exploratory Technologies
(Room: Ban Jelacic - 1st Floor)

Chair: Alice Barana

AN EMPIRICAL STUDY ON THE IMPACT OF IMMERSIVE VIRTUAL REALITY ON ENHANCING INTERCULTURAL SENSITIVITY (F044)

Mahnaz Moallem and Folashade Agbolade

GENERATING EXPLANATORY TEXTS ON RELATIONSHIPS BETWEEN SUBJECTS AND THEIR POSITIONS IN A CURRICULUM USING GENERATIVE AI (F121)

Ryusei Munemura, Fumiya Okubo, Tsubasa Minematsu, Yuta Taniguchi and Atsushi Shimada

15:30 – Social Event (meeting point at the hotel lobby)

Sunday 27th, October 2024

08:15-19:05 Welcome Desk (closes for lunch – 13:00 to 14:15)
(Room: Ban Mazuranic - 1st Floor)

08:40-11:00 Session 27.1

Technology and Mental Models // Technology, Learning and Expertise

(Room: Ban Frankopan - Mezzanine)

Chair: Demetrios G. Sampson

ASSESSMENT OF BARRIERS TO EDUCATIONAL TECHNOLOGY ACCEPTANCE (F061)

Stephen Downes

INVESTIGATING STRATEGY IN A MENTAL ROTATION TASK USING EYE-TRACKING HEAT MAP ANALYSIS (F119)

Kabyashree Khanikar and Ritayan Mitra

DEVELOPMENT OF TWO APPLICATIONS FOR ACOUSTIC EDUCATION FOR ARCHITECTURAL DESIGNERS (F172)

Mari Ueda, Yuichi Tsumoto and Tetsuo Tanaka

MEASURING COMPUTATIONAL THINKING – DEVELOPING A SHORT PERFORMANCE TEST FOR HIGHER EDUCATION (F127)

Josef Guggemos, Roman Rietsche, Stephan Aier, Jannis Strecker and Simon Mayer

A SYSTEMATIC REVIEW ON THE EFFECTIVENESS OF EDUCATIONAL TECHNOLOGIES IN WORKPLACE LEARNING (S088)

Xinjie Xing and Dirk Ifenthaler

09:00-11:00 Session 27.2

Exploratory Technologies

(Room: Ban Jelacic - 1st Floor)

Chair: Charoula Angeli

IMPLEMENTATION AND EVALUATION OF A CHATBOT IN A BUSINESS COURSE IN HIGHER EDUCATION (F083)

Pedro Isaias, Tania Hoque and Paula Miranda

ENHANCING ARTISTIC EDUCATION WITH AI: THE HAMLET WORKSHOP (F053)

Franco Ripa di Meana, Andrea Guidi, Alberto Giretti, Massimo Vaccarini, Matteo Zambelli and Dilan Durmus

ADVANCING COLOUR PERCEPTION: EXPLORING YOUNG CHILDREN'S COLOUR DISCRIMINATION IN MIXED REALITY (F091)

Patrick Jost, Elias Berchtold and Sebastian Rangger

PROPOSAL FOR AN APPROACH TO PROCESSING MEDIA OBJECTS USING AI AND METADATA: A MACHINE LEARNING-BASED APPROACH (F069)

Khalifa Sylla, Mama Amar and Samuel Ouya

11:00-11:30 Coffee Break

11:30-13:10 Session 27.3

Cognition in Education

(Room: Ban Jelacic - 1st Floor)

Chair: Ivana Pondelíková

ASSESSING THE DYNAMICS OF MIDDLE SCHOOL STUDENTS' JUDGMENT OF LEARNING (JOL) IN MATHEMATICS: A STUDY IN KENYA (F106)

Nisumba Soodhani K, Antony Prakash, Daevesh Singh, Rumana Pathan, Amit Mishra, Swati Shelar, Anand Sharma and Ramkumar Rajendran

INVESTIGATING THE FUNCTIONALITY OF METACOGNITIVE PROMPT DURING THE CIRCUIT ANALYSIS PROBLEM-SOLVING (F117)

Jyoti Shaha, Vishwas Badhe and Ramkumar Rajendran

SENSORY PREREQUISITES FOR DIGITAL ENCOUNTERS: STATISTICAL LEARNING AND LANGUAGE OUTCOMES IN NORWEGIAN PRESCHOOLERS (S020)

Giulia Zantonello, Valentin Vulchanov and Mila Dimitrova Vulchanova

FROM SCREENS TO WORDS: UNDERSTANDING THE ROLE OF MODALITY IN DIGITAL SECOND LANGUAGE VOCABULARY LEARNING (S038)

Paula Janjic and Kenny R. Coventry

11:30-13:00 Session 27.4

Technology, Learning and Expertise
(Room: Ban Frankopan - Mezzanine)
Chair: Allan Jeong

UNPACKING THE THREE SPHERES OF INTEREST IN A BLENDED INTENSIVE PROGRAMME: COLLABORATIVE LEARNING, BLENDED LEARNING AND INTERNATIONALISATION (F150)
Alice Barana, Antonino Cambria, Marina Marchisio Conte and Enrico Spinello
EDUCATIONAL BOARD GAME FOR IMPROVING EMPATHETIC MIND AND COMMUNICATION (F126)
Samoekan Sophonhiranrak, Putthachat Angnakoon, Sarunwit Promsaka Na Sakonnakron, Yada Atanan and Tida Tubpun
ROBOTICS EDUCATION THROUGH CROSS-AGE PEER TUTORING: EVALUATING THE LEARNING OUTCOMES FOR TUTORS AND TUTEES (F112)
Vaso Anastasiou, Yiota H. Diakou and Charoula Angeli

13:00-14:15 Lunch Break

14:15-16:15 Session 27.5

Assessing Progress of Learning in Complex Domains // Assessment of Exploratory Learning Approaches
(Room: Ban Jelacic - 1st Floor)
Chair: Andrea Guidi

BRAIN WAVES AND LEARNING IN CHILDREN WITH ADHD: IMPACT OF EDUCATIONAL VIDEO GAMES VS TRADITIONAL METHODS (F056)
Cristina Rebollo, Anna Tonda, Cristina Sorli and Inmaculada Remolar
THE EFFECTS OF POLITENESS IN SHAPING DISCOURSE IN ONLINE DEBATES (F035)
Allan Jeong and Ming Ming Chiu
ASSESSING YOUNG LEARNERS' INFORMAL LEARNING IN A ROBOTIC PROGRAM (S050)
Liyan Song, Qijie Cai, Suzhen Duan and Scot McNary
SELF-ASSESSMENT OF DIGITAL LITERACY-COURSES WITH PUPILS. INTERIM PROJECT REPORT
TEACHING-LEARNING-HUB: DIGITAL HISTORY (S148)
Sophie-Luisa Hopf
DOES GAME CHARACTER'S LIFE SATISFACTION IN LIFE BOARD GAME REFLECT REAL LIFE? (S137)
Kazuhisa Miwa, Hiromu Matsubara and Asaya Shimojo

16:15-16:45 Coffee Break

16:45-18:55 Session 27.6

Collaborative Learning // Student-centered Learning
(Room: Ban Jelacic - 1st Floor)
Chair: Panagiotis Kampylis

TWO-EYED SEEING: VR LEARNING WITH INDIGENOUS RELEVANCE (S153)
Twylla Soosay and Stella George
RELATIONSHIP BETWEEN MATHEMATICAL PROBLEM-SOLVING SKILLS AND ASYNCHRONOUS COLLABORATION IN DIGITAL LEARNING ENVIRONMENTS (F109)
Alice Barana, Marina Marchisio Conte and Sara Omegna
SOCIALLY SHARED METACOGNITIVE REGULATION IN FACE-TO-FACE COLLABORATIVE PROBLEM-SOLVING: CYCLICAL PHASES, FOCI AND FUNCTIONS (F114)
Vishwas Badhe, Ramkumar Rajendran and Jyoti Shaha
E-TUTORIAL USE AND STUDENTS' EPISTEMIC AND ACHIEVEMENT LEARNING EMOTIONS (F030)
Dirk Tempelaar
HUMAN CENTRED AI: SOCIAL AND COLLABORATIVE LEARNING WITH HUMANOID ROBOTS (S094)
Sanaz Fallahkhair, Bex Dagless and Masoud Rahimpoor

16:45-19:05 Session 27.7

Technology, Learning and Expertise
(Room: Ban Frankopan - Mezzanine)
Chair: Said Hadjerrouit

AI-ASSISTED ENHANCING OF GENDER AWARENESS THROUGH READING COMPREHENSION IN HISTORY AND LITERATURE COURSES OF ANGLOPHONE CULTURES (F085)
Ivana Pondelíková and Jana Lupřichová
INTEGRATING GAZE DATA AND DIGITAL TEXTBOOK READING LOGS FOR ENHANCED ANALYSIS OF LEARNING ACTIVITIES (F104)
Ken Goto, Li Chen, Tsubasa Minematsu and Atsushi Shimada
EXPLORING STUDENT PERCEPTION AND INTERACTION USING CHATGPT IN PROGRAMMING EDUCATION (F131)
Boxuan Ma, Li Chen and Shin'ichi Konomi
EMPOWERING TEACHERS TO INTEGRATE AI: DEVELOPING AN LLM-BASED COPILOT (F032)
Sabine Seufert and Stefan Sonderegger
DESIGNING STRUCTURED REFLECTIONS FOR GUIDING LEARNERS' INTERACTIONS WITH GENERATIVE AI (S042)
Rwitajit Majumdar, Daevesh Singh and Mei-Rong Alice Chen

Monday 28th, October 2024

08:30-13:15 Welcome Desk
(Room: Ban Mazuranic - 1st Floor)

09:00-11:00 Session 28.1
Technology, Learning and Expertise
(Room: Ban Frankopan - Mezzanine)
Chair: Josef Guggemos

USING LARGE LANGUAGE MODELS FOR ACADEMIC WRITING INSTRUCTION: CONCEPTUAL DESIGN AND EVALUATION OF THE SOCRAT PROJECT (F025)
Lukas Spirgi and Sabine Seufert
LARGE LANGUAGE MODEL DETUNING IN LEARNING CONTENT UNDERSTANDING (F072)
Tsubasa Minematsu and Atsushi Shimada
EVIDENCE-BASED CONTENT DESIGN AND VALIDATION FOR CYBERSECURITY GAMES (F079)
Nicolai Plintz and Dirk Ifenthaler
LEVERAGING CHATGPT FOR AUTOMATED KNOWLEDGE CONCEPT GENERATION (F133)
Tianyuan Yang, Baofeng Ren, Chenghao Gu, Boxuan Ma and Shin'ichi Konomi

09:10-11:00 Session 28.2
Student-centered Learning
(Room: Ban Jelacic - 1st Floor)
Chair: Demetrios G. Sampson

FOSTERING EXPLORATORY LEARNING IN A CRITICAL DIGITAL MEDIA UNDERGRADUATE COURSE AT A SOUTH AFRICAN UNIVERSITY (F066)
Lorenzo Dalvit
DYNAMICS OF STUDENTS' AFFECTIVE STATES AND VIDEO INTERACTIONS WHILE WATCHING EDUCATIONAL VIDEOS (F141)
Burçak Aydın, Gökhan Akçapınar, Vildan Özeke and Mohammad Nehal Hasnine
A FIGHT AGAINST THE FORGETTING CURVE (F021)
Müslim Atas, Helmut Lindner, Thomas Strametz, Fatima Jammoul, Johannes Feiner and Antonius Metry Saad
HOW CAN GENERATIVE AI BE ADAPTED FOR LEARNING CONTEXT SUPPORT IN CONTEXTUAL VOCABULARY ACQUISITION? (S139)
Mohammad Nehal Hasnine, Mirai Yamada and Gökhan Akçapınar

11:00-11:30 Coffee Break

11:30-13:05 Session 28.3
Learning Paradigms in Academia
(Room: Ban Jelacic - 1st Floor)
Chair: Valentin Vulchanov

SUCCESSFUL JOB INTERVIEW: GRANULATED MESSAGE FROM INDUSTRY TO IT GRADUATES (S140)
Rabab Marouf, Iouri Kotorov, Hamna Aslam, Yuliya Krasnyhkykova and Manuel Mazzara
EXPLORING COMPUTING PARADIGMS AND THEORETICAL PERSPECTIVES ON PROGRAMMING AND COMPUTATIONAL THINKING IN MATHEMATICS EDUCATION (F019)
Said Hadjerrouit
VIDEO FOR NAVOICA, A POLISH MOOC PLATFORM (F073)
Krzysztof Gurba, Anna Ślósarz and Eugenia Smyrnova-Trybulska
DEVELOPING A QUALITY ASSURANCE MODEL FOR OER CONVERSION TOOL (CONVOERTER) (R040)
Lubna Ali, Muhmmad Waseem Khalid and Ulrik Schroeder

13:05 Best Paper Awards Ceremony and Closing Session
(Room: Ban Jelacic - 1st Floor)

Profs. Demetrios G. Sampson and Pedro Isaias

You are invited to check the virtual presentations below.

Video Presentations

CELDA 2024

Online: Youtube

[DEVELOPING A QUALITY ASSURANCE MODEL FOR OER CONVERSION TOOL \(CONVOERTER\) \(R040\)](#)

Lubna Ali, Muhmmad Waseem Khalid And Ulrik Schroeder

[IDENTIFYING INFLUENTIAL FACTORS IN STUDENT DROPOUT USING DECISION TREES \(S059\)](#)

Daniel Plúa Morán, Monica Martínez Gómez And Víctor Yeste

[THE ROLE OF PEER SUPPORT IN STRENGTHENING COMMUNITY VALUES, SOCIAL SKILLS AND EDUCATION IN SUB-SAHARAN AFRICA \(F063\)](#)

Ibolya Tomory

[INVESTIGATING STRATEGY IN A MENTAL ROTATION TASK USING EYE-TRACKING HEAT MAP ANALYSIS \(F119\)](#)

Kabyashree Khanikar and Ritayan Mitra

[A THREE-STEP KNOWLEDGE GRAPH APPROACH USING LLMS IN COLLABORATIVE PROBLEM SOLVING-BASED STEM EDUCATION \(F145\)](#)

Li Chen, Gen Li, Boxuan Ma, Cheng Tang And Masanori Yamada

[TWO-EYED SEEING: VR LEARNING WITH INDIGENOUS RELEVANCE \(S153\)](#)

Twylla Soosay and Stella George