Bibliographic Information

| **Book Title** | 15th International Conference of Education, Research and Innovation |
| **Book Series** | ICERI Proceedings |
| **Editors** | Luis Gómez Chova, Agustín López Martínez, Joanna Lees |
| **Publication Year** | 2022 |
| **Publisher** | IATED Academy |
| **Publisher Address** | Valencia, Spain |
| **Book ISBN** | 978-84-09-45476-1 |
| **Series ISSN** | 2340-1095 |
| **DOI** | 10.21125/iceri.2022 |
| **Conference Name** | ICERI2022 |
| **Dates** | November 7th-9th, 2022 |
| **Location** | Seville, Spain |

**Copyright Information**
This work is subject to copyright. All rights reserved.

**Topics**
- Education
- Educational Research
- Educational Technology

Editorial policy and Publication ethics:
The papers published in these proceedings reflect the views only of the authors. The publisher cannot be held responsible for the validity or use of the information therein contained.

The International Academy of Technology, Education and Development (IATED) aims to publish conference proceedings that contain original research articles of high quality meeting the expected ethical standards. The publication guidelines are provided for authors who submit articles to IATED conferences in order to maintain high ethical standards.

IATED shall guarantee the high technical and professional quality of the publications and that good practices and ethical standards are maintained. If unethical behaviors are identified, an investigation will be initiated and pertinent actions will be taken.

More information about the publication ethics of IATED is available at iated.org/publication_ethics
Preface

The ICERI2022 Conference Proceedings contain selected and revised papers from the 15th International Conference of Education, Research and Innovation.

ICERI2022 was held in Seville, Spain, from the 7th to the 9th of November 2022. ICERI is an annual event in which lecturers and researchers from 79 different countries gather to share valuable research and information about education, pedagogical technologies, and educational innovations.

Keynote speeches, networking activities, plenary sessions, parallel thematic sessions and workshops were, among some of the events on offer, delivered by world-leading educational experts at the conference, which provided participants the opportunity of global networking. The keynote speeches are available at IATED Talks (iated.org/talks/).

The scope of ICERI covered the following topics: Digital & Distance Learning, Digital Transformation of Education, Innovative Educational Technologies, Active and Student-Centered Learning, Assessment, Mentoring & Student Support, Educational Stages and Life-Long Learning, Quality & Impact of Education, Teacher Training and Educational Management, STEM Education, Discipline-Oriented Sessions, Language Learning and Teaching, Inclusion and Multiculturality.

The ICERI2022 Proceedings include the accepted contributions presented at the ICERI2022 Conference. The ICERI2022 International Program Committee is composed of lecturers and researchers from all around the globe. A blind peer review process was followed in order to guarantee the quality of the final publication and during this process, the following points were evaluated: information content, relevance to the educational field, general structure, clarity of contents, originality, and relation to the conference topics and disciplines. The publication is solely in English.

Moreover, ICERI aims to publish conference proceedings that contain high-quality original research articles, meeting the expected ethical standards. All authors that published their papers in the ICERI2022 Proceedings signed the IATED copyright transfer form. IATED guarantees the high technical and professional quality of the publications, and that good practice and ethical standards are maintained. More information about the publication ethics of IATED is available at: https://iated.org/publication_ethics.

Finally, we wish to extend our most sincere thanks to all members and delegates who have contributed to these ICERI2022 Proceedings. We also wish to express our gratitude to all participants and attendees for their engagement, dedication and passion for education.

Luis Gómez Chova
Agustín López Martínez
Joanna Lees
Organizing and Program Committee

Organizing Committee

Program Chairs
Luis Gómez Chova, University of Valencia, Spain
Agustín López Martínez, University of Barcelona, Spain
Joanna Lees, CEU Cardinal Herrera University, Spain

Local Arrangements Chairs
David Martí, International Academy of Technology, Education and Development, Spain
Mª Jesús Suesta, International Academy of Technology, Education and Development, Spain
Javi Doménech, MSX International Techservices, Spain
Miguel Peiró, Progresa Vocational Training Center, Spain

Publication Chairs
Chelo González, Polytechnic University of Valencia, Spain
Ignacio Candel Torres, Capgemini, Spain

Publicity Chairs
Eladio Duque, International Academy of Technology, Education and Development, Spain
Juanan Herrero, Graphimage Graffor, Spain

Web Masters
Jose Luis Bernat, International Academy of Technology, Education and Development, Spain
Javier Martí, IVIRMA Global IT, Spain

Panel Chairs
Mairi Macintyre – University of Warwick, United Kingdom
Sylvia Sanders – Fontys University of Applied Sciences, Netherlands
Tracey Tokuhama Espinosa – Harvard University Extension School, United States
Wendy Gorton – Educational consultant, United States

Session Chairs
Achim Dannecker – University Northwestern Switzerland FHNW, Switzerland
Aiden Carthy – Technological University Dublin, Ireland
Akram Abu-aisheh – University of Hartford, United States
Amy Smith – Massachusetts Institute of Technology (MIT), United States
Anat Moshe – Beit Berl College, Israel
Andrea Dominguez – DeVry University, United States
Anna Isaksson – Halmstad University, Sweden
Ava Fujimoto-Strait – Sam Houston State University, United States
Bee-Yen Toh – Queen’s University Belfast, United Kingdom
Brian Garibaldi – Johns Hopkins University School of Medicine, United States
Camilla Gjellebæk – Østfold University College, Norway
Caroline Pulfrey – EPFL, Switzerland
Carolyn Herrington – Florida State University, United States
Catherine Murphy – Munster Technological University, Ireland
Catherine O’Donnell – Ulster University, United Kingdom
Colin McFadden – University of Minnesota, United States
Cynthia Tomovic – Old Dominion University, United States
Dalun Zhang – Texas A&M University, United States
Daniel Bosmans – Haute Ecole Pédagogique BEJUNE, Switzerland
Daniel Weaver – Messiah University, United States
David Facal – University of Santiago de Compostela, Spain
Deborah Romero – University of Northern Colorado, United States
Declan Qualter – Laois and Offaly Education and Training Board, Ireland
Diana Nicholas – Drexel University, United States
Donatella Persico – Consiglio Nazionale delle Ricerche, Italy
Donatella Persico – Consiglio Nazionale delle Ricerche, Italy
Donatella Persico – Consiglio Nazionale delle Ricerche, Italy
Elmar Krainz – FH JOANNEUM GmbH, Austria
Elvira G. Rincon-Flores – Instituto Tecnológico de Monterrey, Mexico
Eti Devries – Hanze university of Applied Sciences, Netherlands
Fabio Chacon – Bowie State University, United States
Geraldine Maughan – Tech. University of the Shannon: Midlands and Midwest, Ireland
Gwendell Foendoe Aubel – The Hague University of Applied Sciences, Netherlands
Heather McCune Bruhn – Penn State University, United States
Helen Neal – University of Warwick, United Kingdom
Jana Bérešová – Trnava University, Slovakia
Joaquin Villegas – Northeastern Illinois University, United States
Joseph Walsh – Munster Technological University, Ireland
Kaisa Oikarinen – Aalto University, Finland
Karel Němejc – Czech University of Life Sciences Prague, Czech Republic
Kate Lister – Arden University, United Kingdom
Katrin Kivisild – Education and Youth Board of Estonia, Estonia
Kine Maridatter – UiT The Arctic University of Norway, Norway
Lela Kvinikadze – Ivane Javakhishvili Tbilisi State University, Georgia
Leonard Walletzký – Masaryk University, Czech Republic
Maija Macintyre – University of Warwick, United Kingdom
Maria Daskolia – National and Kapodistrian University of Athens, Greece
Maria Ekström – Laurea University of Applied Sciences, Finland
Martin Žagar – RIT Croatia, Croatia
Matthew Andrew – Khalifa University, United Arab Emirates
Mercedes Valiente López – Universidad Politécnica de Madrid, Spain
Michael Green – University of Kent, United Kingdom
Mileta Tomovic – Old Dominion University, United States
Noemi Rodriguez – NYC College of Technology/CUNY, United States
Olga Bogdanova – LAB University of Applied Sciences, Finland
Paolo Perego – Politecnico di Milano, Italy
Paul Lane – GrandValley/UNAN-MGA, United States
Peter Gorder – University of Colorado Colorado Springs, United States
Rasa Poceviciene – Siauliai State University of Applied Sciences, Lithuania
Rune Andersen – University of Agder, Norway
Sally Rule – University of Canberra, Australia
Sharon Hartle – University of Verona, Italy
Shelly Wyatt – University of Central Florida, United States
Sibel Erduran – University of Oxford, United Kingdom
Sigal Eden – Bar-Ilan University, Israel
Silvia Pisano – Laboratori Nazionali di Frascati - INFN & Centro Fermi, Italy
Susan Pawley – The Open University, United Kingdom
Vicky O’Rourke – Atlantic Technology University, Ireland
Viviana Fanti – University of Cagliari and INFN Sezione di Cagliari, Italy
Yehudith Weinberger – Kibbutzim College of Education, Israel

**International Program Committee**
Adriana Agnes Repellin-Moreno – Universidad Panamericana, Mexico
Aileen Cotter – Cork Institute of Technology, Ireland
Akihiro Maeda – *Ryukoku University, Japan*
Alia Ammar – *Drexel University, United States*
Ana Paula Lopes – *Polytechnic Institute of Oporto, Portugal*
Anna Romagnuolo – *University of Tuscia, Italy*
Breno Deffanti – *Graded - The American School of São Paulo, Brazil*
Catherine O’Donnell – *Ulster University, United Kingdom*
Christopher Evans – *Cardiff University, United Kingdom*
Craig Loewen – *University of Lethbridge, Canada*
Craig Walker – *Oklahoma State Department of Education, United States*
Cynthia Rosas Magallanes – *Instituto Mexicano del Seguro Social (IMSS), Mexico*
Daniel Abrahams – *University of Arkansas - Fayetteville, United States*
Darren Falconer – *The University of Western Australia, Australia*
David Jennings – *University College Dublin, Ireland*
Elmaziye Özgür – *Eastern Mediterranean University, Cyprus*
Ewa Bogacz- Wożanowska – *Jagiellonian University, Poland*
Fedor Duzhin – *Nanyang Technological University, Singapore*
Fernando Enrique Ortiz Rodriguez – *Universidad Autónoma de Tamaulipas, Mexico*
Filomena Soares – *Polytechnic of Porto, Portugal*
Frank Brosow – *University of Education Ludwigsburg, Germany*
Helmut Wöllik – *Carinthia University of Applied Sciences, Austria*
Hiroyuki Obari – *Aoyama Gakuin University, Japan*
Ineta Helmane – *University of Latvia, Latvia*
James Mackay – *Otago Polytechnic, New Zealand*
Jaroslaw Kujawski – *University of Gdansk, Poland*
Joanna Richardson – *City, University of London, United Kingdom*
John Craft – *Appalachian State University, United States*
Joseph Agbenyega – *Emirates College for Advanced Education, United Arab Emirates*
João Monteiro – *ISPGAYA - Instituto Superior Politécnico Gaya, Portugal*
Kari Krell – *MacEwan University, Canada*
Kay Gallagher – *Zayed University, United Arab Emirates*
Laila Nordstrand Berg – *Western Norway University of Applied Sciences, Norway*
Luis Roseiro – *Instituto Superior de Engenharia de Coimbra, Portugal*
Luke Raeside – *Technological University Dublin, Ireland*
Maria Rudneva – *RUDN University, Russian Federation*
Martha Leal-Gonzalez – *Institute of Innovation and Tech. Transfer of Nuevo Leon, Mexico*
Matome Mashiapata – *University of South Africa, South Africa*
Mayaugust Finkenberg – *Stevenson University, United States*
Mike Hillis – *California Lutheran University, United States*
Orlando Belo – *Universidade do Minho, Portugal*
Paul Hunter – *IMD, International Institute for Management Development, Switzerland*
Peter Gabor – *University of Calgary, Canada*
Peter Haber – *Salzburg University of Applied Sciences, Austria*
Pia Palotie – *Eezy Tyollisyyspalvelut, Finland*
Remigijus Bubnys – *Vilnius University, Lithuania*
Rosa Cendros Araujo – *Western University, Canada*
Sinéad McCotter – *University of York, United Kingdom*
Sylvia Dempsey – *Cork Institute of Technology, Ireland*
Taija Chaya Votkin – *Aalto University, Finland*
Taketoshi Yokemura – *Shibaura Institute of Technology, Japan*
Tammy Ladwig – *University of Wisconsin Fox Valley, United States*
Thomas Lavery – *The Royal Academy of Engineering, United Kingdom*
Victoria Kompanets – *Lappeenranta University of Technology, Finland*
Wendy Gorton – *Educational consultant, United States*
ICERI2022 Keynote Speakers

Tracey Tokuhama-Espinosa – Harvard University Extension School, United States
Manu Kapur – ETH Zurich, Switzerland

Tracey Tokuhama-Espinosa – Harvard University Extension School (United States)

**Keynote speech: What Every University Professor Should Know About Meaning Making**

Over the years we have heard a lot about the important role of social-emotional learning within school settings. We have also learned something about how the brain learns in regular classrooms. What is less explored is how people make meaning out of their worlds by combining knowledge of how others feel and knowledge of how others think to construct reality. New neuroimaging technology now gives us a glimpse as to how people influence each other’s learning through a dynamic exchange of cognition and emotion. Meaning Making is a term used to describe how humans give context to their learning. In this keynote we will explain how humans learn from this perspective, and why and how higher education must shift to remain relevant in modern times.

**Biography:**
Tracey Tokuhama-Espinosa, Ph.D. is from Berkeley, California, is an alumna of the Harvard Graduate School of Education, and currently teaches a course at the Harvard University Extension School entitled The Neuroscience of Learning: An Introduction to Mind, Brain, Health, and Education Science. She is currently an educational researcher and serves as an Associate Editor of Nature Partner Journal Science of Learning and co-founder of Connections: The Learning Sciences Platform.

Tracey researches indicators to measure educational quality; learning in the digital age; transdisciplinary thinking; bilingualism and multilingualism; and the general improvement of teacher practices. Her most recent books are the Bringing the Neuroscience of Learning to Online Teaching: An Educator’s Handbook (2021); Neuromyths: Debunking False Ideas About the Brain (2019); and The Five Pillars of the Mind: Redesigning Education to Fit the Brain (2019). She has authored articles for UNESCO and was a member of the Organisation for Economic Co-Operation and Development (OECD) expert panel to redefine teachers’ new pedagogical knowledge in modern times.

Tracey’s current focus is on understanding What Kids Want to Know About Their Own Brains, a book coming out with Columbia University’s Teachers College Press next year. She is also writing a book called ThinkWrite: The Neuroscience of Writing, which explains why writing is the highest form of thinking. Finally, she is co-editing a new Handbook on Brain, Neuroscience and Education, which is a collection of work looking at the future of educational practice.

Tracey has lived and worked professionally in Tokyo, Geneva, Lima, and Boston, and is currently in New York and works with teachers, schools, governments, and NGOs in 40 different countries.
Manu Kapur – ETH Zurich (Switzerland)

**Keynote speech: Productive Failure**

If learning from failure is intuitively compelling, how can we intentionally design for it, and bootstrap it for deep learning? In my talk, I will describe my research on Productive Failure, and its implications for how we design powerful learning environments, innovation and creativity.

**Biography:**

Manu holds the Professorship for Learning Sciences and Higher Education at ETH Zurich, Switzerland, and directs The Future Learning Initiative (FLI) at ETH Zurich. An ETH+ funded initiative, the FLI brings together more than 20 professors from 10 departments at ETH to advance research on the science of teaching and learning in higher education contexts, and translate it into the practice of teaching and learning at ETH Zurich.

Prior to this, Manu was a Professor of Psychological Studies at the Education University of Hong Kong. Manu also worked at the National Institute of Education (NIE/NTU) of Singapore as the Head of the Curriculum, Teaching and Learning Department, as well as the Head of the Learning Sciences Lab (LSL).

A mechanical engineer by bachelors training, Manu has always been passionate about mathematics. He taught college mathematics for four years, during which he was also the deputy leader for Singapore’s team to the 43rd International Mathematical Olympiad in Glasgow. It was then that his intrigue for mathematical cognition took root, which led him to pursue a doctoral degree in the science of learning (specialization in instructional technology) at Columbia University in New York. Manu holds a double Masters: a Master of Science in Applied Statistics from Columbia University in New York, and a Master of Education from the NIE, Singapore.

As a learning scientist, Manu makes a commitment not only to advancing understanding of human learning, but doing so in ways that make an impact in the actual ecologies of learning. Drawing on his engineering mindset for design, Manu conceptualized and developed the theory of Productive Failure to design for and bootstrap failure for learning mathematics better. He has done extensive work in real-field ecologies of STEM classrooms to transform teaching and learning using his theory of productive failure across a range of schools and universities in around the world.

His research on Productive Failure has been taken up by the Singapore’s Ministry of Education for wide-scale re-design and implementation of its pre-university mathematics (statistics) curriculum and pedagogy.
The ICERI2022 conference program is available online at https://iated.org/iceri2022

**ORAL SESSIONS MONDAY**

- Virtual & Augmented Reality
- Tutoring & Coaching
- Entrepreneurship Education (1)
- Robotics in Education
- Flipped Learning
- Best Practices in Maths Education
- Students and Teachers Wellbeing
- Exchange & Mobility Programmes
- Technology Enhanced Learning
- Rethinking Assessment in COVID-19 Times
- University-Industry Collaboration (1)
- Responsible Research and Innovation in STEM
- Gender Issues in Education
- Trends in Maths Education
- Special Education (1)
- New Technologies in Language Learning
- Design Thinking
- Employability Trends and Challenges
- Architecture Education Experiences
- Pedagogical Innovations
- Computer Science and Programming in Higher Education
- Inclusion of Learners with Special Educational Needs
- Teaching and Learning Foreign Languages
- 21st Century skills
- Assessment & Feedback
- Entrepreneurship Education (2)
- Engineering Education
- Project and Problem Based Learning
- Coding at Schools
- Special Education (2)
- Second Language Learning & Bilingual Education

**POSTER SESSIONS MONDAY**

- Pedagogical Experiences in Teaching and Learning
- Emerging Technologies and Distance Learning

**ORAL SESSIONS TUESDAY**

- Digital Transformation of Education
- From Face-to-Face to Remote Learning
- Universal Design for Learning & Learning Space Design
- Media & Information Literacy
- Blended and Hybrid/Hyflex Education
- Professional Development of STEM Teachers
- Educational Leadership and Management
- Students Wellbeing during and after COVID-19
- Online Teaching and Learning
- Lessons learned from the COVID-19 pandemic
Student Support  
Diversity Issues & Inclusive Education  
Active & Experiential Learning  
Professional Development of Teachers (1)  
International Experiences  
Remote and Virtual Laboratories  
e-Learning  
Quality Assurance & Learning Analytics  
Inclusion & Multiculturality  
Student Engagement and Motivation  
Service Learning & Community Engagement  
ICT Skills among Teachers  
How to better match the language proficiency needs? The Kielibuusti project  
Cooperative & Problem Based Learning in Computer Science  
Research on Educational Technologies  
University-Industry Collaboration (2)  
Educational Software  
Digital Literacy  
Gamification & Game-based Learning  
Pre-Service Teacher Education  
How to Build an Entrepreneurship Education System across Educational Levels?  
STEM Experiences  
Social Media in Education  
Workplace & Vocational Training  
Curriculum Design Experiences  
Engagement and Motivation during COVID-19 Pandemic  
Sustainable Development Goals in Education  
Professional Development of Teachers (2)  
Educational Management  
Health Sciences Education

POSTER SESSIONS TUESDAY

Innovations and Quality in Education  
New Trends in Education and Research

VIRTUAL SESSIONS

DIGITAL TRANSFORMATION OF EDUCATION  
Data Science & AI in Education  
Learning Analytics & Educational Data Mining  
Digital Technologies and Resources for Learning under Lockdown  
Digital Transformation  
21st Century Skills  
Educational Programming & Robotics

DIGITAL & DISTANCE LEARNING  
Distance Education in COVID-19 Times  
MOOCs & Open Educational Resources  
Blended & Mobile Learning  
e-Learning Experiences  
Learning Management Systems & Virtual Learning Environments  
Post-Pandemic Scenarios in Education

INNOVATIVE EDUCATIONAL TECHNOLOGIES  
AI, Chatbots & Robots  
Virtual & Augmented Reality  
Social Media in Education  
Technology Enhanced Learning
TEACHER TRAINING & ED. MANAGEMENT
ICT & Digital Skills
Professional Development of Teachers
Educational Management

ACTIVE & STUDENT-CENTERED LEARNING
Gamification & Game-based Learning
Active & Experiential Learning
Problem & Project-Based Learning
Developing Soft and Transversal Skills
Pedagogical Innovations

ASSESSMENT, MENTORING & STUDENT SUPPORT
Assessment & Evaluation
Rethinking Assessment in COVID-19 Times
Mentoring & Tutoring
Student Support & Motivation
Student Engagement & Wellbeing in COVID-19 Times

EDUCATIONAL STAGES & LIFE-LONG LEARNING
From Pre-school to Secondary Education
Vocational Training
Transition to the Job Market
Developing Entrepreneurship in Education
Life-Long & Workplace Learning
Libraries and Museums as Learning Spaces

QUALITY & IMPACT OF EDUCATION
Quality in Education
Experiences and Challenges in Curriculum Design
Sustainability & Environmental Awareness
Social Impact of Education
University-Industry Collaboration
Education and Research

MULTICULTURALITY & INCLUSION
Multicultural Education
Diversity Issues
Special Educational Needs
Inclusive Education

STEM EDUCATION
Mathematics & Statistics
Engineering Education
STÉM Experiences
Computer Science Education

LANGUAGE LEARNING AND TEACHING
Foreign Languages
New Technologies in Language Learning
Language Learning & Translation Studies

DISCIPLINE-ORIENTED SESSIONS
Architecture & Interior Design
Health Sciences Education
Business and Marketing Education
Military Education
# Table of Contents

A MIXED METHODS STUDY OF LEARNING CHALLENGES: PERCEPTIONS OF FOUNDATION STUDENTS AT AN INTERNATIONAL BRANCH CAMPUS IN QATAR  
R. Bendriss

ATTITUDES OF SOCIAL MEDIA USERS TOWARDS ONLINE PRIVACY IN TIMES OF A PANDEMIC: PRIVACY CONFIGURATION AND PROFILE DISCLOSURE ON FACEBOOK  
L. Andrade, L. Faria, M. Andersen

SOCIAL MEDIA PRESENCE IN EMPLOYER BRANDING: CONSIDERATIONS FOR HIGHER EDUCATION INSTITUTIONS  
L. Andrade, J. Pimenta, L. Faria

MIGRATION AND PERCEPTION OF RELIGIOUS PLURALISM: A CASE OF TURKISH COMMUNITY IN AMERICA  
B. Gürer

UNIVERSITY STUDENTS’ MOBILITY AND ITS ASPECTS  
E. Nacházelová

THE IMPACT OF THE MIND, EMOTIONAL, AND SPIRITUAL (MES) PROGRAM ON QUALITY OF LIFE AMONG NATIONAL HIGH-SCHOOL TEACHERS IN EASTERN THAILAND  
T. Julvanichpong, K. Piboon, T. Yinggratanasuk, W. Julvanichpong, C. Singhnoy, P. Inchai

SUCCESSFUL TEACHER PREPARATION PROGRAM CHARACTERISTICS  
R. Spangler

PLAYING CATCH UP: ALIGNING CREDIT RECOGNITION AND TRANSFER WITH MICRO-CREDENTIALS  
R. McGreal, K. Perris

DIGITAL TRANSFORMATION IN LANGUAGE EDUCATION DURING THE COVID-19  
H. Obari, S. Lambacher, H. Kikuchi, H. Kojima

PRE-SERVICE MATH & SCIENCE TEACHERS’ VIEWS ON UTILIZING MOBILE TECHNOLOGY IN EARTH SCIENCE COURSE: A PHENOMENOGRAPHIC STUDY  
F. Ornek

JOURNEY THROUGH LIMINALITY: FROM TEACHER, TO STUDENT, TO TEACHER  
I. Ntonia, M. Pazio

SIX SIGMA RE-CERTIFICATION  
D. Gonzalez

‘HOW SHOULD SOCIAL WORK EDUCATION IN ENGLAND RESPOND TO THE 2020 BLACK LIVES MATTER CAMPAIGNS?’ KEY THEMES FROM THE LITERATURE  
A. Higgs

IMPROVING ONLINE LANGUAGE LEARNING INTERACTIVITY WITH MULTIUSER VIRTUAL REALITY ENVIRONMENTS: PREPARING FOR THE METAVERSE  
P. Mourtzis, S. Mystakidis

TECHNOLOGY AND THE INSTRUCTOR: WHERE TO NOW?  
L. Whisenant

INFORMATION SECURITY AND DIGITAL RIGHTS MANAGEMENT: A BRIEF LITERATURE REVIEW  
L. Whisenant

TELECENTRES AS PROMOTERS OF DIGITAL CITIZENSHIP AMONGST POOR POPULATIONS IN BELO HORIZONTE, BRAZIL  
S. Rodrigues Haddad, A. Oliveira, A.F. Beaufils

PREPARING TEACHERS TO SUPPORT EMERGENT BILINGUALS IN THE US & GLOBALLY: AN INSTITUTIONAL OVERVIEW  
D. Romero, M. Milian

TRANSITIONING EARLY FIELD EXPERIENCES FOR PRESERVICE TEACHERS INTO ONLINE OPPORTUNITIES IN TIMES OF CRISIS  
D. Romero, A. Romero de la Torre
CONCERNS OF PRE-ADOLESCENT CHILDREN IN PRIMARY SCHOOLS IN CHINA: FOCUSING ON CONSULTING PARTNERS AND FACTORS INHIBITING CONSULTATION
M. He, F. Inuzuka, I. Chung

ENCOURAGING COURSE DESIGNER ENGAGEMENT WITH DATA ANALYSIS METHODS IN VIRTUAL LEARNING ENVIRONMENTS
S. Smith, D. Cobham, K. Jacques

COMPLEMENTARITY BETWEEN MANAGERS’ VOCATIONAL TRAINING, MANAGEMENT CONSULTING AND COMPANY’S INNOVATION ACTIVITY
M. Baltov, E. Nikolova, M. Neycheva

MENTORING PROGRAM FOR THE INTEGRATION OF INTERNATIONAL STUDENTS INTO HIGHER EDUCATION
P. Alves, C. Morais, L. Miranda

GREEN TRANSITION – CHANGING THINKING PATTERNS AND ACTIONS IN PRACTICE
M. Ekström, K. Hytönen

INTERNATIONALIZED ENGLISH MEDIUM INSTRUCTION PROGRAMMES IN HIGHER EDUCATION INSTITUTES
N. Wang

BUILDING STUDENT-CENTERED SOFTWARE BY ACTUALLY TALKING TO STUDENTS
C. McFadden

RESULTS OF THE INCORPORATION OF THE STRUCTURAL CODE IN THE TEACHING OF STRUCTURAL SUBJECTS FOR THE DEGREES IN MECHANICAL ENGINEERING, AGRICULTURAL ENGINEERING AND MASTER'S DEGREE IN INDUSTRIAL ENGINEERING
J. Ferreiro-Cabello, E. Fraile-Garcia, J. Los-Santos Ortega, C. Gonzalez-Gonzalez

DIGITAL RESOURCES TO ENHANCE EMPLOYABILITY FOR STUDENTS OF INDUSTRIAL CONSTRUCTION IN THE INDUSTRIAL ENGINEERING MASTER’S DEGREE
J. Ferreiro-Cabello, E. Fraile-Garcia, J. Los-Santos Ortega, C. Gonzalez-Gonzalez

DEVELOPING PROFESSIONAL IDENTITY IN FIRST YEAR OF UNIVERSITY
S. Dempsey

PERFORMANCE MEASUREMENT SYSTEM DECOUPLING
R. Vancelee, R. Kelly

TUTORSHIPS TO PROMOTE UNIVERSITY EDUCATIONAL INCLUSION
B.A. Naranjo Sánchez, F. Potes Duque

THE DEVELOPMENT-FORMATIVE FUNCTION OF EDUCATIONAL EVALUATION
I. Szőköl, O. Kováč

INTERIOR DESIGN EDUCATION IN SEARCH OF MEANING
D. Hasirci

A BILINGUAL PROGRAM AT PRE-UNIVERSITY LEVEL (17-19 YEAR OLD): THE CASE OF COLLEGIAL INTERNATIONAL SAINTE-ANNE
H. Rompre

DESIGNING FOR CREATIVE RESEARCH IN GRADUATE EDUCATION
T. Hurwich, D. Nicholas, F. Fleming, P. Gondek, J. Katz-Buonincontro, D. King, E. Perignat

ETHICS IN EDUCATION AND THE USE OF TECHNOLOGY
M. Ben-Jacob, A. Glazerman, D. Wang

THE PROFESSIONAL LEARNING COMMUNITIES IMPERATIVE: HOW SCHOOLS NAVIGATE THE DYNAMICS OF SYSTEMIC AND SCHOOL-BASED DEMANDS IN PLC IMPLEMENTATION
S. Rule, T. Wang

CELL BIOLOGY EDUCATION WITH ADVANCED 3D TECHNOLOGIES FOR K-12 STUDENTS
S. Tanabashi

THE EVOLUTION OF HIGHER EDUCATION - INSTITUTION-TO-INSTITUTION MUTUAL-EXCHANGE
E. Arnold

A SUDDEN SHIFT FROM FACE-TO-FACE TO DIGITAL: WHAT CHALLENGES DID TUTORS FACE WHILE TUTORING DURING COVID-19?
L.M. Langesee, L. Franke, J. Heller
REMOTE TEACHING IN THE EARLY YEARS: AN ETHNOGRAPHIC STUDY OF TEACHERS OF PRESCHOOL CHILDREN DURING THE PANDEMIC
E. Tolentino

IMPACT OF THE COVID-19 CRISIS ON EDUCATION IN NIGERIA: LESSONS LEARNED
L. Audu, A. Lawani

COMPLETION RATE IN INFORMATICS STUDIES – CZECH REPUBLIC EXPERIENCE
L. Nedomova, P. Doucek, M. Maryska

GENDER ASPECT IN INFORMATICS STUDIES
L. Nedomova, P. Doucek, M. Maryska

GUIDELINES FOR TEACHING FOR INFORMATICS TEACHER NOVICES
M. Mladenović, M. Ozretić

A MULTIMODAL TWIST: USING WEBSITES AND VIDEO IN A UNIVERSITY ACADEMIC WRITING COURSE
M. Andrew

IF YOU SHRINK IT, WILL THEY STILL SUCCEED? COMPARING THE EFFECTIVENESS OF PEDAGOGICAL MODELS FOR ACCELERATED LEARNING IN AN ONLINE MASTER’S DEGREE PROGRAM
L. Mandel

INTEREST IN CYBERSECURITY EDUCATION AMONG APPLIED SCIENCES STUDENT POPULATION
N. Kasunic, S. Bracun

NATURE-BASED LEARNING: DESIGNING OUTDOOR PLAY ENVIRONMENTS
B. Isci, D. Hasirci

IS COMPANY’S COMMITMENT TO LEARNING A FACTOR FOR MARKETING INNOVATIONS?
E. Nikolova, M. Neycheva, V. Ruseva

UPSKILLING THE COMPETENCIES OF TEACHERS IN THE PRIVATE SECTOR THROUGH STEAM AND DDMT MODEL
K F T. Lam, T.H. Wang, N. Ku, J H. Chen

EXPLORING THE EMOTIONAL RESPONSES INDUCED BY A REAL PERSON CHAT AND AN AI CHATBOT ASSISTANT

GAMIFICATION IN PRIMARY ENGLISH TEACHING AS A SPRINGBOARD TO CONTROL PUPILS’ BEHAVIOR AND MOTIVATION
P. Tereso, M. Cruz

LEARNING ABOUT MANAGEMENT FROM PRACTITIONERS - DISCOURSES, DILEMMAS AND CONTRADICTIONS STEMMING FROM ANALYSIS OF SEMI-STRUCTURED INTERVIEWS CONDUCTED BY STUDENTS
K. Pavlica, I. Matoušková

THE DESIGN AND DEVELOPMENT OF AN INSTITUTIONAL DIGITAL TOOLKIT TO ENHANCE RESEARCH TEACHING INTEGRATION
S. Floyd, R. Bond, I. McChesney, M. Ballentine

TRANSITION FROM FACE-TO-FACE TO HYBRID HACKATHONS DURING COVID-19 PANDEMIC
R. Khan, N. Sethi

THE INCLUSION OF ELF TRANSCULTURAL COMMUNICATION AND COMMUNICATION STRATEGIES IN ENGLISH LANGUAGE TEACHER EDUCATION
M. Antonello

PROBLEM-BASED TEACHING APPLIED TO PRACTICAL LABORATORY CLASSES: INFLUENCE OF THE STUDENT’S ACADEMIC PROFILE
O. Díaz, E. Segredo-Morales, E. González

TEACHING EXPERIENCE IMPLEMENTING PRACTICAL CASES ON WATER TREATMENT IN UNIVERSITY COURSES
O. Díaz, E. Segredo-Morales, E. González

CENTRALLY MANAGED VIRTUAL SYSTEM FOR SECURITY EDUCATION
M. Gazdík, P. Kaňuch, P. Helebrandt

EXPLORING THE USE OF A CHATBOT TO MEASURE THE EMOTIONAL INTELLIGENCE OF TEACHERS AND STUDENTS IN HIGHER EDUCATION
COMMUNICATION IN ENGLISH AS A LINGUA FRANCA: CHALLENGES FOR TEACHING ENGLISH AS A FOREIGN LANGUAGE
P. Vettorel, M. Antonello

COVID-19 CHALLENGES ON STUDENTS’ ONLINE LEARNING: SOUTH AFRICAN HIGHER EDUCATIONAL INSTITUTIONS PERSPECTIVES
R. Minty, R. Brink, A. Alao

FEEDBACK PRACTICES: HOW CAN COACHING ADDRESS THE NEED FOR DEEP COMMUNICATION TO SUPPORT STUDENT LEARNING AND WELL-BEING?
I. Langseth

PHENOMENA TRIGGERING HEURISTIC STRATEGIES IN SOLVING ATYPICAL WORD PROBLEMS
K. Mottlová, J. Slezáková

PERSONAL, PROFESSIONAL, AND COMMUNITY TRANSFORMATIONS THROUGH INTERNATIONAL TEACHER EXCHANGE PROGRAMS
M. Milian

OPEN EDUCATIONAL RESOURCES AND PRACTICES PROMOTING COLLABORATIVE CONSTRUCTION AND SHARING OF KNOWLEDGE AT LAUREA UNIVERSITY OF APPLIED SCIENCES
A. Helariutta, M. Fred

OUTROUTE: CREATING A NEW GENERATION OF CULTURAL AMBASSADORS THROUGH EDUCATION AND TRAINING
C. Castro Dias, D. Pina, P. Costa

SCHOOL AND SOCIAL INCLUSION OF GIPSY ETHNIC YOUTH: THE INTERVENTION OF SPECIALIZED TECHNICIANS IN THE INTEGRATED PROGRAM OF EDUCATION AND TRAINING
S. Almeida

DIGITAL PEDAGOGENS IN TEACHER EDUCATION POST COVID-19
Y. Weinberger, M. Shonfeld

FINANCIAL LITERACY IN INVESTING: INTERACTIVE METHODS FOR BACHELOR’S PROGRAMS
S. Bekareva, A. Getmanova, A. Ivanova

INVESTIGATING THE RELATIONSHIP BETWEEN SPATIAL SKILLS AND ENGINEERING DESIGN
G. Raju, S. Sorby, C. Reid

BARRIERS TO THE UTILIZATION OF EDUCATIONAL SOFTWARE
R. Garrote Jurado, T. Pettersson, M. Zwierewicz

POST-PANDEMIC ARCHITECTURAL DESIGN PEDAGOGY
J. Kroft, L. De Bartolo, S. Agma, A. Weiss, V. Hui, L.D. Díaz

INVESTIGATING THE BENEFITS OF TRANSITIONING FROM FIXED-POINT TO NAVIGABLE VR
L. De Bartolo, A. Weiss, A. Huang, V. Hui

PLANNING AND TEACHING DEMO LESSONS TO DEVELOP ONE OF THE COMPETENCIES OF THE EXIT PROFILE IN THE ENGLISH LANGUAGE TEACHING (ELT) TRAINING PROGRAM AT UNAE, ECUADOR
U. Recino, D. Villagomez, J.G. Fajardo

WHAT IS BEHIND ARCHITECTURAL EDUCATION? SOFT SKILLS COMPETENCES IN 6 EUROPEAN SCHOOLS OF ARCHITECTURE
C. Sentieri Omarrementería

USING UNIVERSAL DESIGN GAME AS AN EDUCATIONAL TOOL – CASE RUFFPROTO
J. Lahit

PROBLEMS BASED LEARNING TO ESTIMATE FUTURE WATER AVAILABILITY DUE TO CLIMATE CHANGE
G. Ibarra-Berastegi

FAREWELL TO THE PANDEMIC AND FACING THE WAR: CONTEMPORARY CHALLENGES FOR HIGHER EDUCATION IN ROMANIA
G.A. Necula

EDUCATION AS A GREEN SOLUTION FOR REDUCING THE ECOLOGICAL FOOTPRINT
H. Friman, I. Banner, Y. Sitbon, Y. Einav, N. Shaked
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAMIFICATION AND CONTINUOUS LEARNING – ON A QUEST FOR MORE ENGAGING</td>
<td>484</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
</tr>
<tr>
<td>P. Tapala</td>
<td></td>
</tr>
<tr>
<td>MOTIVATION STRATEGIES TO KEEP TRAINEES ENGAGED</td>
<td>491</td>
</tr>
<tr>
<td>E. Ciani, A. Laus</td>
<td></td>
</tr>
<tr>
<td>THE E-CLASSROOM EXPERIENCE OF INTERDISCIPLINARY CONTENT: SPANISH</td>
<td>500</td>
</tr>
<tr>
<td>LANGUAGE SUPPORT</td>
<td></td>
</tr>
<tr>
<td>M.C. Santana-Rogers</td>
<td></td>
</tr>
<tr>
<td>IN-SERVICE EDUCATION OF TEACHING ASSISTANTS FOR PUPILS WITH</td>
<td>505</td>
</tr>
<tr>
<td>INTELLECTUAL DISABILITIES SUPPORTED BY AUTO-ETHNOGRAPHIC RESEARCH</td>
<td></td>
</tr>
<tr>
<td>K. Becirovic, Z. Bagaric, D. Cerepinks</td>
<td></td>
</tr>
<tr>
<td>DIGITAL EDUCATIONAL CONTENT: INCLUSIVE PEDAGOGY AS A PUBLIC</td>
<td>512</td>
</tr>
<tr>
<td>INNOVATION SCHEME TO STRENGTHEN CITIZEN LEARNING PROCESSES</td>
<td></td>
</tr>
<tr>
<td>J. Garcia, L. Pacheco, L. Alarción, N. Parra, M. Silva, J. Bula</td>
<td></td>
</tr>
<tr>
<td>THE IMPACT OF FAMU SMART ACADEMIENS 21ST CENTURY COMMUNITY LEARNING</td>
<td>520</td>
</tr>
<tr>
<td>CENTER ON STUDENT PERFORMANCE: AN INNOVATIVE EDUCATION MODEL FOR</td>
<td></td>
</tr>
<tr>
<td>ADDRESSING ACADEMIC DISPARITY</td>
<td></td>
</tr>
<tr>
<td>R. Ellis, Jr., T. McGriff, V. Wilson</td>
<td></td>
</tr>
<tr>
<td>THE INCLUSIVE CURRICULUM WORKGROUP: AFFIRMING ANTI-RACISM AND</td>
<td>521</td>
</tr>
<tr>
<td>DIVERSITY IN THE WRITING PROGRAM</td>
<td></td>
</tr>
<tr>
<td>C. Wastal</td>
<td></td>
</tr>
<tr>
<td>IMPLEMENTATION OF INNOVATIVE METHODS IN THE TEACHING OF LITERARY</td>
<td>522</td>
</tr>
<tr>
<td>EDUCATION FROM THE PERSPECTIVE OF TEACHERS AND UNIVERSITY STUDENTS</td>
<td></td>
</tr>
<tr>
<td>M. Mašát, K. Smakalová, A. Stepánková, L. Nosková, E. Marková, J.</td>
<td></td>
</tr>
<tr>
<td>Hříšnová, J. Sladová</td>
<td></td>
</tr>
<tr>
<td>DESIGN THINKING SPRINTS IN HIGHER EDUCATION - THREE CASES AND</td>
<td>527</td>
</tr>
<tr>
<td>APPROACHES</td>
<td></td>
</tr>
<tr>
<td>L. Wallenius</td>
<td></td>
</tr>
<tr>
<td>DO WE STILL NEED FULLY EQUIPPED LAB COMPUTERS AFTER THE PANDEMIC?</td>
<td>537</td>
</tr>
<tr>
<td>C. Pang, C. Anton</td>
<td></td>
</tr>
<tr>
<td>WOMEN AND STEM CAREERS: A CURRENT DIAGNOSIS OF THE SITUATION IN</td>
<td>547</td>
</tr>
<tr>
<td>ECUADOR BASED ON LABOR MARKET INDICATORS</td>
<td></td>
</tr>
<tr>
<td>A. Guerrero, M.A. Ruano, C. Avilés, J. Mazzini</td>
<td></td>
</tr>
<tr>
<td>ONLINE MUSEUMS: A PEDAGOGIC TOOL TO FACILITATE OBJECT-ANALYSIS AND</td>
<td>553</td>
</tr>
<tr>
<td>AN ENRICHED DECOLONISED LEARNING EXPERIENCE FOR FASHION DESIGN</td>
<td></td>
</tr>
<tr>
<td>STUDENTS IN HIGHER EDUCATION DURING THE COVID-19 PANDEMIC</td>
<td></td>
</tr>
<tr>
<td>C. O'Shea</td>
<td></td>
</tr>
<tr>
<td>THE CHANGING CONDITIONS OF THE UNIVERSITIES—FROM THE FACE-TO-FACE</td>
<td>561</td>
</tr>
<tr>
<td>EDUCATIONAL EXPERIENCE TO VIRTUAL LEARNING ECOSYSTEMS—HOW THIS</td>
<td></td>
</tr>
<tr>
<td>AFFECTS THE DEVELOPMENT OF DEEP LEARNING AND CRITICAL REFLEXIVE</td>
<td></td>
</tr>
<tr>
<td>THINKING</td>
<td></td>
</tr>
<tr>
<td>G. Sart</td>
<td></td>
</tr>
<tr>
<td>THE ADOLESCENT FOREIGN LANGUAGE CLASSROOM ANXIETY SCALE (AFLCAS) –</td>
<td>562</td>
</tr>
<tr>
<td>PRELIMINARY RESULTS OF ITS APPLICATION AMONGST FRENCH-SPEAKING</td>
<td></td>
</tr>
<tr>
<td>STUDENTS OF EFL IN SWISS SECONDARY SCHOOLS AND IMPLICATIONS FOR PRE-</td>
<td></td>
</tr>
<tr>
<td>SERVICE TEACHER TRAINING</td>
<td></td>
</tr>
<tr>
<td>D. Bosmans, E. Jenny</td>
<td></td>
</tr>
<tr>
<td>HOW TO IMPROVE IT-BASED ENTREPRENEURSHIP EDUCATION COURSES AT THE</td>
<td>571</td>
</tr>
<tr>
<td>UNIVERSITIES AND PREPARE THE STUDENTS FOR THE COMING ECONOMIC</td>
<td></td>
</tr>
<tr>
<td>CRISES?</td>
<td></td>
</tr>
<tr>
<td>G. Sart</td>
<td></td>
</tr>
<tr>
<td>AN APPROACH TO FORMATION OF COMPETENCIES OF TEACHERS IN COMPUTER</td>
<td>572</td>
</tr>
<tr>
<td>SCIENCE AND PHYSICS FOR IMPLEMENTATION OF ONLINE TRAINING</td>
<td></td>
</tr>
<tr>
<td>E. Goranova</td>
<td></td>
</tr>
<tr>
<td>HIGHER EDUCATION TEACHING TRANSFORMATION WITH EDUCATIONAL NEUROSCIENCE PRACTICES</td>
<td>579</td>
</tr>
<tr>
<td>M. Fragkaki, S. Mystakidis, K. Dimitropoulos</td>
<td></td>
</tr>
<tr>
<td>EXPERIENCES IN CREATING ONLINE LANGUAGE OFFERINGS IN INTERNATIONAL</td>
<td>585</td>
</tr>
<tr>
<td>COOPERATION</td>
<td></td>
</tr>
<tr>
<td>M. Ohinen-Salvén, T. Hämäläinen</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>CHANGING THE CURRICULUM TO ENHANCE STUDENT LEARNING</td>
<td>590</td>
</tr>
<tr>
<td>J. Greeff, E. Taylor</td>
<td></td>
</tr>
<tr>
<td>LEADING A DEPARTMENT AT A HIGHER EDUCATION INSTITUTION DURING COVID:</td>
<td>601</td>
</tr>
<tr>
<td>THE IMPORTANCE OF GROUP REFLECTION</td>
<td></td>
</tr>
<tr>
<td>E. Taylor, J. Greeff</td>
<td></td>
</tr>
<tr>
<td>TOWARDS A GENUINE STUDENT CENTERED APPROACH TO LEARNING</td>
<td>602</td>
</tr>
<tr>
<td>R. Andersen, C. Simonsen</td>
<td></td>
</tr>
<tr>
<td>NETWORK TESTING ENVIRONMENT BASED ON VIRTUALIZATION TECHNOLOGY -</td>
<td>610</td>
</tr>
<tr>
<td>LAB SOLUTION</td>
<td></td>
</tr>
<tr>
<td>V. Šac, L. Havaš, D. Srpak, D. Godec</td>
<td></td>
</tr>
<tr>
<td>HERE WE GO AGAIN: DIDACTIC SUITABILITY ANALYSIS OF A STATISTICAL-GRAPH</td>
<td>619</td>
</tr>
<tr>
<td>TASK</td>
<td></td>
</tr>
<tr>
<td>H. Bogas, E. Morais, M.M. Nascimento</td>
<td></td>
</tr>
<tr>
<td>ALTERNATIVE ASSESSMENT IN THE EYES OF UNIVERSITY TEACHERS: EXPLORING</td>
<td>628</td>
</tr>
<tr>
<td>THE RELATIONSHIPS BETWEEN TEACHERS' ATTITUDES, TEACHING ENVIRONMENT</td>
<td></td>
</tr>
<tr>
<td>AND BEHAVIOUR</td>
<td></td>
</tr>
<tr>
<td>S.C. Kong, C.N. Yuen</td>
<td></td>
</tr>
<tr>
<td>RESEARCH AND ANALYSIS OF WORKING INDICATORS OF ONLINE LEARNING AS A</td>
<td>636</td>
</tr>
<tr>
<td>DIFFERENT EDUCATIONAL ENVIRONMENT</td>
<td></td>
</tr>
<tr>
<td>V. Doneva, S. Tsankov</td>
<td></td>
</tr>
<tr>
<td>VIRTUALIZATION AS A TOOL TO ENCOURAGE ACTIVE LEARNING IN PRACTICAL</td>
<td>644</td>
</tr>
<tr>
<td>LABORATORY CLASSES</td>
<td></td>
</tr>
<tr>
<td>G. Turnes, M. Bausà, N. Crespi, C. Palomino</td>
<td></td>
</tr>
<tr>
<td>WHAT IS THE PURPOSE OF HIGHER EDUCATION IN ELECTRICAL ENGINEERING?</td>
<td>649</td>
</tr>
<tr>
<td>HARD SKILLS OR SOFT SKILLS?</td>
<td></td>
</tr>
<tr>
<td>H. Friman, H. Ragones, M. Balberg</td>
<td></td>
</tr>
<tr>
<td>EXPLORING THE PEDAGOGIC PRACTICES OF TEACHING STAFF IN THE IRISH</td>
<td>653</td>
</tr>
<tr>
<td>TECHNOLOGICAL HIGHER EDUCATION SECTOR USING TEACHING AND LEARNING</td>
<td></td>
</tr>
<tr>
<td>REGIME THEORY</td>
<td></td>
</tr>
<tr>
<td>N. Harding</td>
<td></td>
</tr>
<tr>
<td>LANGUAGE, CULTURE AND FEEDBACK – AN EXPLORATION OF EUROPEAN</td>
<td>665</td>
</tr>
<tr>
<td>STUDENTS' EXPERIENCES AND UNDERSTANDING OF FEEDBACK</td>
<td></td>
</tr>
<tr>
<td>M. Pazio</td>
<td></td>
</tr>
<tr>
<td>NOVICE TEACHERS – RETROSPECTIVE REFLECTIONS AT FIRST YEARS OF</td>
<td>666</td>
</tr>
<tr>
<td>TEACHING</td>
<td></td>
</tr>
<tr>
<td>A. Moshe, P. Shavit</td>
<td></td>
</tr>
<tr>
<td>A MULTIDIMENSIONAL ASSESSMENT OF SELF-DETERMINATION IN STUDENTS WITH</td>
<td>667</td>
</tr>
<tr>
<td>INTELLECTUAL DISABILITIES</td>
<td></td>
</tr>
<tr>
<td>P. Shavit</td>
<td></td>
</tr>
<tr>
<td>CREATION OF LEARNING SCENARIOS IN IMMERSIVE WORLDS WITH MINECRAFT</td>
<td>668</td>
</tr>
<tr>
<td>EDUCATION EDITION</td>
<td></td>
</tr>
<tr>
<td>S.A. Casanova Valencia, M.A. Valenzo-Jiménez</td>
<td></td>
</tr>
<tr>
<td>MULTIDISCIPLINARY COLLABORATIVE APPROACH TO SYSTEMS CHANGE FOR</td>
<td>673</td>
</tr>
<tr>
<td>SCHOOL MENTAL HEALTH</td>
<td></td>
</tr>
<tr>
<td>J. Freeny, A. Fulgiam Thurston, S. Haddad</td>
<td></td>
</tr>
<tr>
<td>DEVELOPMENT OF EMPLOYABILITY IN HIGHER EDUCATION: ADAPTATION THE</td>
<td>674</td>
</tr>
<tr>
<td>EAS METHOD AND ITS IMPLEMENTATION</td>
<td></td>
</tr>
<tr>
<td>P. González-Navarro, L.I. Linares-Insa, A.I. Córdoba-Iñesta, N.</td>
<td></td>
</tr>
<tr>
<td>García-Serra, R. Zurriaga-Llorens, A.M. Casino-Garcia</td>
<td></td>
</tr>
<tr>
<td>SOCIAL AND LABOUR INCLUSION. THE INSERTION ENTERPRISE AS DRIVERS OF</td>
<td>680</td>
</tr>
<tr>
<td>DEVELOPMENT OF EMPLOYABILITY</td>
<td></td>
</tr>
<tr>
<td>L.I. Linares-Insa, P. González-Navarro, S. Colomer-Cornejo</td>
<td></td>
</tr>
<tr>
<td>TRANSFORM-EDU: INCREASING GRADUATE EMPLOYABILITY THROUGH</td>
<td>685</td>
</tr>
<tr>
<td>EMOTIONAL AND SOCIAL SKILLS DEVELOPMENT</td>
<td></td>
</tr>
<tr>
<td>A. Carthy, M. O'Regan, W. Chalmers, O. Philip</td>
<td></td>
</tr>
<tr>
<td>EDUCRO SUMMER CAMP FOR CULTURE AND TOURISM STUDENTS: BEST PRACTICES</td>
<td>686</td>
</tr>
<tr>
<td>AND LESSONS LEARNT</td>
<td></td>
</tr>
<tr>
<td>O. Bogdanova</td>
<td></td>
</tr>
</tbody>
</table>
A PROPOSAL FOR EVALUATING EMERGENCY REMOTE EDUCATION BY CREATING A DIGITAL PORTFOLIO  

CROSS-LINGUISTIC INTERFERENCE IN MULTILINGUAL ACQUISITION: CHALLENGES, EXPERIENCE AND STRATEGIES FOR LEARNERS  
O. Maximova, T. Soloveva  

GROUP INFOGRAPHICS, PREPARATION, PRESENTATION AND DEBATE. COLLABORATIVE WORK IN THE UNIVERSITY CLASSROOM  

FOCUS GROUP AS A QUALITATIVE EVALUATION TOOL OF A UNIVERSITY TEACHING PROJECT BASED ON INFOGRAPHICS, IN THE HERITAGE CONSERVATION AND RESTORATION AREA  
M.A. Carabal-Montagud, M. De Miguel-Molina, V. Santamarina-Campos, M.B. De Miguel-Molina  

NEW CHALLENGES FOR HIGHER EDUCATION: THE CASE OF DATING VIOLENCE  
P. Nelas, C. Chaves, M. Ferreira, E. Coutinho, S. Campos  

ENTREPRENEURIAL SELF-LEADERSHIP AND MINDFULNESS: CURRICULA OUTLINE AND EDUCATOR GUIDELINES  
O. Bogdanova  

EXAMINING THE AFFORDANCES OF VIDEO ANNOTATION SOFTWARE (VAS) TO ENHANCE ASSESSMENT PROCESSES  
D. Shore, A. Ahmad, A. Amry, B. Cleaver, G. Bailey, N. Hu  

PLAYING AT LEARNING DESIGN  
K. Maridatara, J. Weines  

INVOLVING THE LEARNERS IN HYBRID UNIVERSITIES: USE OF STUDENT’S GENERATED VIDEOS  
A. Mendieta-Aragón, J. Navio-Marco  

APPLICATION OF DIGITAL BOARDS AS AN INNOVATION FOR TEACHING IN BIOCHEMISTRY AND MOLECULAR BIOLOGY  

INVESTIGATION OF TEACHERS’ ATTITUDES TOWARDS THE USE OF SPECIAL PROGRAMS, METHODS AND FORMS OF WORK WITH GIFTED STUDENTS IN THE REPUBLIC OF CROATIA  
P. Nikolaus, M. Dželalića, N. Marangunić  

EDUCATION OF SECURITY MANAGERS OF MEDICAL FACILITIES IN THE SLOVAK REPUBLIC  
T. Loveček, L. Hadáček  

USE OF VIRTUAL TOOLS IN THE DISSEMINATION OF DNA AND ITS APPLICATIONS  

PODCAST PRODUCTION AS A STUDENT-ACTIVE LEARNING ACTIVITY IN TEACHER EDUCATION  
O. Hembre, S. Soensthagen  

AN INTRODUCTION TO THE TOPIC OF NON-FUNGIBLE TOKENS FOR THE EDUCATIONAL SECTOR  
A. Pfeiffer, S. Bezzina, N. Denk, V. Vella, A. Dingli  

RETHINKING VISUAL ARTS EDUCATION WITH NEW TECHNOLOGIES AND RESOURCES DURING THE COVID PANDEMIC  
L. Stefan, M. Motaianu, C. Motaianu  

DELIVERING THE COMPUTING CURRICULUM ONLINE: CHALLENGES AND OPPORTUNITIES  
O. Pishchukhina  

GENDER DIFFERENCES IN SPATIAL THINKING ONLINE TRAINING  
N. Segura Caballero, G. Maresch  

FLIPPED-ICT METHODOLOGICAL EXPERIENCE FOR THEORETICAL AND PRACTICAL SUBJECTS OF DIFFERENT ENGINEERING DEGREES  
S. Mateo Quero, M. Cuevas Aranda, S. Peinado Serrano, H. Silva de Araújo, A.J. Moya López
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHING PHRASAL VERBS: A PROJECT IMPLEMENTING H5P</td>
<td>819</td>
</tr>
<tr>
<td>L. Prades-Yerves</td>
<td></td>
</tr>
<tr>
<td>LEARNING TO PLAY AND PLAYING TO LEARN: AN ACCOUNT OF</td>
<td>826</td>
</tr>
<tr>
<td>INTERCOMPREHENSIVE GAME-BASED LEARNING WITH MULTILINGUAL STUDENTS</td>
<td></td>
</tr>
<tr>
<td>K. Steil</td>
<td></td>
</tr>
<tr>
<td>INNOVATIVE ASSESSMENT AND FEEDBACK STRATEGIES IMPACTING KEY</td>
<td>835</td>
</tr>
<tr>
<td>STAKEHOLDERS IN RELATION TO THE INDUSTRY PLACEMENT MODULE IN THE</td>
<td></td>
</tr>
<tr>
<td>SCHOOL OF BUSINESS UNDERGRADUATE PROGRAMMES</td>
<td></td>
</tr>
<tr>
<td>C. Murphy, D. McSweeney, M. Collins, E. O’Brien</td>
<td></td>
</tr>
<tr>
<td>HOW DO LEARNERS PERCEIVE TEAM TEACHING? DEVELOPMENT AND</td>
<td>843</td>
</tr>
<tr>
<td>VALIDATION OF THE LEARNERS’ TEAM TEACHING PERCEPTIONS QUESTIONNAIRE</td>
<td></td>
</tr>
<tr>
<td>(LTTPQ)</td>
<td></td>
</tr>
<tr>
<td>M. Simons, D. De Weerd</td>
<td></td>
</tr>
<tr>
<td>MOBILE SENIOR: A NEW SENIOR PROFILE FOR MOBILE DEVICE USE</td>
<td>852</td>
</tr>
<tr>
<td>L. Rocha Machado, A. Helena Sonego, J. Mendes, A. Goulart Rodrigues,</td>
<td></td>
</tr>
<tr>
<td>P. Behar</td>
<td></td>
</tr>
<tr>
<td>FORMATION OF CONVERSATION SKILLS AMONG SECONDARY SCHOOL STUDENTS</td>
<td>861</td>
</tr>
<tr>
<td>IN FOREIGN LANGUAGE CLASSES</td>
<td></td>
</tr>
<tr>
<td>E. Nazmieva, G. Chumamina, N. Pershina</td>
<td></td>
</tr>
<tr>
<td>THE ROLE OF USER-GENERATED CONTENT IN BRAND COMMUNICATION AND THE</td>
<td>865</td>
</tr>
<tr>
<td>TACTICS TO ENCOURAGE IT</td>
<td></td>
</tr>
<tr>
<td>T. Limba, A. Sildauskas, E. Juozenaite</td>
<td></td>
</tr>
<tr>
<td>EXPERIENTIAL LEARNING WHEN TEACHING THE TOPIC “IMPLEMENTATION OF</td>
<td>872</td>
</tr>
<tr>
<td>HAMMING ENCODERS AND DECODERS USING COMPUTER-BASED TRAINING TOOLS”</td>
<td></td>
</tr>
<tr>
<td>A. Borodzhieva, I. Tsvetkova</td>
<td></td>
</tr>
<tr>
<td>IMPROVING THE RISK CULTURE BY EDUCATING MANAGERS IN THE ENTERPRISE</td>
<td>882</td>
</tr>
<tr>
<td>M. Hudáková, K. Kardaš</td>
<td></td>
</tr>
<tr>
<td>PROJECT-BASED LEARNING APPROACH USED FOR TEACHING AND LEARNING THE</td>
<td>892</td>
</tr>
<tr>
<td>TOPIC “DESIGN OF INFINITE IMPULSE RESPONSE FILTERS IN MATLAB” IN THE</td>
<td></td>
</tr>
<tr>
<td>COURSE “DIGITAL SIGNAL PROCESSING” DURING COVID-19 PANDEMIC</td>
<td></td>
</tr>
<tr>
<td>A. Borodzhieva, I. Tsvetkova</td>
<td></td>
</tr>
<tr>
<td>INNOVATION OF THE SECURITY MANAGEMENT PROGRAM OF THE FACULTY OF</td>
<td>901</td>
</tr>
<tr>
<td>SECURITY ENGINEERING</td>
<td></td>
</tr>
<tr>
<td>K. Kampová</td>
<td></td>
</tr>
<tr>
<td>THE STUDY ON THE PROCESS OF INDIGENOUS KNOWLEDGE BASED TEACHING</td>
<td>905</td>
</tr>
<tr>
<td>MATERIAL DEVELOPMENT IN TAIWAN</td>
<td></td>
</tr>
<tr>
<td>J.Y. Yang</td>
<td></td>
</tr>
<tr>
<td>INTEGRATING RESEARCH INTO STEM EDUCATION: APPLICATION TO WIND</td>
<td>910</td>
</tr>
<tr>
<td>ENGINEERING</td>
<td></td>
</tr>
<tr>
<td>J. Estephan, A. Gan Chowdhury, E. Salha, J. Erwin, H. Landorf, R.</td>
<td></td>
</tr>
<tr>
<td>Dou</td>
<td></td>
</tr>
<tr>
<td>ESCAPE PASSIVE LECTURES: AN INTERACTIVE, MULTI-THEMED DIGITAL ESCAPE</td>
<td>915</td>
</tr>
<tr>
<td>ROOM ON MEDICINAL CHEMISTRY TOPICS</td>
<td></td>
</tr>
<tr>
<td>A.S. Abdul Rahim, K.M. Chuah</td>
<td></td>
</tr>
<tr>
<td>SPECIAL EXPONENTIAL DIOPHANTINE EQUATIONS</td>
<td>920</td>
</tr>
<tr>
<td>T. Riemel</td>
<td></td>
</tr>
<tr>
<td>BUILDING A SENSE OF LEARNING COMMUNITY DURING THE ENGLISH CLASSES AT</td>
<td>926</td>
</tr>
<tr>
<td>THE “NICOLAE BALCESCU” LAND FORCES ACADEMY OF SIBIU</td>
<td></td>
</tr>
<tr>
<td>G. Mihaila Lica</td>
<td></td>
</tr>
<tr>
<td>TECHNICAL TRANSLATION IN TRANSLATOR TRAINING</td>
<td>930</td>
</tr>
<tr>
<td>G. Kovács</td>
<td></td>
</tr>
<tr>
<td>STUDYING BRITISH CULTURE – VISIT TO A LIBRARY</td>
<td>938</td>
</tr>
<tr>
<td>G. Kovács, I. Gönczi</td>
<td></td>
</tr>
<tr>
<td>CAN THE TRANSTHEORETICAL MODEL OF CHANGE BE USED TO MODIFY ORGAN</td>
<td>946</td>
</tr>
<tr>
<td>DONATION BEHAVIOR IN NURSING STUDENTS?</td>
<td></td>
</tr>
<tr>
<td>S. Coronil-Espinosa, P. Bas-Sarmiento, M. Fernandez-Gutierrez, M.</td>
<td></td>
</tr>
<tr>
<td>Poza-Méndez</td>
<td></td>
</tr>
<tr>
<td>THE IMPERATIVE OF STUDENTS AND TEACHERS’ WELL-BEING IN FINNISH</td>
<td>953</td>
</tr>
<tr>
<td>UNIVERSITY: A BIBLIOMETRIC APPROACH</td>
<td></td>
</tr>
<tr>
<td>S. Olaleye, E. Olaleye</td>
<td></td>
</tr>
</tbody>
</table>
AUTOMATED GENERATION OF MANDARIN EDUCATIONAL MULTIMEDIA CONTENT FROM EXISTING ENGLISH CONTENT
M.J. Israel, A. Qin, Y. Zhang, J. Xin, N. Shaghaghi

DISTANCE EDUCATION METHODS IN A PANDEMIC SITUATION FOR STUDYING THE TOPIC “INVESTIGATING COVERAGE AND INTERFERENCE IN MOBILE CELLULAR NETWORKS”
I. Tsvetkova, A. Borodzhieva

INTERACTIVE METHODS DURING ONLINE LEARNING WHEN TEACHING THE TOPIC “SPECTRAL ANALYSIS OF SIGNAL HARMONICS”
I. Tsvetkova, A. Borodzhieva

DEVELOPMENT OF RISKY BEHAVIOR OF PUPILS AND ITS PREVENTION AT CZECH PRIMARY SCHOOLS DURING THE COVID-19 PANDEMIC AND DISTANCE LEARNING
M. Krajňáková, T. Čech

TAPPING INTO POWER OF VISUALS TO ENHANCE EFL STUDENTS’ COMMUNICATIVE SKILLS
R. Yakhina, D. Dudkova

TEACHING OF PERIODIC NON-SINUSOIDAL MODES OF ELECTRICAL CIRCUITS VIA SOFTWARE ENVIRONMENTS
V. Raydovska

IMPLEMENTING A FLIPPED CLASSROOM IN THE REMOTE ONLINE LEARNING ENVIRONMENT
K. Adzima

THE FORMATION OF PROFESSIONAL COMMUNICATION COMPETENCE IN RUSSIAN OF FOREIGN POSTGRADUATES NON-PHILOLOGISTS
L. Iarkina, V. Abyshkina, Y. Merkulova, D. Maryanovich

THE TEACHING OF ARCHITECTURE IN TIMES OF PANDEMIC: NEW TECHNOLOGIES IN COLLABORATION IN THE INTERACTION BETWEEN STUDENTS AND TEACHERS
N. Soares de Araujo, A. Piffer

A BIBLIOMETRIC APPROACH TO GLOBAL TEACHER’S TRAINING AND SUPPORT
S. Olaleye

AN APPROACH TO TEACHING PROJECTILE VELOCITY MEASUREMENT IN BALLISTICS
J. Skala, M. Macko, I. Pencak, K. Abraham, Z. Krist, M. Cervenka

BURNOUT SYNDROME AND STRESS MANAGEMENT OF TEACHERS
I. Plevová, L. Váchová, M. Pugnerová, V. Kavková, S. Dobešová Cakirpaloglu, J. Kvintová, B. Kvapilová

THE EXPERIENCE OF MOBBING AND THE NEGATIVE IMPACT ON THE PERCEIVED PERSONAL DISCOMFORT IN PRIMARY SCHOOL TEACHERS
M. Pugnerová, I. Plevová, L. Váchová, S. Dobešová Cakirpaloglu, J. Kvintová, J. Dočkalová

WORKING TOWARDS EQUITY OF ACCESS AND SUCCESS IN STEM AT STELLENBOSCH UNIVERSITY IN SOUTH AFRICA
M. Mouton

TOOLS TO IMPROVE EFFICIENCY AND CONSISTENCY IN ASSESSMENT PRACTICES WHILST DELIVERING MEANINGFUL FEEDBACK
N. Palmer

A FRAMEWORK FOR CENTERING INTRODUCTORY STATISTICS AROUND THE LOGIC OF INFERENCE
R. Pierce, M. Brenneman, A. Dehili

FRACTURES AT L1 AND T12 VERTEBRAE: A FOLLOW-UP COMPUTED TOMOGRAPHY SCAN AFTER TWO YEARS SHOWING BONE SPURS
D. Moeller, K. Budisalich, C. Gunter, M. Myler, T. Kelsey, G. Maddux, B. Schroer

TRAINING OF A DIVERSE SCIENCE WORKFORCE IN A UNIVERSITY-INDUSTRY-GOVERNMENT RESEARCH PARTNERSHIP: CENTER FOR CELLULAR CONSTRUCTION

TECHNOLOGIES IN LITERARY EDUCATION
J. Hrinak

OBSERVATION IN ENGLISH LANGUAGE PEDAGOGY RESEARCH
J. Hrinak
DEVELOPING AND EMPOWERING AUTONOMOUS LEARNERS DURING AND POST-PANDEMIC
P. Koayess, J. Althawahrih, M. Massara

THE NATIONAL DIGITAL ACCESS IMPERATIVE FOR 4IR: ASSESSING DIGITAL SKILLS COMPETENCE IN RURAL SOUTH AFRICA
B. Ngoqo

MANIFESTATIONS OF SOCIAL EXCLUSION OF STUDENTS: SCIENTIFIC AND PRACTICAL ASPECTS AND EVALUATION OF THE EFFECTIVENESS OF THE TEACHING STAFF
N. Havrylova, L. Platash, O. Havrylov, O. Konstantyniv

WHERE DO WE GO FROM HERE? DIDACTIC AND ORGANIZATIONAL QUESTIONS AFTER THE PANDEMIC

ONLINE EVENTS AS A TOOL TO DEVELOP STUDENTS’ PROJECT MANAGEMENT SKILLS
L. Bellotti, A. Kimberley

OUTREACH ACTIVITIES ON INSTAGRAM IMPROVE EDUCATIONAL AND PHYSIOLOGY COMPETENCIES: RELATIONSHIP WITH THE COURSE OF THE ENROLLED DEGREE

DESIGNING TEACHING MATERIAL FOR WORKPLACE PEDAGOGY IN SCHOOL
S. Carlsson, S. Willermark

USING INSTAGRAM TO INCREASE UNIVERSITY EDUCATIONAL SKILLS. THE PROFESSORS’ POINT OF VIEW

A REFLECTIVE PRACTICE PERSPECTIVE ON DEVELOPING PROFESSIONAL DIGITAL COMPETENCE AMONG TEACHERS
H. Haugsbakken, S. Brynildsen

SAGE SOFTWARE FOR MOODLE VIA SAGE CELL: HOW TO ENHANCE THE LEARNING ENVIRONMENT WITH MATHEMATICAL SOFTWARE
J. Jánšky, J. Jekl, V. Ružička

RESEARCHING PSYCHOLOGICAL SAFETY AMONG WELFARE AND INNOVATION STUDENTS
G. Andersson, B.B. Sæthern, A.M. Glømmen, T.A. Langvik, P.A. Sandhaug, O. Hallgren, K.K. Westbye

ROLE-PLAY GAME APPLIED TO MATHS TEACHING: REPRESENTATIONS OF PUPILS ABOUT A DIGITAL ROLE-PLAY GAMING PLATFORM
M. Cruz, P. Medeiros, E. Nunes

RELATIONSHIP OF DIFFERENT ASSESSMENT TYPES IN AN ONLINE INTERDISCIPLINARY COURSE
A. Millet, E. Dinc, H. Mcciane Bruhn, M. Feineman

ENTREPRENEURSHIP AND INNOVATION IN EDUCATION: LEADING CHANGE
S. Davis, P. Holanchock

SUPPORT MEASURES AGAINST COVID-19 FOR SCHOOL INSTITUTIONS: A LINED PROPOSAL WITH TECHNOLOGIES BASED ON ARTIFICIAL INTELLIGENCE
R. Coutinho, P. Notargiacomo

ASSESSMENTS IN E-LEARNING ENVIRONMENTS
O. García, F. Leon, M. Pineda, A. Aguilar

FORMATION OF SOFT SKILLS AMONG MANAGEMENT STUDENTS DURING COVID-19
S. Schelokova, I. Suslova

APPLICATION OF REVERSE ENGINEERING TECHNIQUES FOR LEARNING MANUFACTURING PROCESSES
E. García-Martínez, V. Miguel, A. Molina-Yagüe, A. Martínez-Martínez

ONOMASTICS KNOWLEDGE OF HUNGARIAN MINORITY SECONDARY GRAMMAR AND TRADE SCHOOL STUDENTS OF SLOVAKIA
L. Angyal
THE POSSIBILITIES OF HUNGARIAN TOPONYMIC RESEARCH IN EDUCATION IN SLOVAKIA
L. Angyal

A SOCIOMATERIAL CONNECTIVIST PERSPECTIVE: A NEED FOR DEVELOPING ALGORITHMIC COMPETENCE
H. Haugsbakken

MEDICAL ENGLISH FOR ACADEMIC PURPOSES: THE IMPACT OF A NEW GUIDE FOR POSTGRADUATES ON DEVELOPING SPECIFIC COMMUNICATION SKILLS
A. Barnau, N. Ferková

THE MOST COMMON MISTAKES IN TRANSLATION FROM LATIN AND GREEK INTO MEDICAL ENGLISH: THE ANALYSIS OF WRITTEN TESTS AT JESSENIUS FACULTY OF MEDICINE IN SLOVAKIA
A. Barnau, M. Čovan

INTRODUCING AN ACCESSIBLE TASK-BASED LEARNING (ATBL) APPROACH TO INCLUSIVE ENGLISH LANGUAGE TEACHING (IELT) AT THE UNIVERSITY OF VERONA
S. Hartle, E. Tenca

VIRTUAL SERVICE-LEARNING: A TOOL TO IMPROVE STUDENTS’ SKILLS TRAINING AND EMPLOYABILITY
M.C. González Rabanal, A.J. Acevedo Blanco

ENGLISH LEARNING INFANTS: EXPERIENCES OF FAMILIES
A. Gürven, C. Demirci

PRE-SERVICE TEACHERS’ VIEWS OF DIFFERENT ANIMAL WELFARE ISSUES: IMPLICATIONS FOR TEACHER TRAINING COURSES
A. Almeida

THE DEVELOPMENT OF CRITICAL THINKING IN SCIENCE: A CASE STUDY WITH STUDENTS OF THE 5TH YEAR OF SCHOOLING
J. Lino, A. Almeida

DIGITAL TECHNOLOGIES RESPONSIVENESS AND IMPACT TO THE DISRUPTED TEACHING AND LEARNING DURING LOCKDOWN IN HIGHER EDUCATION
P. Molomo

BUILDING A COLLEGIATE APPROACH TO STUDENT ENGAGEMENT AND TECHNOLOGY-ENHANCED LEARNING INITIATIVES

INDIGENOUS LITERATURE IN THE TEACHING OF PORTUGUESE AS A FOREIGN LANGUAGE IN HIGHER EDUCATION
M. Silva

A STUDY ON THE EFFECTIVENESS OF REMEDIAL LESSONS IN MATHEMATICS AND PHYSICS FOR POLYTECHNIC FOUNDATION PROGRAMME STUDENTS
A. Dewanto, M. Lim, P. Phang

INTEGRATION OF EDUCATIONAL ADMINISTRATION ECOSYSTEM MODEL COMPONENTS FOR SUSTAINABLE DEVELOPMENT
K. Niedre-Lathere, A. Samuseviča

APPLICATION OF DESIGN THINKING IN THE UNIVERSITY OF DEFENCE STUDENT’S LEARNING PROCESS
L. Rak, Ľ. Hradský

DESIGN AND VALIDATION OF A GUIDELINE TO SUPPORT THE IMPLEMENTATION OF SYSTEMIC RESILIENCE PRACTICES WITHIN ENTERPRISES
B. Arenas, A. Solomon, A. Morgado, I. Rafael, R. Comas Forgas

COVID-19 AND LEARNING: PERCEPTIONS OF 4TH GRADE STUDENTS
C. Ferreira, A. Bastos

ENHANCING THE EMPLOYABILITY OF HIGHLY EDUCATED IMMIGRANTS IN COLLABORATION WITH A HIGHER EDUCATION INSTITUTION AND LOCAL EMPLOYMENT SERVICES
A. Karjalainen

CHALLENGES AND BENEFITS TO SOFTWARE ENGINEERING GROUP PROJECT CONTEXTS
E.M. Watson
EXPLORING THE EFFICACY OF A RANGE OF CRITICAL THINKING AND PROBLEM SOLVING TECHNIQUES IN DEVELOPING AN INSTRUCTOR GUIDE
D. Gordon, P. Doyle, A. Becevel, T. Baloh

THE LINK BETWEEN EMOTIONAL INTELLIGENCE AND PERSONALITY
S. Lemrová, S. Dobesova Cakirpaloglu, B. Kvapilová, I. Balaban Cakirpaloglu

E-PORTFOLIO AND REFLECTION: POWERFUL PEDAGOGICAL TOOL FOR LEARNING
Y. Amadu, Y. Oheneba-Sakyi

INSTAGRAM 2.0 A LEARNING TOOL, NEW CHALLENGES AND OPPORTUNITIES TO IMPROVE UNIVERSITY LEARNING

LAB MATH: A CREATIVE LABORATORY FOR RENEWED MATHEMATICAL LEARNING
Y. Cerezo López, M.C. Valbuena Martínez

RUBRICS FOR THE SELF-ASSESSMENT OF SCALE MODELS AND DRAWINGS IN INDUSTRIAL DESIGN: THE IMPORTANCE OF USING DETAILED PERFORMANCE-LEVEL DESCRIPTIONS
F. Felip

INDIAN SCIENCE TEACHERS RELUCTANCE TO ENGAGE IN INQUIRY METHODOLOGY
D. Cline

PROBLEM SOLVING SKILLS: ANALYSIS OF THE RELATIONSHIPS BETWEEN COMPUTATIONAL THINKING AND READING COMPREHENSION
A. Kakacs, K. Harangus

DOCTORAL STUDENTS’ SELF-ASSESSED KNOWLEDGE AND ABILITY IN TERMS OF RESEARCH METHODS
W.M. Phyo, M. Nikolov, A. Hodi

REFLECTIVE TEACHING AND LEARNING IN TEACHER EDUCATION: CHALLENGES AND POSSIBILITIES
R. Bubnys

ACADEMIC DISHONESTY AMONGST POSTGRADUATE STUDENTS: THE EVOLUTION OF MISCONDUCT BASED ON EXPERTS’ KNOWLEDGE
R. Comas Forgas, A. Cerdà-Navarro, L. Moreno-Herrera, J. Sureda-Negre

DESIGNING EXHIBITION SPACE TO SUPPORT EARLY CHILDHOOD EDUCATION IN SCIENCE MUSEUMS: THE COMPASS OF THE NATIONAL MUSEUM OF NATURE AND SCIENCE IN JAPAN
A. Takahashi, E. Yamaguchi, S. Inagaki

VALIDATING A CROSS-CULTURAL MEASURE OF EPISTEMIC COGNITION IN SCIENCE–AN EFA APPROACH
D. Cairns

A COMPLEX INTERVENTION FOR INCLUSIVE KINDERGARTENS – ANALYSIS OF A SOZIALMARIE PRIZE WINNER INNOVATION IN BUDAPEST
I.J. Kovács, É. Deák, G. Erőss

CAN WE INVESTIGATE SOMETHING WE CANNOT SEE? STIMULATING CRITICAL THINKING ABOUT KNOWLEDGE IN THE HISTORY AND SCIENCE CLASS
L. Van Den Broeck, B. Delanote, L. Vervaecke, V. Verschoren, J. De Schrijver

UNPACKING SOCIAL MEDIA CONVERSATIONS TO FIND PRODUCTIVE DIALOGUE
K. Ekman

TEACHER NETWORK ADDING VALUE FOR STUDENTS
T.C. Votkin, H. Laurikainen

IS THE EARTH WITHOUT PEOPLE A BETTER WORLD? STIMULATING REFLECTION ABOUT SUSTAINABILITY IN STEM COURSES
V. Verschoren, L. Van Den Broeck, E. Cornelissen, S. Raeman, F. Mennes, J. De Schrijver

VIRTUAL TEAMS AS AN ARENA FOR LEARNING IN ONLINE EDUCATION - PERSPECTIVES FROM STUDENTS
P.A. Godejord
GREEN GROWTH: TOWARDS THE DECARBONISATION OF THE CONSTRUCTION SECTOR THROUGH VOCATIONAL EDUCATION AND TRAINING
C. García, F. Bertelmann-Angenendt, C. Bricteux, N. Chpiliotoff, C. Frey, V. Kazma, V. Laroche, J. Longmuss, A. Palatinus, L. Pavan, B. Remacle

URSTEAM: A NEW ACADEMIC PROPOSAL OF THE UNIVERSIDAD DEL ROSARIO IN RESPONSE TO NEW DYNAMICS OF SOCIETY
R. Méndez-Romero, G. Castelblanco-Arias, S. Pulgarín-Molina, C. Mancera

SWEDISH IN FINLAND - A MOOC PROMOTING INTEGRATION
S. Sevón, T.C. Votkin

ACTIVITIES, ACHIEVEMENTS AND ABILITIES: A MODEL FOR EMBEDDING MENTAL WELLBEING IN TECHNOLOGY-ENHANCED LEARNING
K. Lister

CORRELATION OF TRADITIONAL AND DIGITAL CONTROL FORMS IN THE PROCESS OF TEACHING FOREIGN LANGUAGES
L. Moskovkin, E. Selezneva, E. Chernovets, E. Chirkova

ONLINE AND FACE-TO-FACE TEACHING PHYSICS USING AN INTERACTIVE METHOD - VIDEO ANALYSIS
P. Hockicko, G. Tarjányiová, J. Kudelčík

THE STRATEGY FOR EDUCATION AND IMPLEMENTATION OF PHOTOGRAMMETRIC 3D DIGITIZATION IN CULTURAL HERITAGE INSTITUTIONS
V. Stojaković, R. Obradović, I. Đurić, I. Vasiljević, M. Obradović, J. Kićanović

3D DIGITIZATION AND VIRTUAL APPLICATION AS TOOLS FOR EDUCATION ABOUT CULTURAL HERITAGE
I. Đurić, I. Vasiljević, M. Obradović, J. Kićanović, V. Stojaković, R. Obradović

RESEARCH ADVANCEMENT ACTIVITIES AS A VECTOR FOR EXECUTIVE EDUCATIONAL LEADERSHIP PRACTICES
L. Kvinikadze, N. Campbell, J. Crockett

THE ROLE OF DOCTORAL STUDENTS’ MOTIVATION AND ANXIETY IN THEIR ENGLISH ACADEMIC WRITING
W.M. Phyo, M. Nikolov, A. Hodi

FROM A PERSONAL TO A MORE SOCIAL VIEW OF STUDENTS’ ACADEMIC PERFORMANCE: THE IMPORTANCE OF PEER SELECTION AT UNIVERSITY

TEACHER’S PERSONAL AND PROFESSIONAL GROWTH THROUGH REFLECTION: RESULTS OF A LONG-TERM ONE CASE STUDY
R. Bubnys, N. Kaunickienė

DESIGNING AND PROGRAMMING GAME-BASED LEARNING WITH HUMANOID ROBOTS: A CASE STUDY OF THE MULTIMODAL “MAKE OR DO” ENGLISH GRAMMAR GAME WITH THE PEPPER ROBOT
I. Buchem, A. Mc Elroy, R. Tutul

THE SIMULATION OF SCIENTIFIC CONFERENCES AS A LEARNING TOOL IN THE SUBJECT OF ORAL IMPLANTOLOGY

360-DEGREE CURRICULUM REVIEW OF AN ONLINE PROFESSIONAL MASTER’S PROGRAM
W. Lu, B. Zoghi

PROSPECTS FOR DATA CENTER INDUSTRY EDUCATIONAL OUTREACH PROGRAMS IN THE STATE OF TEXAS
D. Day, R. Mody, B. Zoghi

THE CONCEPT OF QUALITY IN HIGHER EDUCATION FROM THE PERSPECTIVE OF STUDENTS: IMPLICATIONS FOR THE UNIVERSITIES QUALITY MANAGEMENT SYSTEM
M. Varela, M.L. Neves, R. Fragoso

CREATING INNOVATIVE METHODOLOGIES FOR VET STUDENTS TO CARRY OUT VIRTUAL INTERNSHIPS IN TECHNOLOGY COMPANIES
INTEGRATING CULTURAL AWARENESS INTO THE ENGINEERING DESIGN PROCESS
P. Gorder

RELATIONSHIPS AMONG TEACHER BELIEFS ABOUT STEAM EDUCATION, PERCEPTIONS OF SCHOOL CLIMATE, AND ENACTED PRACTICES
J.P. Stein, J. Craven

GAMIFICATION IN ELECTRICAL / ELECTRONIC ENGINEERING EDUCATION: THE USE OF KAHOOT IN A COURSE ON TELECOMMUNICATIONS
N. Voudoukis, G. Pagiatakis, D. Uzunidis

A POSSIBLE MASSIVE OPEN ON-LINE COURSE (MOOC) ON TELECOMMUNICATIONS
N. Voudoukis, G. Pagiatakis, D. Uzunidis

EDUCATIONAL ESCAPE ROOMS: A BIBLIOMETRIC ANALYSIS
A.S. Abdul Rahim, M.I. Ismail, A. Razali

JEWISH AND ARAB TEACHERS’ ATTITUDES TOWARDS TEACHING SECOND AND FOREIGN LANGUAGE IN ISRAEL
K. Kawar

A MENTORING PROGRAM FOR THE INTEGRATION OF NEWLY ARRIVED MIGRANTS INTO THE SCHOOL ENVIRONMENT OF THE HOST COUNTRY
I. Xenophontos, P. Kosmas, E. Xeni

GLOBALIZATION, ACCREDITATION, AND TEACHER EDUCATION IN THE EMIRATES
K. Gallagher, A. Dillon, R. Tamim

APPLICATION OF LOW-COST SENSORS IN THE INNOVATION OF TEACHING BIOMEDICAL ENGINEERING
J. Kúdelčík, P. Hockicko

IMPLICIT VALUES AND AUTOBIOGRAPHICAL OBJECTS: RAISING AWARENESS IN UNIVERSITY EDUCATIONAL CONTEXTS
M. De Simone, F. Marone, A. De Simone

STUDYING OF ACTIVE LOW-PASS FILTERS VIA VIRTUAL ENVIRONMENTS IN ENGINEERING EDUCATION
V. Raydovska

SPEAK YOUR MIND: INTRODUCING APTLY, THE SOFTWARE PLATFORM THAT TURNS IDEAS INTO WORKING APPS
D.Y.J. Kim, A. Granquist, E. Patton, M. Friedman, H. Abelson

RESEARCH-BASED LEARNING APPLIED TO TEACHING IN BUILDING DEGREE COURSES
C. Morón, D. Ferrández, M. Alvarez, J.P. Diaz Velilla

EUROPEAN PROJECTS MOTIVATE STUDENTS TO PARTICIPATE IN INTERNATIONAL CO-CREATION WORKSHOPS IN A DESIGN THINKING COLLABORATIVE LEARNING APPROACH
M. Caetano, S. Mendes, R. Gamboa

GOALS FOR SUSTAINABLE DEVELOPMENT IN UNIVERSITY EDUCATION: COOPERATION THROUGH EELISA COMMUNITIES
D. Ferrández, M. Fernández, A. Zaragoza, C. Morón

EXPERIENCES OF TEACHING AND LEARNING WITH SOCIAL ROBOTS
S. Ekström

IMPROVING THE QUALITY AND INNOVATION OF HIGHER EDUCATION IN THE STUDY PROGRAM CRISIS MANAGEMENT
K. Buganová, E. Mošková

ANALYSIS OF STUDENTS’ OPINION ABOUT NECESSITY OF EDUCATION IN THE FIELD OF “NEUROREHABILITATION IN NEUROLOGICAL COMPLICATIONS OF COVID-19”
R. Yoshinov, I. Koleva, B. Yoshinov

RELATIONSHIP BETWEEN THE IMPLEMENTATION OF PROFESSIONAL REFLECTION FREQUENCY AND THE DIFFICULTY OF APPLYING THE DIAGNOSTIC COMPETENCE OF MENTOR TEACHERS
R. Orosová, M. Novocký, K. Petríková
COMPARISON OF FIRMS’ INNOVATION DETERMINANTS IN THE ERA OF OPEN INNOVATION: CENTRAL EUROPEAN CASE FOR EFFICIENT UNIVERSITY-INDUSTRY COOPERATION
L. Růžičková, V. Prokop, J. Stejskal, F. Ur Rehman

THE EFFECTS OF PUBLIC SUBSIDIES ON FIRMS’ INNOVATION AS A FORM OF INDUSTRY-GOVERNMENT PARTNERSHIP: COMPARISON OF WESTERN AND CENTRAL EUROPEAN COUNTRIES
M. Mazel, V. Prokop, J. Stejskal, F. Ur Rehman

ELECTRONIC LEARNING IN THE EDUCATIONAL MODULE “NEUROREHABILITATION IN NEURO-COVID” (WITH CLINICAL CASES)
I. Koleva, B. Yoshinov, R. Yoshinov

THE HYBRID CLASSROOM: POST-COVID19 SUCCESS FACTORS AND SPECIFICATIONS FOR DUAL-MODE TEACHING AND LEARNING
D. MacKevett, P. Feubli

INFORMATIVE CAPSULES AS A DISRUPTIVE TOOL FOR AUTONOMOUS STUDENT LEARNING IN UNIVERSITY ARCHITECTURE STUDIES
P. Miguel-Sin Monge, A. San José Cabrero, S. Dominguez Gil, G. Ramírez Pacheco

THE STEAMONEDU ONTOLOGY: A SEMANTIC WEB ONTOLOGY FOR STE(A)M EDUCATION
N. Spyropoulou, A. Kameas

IMPROVING SKILLS AND EMPLOYABILITY POTENTIAL OF UNIVERSITY STUDENTS
M. Lasková, K. Buganová

CONTEMPORARY INFORMATION AND COMMUNICATIONS TECHNOLOGIES IN THE LEARNING PROCESS: CASE OF UNDERGRADUATE STUDIES IN TOURISM
I. Tsener

PROFESSIONAL REFLECTION TYPES OF HIGH SCHOOL TEACHERS AS PREDICTORS OF BURNOUT
M. Novocký, R. Oroszová, K. Petríková

PRE-SERVICE TEACHERS ENGAGING IN CO-TEACHING: A TRANSFORMATIVE LEARNING PERSPECTIVE
B. Lenong

PARENTS’ VIEWS ON THE ORGANIZATION OF ONLINE EDUCATIONAL PRACTICE IN KINDERGARTEN
S. Tomaš, M. Vrdoljak, D. Delić

ANATOMY TALKING BOOK AND PODCAST: ASSISTIVE TECHNOLOGY IN HIGHER EDUCATION CONTRIBUTING TO INCLUSIVE EDUCATION IN HEALTH COURSES
T. Lima, L. Martins, C. Rodrigues, N. Pedro, L. Santiago, T. Oliveira, R.M. Mariani Braz

EXPLORING GLOBAL CONNECTIONS VIA PLACE- BASED IMMERSION WITHIN THE QUARTIER OF BELLEVILLE: AN URBAN REFUGE FOR REVOLUTIONARIES, BOHEMIANS, ARTISTS, AND IMMIGRANTS IN THE CITY OF LIGHT
J. Strait

EXPERIENCES WITH A MULTIDISCIPLINARY PROJECT AT THE PREPARATORY COURSE FOR ENGINEERING STUDIES
T. Schjem, V. Talmo, E. Krystad, H. Røli Karlsen

THE EFFECT OF THE COMPUTATIONAL ACTION PROCESS ON STUDENTS’ SOFTWARE PROTOTYPE IDEAS
H. N. Pang, R. Parks, C. Breazeal, H. Abelson

DIGITAL REALITIES IN EDUCATION: PROJECTS IMPLEMENTED USING AUGMENTED REALITY IN PORTUGAL
P.N. Rito

AUGMENTED REALITY IN PORTUGAL: ITS USE, ITS DEVELOPMENT, AND CONTEXTS
P.N. Rito

AN EXAMINATION OF SECONDARY READING INTERVENTIONS FOR SPECIAL EDUCATION AND THE RESULTING DEPARTMENT RESOURCE TO SUPPORT OUR STUDENTS
J. Fundine

SIBLINGS OF STUDENTS WITH DISABILITIES: A (NON)EXISTENT CATEGORY OF STUDENT POPULATION?
A. Blazevic Simic
DESIGN THINKING ONLINE IS FOR EVERYBODY EVERYWHERE
C. J. Vallis

TEACHING PROGRAMMING ON ZOOM—LESSONS LEARNED FROM VIRTUAL CLASSES IN THE TIMES OF COVID-19
X.Y. Suo

PILOTING THE LEARNING BY DEVELOPING ACTION MODEL PEDAGOGY IN FINLAND HEIS
T. Lintilä, M. Žarb

MICROHISTORY, MUNICIPAL ARCHIVES AND DIGITIZATION: SOME OBSERVATIONS FROM BULGARIA
H. Atanasov, P. Stamenova

ICT IN SERVICE OF COLLECTING INFORMATION ON THE ARCHIVAL DOCUMENTARY HERITAGE OF THE BULGARIAN REVIVAL
H. Atanasov, Y. Nikolov, I. Marinova

ASSESSING THE LEVEL OF TEACHERS’ COMPUTATIONAL THINKING SKILLS THROUGH TASK-BASED LEARNING IN SCRATCH
V. Voinohovska, J. Doncheva

ASSESSMENT OF ALGORITHMIC AND LOGICAL THINKING OF FIRST- AND SECOND-YEAR COMPUTER SCIENCE STUDENTS AT J. SELYE UNIVERSITY IN ACADEMIC YEARS 2019/20 AND 2021/22
L. Végő, S. Gubo

STUDY OF USING SCRATCH AS AN INNOVATIVE TOOL OF ESTABLISHING CONDITIONS FOR AN INTERDISCIPLINARY-ORIENTED LEARNING PROCESS
V. Voinohovska, J. Doncheva

BECOMING A REFLEXIVE PROFESSIONAL
A. Kimberley

ACTIVITIES FOCUSED ON MATHEMATICAL PRE-LITERACY DEVELOPMENT USING THE BEE-BOT INTERACTIVE TOY
M. Uhlířová, J. Laitochová, K. Skládalová

THE CONTRADICTION IN STUDENTS’ DECISION-MAKING WHEN CHOOSING A FIELD OF STUDY AND THE REAL NEEDS OF EMPLOYERS ON THE LABOUR MARKET
V. Blašková, H. Stojanova

VALUES EDUCATION WITH CONTEMPLATIVE PRACTICES FOR MEDICAL STUDENTS
F. Marone, M. De Simone

WIDENING ACCESS INTERVENTIONS TO ENABLE ENGAGEMENT IN HIGHER EDUCATION
C. O’Donnell, B. Murphy, B. Hunter, A. Toye

CREATING INTERACTIVE DATA DASHBOARDS TO INFORM WIDENING ACCESS POLICY AND PRACTICE DECISION MAKING AT ULSTER UNIVERSITY
C. O’Donnell, B. Murphy

UNIVERSITY TUTORING BEFORE AND AFTER COVID-19: AN EXPERIENCE OF REDESIGN FROM THE UNIVERSITY OF PADUA (ITALY)
R. Bonelli, A. Bonin, L. Da Re

THE "DOUBLE SELECTION" MECHANISM AND PUBLIC INTERVENTIONS AIMED AT STRENGTHENING STUDENTS’ COMPETENCIES – THE CASE OF THE COMPETENCE DEVELOPMENT PROGRAMME IN POLAND
M. Jelonek

RECOGNISING AND ADDRESSING MATHS ANXIETY WITHIN MATURE STEM STUDENTS AT A DISTANCE LEARNING UNIVERSITY
S. Pawley, S. Organ

WORKING GENDERPRO(OF) IN ECEC
L. Vandenbussche, E. De Latter, H. Van Liefferinge

E-SERVICE-LEARNING: A GERONTOLOGICAL SOCIAL WORK APPROACH
D. Monteiro, C. Vieira da Silva

‘THOSE EXCLUDED FROM WITHIN’: BARRIERS TO LEARNING AND ETHNICITY IN THE BULGARIAN SOCIAL SPACE (AN EMPIRICAL CASE)
M. Tasheva, R. Madgarova, A. Epitropova, S. Penkova

GENDER (IN)EQUALITIES IN EDUCATION: THE CASE OF BULGARIA
S. Penkova, M. Kadieva, M. Tasheva, A. Epitropova
ABOUT SOME ASPECTS OF THE TEACHING OF INTERDISCIPLINARY UNDERGRADUATE SUBJECTS
L. Kalandadze
1972

RECOGNISING NEW TRENDS IN VET TOWARDS GREEN TRANSITION: EXPERIENCE FROM NORTH MACEDONIA
1978

CHALLENGING THE BELIEFS THAT SYNCHRONOUS ONLINE LECTURE ATTENDANCE CORRELATES TO STUDENTS’ OVERALL GRADE
B.Y. Toh, N. Buchanan
1985

EXAMINING STUDENT INNOVATIVE BEHAVIOR IN UNDERGRADUATE MAKERSPACE-BASED COURSES VIA INDUSTRY-BASED ENTREPRENEURIAL FRAMEWORK
S. Supraja, F.S. Lim, S. Tan, S. Y. Ho, B.K. Ng, A.W.H. Khong
1995

BUILDING BRIDGES – HOW CAN TEACHERS AND STUDENTS IN THE APPLIED SOCIAL SCIENCES FACILITATE EFFECTIVE LEARNING COMMUNITIES IN THE DIGITAL CLASSROOM?
N. Weimann-Sandig
2001

SYSTEMS THINKING AS A KEY COMPETENCE FOR SUSTAINABLE DEVELOPMENT AND DIGITAL TRANSFORMATION
S. Armenia, G. Tsaples, J. Papathanasiou, F. Barnabé, S. Nazir
2006

AFTER THE PANDEMIC, HOW MUCH “DIGITAL LITERACY EDUCATION” DO PRESERVICE TEACHERS WANT AND NEED? RESULTS OF A STUDENT SURVEY AND THE CONSEQUENCES FOR TEACHER TRAINING
G. Marci-Boehncke, X.C. Meyer
2012

THE IMPACT OF INCLUSIVE EDUCATION ON NATIONAL DEVELOPMENT - EVIDENCE FROM NIGERIA
R.A. Sijuola
2024

DEVELOPING SCIENCE SKILLS IN PRESCHOOLERS: PRESENTATION OF THE PROJECT ERASMUS+ “N’EURO NEST 3.0”
S. Gavdac, M.E. Cîmpean, M.D. Bocoș
2033

LEARNING IN THE MUSEUM AND THE CHALLENGES OF STEAM LEARNING
R. Lebedova, M. Sapundzhiev
2038

LEARNING BY DOING – PROMPTING THE RESEARCH INTEREST AND CREATIVE PERFORMANCE OF STUDENTS
R. Lebedova, M. Sapundzhiev
2044

LONGITUDINAL STUDY OF LEARNING OUTCOMES DURING COVID FOR BACHELORS GRADUATES IN COMPUTER SCIENCE
K. Berkling, D. Saller, C. Winter, J. Winkler
2050

THE MORE SUPPORT UNDERGRADUATES RECEIVE, THE GRITTIER THEY ARE
Z. Lu
2059

LOCAL TECHNOLOGIES IN FOREIGN LANGUAGE TEACHING AND LEARNING: META-ANALYSIS OF RESEARCH IN SLOVAKIA
B. Horvathova
2066

INTERNATIONAL TALENTS’ LANGUAGE LEARNING AND INTEGRATION SUPPORTED WITH ONE-STOP SERVICE
J. Viinanen
2072

STRENGTHENING THE CRITICAL THINKING OF STUDENT TEACHERS BY APPLYING AN INTERVENTION PROGRAMME
M. Koszarová
2080

FACTORS IMPACTING THE APPLICATION OF FORMAL ASSESSMENTS IN INTERMEDIATE PHASE MATHEMATICS IN SOUTH AFRICA
S. Sibanda, A. Rambula
2088
DEPARTMENT HEADS’ MANAGEMENT OF TEACHING IN PRIMARY SCHOOLS
P. Kalane, A. Rambuda

DEVELOPING AN INTEGRATED FRAMEWORK FOR ANALYZING WAYS OF REASONING IN MATHEMATICS

ORGANIZATIONAL CAPACITY BUILDING FOR ICT-MEDIATED TEACHING AND LEARNING PROCESSES IN A HIGHER EDUCATION INSTITUTION IN MEDELLIN, COLOMBIA
J. Tabares-Quíroz, V. Salazar-Molina, S. García-Gutiérrez, S. Gómez-Jaramillo

FROM INFORMATIVE PRACTICES TO COMMUNICATIVE PRACTICES IN THE MEDIATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN A HIGHER EDUCATION ORGANIZATION
J. Tabares-Quíroz, J. Macías-Prada, J. González-Duque

REMARKS TO ORGANIZATIONAL FACTORS OF THE ACADEMIC ENGAGEMENT AT THE UNIVERSITY
T. Corejova, A. Corejova

PARENTAL ENGAGEMENT IN SCHOOL: TRENDS, CHALLENGES AND OPPORTUNITIES
D. Dias, R. Barroso

THE COGNITIVE DEVELOPMENT OF CHILDREN THROUGH RAVEN’S COLOURED PROGRESSIVE MATRICES: WHEN WHERE MATTERS
R. Barroso, D. Dias

INTERNATIONAL PROJECT ABOUT THE INTRODUCTION OF TRADITIONAL KNOWLEDGE ON MEDICINAL PLANTS AMONG STUDENTS OF HEALTH SCIENCES

LEARNING MANAGEMENT SYSTEMS: IS IT TIME FOR A NEW GENERATION?
A. Molinar

SUPPORTING STUDENTS THROUGH INCREASING THEIR SELF-EFFICACY
K. Mullamaa

PEDAGOGY STUDENTS’ AWARENESS OF THEIR OWN DIGITAL FOOTPRINTS
J. Miková, R. Kárniková, H. Mičková

DUAL LANGUAGE POLICIES TO INTERNATIONALIZE JAPANESE HIGHER EDUCATION: LANGUAGE SEPARATION WITHIN INTERNATIONAL STUDENTS?
M. Shibata, A. Staicov

SEXUAL DIVERSITY AND HEALTH SYSTEM HUMANIZATION. DESIGN, IMPLEMENTATION AND OUTCOMES ANALYSIS OF AN INNOVATIVE HIGHER EDUCATION CURRICULUM
G. Giorgi, V. Carmona, C. Del Campo, M. Vazquez, B. López-Plaza, L.G. González-Rodríguez

CULTURE IN CRISIS: PRESERVING THE ROMAGNOLO LANGUAGE THROUGH EDUCATION, KNOWLEDGE, AND TECHNOLOGICAL IMPACTS
A. Christie, T. Tailor, O. Baiocchi

INDUSTRY VERIFIED SKILLS BLOCKCHAIN SYSTEM (IVS)
A. Elmessiry, M. Elmessiry, M. Elmessiry

GATELOG: EDUCATIONAL VIDEO GAME TO SUPPORT THE TEACHING OF DIGITAL ELECTRONIC CIRCUITS
B.S. Vera Moreno, D.M. Rivera Pinzón

APPLICATION IN VIRTUAL REALITY FOR THE LEARNING OF CONCEPTS ASSOCIATED WITH SPATIAL SOUND
M.L. Franco Rojas, D.M. Rivera Pinzón

“HEY, TEACHERS, LEAVE THE KIDS ALONE!” INCREASING STUDENTS’ MOTIVATION FOR LEARNING ENGLISH
D.E. Tutuianu

TWO HEADS ARE BETTER THAN ONE! PROJECT-BASED ENGLISH CLASSES – PARTICULAR BENEFITS FOR MILITARY STUDENTS
D.E. Tutuianu

CZECH LEARNERS’ FREQUENT MISTAKES IN ENGLISH WRITING
M. Šikolová, L. Koláčková, M. Veselá
A NARRATIVE INQUIRY ON SOUTH KOREAN CULTURE EXPERIENCE OF GHANAIAN STUDENTS THROUGH CRITICAL MULTICULTURALISM  
Y.Y. Chen, C. Hur  

CHILDREN’S RIGHTS IN THE PEDAGOGICAL ENVIRONMENT  
B. Ilieva, N. Shopova  

CORRELATION OF CHARACTERISTICS OF PERSONAL SELF-DETERMINATION AMONG STUDENTS WITH DISABILITIES  
Y. Selivanova, A. Sharov, M. Konovalova, O. Hmelkova, E. Shchetinina  

ENCOURAGING SOCIAL INTERACTION OF STUDENTS WITH VISUAL IMPAIRMENTS IN MAINSTREAM PRIMARY SCHOOLS IN THE REPUBLIC OF CROATIA  
A. Blazevic Simic, D. Noll  

TEACHING ADVANCED PROGRAMMING WITH COMPETITIONS  
X.Y. Suo  

GENDER IDENTITY OF PERSONALITY  
L. Osadcha, N. Komisarenko, O. Oliynyk, E. Polishchuk, L. Movchan  

THE REMOTELY WORK CHALLENGES OF LATVIAN PHYSIOTHERAPISTS DURING THE CORONAVIRUS PANDEMIC PERIOD  
A. Kaupuzs, I. Kaminska, E. Gorbunova  

TEACHING FINNISH AS A SECOND LANGUAGE TO INTERNATIONAL EXPERTS OF THE HIGHER EDUCATION  
A. Elg  

INPUTS IN MY BLOCKS IN THE SCRATCH PROGRAMMING SECONDARY PUPILS  
M. Tomcsányiová  

SHAPING PRE-SERVICE TEACHERS’ BELIEFS ABOUT TEACHING ENGLISH GRAMMAR: LONGITUDINAL RESEARCH FINDINGS  
M. Siposova, P. Ostradicky  

SUCCESSFUL ENGLISH GRAMMAR INSTRUCTION SHOULD BE MULTI-FACETED AND ECLECTIC  
M. Siposova, I. Jurikova  

PICTURIZING STRATEGY: INTRODUCING A NEW PARTICIPATORY INTERVIEW TOOL IN RESEARCH WITH YOUNG CHILDREN  
R. Tkotzyk, J. Lategahn, G. Marci-Boehncke  

INNOVATIVE METHODOLOGIES TO FACE HARASSMENT AND SCHOOL LEAVING AND STOP HATE SPEECH IN EUROPE  

CRISIS SITUATIONS AS AN INNOVATIVE ELEMENT OF GEOGRAPHICAL EDUCATION IN THE SLOVAK REPUBLIC  
H. Kramáreková, D. Jakusová, M. Nemčíková, D. Oremusová  

LOCAL LANDSCAPE GEOGRAPHY TEXTBOOKS IN THE SLOVAK REPUBLIC EDUCATIONAL PRACTICE  
D. Oremusová, M. Nemčíková, H. Kramáreková, Z. Jenísová  

A MODEL OF PERCEPTION OF INSTRUMENTAL MUSICAL WORKS IN PRESCHOOL AND PRIMARY SCHOOL AGE “TELL ME MUSIC”  
S. Smilkova  

THE INTEGRATION OF 3D PRINTING AND ADVANCED INDUSTRIAL ROBOTICS IN TRADITIONAL MICRO AND SMALL ENTERPRISES THROUGH EDUCATION: ACCESS-3DP PROJECT  
A. Muñoz Puche, G. Cañavate Cruzado, J.C. Bañón Guillén, F.J. Melero Muñoz, J. Garrido Lova  

LITHUANIAN LANGUAGE AND CULTURE COURSE AS A KEY FACTOR IN UKRAINIAN REFUGEES’ INCLUSION  
J. Pivoriene, O. Merfeldaitė, I. Palomo-Domínguez  

A BIONIC APPROACH THROUGH EDUCATION - CREATION OF A TRAINING MATERIAL ON 4.0 TECHNOLOGIES, LEADERSHIP AND TALENT PROMOTION IN THE FRAMEWORK OF THE GIST PROJECT  

WHAT TO PRIORITIZE IN BUILDING ACADEMIC DIGITAL CAPACITY: USING SELFIE TO SUPPORT DIGITAL DEVELOPMENT IN SCHOOLS  
C. Pulfrey, C. Caneva
USING VARIOUS TEACHING STRATEGIES TO KEEP STUDENTS ENGAGED DURING THE COVID-19 PANDEMIC
S.S. Ling

UNIVERSITY-INDUSTRY COOPERATION IN AREA OF ADDITIVE MANUFACTURING: A CASE STUDY
M. Ťavodová, M. Dudo, M. Vargová, P. Beňo

BIOGAS OBTAINING FROM WASTES GENERATED IN UNIVERSITY CAMPUSES: PRACTICAL CASE STUDY BASED ON TRANSDISCIPLINARY LEARNING

THE ROLE OF COGNITIVE FLEXIBILITY IN LINGUISTIC AND NUMERIC SKILLS AMONG KINDERGARTEN AND FIRST-GRADE CHILDREN
D. Cohen, S. Shaul

EXPLORING THE CONTRIBUTION OF LINGUISTIC, COGNITIVE AND CULTURAL FACTORS IN SCIENCE TEACHING AND KNOWLEDGE BUILDING WITH A FOCUS ON MATHEMATICS AND COMPUTER SCIENCE
M. Kritikou, D. Tsolis

IMPLICATIONS OF GENERATIVE DESIGN METHODOLOGY IN DESIGN EDUCATION PROCEDURES
D. Medrán, M.M. Espinosa, R. Prádanos Del Pico, M. Domínguez

INTERCULTURAL COMPETENCE THROUGH TRANSFORMATION
K. Schneider

DETERMINATION OF THE LEVEL OF READING LITERACY OF PRIMARY SCHOOL PUPILS IN AN INTERNATIONAL CONTEXT
M. Žišková

WHAT IS THE EFFECT OF EMOTIONAL ENGAGEMENT AND BULLYING ON ACHIEVEMENT GAP: MULTILEVEL ANALYSIS
S. Raiziene, D. Sevalneva, R. Erentaite

HUMAN CHALLENGES SCHOOLS FACE IN THEIR QUEST FOR DIGITAL INTEGRATION AND HOW TO OVERCOME THEM
C. Pulfrey, C. Caneva

BUILDING PARTICIPATION IN THE CHILD PROTECTION SYSTEM THROUGH THE PROCESS OF CONSTRUCTION OF A CARE LEAVERS-LED POLICY. FIRST REFLECTIONS FROM THE EUROPEAN CARING PROJECT
C.C. Montà

MOODLE DESIGN OF A MANDATORY MASSIVE PHYSICS COURSE FOR AGRONOMIC ENGINEERING DEGREE
L. Amy, R. Eyheralde, P. Ferrúa

AMBIENT LEARNING SPACES: CHANCES AND CHALLENGES OF INTERACTIVE KNOWLEDGE MEDIA PLATFORMS FOR SCHOOLS AND MUSEUMS
M. Herczeg

GENDER PERSPECTIVE IN A PROGRAMMING COURSE
C. Manresa-Yee, J.M. Buades Rubio, A. Oliver, G. Moyà Alcover, S. Ramis, M. Orell

THE ORCA ECOSYSTEM - ADVANCING THE MISSION OF OER TOGETHER THROUGH COMPETENCES IN THE NETWORK
A. Niemann, S. Schotemeier, C. Funk

COMBINING CRITICAL THINKING WITH DIGITAL SKILLS IN EUROPEAN CONTEXT: AN EXAMPLE OF PROJECT “PLATO’S EU”
B. Ćurko, A. Kovačević, M. Pavlić

THE LEVEL OF KNOWLEDGE OF SECONDARY SCHOOL STUDENTS IN PROVIDING FIRST AID
R. Lenková, I. Boržíková, T. Lukáčová

RISK FACTORS OF HEALTH-RELATED BEHAVIOUR OF SLOVAK UNDERGRADUATES AND THE POSSIBILITIES OF APPLYING PREVENTIVE EDUCATIONAL STRATEGIES
I. Boržíková, R. Lenková, F. Pajonková

CROSS-CULTURAL AND LINGUISTIC INTERACTION IN THE CONTEXT OF TEACHING FOREIGN LANGUAGES AND MINIMISING STUDENTS’ MISTAKES
M. Egorova, T. Zapata Ruiz
CHRONICITY AT SCHOOL: FROM BARRIER TO LEARNING RESOURCE
G. Cucuzza

COULD THE UNIVERSITIES AND PHILOSOPHY HELP US CREATE A MORE DEMOCRATIC SOCIETY?
D. Kováčová, B. Baďurová, V. Strahovnik

ENTREPRENEURSHIP AND PEDAGOGICAL INNOVATION IN THE CLASSROOM THROUGH A SCRUM-BASED EDUCATIONAL METHODOLOGY: A PRACTICAL LEARNING EXPERIENCE IN AN UNDERGRADUATE COURSE IN SPAIN
J.V. Tomás-Miquel, A.E. Fotá, P. Rodríguez-Martínez, A. Gajownik

THE ROLE OF LEADERSHIP IN PROMOTING SOCIAL RESPONSIBILITY IN HIGHER EDUCATION
A. Albuquerque, S. Fernandes, P. Morais, A. Pereira

MANAGING STRESS IN ONLINE DISSERTATION STUDENTS: A MULTIPLE CASE STUDY OF FACULTY PERCEPTIONS OF LOWERING STUDENTS’ AFFECTIVE FILTER
L. Bedford, A. Babcock

DO ICT SELF-EFFICACY BELIEFS PREDICT ACTUAL DIGITAL LITERACY? EVIDENCE FROM LITERATURE IN THE SCHOOL CONTEXT
T.L.A. Nguyen, A. Habók

LOOKING FOR ALTERNATIVE CONCEPTIONS ABOUT LIGHT IN COLOMBIAN RURAL STUDENTS
L.C. Arboleda-Hernandez, C.P. Suarez Rodriguez, D.F. Becerra Rodríguez

USING SOCIAL MEDIA TO IMPROVE STUDENT ENGAGEMENT AND SUCCESS IN A LARGE INTRODUCTORY UNIVERSITY-LEVEL SCIENCE COURSE
A. Fujimoto-Strait, R. Guida

KIELIBUSTI (LANGUAGE BOOST) PROJECT: DEVELOPING BETTER LEARNING POSSIBILITIES OF FINNISH AND SWEDISH FOR INTERNATIONAL EXPERTS. PROJECT GOALS AND DEVELOPMENT PRINCIPLES
S. Heinzmann

HARM MINIMIZATION: A TOBACCO REDUCTION FOR YOUTH PROGRAM
N. Piquette, K. Haight, O. Awosoga

EDUCATIONAL ASPECTS OF THE PERCEPTION OF BILINGUAL VISUAL LANGUAGE USE AMONG HUNGARIANS IN SLOVAKIA
K. Presinszky

THE MULTILINGUAL LINGUISTIC LANDSCAPE AS A MULTIDISCIPLINARY ELEMENT OF THE CURRICULUM
K. Presinszky

DEVELOPMENT OF A 3D PRINTED MODEL OF A FULL SIZE HUMAN SKULL FROM A CT SCAN WITHOUT AN IV CONTRAST AGENT: ANATOMY TRAINING SIMULATOR FOR NURSING STUDENTS
K. Budisalich, H. Schroer, C. Tverberg, D. Moeller, G. Maddux, B. Schroer

ANALYSIS OF THE OPPORTUNITIES FOR OBTAINING NEW KNOWLEDGE FROM ANCIENT MANUSCRIPTS
K. Rasheva-Yordanova, I. Dimitrova, G. Dimitrov

3D PRINTED MODELS OF A COLLAPSED/PUNCTURED LUNG AND THE CORRESPONDING HEALED LUNG: DEVELOPMENT AND APPLICATION FOR ADVANCED NURSING STUDENT TRAINING
K. Budisalich, C. Gunter, C. Tverberg, D. Moeller, G. Maddux, B. Schroer

SAFETY FROM THE PERSPECTIVE OF UNIVERSITY STUDENTS WITH DISABILITIES
A. Hanakova, B. Hudcova, T. Hrudova, K. Krahulcova, K. Kroupova, M. Potmesil, V. Razickova, K. Simunkova, G. Spinarova, E. Urbanovska, V. Vachalova

SUPPORTING PARENTS AS PARTNERS IN EDUCATION: MEASURING THE IMPACT OF AN EXPERIENTIAL INTERVENTION PROGRAMME ON VIRTUAL LEARNING ENVIRONMENTS IN POST-PRIMARY SCHOOLS
D. Qualter

ACCOUNTABILITY, PREEMPTION AND SCHOOL CHOICE: INTERGOVERNMENTAL TENSIONS AND THE CASE OF FLORIDA
C. Herrington

USE OF A VOICE ASSISTANT TO SUPPORT THE DEVELOPMENT OF INFORMATION MANAGEMENT SKILLS
G. De la Cruz Martinez, E. Cruz Hernández, S.M. Martinez Ramirez
INTRODUCING THE ENTREPRENEURIAL MINDSET, DELIBERATE PRACTICE IN A RURAL TOURISM CONTEXT: A CASE STUDY
D. Wilborne, J. Ludwig, P. Hackbert

DOES STUDENT-CENTERED INSTRUCTION MATTER? INVESTIGATING UNDERGRADUATE STUDENTS’ PERCEPTIONS ON PROOF
Y.Y. Ko, A. Johnson, M. Rose

SO, YOU WANT TO SET UP A FAB LAB: REALIZATIONS IN RUNNING A MAKER SPACE IN A PHILIPPINE HIGH SCHOOL
J. Alcarez

THE SUMMARY STRATEGY AND THE PERFORMANCE OF STUDENTS IN THE SUBJECT OF SCIENTIFIC RESEARCH METHODS
J. Flores, R. Ordoñez, D. Anzules

THE SUSTAINABLE DEVELOPMENT OF THE AERONAUTICAL SECTOR FROM A SOCIO-ENVIRONMENTAL APPROACH
R. Florencio da Silva, A.D. Torres-Rivera, R. Chavero López, J.O. Escobedo Alva, M.A. Mendoza Becerril, A.J. Mc Namara Valdes, D. Linares Ramírez

CULTURAL ACTIVITIES AS A TEACHING METHOD FOR ENVIRONMENT CONSERVATION IN VISTA HERMOSA, MEXICO CITY
A.J. Mc Namara Valdes, L.A. Garcia-Serrano, R. Florencio da Silva

ACCESSIBILITY AND SAFETY IN THE CONTEXT OF PERSONS WITH DISABILITIES OR SPECIFIC NEEDS - A MONITORED ISSUE IN RESEARCH CONCEPTS

SHARING THE LEARNING BY DEVELOPING MODEL IN AN INTERNATIONAL CONTEXT
M. Ekström, J. Aalto

MACHINE LEARNING TO EXPLOIT MASSIVE OPEN ONLINE COURSES LEARNING PROCESS DATA
J. Toutouh, B. Bossavit

ELEMENTS OF POSITIVE PEDAGOGY, METHODS OF IMPLEMENTATION AND INFLUENCE IN THE EVOLUTION OF PERFORMANCE IN EDUCATION
L.M. Popescu (Iacob), VA. Enachescu

INITIAL ASSESSMENT OF THE INFLUENCE OF THE WAR IN UKRAINE ON THE DEVELOPMENT OF PROFESSIONAL EDUCATION OF MILITARY ENGINEERING OFFICERS
J. Kompan, J. Jančo, M. Hrnčiar

CHALLENGES FOR THE DEVELOPMENT OF THE MILITARY EDUCATION FOR THE DEPLOYMENT OF DECLARED FORCES IN UN PEACEKEEPING OPERATIONS
M. Hrnčiar, J. Kompan

STUDENTS’ SELF-ASSESSMENT OF ENTREPRENEURSHIP COMPETENCE IN THE STUDY PROCESS – LATVIAN CASE STUDY
A. Slišāne, G. Lāma, A. Oļesika, Z. Rubene

MIND-MAPPING AS A DIDACTIC TOOL IMPLEMENTED IN E-LEARNING
M. Piotrowska

OPPORTUNITIES AND CHALLENGES IN THE EDUCATION OF PRISONERS IN THE REPUBLIC OF CROATIA
A. Jandrić Nišević

REFLECTIONS ON A COURSE ABOUT RADICAL DISCOURSES AND THE DIGITAL PUBLIC SPHERE AT A SOUTH AFRICAN UNIVERSITY
L. Dalvit

LEVEL OF SELECTED ELEMENTS OF COMMUNICATIVE COMPETENCIES AMONG PRIMARY SCHOOL TEACHERS IN THE CZECH REPUBLIC
R. Kárníková, J. Miková

ADAPTATION OF CRISIS MANAGEMENT STUDY PROGRAM TO THE NEEDS OF IMPROVING THE QUALITY OF LIFE OF THE POPULATION
S. Strelcová, A. Kelláik, J. Kubáš, P. Prievozník

FROM PROMOTION TO PERSUASION: SUPPORT AS ESSENTIAL NEXT STEP FOR ESTABLISHING OPEN EDUCATIONAL RESOURCES AT UNIVERSITIES
M. Kopp, N. Linschinger, K. Neuböck
INTERACTIVE OPEN-SOURCE SOFTWARE TOOL FOR TEACHING AND LEARNING CONTROL SYSTEMS DESIGN
H. Meneses Navarro, J. Louzao, O. Arrieta, R. Vilanova

OPPORTUNITIES FOR THE DEVELOPMENT OF COMMUNICATIVE COMPETENCIES OF ELEMENTARY SCHOOLS TEACHERS IN THE CZECH REPUBLIC
R. Kárníková, M. Fasnerová

HYBRID/VIRTUAL PHYSICAL COMPUTING PROTOTYPING HANDS-ON LABORATORY DURING COVID-19 PANDEMIC
P. Perego, P. Bobrova

THE FOOD SYSTEM FACING THE CHALLENGE OF CLIMATE CHANGE: A ROLE PLAY

OPENING A NEW DISCOURSE FOR ENTREPRENEURSHIP EDUCATION: MOVING BEYOND SQUARE PEGS IN ROUND HOLES
C. Donaldson, J. Villagrasa

PRACTICAL INSIGHTS FOR ASSESSING STUDENT PROGRESS IN THE ENTREPRENEURIAL CLASSROOM
C. Donaldson, J. Villagrasa, F. Sanchez

LEARNING THROUGH FASHION ARCHIVES: THE CASE OF THE GIANFRANCO FERRÉ ARCHIVE
V. Cognini, F. Vacca

STUDENT SATISFACTION WITH VIRTUAL TOOLS AT UNIVERSITY
M. Lara, J. Flores, S. van Der Meer, I. Bezemer

3D PRINTING FOR THE OPTIMISATION OF RESOURCES IN TEACHING PRACTICES IN THE PHYSICAL OPTICS LABORATORY
C. Vázquez Ferri, J. Espinosa Tomás, J. Pérez Rodríguez, E. Perales Romero, B. Domenech Amigot, C. Hernández Poveda

SPECIAL CITATION INDEX FOR EVALUATION OF SCIENTIFIC WORK TOPICALITY IN THE CONTEXT OF KNOWLEDGE TRANSFER
V. L’vov, Y. Kikhaiev, I. Novikova, O. Bediukh

PERSONALIZED AND SELF REGULATED LEARNING AND ONTOLOGY-BASED KNOWLEDGE MODELS IN THE CLOUD
T. Ivanova

TEACHER’S PROFESSIONAL DEVELOPMENT – CURRENT TRENDS AND CHALLENGES FOR TEACHERS IN SLOVAKIA
J. Ferencova

ACTION RESEARCH – A METHOD OF SUPPORTING CHANGE IN SCHOOLS?
J. Ferencova

SOCIOEMOTIONAL COMPETENCES DEVELOPMENT IN ARCHITECTURE DEGREE & MASTER STUDENTS IN SPAIN
S. Domínguez Gil, P. Miguel-Sin Monge, A. San José Cabrero, G. Ramírez Pacheco

FEEDBACK ON A ROBOTIC PROJECT FOR COMPETENCY-BASED LEARNING IN FRENCH UNIVERSITY BACHELOR OF TECHNOLOGY
N. Lardenois, J. Chevrie, L. Vermeiren

WIDENING THE HIGHER EDUCATION COMMUNITY: EXPANDING AND DIGITALLY ENHANCING CUSTOMER JOURNEYS FOR SMALLER-SIZED BUSINESSES THROUGH MASTERS PROJECTS AND THEN THROUGH PRESENTATIONS AT CO-WORKING COMMUNITY SPACES
Y.H. Tsai, M. Macintyre, S. Street

THE STATE OF KNOWLEDGE OF TEACHERS AND EDUCATORS IN PRIMARY AND SECONDARY EDUCATION ON CYBER THREATS CHALLENGING STUDENTS ON A DAILY BASIS - PROPOSAL OF PREVENTION AND TRAINING AREAS
D. Siemieniecka, K. Majewska

THE DISABLED CHILDREN'S PERCEPTION OF THEIR PARTICULAR HEALTH CONDITION: TRUTH OR CHALLENGE
I.A. Maruşca

LESSONS LEARNED FROM TEACHING IN THE PANDEMIC: IMPACTS, RESPONSES AND WHAT WORKED
M. Carroll, F. Constantinou
NON-STANDARD (PROSPECTIVE?) PLACES TO LEARN, I.E. SUPPORTING SCHOOLS ACTIVITIES WITH LOCAL ENVIRONMENT RESOURCES
A. Kulpa-Puczyńska

LESSONS LEARNT FROM HAVING TO ADAPT TO THE COVID PANDEMIC IN A HIGHER EDUCATION INSTITUTION IN THE UK
A. Battaglia

GAME DESIGN FOR TEACHING, LEARNING AND ASSESSMENT
S. Bezzina, A. Dingli, A. Pfeiffer, T. Wernbacher

PERCEPTIONS BY TEACHERS-BEGINNERS OF THEIR PREPARATION FOR PEDAGOGICAL WORK AT PRIMARY SCHOOL DURING STUDY AT HIGH EDUCATION ESTABLISHMENT IN LATVIA
J. Davidova, S. Zariņa

ONLINE BIBLIOThERAPY PUBLICATIONS IN BULGARIA: A TRAINING ELEMENT IN THE PERIOD OF GLOBAL PANDEMIC
S. Efīmova

DESIGNING ONLINE ASSESSMENTS RELIABLY ROBUST TO CHEATING FROM QUESTION BANKS
R. Pierce, M. Brenneman

THE INFLUENCE OF 21ST CENTURY SKILLS ON THE TRANSITION TO HIGHER EDUCATION
K. Pap, M. Baars

IMPLEMENTING COMPUTATIONAL THINKING MODULES: PRE-UNIVERSITY STUDENTS IN REMOTE LEARNING
S.L. Ong, J.P.W. Ling, W.L. Chang, N. Kamarudin

BACK TO THE DRAWING BOARD. THE CHOREOGRAPHY BEHIND RETURNING TO THE PHYSICAL ARCHITECTURAL DESIGN STUDIO
S. Bors, L. Patachi

THE PHYSICAL EXAM IN A TELEMEDICINE SPHERE: AN ESSENTIAL BUT UNFAMILIAR SKILL
C. Tamargo, G. Berkenblit, A. Apfel, J. Luckin, B. Garibaldi

HOW TO CREATE DIGITAL XML-ANNOTATED GLOSSARIES IN CLASS? A MULTIMODAL APPROACH TO TEACHING SPECIALIZED LANGUAGES ACROSS ALL LEVELS OF EDUCATION
S. Araújo, M. Aguiar

GLOBAL WOMEN'S BREAKFAST AS AN OPPORTUNITY TO CREATE AN INTERNATIONAL SCIENTIFIC COLLABORATION NETWORK
M.J. Ramalhosa, C. Soares, O. Matos Freitas, S. Teixeira, V. Cruz Fernandes, C. Delerue-Matos

INTERNATIONAL YEAR OF THE PERIODIC TABLE: CREATING AWARENESS OF THE CENTRALITY OF CHEMISTRY AND ITS ROLE IN SOLVING PROBLEMS OF HUMANITY FROM A PERSPECTIVE OF SUSTAINABLE DEVELOPMENT
C. Soares, V. Cruz Fernandes, S. Teixeira, O. Matos Freitas, M. J. Ramalhosa, C. Delerue-Matos

SUSTAINABLE EDUCATION FOR FUTURE GENERATIONS
M. Boras

DIGITAL TRANSFORMATION OF ADULT EDUCATION IN LATVIA: LESSONS LEARNT DURING THE COVID-19 PANDEMIC
I. Jekabsone

ASSESSING THE STUDENTS’ PROSPECTIVE PERCEPTIONS OF THE FINAL MASTER PROJECT IN ACTUARIAL SCIENCE
M.C. Mayorga-Toledano, E. Trigo-Martínez, A. Fernández-Morales

THE IMPLEMENTATION OF AN OPEN-SOURCE ERP ONLINE SOLUTION TO SUPPORT LABORATORY CLASSES AND STUDENTS ASSESSMENT IN HIGHER EDUCATION DURING COVID-19 LOCKDOWN
C. Batista, C. Alves

RETRIEVAL-BASED LEARNING AS A STRATEGY TO PROMOTE STUDENTS’ CONCEPTUAL LEARNING ABOUT THE PRINCIPLE OF CONSERVATION OF ENERGY BY TRANSCODING OF AN ARTISTIC SIGN INTO A SCIENTIFIC CONCEPT
M. Barros, C.E. Laburdi, Y.B. Santos, J.P. Ribeiro

THE USE OF PASCAL AS TEACHING TOOL FOR PROTEIN ENGINEERING
J. Sainz Pérez, M. Medina O’Donnell, F.J. Reyes Zurita
PERCEPTION OF THE CONCEPT OF 'QUALITY TEACHING' AMONG TEACHERS TAKING PART IN A TEACHING OBSERVATION PROJECT: INSIGHTS AND REFLECTIONS
M. Milani

PEDAGOGICAL STRATEGIES IN DISTANCE EDUCATION FOR CYBERSENIOR KNOWLEDGE MULTIPLIERS: AN EXPERIMENT DURING COVID-19
T. Grande, L. Rocha Machado, B. Slodkowski, P. Behar

DEVELOPING MATHEMATICAL LITERACY IN LEISURE-BASED EDUCATION FROM THE PERSPECTIVE OF PROSPECTIVE TEACHERS
J. Laitochová, M. Uhlířová, K. Večeřová

INTERACTION BETWEEN EDUCATION AND THE BUSINESS IN BULGARIA – MODELS OF SUCCESSFUL COOPERATION
K. Mincheva, D. Mladenova, H. Bogova, A. Tsvetkova

PROJECT MANAGERS COACH THEIR TEAMS IN PERFORMANCE AND CHANGEABILITY
T. Tallgren, T. Uusitalo

LESSON LEARNED FROM THE DEVELOPMENT AND IMPLEMENTATION OF INTERACTIVE EDUCATIONAL MATERIAL IN THE 3RD GRADE'S HISTORY LESSON
A. Noula, C. Pierrakeas

DEVISING A STANDARDISED, NATIONAL MANDATORY ONLINE TEACHING AND ASSESSMENT PROGRAMME FOR CLINICAL NURSE EDUCATORS (PRECEPTORS/MENTORS): THE BENEFITS, CHALLENGES AND PROJECT BLUE PRINT DEVELOPED FROM THE STAKEHOLDERS EVALUATION
E. McSharry, G. George, E. Fallon, B. Bradley, C. Rochford, F. Hunt

CONSIDERATIONS ABOUT THE FINAL DEGREE PROJECT (FDP)
F.J. Reyes Zurita, J. Sainz Pérez, M. Medina O'Donnell

A PERFORMANCE EVALUATION OF PROJECT-BASED LEARNING IN A HIGHER EDUCATION SCIENCE COURSE
M. Ibáñez, M.E. González-Benito, M. Pirredda, S. Mira, C. Martín

FROM THEORY TO PRACTICE: THE USE OF FLIPPED CLASSROOMS TO CREATE IMMERSIVE ENGLISH CLASSES FOR A1 LEVEL STUDENTS IN A UNIVERSITY IN ECUADOR
E. Vargas-Caicedo, A. Guaman-Tumbaco

PERSONAL DATA PROTECTION APPLICABLE TO AN E-LEARNING SYSTEM USING AN INDIVIDUAL PROFILE
Y. Anastasova, S. Tontcheva-Pencheva

THE POWER OF LEARNING: PAST, PRESENT, AND FUTURE
Y. Guan-Raczkowski

MOTHER TONGUE INTERFERENCE ON ENGLISH SPEAKING SKILLS: A CASE STUDY ON SCHOOL STUDENTS IN INDIA
R.Z. Hauzel, T. Pattnaik, S. Nethi

PROFESSIONAL COMPETENCES OF TEACHERS OF SECOND CHANCE EDUCATION AND THEIR DEVELOPMENT
V. Sutakova

PROJECT-BASED EDUCATION IN PRIMARY SCHOOL WITH THE USE OF VIRTUAL AND AUGMENTED REALITY
K. Dimitrova

SPECIFICATION OF EDUCATION PROCESS OF ADULT LEARNERS IN SECOND CHANCE EDUCATION IN SLOVAKIA
V. Sutakova

DEVELOPMENT OF KEY COMPETENCIES THROUGH GAMES, TEAM TASKS AND PROJECT WORK IN PRIMARY SCHOOL
K. Dimitrova, R. Papancheva

THE DESIGN, VALIDATION AND USE OF CLASSROOM ASSESSMENTS FOR MULTIDIMENSIONAL SCIENCE PROFICIENCY
J. Pellegrino

ENHANCING STUDENTS’ ONLINE READING COMPREHENSION THROUGH COLLABORATION AND READING AS A PROBLEM SOLVING PROCESS
I. Gaki, I. Spantidakis, A. Monzaki
TRANSFORMING INTERNATIONAL EXCHANGE: ENHANCING CULTURAL COMPETENCY IN THE DOMINICAN REPUBLIC AND THE UNITED STATES
C. Whann, S. Winn, L. Calix, M. Banks, L. Camacho, E. Moquete

3006

INNOVATIVE DOCKERIZED WEBSITE BUILDER
P. Bakonyi, M. Vančo, I. Kotuliak

3013

A CASE STUDY OF SERIOUS GAMES WITH AUGMENTED REALITY FOR LEARNING FACILITATING IN CHEMISTRY
K. Nánón, M. Vinnikov, M. Lee

3017

DEVELOPMENT OF ENTREPRENEURSHIP SKILLS IN HIGHER EDUCATION
R. Pocevičiene

3027

LET’S STOP MOTIVATING - LET’S HELP DISCOVER THE MEANING OF LEARNING
R. Pocevičiene

3035

INTERPERSONAL MUSICAL PERCEPTION OF YOUNGER SCHOOL-AGE CHILDREN
P. Kusý, I. Šuhajdová

3040

MANAGING THE PROCEDURES OF A HIGHER EDUCATION INSTITUTION USING GOOGLE WORKSPACE

3051

THE USE OF MUSIC THERAPY AND MUSIC PHILETICS IN SLOVAK KINDERGARTENS
P. Kusý

3062

INTRODUCING PROJECT-BASED LEARNING AND REAL-WORLD METHODOLOGIES AND TOOLS EARLIER IN THE SOFTWARE DEVELOPMENT CURRICULUM
D. Weaver, T. Bunch

3071

PROGRESS OF THE INCLUSIVE SCHOOLING AGENDA: WHAT THE CRPD COMMITTEE’S CONCLUDING OBSERVATIONS SAY
M. Winzer, K. Mazurek

3079

EFFECTS OF A STEAM-6E AR PROGRAMMING DESIGN COURSE ON ELEVATING STUDENTS’ LEARNING MOTIVATION AND COMPUTATIONAL THINKING: A CASE STUDY OF AR GAMES IN DIGITAL EXHIBITIONS
Y.C. Tsai

3084

A. Mena Vásquez, C. Devece Carañana

3091

ONLINE TEST PRACTICES: INSIGHTS INTO THE USE OF MOODLE QUIZZES IN A BUSINESS SCHOOL CONTEXT DURING A PANDEMIC
V. Fester

3102

SELF-REFLECTION OF THE CONCEPT OF TEACHING: A VIEW OF MANAGERIAL SKILLS OF UNIVERSITY TEACHERS
K. Němejc, K. Tomšíková, J. Šedivý

3111

LESS MASSIVE BUT MORE EFFICIENT ONLINE LEARNING FOR EFL TEACHERS
A. Kalizhanova, T. Shelestova

3117

PREPARING FOR UNIVERSITY STUDIES IN FINLAND: STARTING FINNISH LANGUAGE STUDIES ALREADY IN YOUR HOME COUNTRY
N. Helkiö

3123

APPLYING COGNITIVE LOAD THEORY AND THE VIRTUAL MEDICAL TECHNOLOGY ACCEPTANCE MODEL (VMEDTAAM) TO THE DESIGN AND DEVELOPMENT OF A VIRTUAL REALITY ANATOMY MEDICAL CLASSROOM
M.A.A. Mohd Hamizi, N.A. Mohamed Mokmin, U.H. Ariffin

3124

WOLFRAM CLOUD AS AN INTERACTIVE TOOL TO SUPPORT SECONDARY SCHOOL TEACHING
D. Nocar, J. Vaško, T. Zdráhal

3133

CYBERBULLYING AS ONE OF THE POSSIBLE RISKS OF DISTANCE LEARNING
H. Mičková, J. Miková, Z. Nováková, J. Šmída

3138

EDUCATOR’S PERCEPTION OF USING AUGMENTED REALITY TO CREATE STEM LEARNING MATERIAL
U.H. Ariffin, N.A. Mohamed Mokmin, M.A.A. Mohd Hamizi

3144

3D AUDIO-TACTILE MAPS AND MODELS FOR PEOPLE WITH VISUAL IMPAIRMENT
V. Ruzickova, A. Vondrákova, V. Vachalova, G. Spinarova, K. Kroupova

3151
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT OF SMART CITY SERVICES FROM THE PERSPECTIVE OF QUADRUPLE HELIX</td>
<td>3158</td>
</tr>
<tr>
<td>L. Walletzký, L. Nencková, Z. Schwarzová</td>
<td></td>
</tr>
<tr>
<td>INTERNATIONAL SOFTWARE DEVELOPMENT PROJECT STUDY MODULE IMPLEMENTED IN VIRTUAL TEAMS IN COOPERATION WITH WORKING LIFE</td>
<td>3164</td>
</tr>
<tr>
<td>N. Sarrazin, T. Lintilä, N. Debons</td>
<td></td>
</tr>
<tr>
<td>AIRLAB – A HANDS-ON EXPERIENCE ON THE MEASUREMENT OF ATMOSPHERIC PARTICULATE MATTER FOR UPPER SECONDARY STUDENTS</td>
<td>3172</td>
</tr>
<tr>
<td>S. Hemmer, L. Contti, L. Mobilia</td>
<td></td>
</tr>
<tr>
<td>FACTORS AFFECTING SCIENCE LEARNING ASSESSMENT: THE TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY CASE</td>
<td>3179</td>
</tr>
<tr>
<td>C. Santziakī, Z. C. Zacharia, N. Papadouris, CHR. TH. Nicolaou</td>
<td></td>
</tr>
<tr>
<td>THE ROLE OF CULTURAL MEMORY FOR THE CREATION OF AN INTERACTIVE EDUCATIONAL ENVIRONMENT</td>
<td>3186</td>
</tr>
<tr>
<td>D. Mladenova, K. Planska-Simeonova, A. Tsvetkova, S. Dimitrova</td>
<td></td>
</tr>
<tr>
<td>NON-PROFIT MARKETING LESSON TO DEVELOP AND REINFORCE APPLIEDPROFESSIONAL SKILLS IN BOTH STUDENTS AND TEACHERS</td>
<td>3191</td>
</tr>
<tr>
<td>N. Sarrazin, M. Zumstein, N. Debons</td>
<td></td>
</tr>
<tr>
<td>USING SOCIAL NETWORKING MEDIA TO DESIGN AN ONLINE COURSE – A CASE STUDY</td>
<td>3198</td>
</tr>
<tr>
<td>D. Jaksic</td>
<td></td>
</tr>
<tr>
<td>BEST OF BOTH WORLDS: HOW CAN WE USEFULLY COMBINE ONLINE AND CLASSROOM TEACHING IN THE CONTEXT OF PROJECT-BASED LEARNING WITHIN THE FRAMEWORK OF INDUSTRY-UNIVERSITY COOPERATION?</td>
<td>3205</td>
</tr>
<tr>
<td>R. Groś, K. Freundenthaler, T. Ulrich</td>
<td></td>
</tr>
<tr>
<td>MINORITY NAME MANAGEMENT IN A SLOVAK-HUNGARIAN BILINGUAL ENVIRONMENT</td>
<td>3214</td>
</tr>
<tr>
<td>J. Bauko</td>
<td></td>
</tr>
<tr>
<td>TEACHING OF THRESHOLD AND COMPLEX CONCEPTS IN MECHATRONICS</td>
<td>3215</td>
</tr>
<tr>
<td>E. Mäkiö, J.R. de Oliveira Leo, M. Tareen, F. Freeha Azmat, B. Ahmad</td>
<td></td>
</tr>
<tr>
<td>TRANSITION FROM FACE-TO-FACE LEARNING TO REMOTE TEACHING – FACULTY PERSPECTIVE</td>
<td>3224</td>
</tr>
<tr>
<td>V. Haralanova, S. Khoshaba</td>
<td></td>
</tr>
<tr>
<td>POPULARISATION OF LINGUISTICS IN UNIVERSITY EDUCATION</td>
<td>3234</td>
</tr>
<tr>
<td>J. Bauko</td>
<td></td>
</tr>
<tr>
<td>TEACHERS’ REASONING IN DIFFERENT TOPICS OF SCHOOL MATHEMATICS</td>
<td>3240</td>
</tr>
<tr>
<td>J. Michal, J. Novotná, M. Slavíčková</td>
<td></td>
</tr>
<tr>
<td>BLENDED LEARNING IN TERTIARY EDUCATION IN THE CZECH REPUBLIC – VISIONS FOR THE FUTURE</td>
<td>3244</td>
</tr>
<tr>
<td>H. Pavlísova</td>
<td></td>
</tr>
<tr>
<td>EDISON (EXPERIENCE DEMOCRACY IN SCHOOLS NOW) - LOCAL DEMOCRATIC SCHOOL DEVELOPMENT STRENGTHENING DEMOCRATIC COMPETENCES AND REALIZING INNOVATIONS AT SCHOOLS IN KOSOVO THROUGH FOLLOWING A PARTICIPATORY-DEMOCRATIC SCHOOL DEVELOPMENT APPROACH</td>
<td>3253</td>
</tr>
<tr>
<td>M. Rezel, V. Sylhasi</td>
<td></td>
</tr>
<tr>
<td>MAXIMISING TEAMWORK ENGAGEMENT BENEFITS VIA OPTIMISING TEAM MEMBER PERSONALITY MATCH</td>
<td>3261</td>
</tr>
<tr>
<td>N. Forman, J. Udvaros, K. Szabó, L. Szabó</td>
<td></td>
</tr>
<tr>
<td>CAMPUS PRAKTIKUM: HOW TO BRING THE UPV CLOSER TO THE FUTURE STUDENTS IN AN IMMERSIVE WAY</td>
<td>3268</td>
</tr>
<tr>
<td>E. Gimenez-Barco, A. Veloso Padilla, M.A. Torralba Navarro, M.E. Gómez-Martín</td>
<td></td>
</tr>
<tr>
<td>D. Mesquita, J. Cabral, J.M. Alves</td>
<td></td>
</tr>
<tr>
<td>THE IMPORTANCE OF TEACHING DRONES IN LOGISTICS</td>
<td>3286</td>
</tr>
<tr>
<td>J. Udvaros, N. Forman, L. Szabó, K. Szabó</td>
<td></td>
</tr>
<tr>
<td>FORMATION OF RESEARCH COMPETENCIES OF MASTERS’ STUDENTS</td>
<td>3291</td>
</tr>
<tr>
<td>G. Podzhebensova, K. Zvyagin, L. Yazdova, M. Kulakovich, I. Balandina, T. Moskvitina</td>
<td></td>
</tr>
</tbody>
</table>
METHODOLOGY FOR TEACHING FUNDAMENTALS OF COMPUTER PROGRAMMING FOR ENGINEERING AND HIGH SCHOOL STUDENTS NON-SPECIALISTS IN COMPUTER SCIENCE
J.R. Pérez Beltrán, R.P. Ñeco García, N.M. García Aracil, J.M. Catalán Orts, I. Fabra Ramón

BLENDING LEARNING ON TWITTER SOCIAL NETWORK: ONLINE, PERSONALISED AND FLIPPED LEARNING
T. Balcarova, L. Pilařová

CONTRIBUTION OF PEER-TO-PEER EVALUATION IN COLLABORATIVE EDUCATION BY PROJECTS DEVELOPED IN THE FIELD OF UNIVERSITY TRAINING OF ENGINEERS
I. Gil, I. Domínguez, M.M. Espinosa, R. Prádanos Del Pico, M. Domínguez

A ROCKY OUTCROP IN THE LABORATORY: FLIPPED CLASSROOM FOR LEARNING GEOMECHANICAL STATIONS

ORGANIZATIONAL COMMITMENT IN PORTUGUESE HIGHER EDUCATION TEACHERS
M. Ribeiro, C. Antão, V. Lebres, A. Fernandes

EXPERIENCES IN THE USE OF WIKIS AS A COLLABORATIVE TOOL FOR TEACHING COMPUTER SCIENCE
J.R. Pérez Beltrán, R.P. Ñeco García

DEVELOPING A CHALLENGE: THE DESIGN OF GREEN BUS STOPS AS A TOOL FOR INTERNATIONAL AND INTERDISCIPLINARY COLLABORATION IN FACE-TO-FACE SUMMER SCHOOLS

ASSESSING PUPILS' ACHIEVEMENTS IN TECHNOLOGY EDUCATION: PERCEPTIONS OF PUPILS AND TEACHERS
B. Zygaite, A. Guoba, I. Kepalienė

MODELING THE EDUCATION OF THE FUTURE WITH THE HELP OF ROBOTIC PROCESS AUTOMATION
M.I. Vulpe, V.A. Endăchescu

A MULTIDIMENSIONAL VIEW OF JOB SATISFACTION IN A PORTUGUESE PUBLIC HIGHER EDUCATION INSTITUTION
M. Ribeiro, C. Antão, V. Lebres, A. Fernandes

MODELS FOR CREATING VISUAL CULTURE IN THE SPHERE OF HIGHER EDUCATION
D. Mladenova, E. Zdravkova-Velichkova, K. Boyanov

USE OF ONLINE QUESTIONNAIRE TOOLS AND THEIR CORRELATION WITH THE EVALUATION OF DENTISTRY STUDENTS

EXPLORING THE USE OF MACHINE LEARNING TO IMPROVE STUDENT ENGAGEMENT AND RETENTION
I. Ogbuchi, E. Kiely, C. Quigley, D. McGinty

DIFFERENCES IN MOTOR ABILITIES OF PRESCHOOL CHILDREN CONCERNING THEIR ADDITIONAL ENGAGEMENT IN SPORT ACTIVITIES
J. Alić, V. Valjan Vukić, D. Kuna

APPLICATION OF "FLIPPED LEARNING" METHODOLOGY IN CHEMICAL ENGINEERING USING YOUTUBE AS TEACHING TOOL
M. Moya, M.T. Ocaña, I. Romero, F. Espinola, C. Cara

A CONSTRUCTIVIST APPROACH IN THE PROCESS OF LEARNING MECHATRONICS
D. Fait, V. Mašek, R. Čermák

STUDENT PREFERENCES WITH GAMIFICATION SYSTEMS IN EDUCATION IN DENTISTRY: IMMEDIATE VERSUS DEFERRED ACTIVITIES

BLENDING LEARNING AS A NEW METHODOLOGY FOR SHARING KNOWLEDGE AND COLLABORATING TO CREATE A SMALL URBAN OBJECT
THE DESIGN THINKING MODEL APPLIED TO AN ARTISTIC PROJECT IN THE CONTEXT OF EUROPEAN UNIVERSITIES
P. Macedo, L. Recnik, C. Munk

THE INTERNET: A NEW RENAISSANCE FOR THE UNIVERSITY
M.A. Garito

ONLINE ASSESSMENT CHALLENGES IN ENGINEERING GRAPHICS AND DESIGN
C.S. Masoabi

RECOGNIZING SOCIAL DISADVANTAGE IN THE PROCESS OF ADDRESSING EDUCATIONAL INEQUALITIES
Z. Němec, L. Felcmanová

MAJOR ROLES OF SCHOOL COUNSELLING PROFESSIONALS IN PROVIDING SUPPORT FOR STUDENTS FROM SOCIALLY DISADVANTAGED BACKGROUNDS
Z. Němec, A. Kubičková

TECHNOLOGICAL WATCH IN MANUFACTURING INDUSTRY: IDENTIFYING TRAINING NECESSITIES
J.J. Ortega Gras, J. Garrido Lova, B. Puche Garcia, O. Olivier Garnier, M. Daddiza

THE COMPETENCY-BASED APPROACH IN THE STUDY OF THE SUBJECT ‘TECHNOLOGY’ - A COMPARISON OF THE CASES OF LITHUANIA AND LATVIA
A. Strode, B. Zygaitiene

SELF-ADVOCACY AMONG COLLEGE STUDENTS WITH AND WITHOUT LEARNING DISABILITIES: THE CONTRIBUTION OF ACADEMIC SELF-EFFICACY AND SUPPORT
P. Shavit, R. Michael

EVOLUTION OF STUDENT APPROACH TO LEARNING IN A DEGREE LEVEL SUBJECT
N. Andrés-Colás, M. Leiva-Brondo

MACHINE LEARNING MODEL USAGE TO ANALYZE MOTIVATION AND PREDICT STUDENTS’ PERFORMANCE DURING COVID-19 IN HIGHER EDUCATION
A. Zabolotskikh, T. Dugina

THE ROLE OF UNIVERSITIES IN SUPPORTING THE DEVELOPMENT OF COMPETENCES 4.0 THROUGH UNIVERSITY-BUSINESS COLLABORATION
P. Poszytek, J. Fila, M. Jezowski

ASSESSMENT OF ALGORITHMIC THINKING OF SLOVAK AND HUNGARIAN SECONDARY SCHOOL STUDENTS
Š. Gubo, L. Végh

PERCEPTION OF SMART CITY IDEA IN SMALLER MUNICIPALITIES AND ITS IMPACT ON MULTIDISCIPLINARY EDUCATION
Z. Schwarzová, L. Wallecký

THE NEED TO ENHANCE INTERNATIONAL BLENDED MOBILITY IN SOUTH ASIA HIGHER EDUCATION: THE CASE OF MALAYSIA, INDONESIA, BANGLADESH, AND VIETNAM BEFORE AND DURING THE OUTBREAK OF COVID-19
I. Juknyte-Petrekienë, N. Gedultiene, R. Valutyte, I. Zališienë, C.Z. Lamagna, F. Hassan

A COMPARATIVE STUDY OF UNDERGRADUATE STUDENTS’ ATTITUDES TOWARDS MATHEMATICS, ITS LEARNING AND TEACHING
G. Pranaitytė, B. Narkevičienė

COMPREHENSION MONITORING ACROSS LANGUAGES – DOES FEEDBACK WORK?
L. Temelman-Yogeve, A. Prior, T. Katzir

REVIVING LEGACY LAB COURSE EXPERIMENTS WITH INEXPENSIVE COMMODITY HARDWARE AND A STATE-OF-THE-ART DATA ANALYSIS WORKFLOW – A CASE REPORT
C. Mayer

EXECUTIVE FUNCTIONS AND READING COMPREHENSION IN ADULTS WITH ADHD
V. Markovich, T. Katzir, E. Tirosh

COLLABORATIVE LEARNING AND TECHNIQUES FOR ENCOURAGING ACTIVE PARTICIPATION IN THE CLASSROOM: AN EXPERIENCE OF UNIVERSITY TEACHING INNOVATION IN THE PERIOD 2010-2020
A. Martinez Serrano

COMPARISON OF STUDENT’S APPROACH TO LEARNING IN TWO SUBJECTS OF BIOTECHNOLOGY DEGREE PER STUDENT BASIS
M. Leiva-Brondo, C. Esteras, J. Blanca, J. Cañizares
INTERDISCIPLINARY INVESTIGATION OF THE IMPACT OF A BEHAVIORAL INTERVENTION ON THE TOTAL DISTANCE COVERED IN SMALL-SIDED SOCCER GAMES
R.M. Pop, V.T. Grosu, M.N. Ordean, A.S. Rusu

THE EFFECTIVENESS OF TEACHING AIDS FOR MATHEMATICS TEACHING THROUGH THE EYES OF PROSPECTIVE TEACHERS
R. Dofková, J. Wossala, V. Scheichenostová

A STUDY OF COGNITIVE ABILITIES IN THAI CHILDREN
P. Visessuvananpoorn, J. Wintachai

THE IMPLEMENTATION OF THE CAPS FOR SEVERE INTELLECTUAL DISABLED LEARNERS – A SUCCESS STORY?
H. Louw, J. Rens

AN INTEGRATIVE REVIEW ON THE EXPERIENCES OF INTEGRATION OF QUALITY ASSURANCE SYSTEMS IN UNIVERSITIES
L. Mion

THINKING THE FUTURE IN THE PRESENT - THE WAY TO A MORE COMPETITIVE AND DIGITAL INDUSTRY
A. Fabre, S. Pelayo

ENSURE THE CONTINUITY OF INTERNATIONALIZATION AND AN ON-GOING DEVELOPMENT OF GLOBAL CITIZENSHIP COMPETENCIES IN A DUTCH TAUGHT HEALTH CARE BACHELOR
G. Foendoe Aubel

SOCIAL INEQUALITIES THAT AFFECT TRANSITION PROCESSES FROM GRADE 7 TO GRADE 8 WITHIN AN INCLUSIVE SOUTH AFRICAN EDUCATION SYSTEM
P. Engelbrech, J. Rens, H. Louw

VIEWS OF INCLUSION ACROSS TIME AND SPACE: FIVE YEARS OF PERSPECTIVES FROM UNIVERSITY TUTORS ON ACCESSIBILITY AND INCLUSION
K. Lister, V.K. Pearson, E. McPherson, A.M. Gallen

THE EFFECT OF GOVERNMENT SUBSIDY ON TECHNICAL SECONDARY SCHOOLS’ CURRICULUM DELIVERY IN SOUTH AFRICA
C. Mphojane

APPLICATION OF GAMIFICATION ELEMENTS IN UNIVERSITY EDUCATION TO IMPROVE THE LEARNING PROCESS
C. Goldmann, R. Woll

ICT IN WORK WITH CHILDREN WITH DEVELOPMENTAL DISORDERS IN PRIMARY AND PRE-PRIMARY EDUCATION
V. Gabaľová, V. Stoffová, J. Kočišová

NEW TRENDS AND EXPERIENCES OF SUPPLEMENTARY EDUCATION
H. Moisander, M. Tanskanen

RETHINKING SCHOOL BUSINESS PARTNERSHIPS TO DRIVE INNOVATION AND TEAM LEADERSHIP IN PUBLIC SCHOOLS AMID THE NEW NORMAL: A CASE OF SOUTH AFRICAN PUBLIC SCHOOLS IN LIMPOPO PROVINCE
M. Lamola

IDENTIFYING THE CHALLENGES OF COMMUNICATION WITHIN VIRTUAL TEAMWORK
C. Goldmann, A. Wolter, R. Woll

THE STUDY OF INTERMEDIAL FEATURES IN LITERATURE
L. Lutas

METHODOLOGICAL CHALLENGES IN PRACTICE-ORIENTED RESEARCH: CLOSING THE GAP BETWEEN EDUCATIONAL RESEARCH AND TEACHING PRACTICE
M. Utterberg Modén, M. Tallvid, J. Lundin, B. Lindström

TEACHING IN THE TIMES OF PANDEMIC
M. Tomovic, C. Tomovic

FACE-TO-FACE AND DISTANCE FORM OF PROGRAMMING TEACHING
V. Gabaľová, V. Stoffová, H.I. Oppenbergerová

BULLYING PREVENTION IN SCHOOLS
J. Ďurica, V. Soltíš, V. Adamová
THE IMPORTANCE OF SOCIAL-EMOTIONAL COMPETENCE FOR FIRST-YEAR TEACHERS’ PROFESSIONAL DEVELOPMENT
T. Kazarnovski

HOW ARE STUDENTS ENGAGING IN DIFFERENT TYPES OF ONLINE DISCUSSION BOARDS?
C. Vallis, C. Prieto Alvarez, N. Arthars

MOTIVATION AND STUDENTS’ GRADES IN HYBRID (IN-PERSON AND ONLINE) TRAINING
I. Getova, N. Yanev, Y. Anastasova, M. Trifonova

A TECHNOLOGICAL INTERVENTION FOR PROMOTING EYE CONTACT AMONG BOYS WITH AUTISM SPECTRUM DISORDER: CAN METACOGNITIVE SKILLS MAKE A DIFFERENCE?
O. Tova, A. Shamir, S. Eden, S. Horovitz, N. Munits, M. Amon

REPLICATION ON COGNITIVE LOAD DURING FIRST CONTACT WITH MIXED REALITY USING HEAD-MOUNTED DISPLAYS
R. Kockord, O. Bodensiek

A THEORY OF CONDITIONAL SOCIAL EQUALITY IN LEARNINGS GROUPS
H. Ahl, J. Hedegaard

STUDY OF THE EFFECTIVENESS OF PRE-LABORATORY VIDEOS ON ENHANCING STUDENTS’ SKILLS AND PERFORMANCE IN THE ANALYTICAL CHEMISTRY PRACTICAL CLASSES
E. Palacio, A. Figuerola, M.A. Vargas-Muñoz, L. Ferrer, J.G. March

PEDAGOGICAL SUPERVISION FOR STUDENT SUPPORT IN HIGHER EDUCATION
D. Stieģele, I. Miķelsone, D. Bethere, I. Ģriškēviča

ENGLISH FOR TOURISM AND HOSPITALITY PURPOSES IN HIGHER EDUCATION: SOME INSIGHTS FROM ENGLISH FOR SPECIFIC PURPOSES
S.R. Pereira, V. Costa

FEATURES OF TEACHING LISTENING SKILLS IN ENGLISH (AT THE SENIOR STAGE OF EDUCATION)
E. Harkova, K. Bashkirova

DEVELOPING SCHOOLS AS LEARNING ORGANISATIONS IN LATVIA: UNDERSTANDING AND IMPLEMENTATION PRACTICE IN LOCAL GOVERNMENTS
I. Lusena-Ezera, D. Kleina

THE PERCEPTIONS OF SCHOOL LEADERS ABOUT THE IMPLICATIONS OF THE COVID-19 PANDEMIC ON TECHNOLOGICAL, ORGANIZATIONAL, CULTURAL, AND PEDAGOGICAL LEVELS: AN EXPLORATORY STUDY IN PORTUGAL
M. Araujo, D. Mesquita

USE OF MODERN TECHNOLOGIES IN TEACHING ENGLISH SPEAKING (AT THE SENIOR STAGE OF TRAINING)
E. Harkova, K. Bashkirova

PROJECT BASED LEARNING FOR INCREASING ATTRACTIVITY OF TECHNICAL EDUCATION AT ELEMENTARY SCHOOLS AND HIGH SCHOOLS
R. Čermák, R. Teplý, V. Mašek, D. Fait

ENGLISH FOR TOURISM AND HOSPITALITY AS A BOOSTER FOR GLOBAL CITIZENSHIP EDUCATION
S.R. Pereira, V. Costa

PHOTO-RESEARCH(ING): APPLICATIONS, OPPORTUNITIES AND CRITICAL ISSUES IN USING PHOTOGRAPHY IN EDUCATIONAL RESEARCH
L. Carriera

RELEVANT SKILLS FOR A SUCCESSFUL TRANSITION TO HIGHER EDUCATION: STUDENTS AND TEACHERS’ PERSPECTIVES
M. Lara, P. Dekkers, J. Brouwer, T. Bom, M. Baars

PERSONALIZED ADAPTIVE LEARNING TECHNOLOGY: SUPERCHARGING SECOND LANGUAGE LEARNING
S. Wyatt, M. Redmon

TRAINING INTANGIBLE CULTURAL HERITAGE PROFESSIONALS IN ENTREPRENEURIAL AND DIGITAL SKILLS: THE NICHE CASE
F. Polymeropoulos, R. Chaliampalias, N. Ntalakouros, C. Piretrakas, A. Kameas
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPLEMENTING AN EARLY PREVENTION ANALYTICS MODEL ON SUPPORTING</td>
<td>3757</td>
</tr>
<tr>
<td>STUDENT SUCCESS</td>
<td></td>
</tr>
<tr>
<td>J. Wang</td>
<td></td>
</tr>
<tr>
<td>THE USE OF A VIRTUAL IMAGE AS AN EDUCATIONAL RESOURCE FOR THE</td>
<td>3763</td>
</tr>
<tr>
<td>OPHTHALMIC OPTICS LABORATORY</td>
<td></td>
</tr>
<tr>
<td>E. Perales Romero, J. Espinosa Tomás, E. Chorro, B. Domenech Amigot,</td>
<td></td>
</tr>
<tr>
<td>K. Huraibat, C. Vázquez Ferri, V. Viqueira</td>
<td></td>
</tr>
<tr>
<td>BLOOMING PERSONALITIES: ON THE IN-PERSON AND INTEGRATED EDUCATIONAL</td>
<td>3764</td>
</tr>
<tr>
<td>APPROACH IN HIGHER EDUCATION – A CASE STUDY FROM JAPANESE STUDIES</td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT OF SOFIA UNIVERSITY “ST KLIMENT OHRIDSKI”, BULGARIA</td>
<td></td>
</tr>
<tr>
<td>V. Nikolova, G. Petkova</td>
<td></td>
</tr>
<tr>
<td>PRESENTATION OF AN EDUCATIONAL DECISION SUPPORT TOOL USING ARTIFICIAL</td>
<td>3772</td>
</tr>
<tr>
<td>INTELLIGENCE TECHNIQUES IN THE PROFESSIONAL LEARNING COMMUNITY</td>
<td></td>
</tr>
<tr>
<td>CONTEXT</td>
<td></td>
</tr>
<tr>
<td>A. Villeneuve, A. Huot</td>
<td></td>
</tr>
<tr>
<td>UPSKILLING THE PROFESSIONALS IN CULTURAL HERITAGE: A METHODOLOGY IN</td>
<td>3778</td>
</tr>
<tr>
<td>DESIGNING ONLINE COURSES</td>
<td></td>
</tr>
<tr>
<td>P. Polymeropoulos, C. Pierrakeas</td>
<td></td>
</tr>
<tr>
<td>APPLICATION OF PROJECT-BASED LEARNING IN ANIMAL HUSBANDRY USING</td>
<td>3786</td>
</tr>
<tr>
<td>FLIPPED CLASSROOM AND VIRTUAL REALITY</td>
<td></td>
</tr>
<tr>
<td>A. Chikurteva, T. Atanasova</td>
<td></td>
</tr>
<tr>
<td>A SERVICE-LEARNING EXPERIENCE TO FOSTER STEM VOCATIONS AND PROMOTE</td>
<td>3796</td>
</tr>
<tr>
<td>EQUAL OPPORTUNITIES</td>
<td></td>
</tr>
<tr>
<td>Pavón</td>
<td></td>
</tr>
<tr>
<td>ACCOUNTABILITY &amp; TIME MANAGEMENT: AN INNOVATIVE APPROACH</td>
<td>3803</td>
</tr>
<tr>
<td>R. Abreu, F. Caetano, F. Carreira, A.C. Borrego, S. Loureiro</td>
<td></td>
</tr>
<tr>
<td>RE-FOUNDING THE TRANSDISCIPLINARY DOCTORAL SCHOOL: CO-CREATED</td>
<td>3811</td>
</tr>
<tr>
<td>EDUCATION FOR CONNOISSEURSHIP</td>
<td></td>
</tr>
<tr>
<td>Z. Barakzai, K.A. Németh, B. Tamas</td>
<td></td>
</tr>
<tr>
<td>EVALUATION OF THE SUSTAINABILITY OF AN ENGINEERING DEGREE</td>
<td>3815</td>
</tr>
<tr>
<td>APPRENTICESHIP PILOT IN NEW ZEALAND AND THE IMPLICATIONS FOR FUTURE</td>
<td></td>
</tr>
<tr>
<td>EXPANSION</td>
<td></td>
</tr>
<tr>
<td>J. Mackay, H. Cadzow</td>
<td></td>
</tr>
<tr>
<td>GENERATION OF AN AUTOMATIC-PERSONALISED ACADEMIC CALENDAR</td>
<td>3826</td>
</tr>
<tr>
<td>R. Muñoz Pavón, P. Carames, J. Jerez, M. García Alberti, A. Enfedaque</td>
<td></td>
</tr>
<tr>
<td>B. Muñoz-Medina, S. Blanco</td>
<td></td>
</tr>
<tr>
<td>PROPER DRESS CODE: USING CASE STUDIES ON FINNISH TEXTILES COMPANIES</td>
<td>3831</td>
</tr>
<tr>
<td>TO DISCUSS PROACTIVE LAW, TRADEMARKS, AND SUSTAINABILITY</td>
<td></td>
</tr>
<tr>
<td>S. Monseau, K. Sorsa</td>
<td></td>
</tr>
<tr>
<td>DIGITAL COGNITIVE TECHNOLOGY OF DISTANCE LEARNING BASED ON A UNITED</td>
<td>3841</td>
</tr>
<tr>
<td>ARTIFICIAL IMMUNE SYSTEM</td>
<td></td>
</tr>
<tr>
<td>G. Samigulina, Z. Samigulina</td>
<td></td>
</tr>
<tr>
<td>MENTORING OF PEDAGOGICAL PRACTICE - A STARTING POINT IN THE QUALITY</td>
<td>3842</td>
</tr>
<tr>
<td>OF EDUCATION</td>
<td></td>
</tr>
<tr>
<td>E.L. Mara</td>
<td></td>
</tr>
<tr>
<td>PSYCHOMETRIC PROPERTIES OF THE TEST OF EARLY ARABIC LITERACY SKILLS</td>
<td>3847</td>
</tr>
<tr>
<td>E. Hassanein</td>
<td></td>
</tr>
<tr>
<td>THE &quot;JUST YOUTH. HAVING A SAY IS A SUSTAINABLE ACTION&quot; EXPERIENCE:</td>
<td>3848</td>
</tr>
<tr>
<td>FIRST REFLECTIONS ON THE METHODOLOGY OF A UNIVERSITY ORIENTATION</td>
<td></td>
</tr>
<tr>
<td>PROGRAM</td>
<td></td>
</tr>
<tr>
<td>C.C. Montá, L. Carriera, E. Biffi, S. Malatesta</td>
<td></td>
</tr>
<tr>
<td>INNOVATIVE ACTIVE LEARNING METHODOLOGIES APPLIED TO HEALTH AND</td>
<td>3853</td>
</tr>
<tr>
<td>AGING-RELATED BACHELOR'S THESES TO ACHIEVE SUSTAINABLE DEVELOPMENT</td>
<td></td>
</tr>
<tr>
<td>GOALS: THE RESULTS OF IKASASUN-ODS PROJECT</td>
<td></td>
</tr>
<tr>
<td>T. Teresa Morera-Herreras, M. Torrecilla, AM. Ochoa de Retana, G.</td>
<td></td>
</tr>
<tr>
<td>Puras, A. Fernández-Quintela, C. Miguel, L. Sáenz-Del-Burgo, I.</td>
<td></td>
</tr>
<tr>
<td>Fernández, MP. Portillo, J. Ciriza, E. Sevillano, E. Eraso, A.</td>
<td></td>
</tr>
<tr>
<td>Vallejo, S. Gómez-Zorita, L. Aguirre, S. Ballesteros, E. Mateo, J.</td>
<td></td>
</tr>
<tr>
<td>Milton, C. Bruezos-Cidón</td>
<td></td>
</tr>
<tr>
<td>ATTITUDES TO THE THERAPEUTIC POTENTIAL OF READING IN ATYPICAL</td>
<td>3854</td>
</tr>
<tr>
<td>SITUATIONS: A SCIENTIFIC PROJECT FROM BULGARIA IN THE MIDDLE OF ITS</td>
<td></td>
</tr>
<tr>
<td>IMPLEMENTATION</td>
<td></td>
</tr>
<tr>
<td>S. Eftimova</td>
<td></td>
</tr>
</tbody>
</table>
ESP WITH ITALIAN DOCUMENT MANAGERS – TEACHING STRATEGIES AND ADAPTATIONS
M. Cronin

THE PROSPECTIVE PRIMARY EDUCATION TEACHERS’ VIEW ON THE DEVELOPMENT OF MATHEMATICAL LITERACY IN THE NEW CONCEPT OF INFORMATICS IN THE CZECH REPUBLIC
J. Wossala, R. Dofková, P. Seidlová

MATHEMATICS, LITERATURE AND ART: GETTING PASSIONATE ABOUT MATHEMATICS THROUGH THE USE OF DIGITAL TECHNOLOGIES
A. Amirante, L. Tortorelli, I. Veronesi

TRANSFORMING ASSESSMENT FROM BURDEN TO JOY
T. Campbell, M. McMartin

PARTICIPATION OF BACHELOR AND MASTER STUDENTS FROM THE SPECIALTIES OF ARCHIVAL AND DOCUMENTARY STUDIES, UNIVERSITY OF LIBRARY STUDIES AND INFORMATION TECHNOLOGIES IN THE “STUDENT PRACTICES - PHASE 2” PROJECT
S. Eftimova

DO CHILDREN WHO LEARNED TO READ DURING COVID 19 READ BETTER FROM SCREENS?
S. Dotan, T. Katzir

DIGITAL PRESENTATION OF ARCHIVE-DOCUMENTARY HERITAGE - RESPONSE TO THE EXPECTATIONS AND NEEDS OF USERS AND LIBRARY SPECIALISTS
E. Tsvetkova

LATVIAN HIGHER EDUCATION STUDENTS’ SELF-ASSESSMENT OF THE INNOVATIVE COMPETENCE IN THE STUDY PROCESS
A. Oļesika, S. Siļšāne, G. Lāna, Z. Rubene

HELPING DIGITAL NATIVES TO BECOME DIGITAL NATIVES THROUGH PRODUCTION STANDARDS, RESEARCH AND QUALITY SYSTEMS?

HACKATHONS FOR SCHOOLS: COLLABORATIVE INNOVATION EVENTS AS A CONTEXT FOR THE DEVELOPMENT OF THE DIGITAL CAPACITY OF SCHOOLS
N. Giannoutsou, T. Nanaieva, A. Brolpito

REFLECTIONS ON DISTANCE EDUCATION MANAGEMENT IN BRAZIL: CASE STUDIES ON THE DEVELOPMENT OF DIDACTIC MATERIAL IN DISTANCE EDUCATION IN CORPORATE UNIVERSITIES
E. Naime, A.P. Afonso, M. Vieira

USING TASK-BASED LANGUAGE TEACHING (TBLT) APPROACH TO IMPROVE THE READING PROFICIENCY OF MATURE STUDENTS
S. Adjei-Mensah, N. Boakye

DEVELOPMENT OF PROFESSIONAL COMPETENCE OF DESIGN TECHNOLOGY STUDENTS IN MANUFACTURING INTERNSHIP
S. Mezinska

AUTHENTIC MATERIALS – GOOD EXAMPLES OF THE NATIVE SPEAKERS’ SENSITIVITY TO DIFFERENT ACCENTS AND VARIETIES
J. Bérešová

EXPERIENCES AND BEST PRACTICE IN ACCREDITATION AND QUALITY PROCESSES AT FSE UNIZA
E. Sventekova, M. Vandlickova

MUSEUM PODCASTING POSSIBILITIES FOR INTERCULTURAL EDUCATION
A. Kalizhanova, T. Shelestova

ARE STUDENTS’ WORRIES JUSTIFIED WITHOUT STATISTICAL EVIDENCE?
J. Bérešová

MODELS AND PRACTICES OF ELEARNING USE AT THE CATHOLIC UNIVERSITY OF MOZAMBIQUE: A CASE STUDY
M. Salite, A.P. Afonso, L. Morgado

THE INFLUENCE OF THE THEORY OF EMBODIED COGNITION ON THE DEVELOPMENT OF THE LANGUAGE OF SMALL PRESCHOOLERS
M.C. Manea, M.D. Bocoș
TO NURTURE A MULTILINGUAL MIND. FOREIGN LANGUAGE INTRODUCTION IN PRE-SCHOOL. CASE STUDY: BAMBINI BICOCCA KINDERGARTEN
P. Lefterov

INTERCULTURAL SKILLS FOR FUTURE SIGNAL PROCESSING ON HEALTHCARE: HOW COLLABORATIVE ON-LINE INTERNATIONAL LEARNING TRAINS ENGINEERS
B. Lopez, R.C. Guido, A. Betts, K. Zerva

ACADEMIC PERFORMANCE, GRADE INFLATION AND REGULATORY EXCEPTIONS IN HIGHER EDUCATION DURING THE PANDEMIC
D. Toro

INFLUENCE OF COVID-19 ON THE LEARNING OUTCOMES OF UNDERGRADUATE STUDENTS: THE ROLE OF GAMIFICATION
M. Vega-Zamora, R. Barreda-Tarrazona

THE PROFESSIONAL UNIVERSITY DEGREE OF ACTUARY THROUGH BLOOM'S TAXONOMY
A. Arsuaga-Uriarte, J.I. De-la-Peña-Esteban, A. Garayeta-Bajo, O. Gómez-Pérez-Cacho, R. Moreno-Ruiz, E. Trigo Martínez

CHANGE OR DIE: ORGANIZATIONAL FACTORS THAT FACILITATE OR BLOCK ORGANIZATIONAL SURVIVAL DURING DISRUPTIVE CHANGE
I. Mikhailova

CURRENT SAFETY AND SECURITY TOPICS AND BEST PRACTICES OF THEIR IMPLEMENTATION IN STUDY PROGRAMS
E. Sventekova, J. Kapusniak

FOLK CRAFTS IN WORK ACTIVITIES AT PRIMARY SCHOOL
M. Hubalovska, A. Kubankova, T. Milova

DIVERSITY AND SOCIAL JUSTICE: REVIEW OF POTENTIAL CHALLENGES OF BUILDING DIVERSE AND INCLUSIVE WORKFORCE IN GHANA’S TERTIARY INSTITUTIONS
E.K. Honu, D. Dzansi, L. Dzansi, K. Boemah

BLAST – BUILDING LEADERS FOR ADVANCING SCIENCE AND TECHNOLOGY: A PARTNERSHIP BETWEEN THE VIRGINIA SPACE GRANT CONSORTIUM AND THE UNIVERSITY OF VIRGINIA, VIRGINIA POLYTECHNIC INSTITUTE, AND OLD DOMINION UNIVERSITY
C. Tomovic, M. Sandy, J. Back, V. Jovanovic, K. Lester, E. Murphy, S. Mckinney, M. Tomovic

APPLICATION OF AUGMENTED REALITY IN TEXT-BASED LEARNING ENVIRONMENTS
D. Djulovic, B. Ramic-Brkic

FOUNDATION YEAR 1 DOCTORS AS MEDICAL EDUCATORS – A PROGRAMME INTRODUCING NEWLY QUALIFIED DOCTORS TO UNDERGRADUATE TEACHING THROUGH A WORKSHOP AND DEDICATED NEAR-TO-PEER TUTOR SCHEME
H. Knifton

PERCEPTIONS OF TEACHER CANDIDATES ABOUT SCIENCE AND SCIENTISTS
Ş. Kösem

HOW EDUCATION IS IMPROVING SOCIAL INTERVENTIONS IN RURAL AREAS
L. Pinto, D. Pereira, M. Ferreira

IMPACT OF ECONOMIC CRISIS ON EDUCATION
B. Xie

CRITICAL THINKING AND PROBLEM SOLVING
B. Xie

LINGUISTIC AND EMOTIONAL EFFECTS OF ANIMAL-ASSISTED LITERACY INTERVENTION PROGRAM AMONG ELEMENTARY SCHOOL STUDENTS WITH READING DIFFICULTIES
A. Bufman, O. Lipka, T. Katzir

SMARTEX PROJECT-TRANSNATIONAL COOPERATION BETWEEN UNIVERSITIES
P. Díaz-García, L. Capablancas-Francés, R. Belada-Anaya, M. Tufaili, B. Zahid, A.W. Rajput

CO-CREATING WARWICK UNIVERSITY COMMUNITY
T. Olaofe, S. Mortazavi, B.N. Karaca, C. Gramadavathepura-Shivamadappa, C. Green, M. Macintyre
CIRCULAR ECONOMY OF FIBROUS COMPOSITES AND TECHNICAL TEXTILES E-LEARNING
P. Díaz-García, L. Capablanca-Francés, R. Belda-Anaya, D. Mikucioniene, L. Indrie, N. Dimopoulou, G. Priniotakis

LESSONS LEARNED FROM THE DEVELOPMENT OF MASSIVE OPEN ONLINE COURSES ON INNOVATIVE STRATEGIES FOR THE REHABILITATION OF BUILT HERITAGE
M. Philokyprou, S. Thravalou

RISK FACTORS IN THE RELATIONSHIPS BETWEEN PARENTS OF CHILDREN WITH DISABILITIES AND EXPERTS
Z. Haičlova, I. Grohmann, J. Michalík, P. Hajkova, L. Nováková

EDUCATING FOR SAFETY AT SCHOOL: ACCIDENT PREVENTION AND ACTION IN CASE OF BURNS
G. Colaço, H. Simões, A. Lucena, J.M. Freitas

VALIDATING THE DEVELOPMENT OF SOFT SKILLS SENSITIVITY IN SPECIAL EDUCATORS AND COUNSELLORS
P. Jurkovicová

BREAKING DOWN BARRIERS FOR COOPERATION BETWEEN ACADEMIA AND INDUSTRY - 10 YEARS OF MAKING UNIVERSITY-INDUSTRY TRAINING ARENAS HAPPEN
F.R. Johansen, G. Andersson, B.G. Hauge

RESEARCH ON CHANGES IN THE VALUE SYSTEM AND LEVEL OF WELL-BEING OF STUDENTS AND THE ELDERLY POPULATION AS A RESULT OF THE COVID-19 PANDEMIC
P. Voborník, V. Strnadová, K. Provazníková

THE ROLE OF EARLY CHILDHOOD EDUCATORS’ WELL-BEING IN THEIR RELATIONSHIP WITH CHILDREN
S. Tatalović Vorkapić

MAPPING GOOD PRACTICE IN THE SYSTEM OF SUPPORTING THE INDEPENDENCE OF YOUNG ADULTS WITH DISABILITIES – PARTIAL RESULTS
P. Jurkovicová, V. Ruzicková

QUIZZES AND EDUCATIONAL VIDEOS TO IMPROVE PERFORMANCE LEVELS IN TRAINING IN BUILDING STRUCTURES
B. Orta, C. Olmedo, M. A. Benito, D. Mencías-Carrizosa, V. Pascual, A. Marín, J. Antuña

H5P-PANDEMIC: COLLABORATIVE DEVELOPMENT OF INTERACTIVE AND PORTABLE EXERCISES IN A GENETIC ENGINEERING GAME

ORGANIZATION OF THE LEARNING CONTEXT IN TIMES OF PANDEMIC: STUDENT PERCEPTIONS
P. Morales Bueno, R. Santos Rodas

DEVELOPING AN ONLINE HOME LABORATORY COURSE WHERE STUDENTS MAKE THEIR OWN EQUIPMENT
J. Mackay

 GRATITUDE INTERVENTION PROGRAM AS A COPING STRATEGY IN UNIVERSITY PROFESSORS
J. Beltrán-Sánchez, O. Nava-Manzo, G. Martinez-Ramírez, A. Guardiola-Ramírez, A. Valle-de-la O

DESIGN OF A PHYSICS DYNAMICS LESSON FOR AGRONOMY ENGINEERING BASED ON CRITICAL THINKING AND COOPERATIVE LEARNING
L. Amy

THE EFFECTIVENESS OF ONLINE EDUCATION: THREE COMPARATIVE STUDIES
R.S. Carlisle

PREPARING STUDENTS FOR THE FUTURE THROUGH ROBOTICS FOR K12
A. Codera, Jr., C. Saulo, J. Caro

JAPANESE TEXTBOOK ANALYSIS: A DISCOURSE-BASED APPROACH
V. Fester, A. Fester, K. Umeda
TOTAL QUALITY MANAGEMENT PRACTICES RELATED TO HUMAN TALENT MANAGEMENT AND THE GENERATION OF INNOVATION IN THE HIGHER EDUCATION INSTITUTIONS: A LITERATURE REVIEW
A. Mena Vásquez, C. Devece Carañana

AUGMENTED REALITY FOR THE TEACHING OF STEM COURSES IN SENIOR HIGH SCHOOL
J. Caro, J.C. Boque, P. Yang-Ed

FOSTERING CHILDREN’S IMAGINATION AND CREATIVE PROCESSES THROUGH MAKING ACTIVITIES TAKING PLACE IN A MAKERSPACE
L.M. Santos, L. Menano, C. Habak

ANALYSIS OF FUNCTIONAL REQUIREMENTS OF E-LEARNING AND KNOWLEDGE MANAGEMENT SYSTEMS AND ASSESSMENT OF THEIR EFFICIENCY
I. Blagoev, G. Vassileva, V. Monov

THE INVESTIGATION OF STUDENTS WITH HIGH MATHEMATICS ACHIEVEMENTS ATTITUDE TOWARDS TEACHING, LEARNING AND TEACHING - LEARNING CONDITIONS
B. Narkevičienė

DIDACTIC COMPETENCES OF STUDENTS OF THE TEACHER EDUCATION PROGRAMME TO PLAN A LESSON IN THE CONTEXT OF THE DEVELOPMENT OF PUPILS’ CRITICAL THINKING
I. Ištvan

DESIGNING AND IMPLEMENTING A SEMINAR FOR B.ED. STUDENTS FROM MATHEMATICS AND SCIENCE EDUCATION: TEACHING INQUIRY USING THE STEM APPROACH
R. Segal, O. Eldar

SELECTED COOPERATIVE METHODS AND THEIR USE TO DEVELOP CRITICAL THINKING IN UNDERGRADUATE TEACHER EDUCATION
I. Ištvan

ADAPTING THE TEACHING METHODS FOR EDUCATIONAL PROGRAMS "ADVERTISING AND PUBLIC RELATIONS" AND "PUBLISHING AND EDITING" IN TIME OF CRISIS
V. Kasianchuk, O. Levchuk, S. Fiialka, O. Holovko, A. Lytvyn, I. Pobidash

CITIZEN VS. PROFESSIONAL DEVELOPERS: DIFFERENCES AND SIMILARITIES OF SKILLS AND TRAINING REQUIREMENTS FOR LOW CODE DEVELOPMENT PLATFORMS
R. Bernsteiner, S. Schlögl, C. Ploder, T. Dilger, F. Brecher

SUMMER CAMPS AND THE FORMAL EDUCATION OF NATURAL SCIENCES IN PRIMARY EDUCATION
M. Díaz-Rodriguez, A. Ortuzar-Iragorri

PRAGMATISM AS A TEACHING APPROACH FOR ENGAGING STUDENTS IN COMPUTING EDUCATION
S. Sohail, G. Saltar

APPLICATION OF PRODUCTION-ORIENTED APPROACH IN THE ENGLISH COURSE FOR NON-ENGLISH MAJOR POSTGRADUATES IN CHINA
X.Y. Chen, M. Cao, Q. Xie

PSYCHOMETRIC TESTING OF THE ADAPTED COMPUTATIONAL THINKING TEST IN GREEK CULTURE: ENSURING ITS RELIABILITY, STRUCTURE AND CONVERGENT VALIDITY
P. Kakavas, F.C. Ugolini

QUO VADIS? THE PROCESS OF EDUCATION, PREPARATION AND TRAINING OF CADETS – LEADERSHIP IN THE ARMED FORCES ACADEMY OF GEN. M. R. STEFANIK
M. Petrufova, L. Belan

INITIAL TEACHERS EDUCATION: THE ETWINNING EXPERIENCE IN FIVE ITALIAN UNIVERSITIES
E. Gabbi, I. Ancillotti, M. Ranieri, F. Fabbro

LEARNING ANALYTICS VIEW OF TEACHERS’ ACTIVITY IN A LARGE ONLINE PROFESSIONAL COMMUNITY
E. Gabbi
THE USE OF INTERACTIVE TABLETOP SURFACE IN SUPPORTING STUDENTS’ COLLABORATIVE WORK: INTERACTION AND INTERFACE DESIGN
S. Sulaiman, D.R. Awang Ramli, S. Mahamad, S. Basri

OVERDIMENSION OF THE CURRICULUM AS AN OBSTACLE TO ACHIEVING THE QUALITY OF THE TEACHING PROCESS
J. Varecha

STUDENT WITH INTELLECTUAL GIFTEDNESS AND ATTENTION DEFICIT HYPERACTIVITY DISORDER IN THE PROCESS OF READING COMPETENCE ACQUISITION
L. Lukáč, B. Hlebová, J. Kožárová

LEARNING STYLES AND THEIR INFLUENCE ON QUALITY OF EDUCATION
J. Varecha

ONLINE EXAMINATIONS DURING COVID-19
T. Vilner, E. Zur

AUDIOVISUAL MATERIAL FOR THE AUTONOMOUS LEARNING OF SKILLS IN THE LABORATORY COURSES OF THE BACHELOR’S DEGREE IN CHEMISTRY

READING COMPETENCE OF PUPILS OF THE 4TH YEAR OF BASIC EDUCATION IN THE CZECH REPUBLIC
M. Fasnerová, J. Petrová, M. Žísková, J. Trávník, K. Barancová, R. Kárníková

TEACHING FOREIGN LANGUAGES FOR THE ADAPTATION PERIOD: METHODOLOGICAL CHALLENGES
M. Burima

ORGANISING A CHALLENGE-BASED LEARNING EXPERIENCE IN HIGHER EDUCATION: PRE-SERVICE TEACHERS TRAINERS’ VIEWS
A. Cervero-Carrascosa, E. González Quiza, A. Chover Lafarga, E. Vidal Prades

DEVELOPMENT AND ASSESSMENT OF A TEACHING PROPOSAL FOR THE COMPREHENSION OF THE MEASUREMENT DIVISION MODEL IN FRACTION-BY-FRACTION DIVISION PROBLEMS BY PRIMARY SCHOOL STUDENTS IN GREECE
P. Kakavas, A. Papapouliou, N. Manesis

READING COMPETENCE ISSUES IN STUDENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER IN YOUNGER SCHOOL AGE
L. Lukáč, B. Hlebová, J. Kožárová

THE VALUE OF AESTHETIC EXPERIENCE: TEACHER BELIEFS, KNOWLEDGE AND SKILLS IN AESTHETICALLY-INFUSED INQUIRY-BASED LEARNING (AIIIBL) IN SINGAPORE SCHOOLS
P. Costes-Onishi, A. Azlan

COMMON TEACHING AND ITS EFFECTS IN THE IMPLEMENTATION OF THE CROSS-CULTURAL COMPETENCE COURSE
J. Bylica

TRANSFERABLE SKILLS DEVELOPMENT DURING THE PHD- EVALUATION OF DOCTORAL SUMMER SCHOOLS IN CIRCULAR ECONOMY
S. Khodaei, M. Bechtold, A. Abdelrazeg, J. Hildenbrand, M. Snol, G. Melo, E. Pirard, I. Isenhardt

IMPLEMENTATION OF THE SOTO MODEL AS A SUCCESSFUL AND FUN LEARNING STRATEGY IN ELEMENTARY SCHOOL
F. Jannah, R. Sari, R. Fahlevi, R. Radiansyah, N. Kartika Sari, P. Mega Puspita

SPATIAL PERCEPTION OF THE SOLAR SYSTEM: A 3D VISUALIZATION E-LEARNING MODULE
V. Georgiev, A. Nikolova, J. Stoikov

SCHOOL COLLECTIVE SELF-REFLECTION AS A BASIS FOR DIGITAL CAPACITY DEVELOPMENT
C. Herrero

HAPTIC TECHNOLOGIES IN VIRTUAL UPSKILLING AND TRAINING SCENARIOS: AN UMBRELLA REVIEW
F. Norouzinia, L. Paz, N. Peters, M. Müller, D. Werth

IMPROVING GENDER BALANCE THROUGH A COMBINED STEM DEGREE
E. McPherson, A. Clarke, A.M. Gallen, M. Keys, P. Wolf
TUNEHOP: THE MOBILE APPLICATION FOR LEARNING MUSICAL INSTRUMENTS
E. Kuš, M. Čarapina

DIGITAL JOB ONBOARDING
F. Niederl, E. Krainz, B. Reiter

INTEGRATION OF NEWCOMERS INTO THE LATVIAN EDUCATION SYSTEM: ANALYSIS OF EXPERIENCE AND OPPORTUNITIES
L. Danilane, S. Usca, J. Dzerviniks, I. Prudnikova, V. Dzervinika

PROJECT BASED LEARNING ON DESIGN FOR 3D PRINTING ASSEMBLY
P. Bolzan, A. Ascani

APPLIED HEALTH LITERACY IN RELATION TO SOMATIC CHARACTERISTICS AMONG FUTURE EDUCATORS
T. Sojková, M. Hřívnová

G-CORE AS AN INNOVATIVE TOOL TO SUPPORT REFLECTION IN A HIGHER EDUCATION ONLINE COURSE
A. Isaksson, J. Lindgren, P. Nilsson

LEARNING BY DOING: INVESTIGATING THE INTEGRATION OF DESIGN THINKING RESEARCH METHODS INTO AN AUTO-CONSTRUCTION DESIGN WORKSHOP FOR THE DEVELOPMENT OF LIVING ENVIRONMENTS FOR SENIORS
S.M. Gramegna, R. Valušytė

VOLUNTARY QUIZZES AS A MEANS TO SUPPORT SELF-DIRECTED LEARNING AND EXAM PREPARATION
S. Eberl, S. Schlögl, T. Spieß

BLENDLED LEARNING: A NEW TREND IN EDUCATION
A. Baquero, R. Escortell

HOW DO THIRD GRADE CHILDREN AND THEIR MOTHER’S PERCEIVE PARENTAL INVOLVEMENT IN READING AND IS IT RELATED TO READING ACHIEVEMENT?
B. Segal, T. Katsir, M. Shany

THE IMPACT OF A SHIFT IN THE TEACHING ENVIRONMENT OF HANDS-ON ORIENTED COMPUTER NETWORKS COURSE
N. Kassonic, D. Bjelobrk Knezevic

COVID-19 AND WAR EMERGENCY REMOTE TEACHING SHIFTS IN UKRAINE: CHALLENGES FACED AND LESSONS LEARNED
I. Andrusiak, O. Kolesnyk, M. Slyvka, A. Kolesnyk

PRIMARY SCHOOL PRINCIPALS’ PERSPECTIVE ON THE IDEA OF SOCIAL SUPPORT THROUGH HELPFUL AND CONSTRUCTIVE INTERACTIONS WITH COLLEAGUES AS A FACTOR IN RESILIENCE
A. Znidarec Cuckovic

PARAMETRIC MODELING FOR ADDITIVE CLAY MANUFACTURING AS A VECTOR FOR SUSTAINABILITY/CIRCULARITY IN DESIGN EDUCATION
A. Ascani, L. Cipriani, P. Bolzan

UNIVERSITY - INDUSTRY COLLABORATION EXPERIENCES FROM LINNAEUS UNIVERSITY
S. Khoshaba, V. Haralanova

ADDED VALUE OF THE PL@NTNET SMARTPHONE APPLICATION FOR THE MOTIVATION AND PERFORMANCE OF LOWER SECONDARY SCHOOL STUDENTS IN SPECIES IDENTIFICATION
V. Lang, A. Sorgo

M. Hřívnová, T. Sojková

GROUP DESIGN OF INFOGRAPHICS, AN INEXHAUSTIBLE VISUAL RESOURCE FOR THE UNIVERSITY TEACHING OF DRAWING
M.V. Esgueva López, M.P. Santiago Martín de Madrid, V. Santamarina-Campos, L. Fuster López

EVALUATION OF THE IMPLEMENTATION OF PROJECT-BASED LEARNING IN THE MASTERS IN TEXTILE ENGINEERING AT THE UPV
I. Montava Seguí, E. Bou Belda, P. Díaz García, L. Capablanca Francès, J. Gisbert Payá, R. Belda Anaya
PEDAGOGICAL MODEL OF ACHIEVING PLANNED EDUCATIONAL OUTCOMES BY PRIMARY SCHOOL STUDENTS BY BLENDED LEARNING FORMATS
K. Zvyagin, I. Kozlova, L. Makhusutova, L. Yuzdova, T. Moskvitina, I. Balandina

ANALYSIS OF THE RESULTS OBTAINED THROUGH INDICATORS AFTER THE APPLICATION OF THE PBL METHODOLOGY IN THE MASTER’S DEGREE IN TEXTILE ENGINEERING UPV
I. Montava Seguí, E. Bou Belda, L. Capablanca Francés, P. Díaz García, J. Gisbert Payá, R. Belda Anaya

EDUCATION AND SCIENCE COMMUNICATION TRAINING: A STUDY WITHIN A RESEARCH FELLOWS NUCLEUS
S. Ambrósio, R. Torres, S. Santos

RESULTS OF APPLYING THE JIGSAW PUZZLE FOR LEARNING NETWORK TOPOLOGIES
M. Dolz, M. Castillo, V. Tomás

MASTER STUDENTS’ PERCEIVED VALUE OF AN ELECTIVE COURSE THROUGH THEIR REFLECTIVE STATEMENTS
M. Gallarza, Y. Ouazzani, I. Colin-Lachaud, K. Picot-Coupey

DYNAMIC ASSESSMENT OF E-LEARNING IN FOREIGN LANGUAGES PROGRAMS IN SUSTAINABLE AND EMERGENCY DIGITIZATION FORMATS
R. Makhachashvili, I. Semenist

LEARNINGS FROM GENDER IN TEACHING COURSES: MAIN NEEDS AND RESISTANCES
E. Mas de les Valls, M. Peña, N. Olmedo-Torre, A. Lusa

DATA MODELING - LEARNING OUTCOMES AS THE FINAL METHOD OF EVALUATING THE ACQUIRED KNOWLEDGE AT THE UNIVERSITY NORTH
T. Horvat, L. Havaš, D. Srpak, V. Šac

HOLISTIC MODEL OF ENHANCING PERSONALITY IN SOCIAL MEDIA EDUCATION FOR HIGHER INSTITUTION STUDENTS
N. Omar, R. Embong, Z.J. Mohammad Yusoff, F.Z. Ismail, R. Abdul Rashid, I.R. Ismail

INNOVATING PRACTICAL SKILLS-ORIENTED TRAINING FOR SECURITY PROFESSIONALS IN THE AREA OF PRIVATE SECURITY
Z. Zvakova, M. Boras

SPORTS EVENTS AS AN EDUCATION AREA WITH STUDENTS-PUPILS COLLABORATION
H. Wöllik

TEACHER BEING THE LEADING ROLE: INTRODUCING COMPARATIVE LITERATURE MECHANISM IN LITERATURE TRANSLATION COURSE
T. Zhang, Z. Du

ANALYSIS OF THE IMPACT OF THE TEACHER’S PRESENCE IN AN ONLINE TRAINING SESSION ON STUDENTS USING THE EYE TRACKING TECHNIQUE
J.E. Sandubete, A. Rodríguez-Fuertes, P. Reinares-Lara

PISANKA: THE MOBILE APPLICATION FOR LEARNING HOW TO WRITE UPPERCASE LETTERS
F. Čulig, M. Carapina

PRACTICAL TRAINING OF SECURITY MANAGERS AND SECURITY PROFESSIONALS IN THE FIELD OF PROTECTION AGAINST EXPLOSIVE SYSTEMS
Z. Zvakova, L. Figuli

ONLINE TEACHING AND LEARNING IN UNCERTAIN TIMES: CHALLENGES AND WAYS OF COPING WITH THE NEW REALITY IN HIGHER EDUCATION
R. Wadmany, N. Davidovitch

THE USE OF SCREENCAST FEEDBACK IN UNDERGRADUATE DIGITAL DESIGN TEACHING PRACTICE
M. Green

SOCIAL NETWORKS AS AN EFFECTIVE WAY TO IMPROVE THE INTERCULTURAL COMMUNICATION SKILLS OF CHINESE RUSSIAN LEARNERS: A CASE OF TEACHING COMPLIMENTS
Z. Du, T. Zhang
THE SIGNIFICANCE OF TEACHING COMPLIMENTARY TRANSLATION IN LITERARY TRANSLATION COURSES - TAKING CHINESE RUSSIAN LANGUAGE STUDENTS AS EXAMPLE
T. Zhang, Z. Du

COMMUNICATING ABOUT THE PANDEMIC IN EARLY CHILDHOOD: THE ALT-ER 2.0 PLATFORM

APOLLONIUS’ PROBLEM LCC AS A STIMULUS FOR STUDENTS TO APPLY DIFFERENT GEOMETRIC KNOWLEDGE
D. Nocar, J. Vaško, T. Zdráhal

DIGITALLY MEDITATED LEARNING OF ACCOUNTING STUDENTS AMID COVID-19 PANDEMIC: A UNIVERSITY OF TECHNOLOGY CASE STUDY
M. Mokhampanyane

STUDENT-TEACHER RELATIONSHIP AND CHILDREN’S ATTACHMENT – IS THERE A CONNECTION?
S. Tatalović Vorkapić, I. Mihić, A. Smolić Batelić

RECONSTRUCTING THE QUALITY DEBATE USING INSTITUTIONAL AUDITS IN A COVID-19 CONTEXT: LESSONS FROM THE SOUTH, THE UNISA EXPERIENCE
K. Ndlovu, L.L. Lalendle, E. Johannes, M. Matshoba

EVALUATION OF THE EXPERIENCE IN SERVICE-LEARNING ACTIVITIES OF NURSING STUDENT
S. Cebada-Sánchez, M.L. Moratalla-Cebrián, R. Bartolome-Gutiérrez, I. Marcilla-Toribio, C. Berlanga-Macías, M. Martínez Andrés

LEARNING POWER SYSTEM SIMULATION IN AN INTERNATIONAL FRAMEWORK

MICROWAVE FILTER DESIGN AND FABRICATION FOR TEACHING IN ENGINEERING DEGREES

HOLISTIC THOUGHTFUL CLASSROOM FOR PROMOTING HIGHER ORDER THINKING SKILLS IN THE 21ST CENTURY LEARNING
R. Embong, W.M. Wan Yusoff, S. Che Seman, H.A. Hashim, H. Md Lateh @ Junid

OVERCOMING THE CHALLENGES TO THE ACCESSIBILITY OF DIGITAL LEARNING FOR THE SOCIAL CARE WORKFORCE
S. Freeman, L. Lord, S. First

COMMUNICATION ASPECT OF PEDAGOGUE’S COLLABORATION WITH THE SCHOOL PRINCIPAL AND TEACHERS
A.M. Iveljić

MAPPING HIGHER JOURNALISM EDUCATION IN EUROPE: DEVELOPMENT OF AN OPEN ACCESS INTERACTIVE DIGITAL REPOSITORY
T. Vukić

HUMANISTIC INTEGRATIVE LEARNING APPROACH TO HOLISTIC STUDENT DEVELOPMENT FOR THE POST-PANDEMIC WORLD
R. Embong, A. Awang Abd. Rahman @ Jusoh, N. Nordin, H.A. Hashim, A.D. Md Zain

COLLABORATIVE TRANSLATIONS OF EARLY MEDIEVAL ENGLISH LITERARY TEXTS: PROJECT-BASED LEARNING AND THE DEVELOPMENT OF KEY COMPETENCES IN ENGLISH STUDIES
F.J. Minaya Gomez

FROM SECONDARY EDUCATION TO HIGHER EDUCATION: THE INFLUENCE OF SOCIAL-EMOTIONAL LEARNING DURING EDUCATIONAL TRANSITION
P. Dekkers, M. Lara, M. Baars

BUILDING A VIRTUAL LABORATORY BENCH TO EXAMINE HEAT TRANSFER PROCESSES
A. Parushev, A. Chekichev, R. Popov

EDUCATION OF CRISIS AND SECURITY MANAGERS FOCUSED ON PSYCHOSOCIAL RISKS RESULTING FROM PRACTICE
V. Moricová, Z. Zvaková, D. Kováčová
THE ADVANTAGES OF A VIRTUAL LABORATORY FOR FOREIGN LANGUAGE TEACHING AT UNIVERSITY LEVEL: THE CASE OF ENGLISH FOR SPECIFIC PURPOSES
I.A. Drobot

A SERVICE-LEARNING PROJECT AS A TEACHING TOOL TO FIGHT AGAINST HYPERTENSION

REMOTE PRACTICE EXAM TESTING ON DOCKER
J. Jurc, M. Storbak, P. Segec

CHANGES IN THE RELATIONSHIP OF HIGH SCHOOL STUDENTS WITH SELF AND OTHERS, THROUGH INVOLVEMENT IN EXTRACURRICULAR EDUCATIONAL ACTIVITIES
A. Fantana, D. Opris

BUILDING A VIRTUAL INSTRUMENT FOR RESEARCH AND ANALYZING FILTERS IN LABVIEW AND MATLAB
A. Chekichev, A. Parushev, R. Popov

VIRTUALIZATION IN EDUCATION USING THE VIRTUAL ROUTER TOOL
J. Jurc, M. Storbak

WORKSHOP ON LIFE STREAMING SHOPPING: ENGAGING PSYCHOLOGY STUDENTS INTO THE MEASUREMENT OF A NEW CONSUMER EXPERIENCE

FUTURE INNOVATION: DEVELOPING COGNITIVE DIVERSITY THROUGH UNIVERSITY-INDUSTRY COLLABORATION
J. Davidson, C. Chase

IMPROVING LEARNING THROUGH THE CREATION AND RESOLUTION OF CLINICAL CASES ONLINE
C. Guinot-Barona, C.M. Ferrer Serrador, L. Galañ López, A. Lanuza García

THE STRATEGY OF EDUCATION IN ETHICS TO ACQUIRE SOFT SKILLS IN SECURITY SCIENCES
D. Kováčová, J. Studená, V. Moricová

THE CHALLENGES AND BENEFITS OF MOVING MUSICAL IMPROVISATION ONLINE: LESSONS FOR EDUCATIONAL DESIGN AND PRACTICE
S. Wilson

LINKING THEORY TO PRACTICE: HOW GAME EXPERIENCE CAN CONTRIBUTE TO REVISING AND INCREASING UNDERSTANDING OF THE PARADIGMS OF LEARNING
B.J. Godejord

INCREASE MARITIME CYBER SITUATIONAL AWARENESS AT A STRATEGIC LEVEL

SAFETY PARK LEARNING ENVIRONMENT AND DIGITAL TECHNOLOGIES FOR TRAINING OCCUPATIONAL SAFETY IN CONSTRUCTION AND ENGLISH FOR PROFESSIONAL COMMUNICATION
E. Seleznева

MORAL VALUES AND THE QUANTITATIVE DIMENSION OF THE FRIENDSHIP RELATIONSHIP BETWEEN ADOLESCENTS
D. Opris, M. Opris, A. Fantana

EXPERIENCE WITH SEVERAL QUALITATIVE EVALUATION METHODS IN EDUCATION
P. Fanta, D. Skokanová

AN INTERDISCIPLINARY PATH TO THE EXPLORATION OF THE UNIVERSE WITH THE USE OF TECHNOLOGIES FOR PRIMARY SCHOOL STUDENTS
C. Aramo, I. Veronesi
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEB-ASSESSING FOREIGN LANGUAGE ACQUISITION OF MIXED ABILITY PRIMARY</td>
<td>4871</td>
</tr>
<tr>
<td>SCHOOL PUPILS TO ENHANCE DIFFERENTIATED FLIPPED BLENDED LEARNING</td>
<td></td>
</tr>
<tr>
<td>S. Gkika, N. Zygouris, I. Galantamos, P. Oikonomou, G. Dimitriou, S.</td>
<td></td>
</tr>
<tr>
<td>Kopsidas, G. Stamoulis</td>
<td></td>
</tr>
<tr>
<td>EXPLORING PEDAGOGICAL CONTENT KNOWLEDGE OF ENTREPRENEURSHIP</td>
<td>4881</td>
</tr>
<tr>
<td>EDUCATION, TECHNICAL VOCATIONAL EDUCATION, AND TRAINING LECTURERS IN</td>
<td></td>
</tr>
<tr>
<td>THE CONTEXT OF KNOWLEDGE OF CONTENT AND STUDENTS</td>
<td></td>
</tr>
<tr>
<td>M.S. Motsoeneng</td>
<td></td>
</tr>
<tr>
<td>THE LEVEL OF DEVELOPMENT OF DIGITAL COMPETENCE AMONG TEACHER</td>
<td>4882</td>
</tr>
<tr>
<td>TRAINING STUDENTS</td>
<td></td>
</tr>
<tr>
<td>K. Harangus, A. Kakucs</td>
<td></td>
</tr>
<tr>
<td>INTERDISCIPLINARY COLLABORATION ENHANCED BY A SHARED GOAL ON</td>
<td>4889</td>
</tr>
<tr>
<td>MULTIPLE BACHELOR’S THESIS: A CASE STUDY FOCUSED ON SUSTAINABLE URBAN</td>
<td></td>
</tr>
<tr>
<td>DRAINAGE SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>M. Garmentian, A. Gredilla, A. Laurenc, E. Madrazo-Uribeetzebarria,</td>
<td></td>
</tr>
<tr>
<td>M. Meaurio</td>
<td></td>
</tr>
<tr>
<td>THE ROLE OF AUTOMATED STUDENT ADVISING WHEN INCENTIVISING STUDENT</td>
<td>4896</td>
</tr>
<tr>
<td>SUCCESS</td>
<td></td>
</tr>
<tr>
<td>R. Rawatlal</td>
<td></td>
</tr>
<tr>
<td>A VIRTUAL WORLD EDUCATIONAL GAME FOR TEACHING NEW ICT SKILLS TO</td>
<td>4897</td>
</tr>
<tr>
<td>TEACHERS: CHALLENGES AND OPPORTUNITIES</td>
<td></td>
</tr>
<tr>
<td>P. Athanasiou, K. Dimitropoulos, E. Voyiatzaki, I. Hatzilygeroudis</td>
<td></td>
</tr>
<tr>
<td>ALGORITHMIC AND SIMULATION-BASED TEACHING OF COMPUTER SCIENCE AND</td>
<td>4904</td>
</tr>
<tr>
<td>MATHEMATICS IN HIGHER EDUCATION</td>
<td></td>
</tr>
<tr>
<td>N. Annaš, O. Takač</td>
<td></td>
</tr>
<tr>
<td>THE USE OF VIRTUAL REALITY TO PRACTICE PUBLIC SPEAKING IN A FOREIGN</td>
<td>4912</td>
</tr>
<tr>
<td>LANGUAGE: A CASE STUDY WITH PORTUGUESE HIGHER EDUCATION STUDENTS</td>
<td></td>
</tr>
<tr>
<td>C. Tavares, G. Chorão, P. Duarte</td>
<td></td>
</tr>
<tr>
<td>ENQER VIEW - AN ANALYTICAL DASHBOARD FOR THE COMPARISON OF</td>
<td>4921</td>
</tr>
<tr>
<td>UNIVERSITIES’ ENTRY QUALIFICATIONS ON EXIT RESULTS</td>
<td></td>
</tr>
<tr>
<td>N. Paltalidis, Z. Hong</td>
<td></td>
</tr>
<tr>
<td>INTERACTION BETWEEN A DIGITAL ELEMENT AND TRADITIONAL TEACHING IN</td>
<td>4930</td>
</tr>
<tr>
<td>HIGHER EDUCATION CLASSES: LITHUANIA’S CASE</td>
<td></td>
</tr>
<tr>
<td>I. Piščkiene, V. Mickevičienė</td>
<td></td>
</tr>
<tr>
<td>SAP VIEW - ANALYTICAL DASHBOARD SOFTWARE FOR THE ANALYSIS OF</td>
<td>4940</td>
</tr>
<tr>
<td>STUDENTS’ ACADEMIC PERFORMANCE</td>
<td></td>
</tr>
<tr>
<td>N. Paltalidis, Z. Jin</td>
<td></td>
</tr>
<tr>
<td>TEACHER PERCEPTIONS ON IMPLEMENTING MOBILE AR FOR THE TEACHING OF</td>
<td>4948</td>
</tr>
<tr>
<td>ITALIAN AS A FOREIGN LANGUAGE</td>
<td></td>
</tr>
<tr>
<td>M. Manna</td>
<td></td>
</tr>
<tr>
<td>SELF-ASSESSMENT OF TEACHERS IN DIGCOMPEDU SUB-AREAS</td>
<td>4949</td>
</tr>
<tr>
<td>P. Bohackova, K. Kilianova, L. Klubal, P. Kockova, K. Kostolanyova</td>
<td></td>
</tr>
<tr>
<td>ADDRESSING LOW MOTIVATION IN STUDENTS THROUGH THE ANALYSIS OF THE</td>
<td>4953</td>
</tr>
<tr>
<td>MOTIVATION PROFILE IN HIGH EDUCATION</td>
<td></td>
</tr>
<tr>
<td>B. Martínez Pabón, L. Raya, J.J. Garcia Rueda, M. Angulo, B. Sainza</td>
<td></td>
</tr>
<tr>
<td>Fraga</td>
<td></td>
</tr>
<tr>
<td>DISCIPLINARY DIFFERENCES IN DIGITAL COMPETENCE IN ONLINE ASSESSMENT:</td>
<td>4962</td>
</tr>
<tr>
<td>A EUROPEAN CROSS-COUNTRY AND INTERDISCIPLINARY NEEDS ANALYSIS FOR THE</td>
<td></td>
</tr>
<tr>
<td>ERASMUS+ PROJECT ‘DIGITALHEIGHTS’</td>
<td></td>
</tr>
<tr>
<td>N. Souleles, M. Samdanis, E. Papageorgiou</td>
<td></td>
</tr>
<tr>
<td>AN INTERACTIVE APPROACH TO CHILDREN’S CRITICAL MEDIA LITERACY</td>
<td>4972</td>
</tr>
<tr>
<td>EDUCATION: DEVELOPING THE MINDING MEDIA VIDEO TRAINING LIBRARY</td>
<td></td>
</tr>
<tr>
<td>V. O’Rourke, J. Blue</td>
<td></td>
</tr>
<tr>
<td>EFFECTS OF DIFFERENT VIDEO PLAYBACK SPEEDS ON THE ACQUISITION OF NEW</td>
<td>4979</td>
</tr>
<tr>
<td>SKI KNOWLEDGE</td>
<td></td>
</tr>
<tr>
<td>D. Kuna, M. Marinovic, M. Babic</td>
<td></td>
</tr>
<tr>
<td>ASCERTAINING RESEARCH: GRADUATE RESEARCH ASSISTANTS ONE YEAR</td>
<td>4986</td>
</tr>
<tr>
<td>JOURNEY</td>
<td></td>
</tr>
<tr>
<td>J. Harding Middleton</td>
<td></td>
</tr>
<tr>
<td>PROBLEMS AND COUNTERMEASURES OF ONLINE TEACHING DURING THE EPIDEMIC</td>
<td>4991</td>
</tr>
<tr>
<td>Q. Bai, Y. Cao, Y. Huang</td>
<td></td>
</tr>
</tbody>
</table>
PARENTAL PARTICIPATION AND FUNCTIONING OF ASYLUM-SEEKING PARENTS IN THE EYES OF KINDERGARTEN TEACHERS AND THERAPISTS IN KINDERGARTENS
S. Bar-On

TEACHING COMPUTER SCIENCE FOR THE GENERATION Z – WHY WE NEED MORE PROBLEM-BASED TEACHING IN CS CURRICULA
E. Krainz, A. Öffl, J. Feiner, H. Schwab, M. Knoll, W. Zugaj

TRANSITION SKILLS IN HIGHER EDUCATION
E.W. de Vries

LIVED EXPERIENCES OF PRE-SERVICE ACCOUNTING TEACHERS DURING COVID-19 ERA IN INSTITUTIONS OF HIGHER LEARNING
L. Mphatsoane

APOLLONIUS’ PROBLEM CCC AS A STIMULUS FOR NEW SOLUTION METHODS USING MATHEMATICAL SOFTWARE
D. Nocar, J. Vaško, T. Zdráhal

MODELLING A CO-DESIGN PROCESS TO ENVISION DESIGN DIDACTICS IN A POST-PANDEMIC TIME - THE CASE OF THE SCHOOL OF DESIGN, POLITECNICO DI MILANO
A.G. Manciaracina, I. Bollati, M. Mazzarello, A. Taverna

EXPLORATION OF DISTANCE LEARNING OF FOREIGN LANGUAGES UNDER MOBILE LEARNING DURING THE EPIDEMIC
Q. Bai, Y. Cao, Y. Huang

ANALYSIS OF THE NEED FOR INTERDISCIPLINARY ART CURRICULUM
Y. Cao, Q. Bai, M. Mishatkhina

THE IMPORTANCE OF MOTIVATION IN COMPUTER SCIENCE TEACHING
A. Acalin, K. Pavlina, A. Pongrac Pavlina

WHAT DO THEY KNOW ABOUT THE EARTH SYSTEM AND GEOETHICS? PORTUGUESE 11TH-GRADE STUDENTS AND SENIOR CITIZENS’ CONCEPTIONS
T. Ribeiro, C. Vasconcelos

MODEL CONSTRUCTION FOR THE SYNTHESIS OF THE SUBJECT NATURAL SCIENCES
A. Ortuzar-Iragorri

THE RETURN TO THE CLASSROOM: OFFERING SCAFFOLDING JOINT CLASSES TO PREPARE FOR FLIPPED WORKGROUPS
C. Tromp

THE LABORATORY WORK AND THE RELEVANCE OF GOWIN'S V: PORTUGUESE MIDDLE SCHOOL SCIENCE TEACHERS' PERCEPTIONS
D. Lima, C. Vasconcelos

HOW EYE-TRACKING TECHNOLOGY CAN BE USED IN DYSLEXIA RESEARCH: AN OVERVIEW
N. Dostálová

PRESENTING MEANINGFUL MATHEMATICAL TASKS THROUGH STORIES FROM HISTORY OF MATHEMATICS: EXAMPLES FROM THE ISLAMIC CONTEXT
H. Haydar, B. Durmaz

ON THE HIGHER EDUCATION QUALITY AND IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT
I. Chiyon Carrasco, S. Sastre-Merino, C. Garay Rondero, J.C. Mosquera Feijoo

FOSTERING COLLABORATIVE ONLINE LEARNING: PRE-SERVICE STUDENTS’ PERSPECTIVES
N.M. Majola, B. Lenong, G. Hlumbane

A JOURNEY FROM THE SCHOOLYARD TO THE MOON AND BEYOND: DISCOVERING WAYS TO "GROW" THROUGH RISKY PLAY

RESEARCH TRENDS IN THE USE OF SOCIAL MEDIA AS A TEACHING AND LEARNING TOOL IN HIGHER EDUCATION: CONTENT AND BIBLIOMETRIC ANALYSIS
E. Perez, S. Manca, R. Fernández-Pascual, C. Mc Guckin

A SENSORY GARDEN FOR ENVIRONMENTAL EDUCATION AND LIFE QUALITY IMPROVEMENT
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIAL EMOTIONAL ENVIRONMENT COMPONENT OF SELF-DIRECTED LEARNING</td>
<td>5124</td>
</tr>
<tr>
<td>SKILLS DEVELOPMENT IN PRIMARY SCHOOL (GRADES 1-3)</td>
<td></td>
</tr>
<tr>
<td>I. Pelnēna, A. Medveckis</td>
<td></td>
</tr>
<tr>
<td>EVALUATION OF THE STUDENTS' PRACTICE FROM THE COMPANIES' POINT OF</td>
<td>5131</td>
</tr>
<tr>
<td>VIEW</td>
<td></td>
</tr>
<tr>
<td>M. Kuncova, D. Frendlovska, J. Seknickova</td>
<td></td>
</tr>
<tr>
<td>CONCRETE DOSAGE: FROM TRIAL-AND-ERROR TO THE USE OF PERSONAL</td>
<td>5138</td>
</tr>
<tr>
<td>COMPUTERS, WHICH METHOD IS BETTER FOR UNIVERSITY STUDENTS?</td>
<td></td>
</tr>
<tr>
<td>E. Gimenez-Carbo, C. Mazo, H. Coll, L. Soriano</td>
<td></td>
</tr>
<tr>
<td>LIVED EXPERIENCES OF ACCOUNTING TEACHERS IN SELECTED SCHOOLS ON</td>
<td>5143</td>
</tr>
<tr>
<td>ONLINE LEARNING: SUSTAINABLE CURRICULUM PRACTICE APPROACH</td>
<td></td>
</tr>
<tr>
<td>L. Mphatsane</td>
<td></td>
</tr>
<tr>
<td>THE EFFECT OF ART HISTORY TRAINING ON ARTISTIC CRITICAL THINKING</td>
<td>5144</td>
</tr>
<tr>
<td>DURING COVID-19 LOCKDOWN</td>
<td></td>
</tr>
<tr>
<td>B. Tamás, A. Barta, B. Galfi</td>
<td></td>
</tr>
<tr>
<td>INFOGRAPHICS AS AN INSTRUMENT OF CONTINUOUS EVALUATION: A PROPOSAL</td>
<td>5149</td>
</tr>
<tr>
<td>FROM THE EXPERIENCE OF USING THE TOOL AS A GROUP PRACTICAL ACTIVITY</td>
<td></td>
</tr>
<tr>
<td>D. Catala-Perez, M.B. De Miguel-Molina, M. De Miguel-Molina, V.</td>
<td></td>
</tr>
<tr>
<td>Santamarina-Campos</td>
<td></td>
</tr>
<tr>
<td>FACTORS AFFECTING E-LEANERS' SATISFACTION ON DISTANT LEARNING: A CASE</td>
<td>5156</td>
</tr>
<tr>
<td>OF LOMONOSOV MOSCOW STATE UNIVERSITY GRADUATE PROGRAMS</td>
<td></td>
</tr>
<tr>
<td>A. Kisil, M. Ulyanova</td>
<td></td>
</tr>
<tr>
<td>COUPLING CULTURALLY RESPONSIVE TEACHING AND STEAM EDUCATION:</td>
<td>5164</td>
</tr>
<tr>
<td>EXAMINING GLOBAL AND LOCAL HERITAGE SITES TO DEVELOP STEAM</td>
<td></td>
</tr>
<tr>
<td>PROFICIENCIES</td>
<td></td>
</tr>
<tr>
<td>C. Maguire, T. Hogan</td>
<td></td>
</tr>
<tr>
<td>POTENTIALS FOR TECHNOLOGY-SUPPORTED TEACHING AND LEARNING IN</td>
<td>5165</td>
</tr>
<tr>
<td>CONTINUING EDUCATION: INSIGHTS FROM A MIXED METHODS STUDY</td>
<td></td>
</tr>
<tr>
<td>L. Häflisch</td>
<td></td>
</tr>
<tr>
<td>PYTHON COURSE FOR GAME DEVELOPMENT: AN INITIATIVE OF WOMEN IN STEM</td>
<td>5175</td>
</tr>
<tr>
<td>C. B. Souza, E. H. Q. V. Costa, J. C. C. Duarte, M. G. Moreira, S.</td>
<td></td>
</tr>
<tr>
<td>M. B. S. B. Fraga, V. Rodrigero, L. R. Santos, C. A. Martins, F. A.</td>
<td></td>
</tr>
<tr>
<td>Pereira, I. B. Henriques, M. M. Silva, M. M. S. Matsumoto, N. Jodas,</td>
<td></td>
</tr>
<tr>
<td>S. S. D. Custódio, L. K. Teles, K. D. Fook</td>
<td></td>
</tr>
<tr>
<td>AVOIDING MISSING IMPORTANT STEPS IN EDUCATIONAL MANAGEMENT</td>
<td>5183</td>
</tr>
<tr>
<td>G.M. Moraru</td>
<td></td>
</tr>
<tr>
<td>FOSTERING TRANSNATIONAL RESEARCH, INNOVATION AND EDUCATION</td>
<td>5190</td>
</tr>
<tr>
<td>THROUGH AN INTERNATIONAL EUROPE AND AFRICA COLLABORATION PROJECT</td>
<td></td>
</tr>
<tr>
<td>I. Mocanu, O. Cramariuc, K. Bierwirth, H. Lebik, B. Kodom, M. Mecklin</td>
<td></td>
</tr>
<tr>
<td>LEVERAGING THE INTERNET OF THINGS TOWARDS RAISING ENVIRONMENTAL</td>
<td>5195</td>
</tr>
<tr>
<td>AWARENESS IN EUROPEAN CLASSROOMS</td>
<td></td>
</tr>
<tr>
<td>T. Kouvara, A. Fanariotis, V. Fotopoulos, C. Karachristos, T.</td>
<td></td>
</tr>
<tr>
<td>Orphanoudakis</td>
<td></td>
</tr>
<tr>
<td>THE RELATIONSHIP BETWEEN EMPATHY AND EMOTIONAL EXHAUSTION IN</td>
<td>5203</td>
</tr>
<tr>
<td>UNIVERSITY PROFESSORS</td>
<td></td>
</tr>
<tr>
<td>G. Martinez-Ramirez, O. Nava-Manzo, A. Guardiola-Ramirez, J.</td>
<td></td>
</tr>
<tr>
<td>Beltran-Sanchez, A. Valle-de la O</td>
<td></td>
</tr>
<tr>
<td>INCLUSIVE DESIGN TO BRIDGE THE DIGITAL DIVIDE AND TO INCREASE</td>
<td>5209</td>
</tr>
<tr>
<td>ACCEPTANCE OF OLDER ADULTS FOR SMART MEDICATION COMPLIANCE DEVICES</td>
<td></td>
</tr>
<tr>
<td>I. Mocanu, O. Cramariuc, K. Bierwirth, K. Piotrowicz, A. Mocanu</td>
<td></td>
</tr>
<tr>
<td>EDUCATION AND INCLUSION OF FORCED MIGRANTS THROUGH SPORT: UNDERSTANDINGS FROM POLITICS AND PRACTICE</td>
<td>5216</td>
</tr>
<tr>
<td>B. Valongo, T. Silva Dias, S. Marques da Silva</td>
<td></td>
</tr>
<tr>
<td>PROFESSIONAL TRAINING OF LAST YEAR ENGINEERING STUDENTS USING THE</td>
<td>5217</td>
</tr>
<tr>
<td>CASE STUDY METHOD</td>
<td></td>
</tr>
<tr>
<td>G.M. Moraru</td>
<td></td>
</tr>
<tr>
<td>TRANSITION UP, OUT AND BACK; CONTEXTUALISING INCLUSIVE STUDENT</td>
<td>5223</td>
</tr>
<tr>
<td>LIFECYCLE INTERVENTIONS AGAINST GRADUATE LIMINALITY</td>
<td></td>
</tr>
<tr>
<td>A. Amayo</td>
<td></td>
</tr>
<tr>
<td>POETIC INSIGHT INTO STUDENT MOTIVATION AND EXPERIENCE</td>
<td>5224</td>
</tr>
<tr>
<td>L. Robson</td>
<td></td>
</tr>
</tbody>
</table>
EXAMINING THE RESULTS OF FINAL PAPERS IN MECHANICAL ENGINEERING DURING THE COVID-19 PANDEMIC
G. Kiss, E.C. Berecz

AN INSIGHT IN THE DIMENSIONS OF INSTRUCTION QUALITY IN ENGINEERING EDUCATION
J.C. Mosquera Feijoo, S. Andrés Martinez, D. Santillán Sánchez, L. Cueto-Felgueroso Landeira

THE IMPACT OF A SHARED SCREEN ON A TEACHER'S ACTIVITIES IN A COMPUTER-SUPPORTED CLASSROOM
R. Shaikh, H. Raval

FINDING POETRY IN YOUR DATA
L. Robson

SELF-REPORTED INAPPROPRIATE NEGOTIATION STRATEGIES QUESTIONNAIRE COMPARISONS AMONG BUSINESS VERSUS SOFTWARE ENGINEERING STUDENTS
D. Brannon, M. Manshad, V. Iyer

THE RELATIONSHIP BETWEEN CHEMISTRY AND TELECOMMUNICATIONS ENGINEERING AS A DRIVING FORCE AND MOTIVATION FOR UNDERGRADUATE THESIS WITH IMPROVED TRANSVERSAL SKILLS

A NEW SET OF TOOLS FOR ADAPTIVE SELF-PACED LEARNING IN COMPUTER-AIDED DESIGN FOR ENGINEERING
F. Salmerón Medina, M. Alcalde Rico, F. Gómez-Estern Aguilar, F. Valderrama Gual

DIGITAL LITERACY & MOTIVATION: CREATING PERSONAS WITH MIXED-METHODS TO TAILOR ONLINE TRAINING TO THE CRAFT INDUSTRY
M. Tasiariu, D. Langer, J. Birke, S. Zeiner-Fink, A.C. Bullinger

EDUCATIONAL RESEARCHERS AND SCIENCE COMMUNICATION: THE CASE OF A BIWEEKLY COLUMN PUBLISHED IN REGIONAL NEWSPAPER S. Ambrósio, M.H. Araújo E Sá, C. Guerra

FACILITATION OF COMPETENCE ACQUISITION THROUGH FORMATIVE E-ASSESSMENT
R. Meissner, C. Ruhland

MICROCREDENTIALS FOR IN SERVICE MATHEMATICS TEACHERS AND AMBITIOUS TEACHING PRACTICES: UNDERSTANDING THE STRENGTHS AND BARRIERS
H. Haydar

AUTOMATED GRADING IN COMPUTER-AIDED DESIGN FOR ENGINEERING
F. Salmerón Medina, M. Alcalde Rico, F. Gómez-Estern Aguilar, F. Valderrama Gual

CONCEPTION OF TEACHING THE COURSE NUMERICAL METHODS AND STATISTICS AT THE FACULTY OF MECHANICAL ENGINEERING, UNIVERSITY OF ŽILINA AND ITS TRANSFORMATION DURING THE COVID 19 PANDEMIC
I. Pobočíková, M. Michalková, Z. Sedliačková, V. Guldan, R. Chupáč

INTERACTIVE INNOVATION BROKER: A CONSENSUAL FRAMEWORK FOR MULTI-ACTOR APPROACH PRACTICAL IMPLEMENTATION
O. Bernardez, J. Domingues, N. Rodríguez-Aubo, W. Filipowska, C. Cotelo

STUDENTS' SATISFACTION IN THE ACCOUNTING AND ADMINISTRATION GRADUATION: FACTORS THAT AFFECTED THE EXPERIENCE OF DISTANCE LEARNING CONTEXT
A. Monteiro, R. Bertuzzi, C. Pereira, R. Soares

SPACES FOR YOUTH PARTICIPATION IN DECISION-MAKING: A PEDAGOGICAL REFLECTION BASED ON A CONTENT ANALYSIS OF EUROPEAN AND INTERNATIONAL YOUTH STRATEGIES
D. Bianchi, L. Carriera, C.C. Montà

WHAT ABOUT SCHOOL PROFESSIONALS? SELF-ASSESSMENT OF THEIR SOCIO-EMOTIONAL COMPETENCIES
T. Maglica, A. Grčić, M. Ljubetić

CREATING GLOBAL CITIZENS: DIVERSITY, EQUITY, AND INCLUSION IN GENERAL EDUCATION CURRICULUM
A. Dominguez

BEYOND A BLURB ON THE RESUME: IMPROVING THE ACADEMIC VALUE OF FIELD EXPERIENCES THROUGH STRUCTURED REFLECTION
M. Finkenberg
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSESSING CHANGE: ASSESSMENT, ACCREDITATION AND CURRICULUM DESIGN</td>
<td>5337</td>
</tr>
<tr>
<td>A. Dominguez</td>
<td></td>
</tr>
<tr>
<td>EXPLORING SOCIAL MEDIA USES AND INTERNET ADDICTION DURING THE</td>
<td>5338</td>
</tr>
<tr>
<td>PANDEMIC</td>
<td></td>
</tr>
<tr>
<td>P. Silveira</td>
<td></td>
</tr>
<tr>
<td>WHAT LIES BENEATH? USING A MULTIMODAL INQUIRY FRAMEWORK TO EXAMINE</td>
<td>5342</td>
</tr>
<tr>
<td>LECTURERS’ SEMIOTIC CHOICES IN THE DESIGN AND DEVELOPMENT OF</td>
<td></td>
</tr>
<tr>
<td>MULTIMODAL SCREENCASTS TO TEACH DISCIPLINARY CONCEPTS IN HIGHER</td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
</tr>
<tr>
<td>G. McDermott</td>
<td></td>
</tr>
<tr>
<td>REMOTE TEACHING METHOD FOR HUMAN-ROBOT COLLABORATION ON THE FACTORY</td>
<td>5350</td>
</tr>
<tr>
<td>FLOOR</td>
<td></td>
</tr>
<tr>
<td>W. Souza Picanço, G. Soprano Machado, M. Melo de Carvalho, F. Antonio</td>
<td></td>
</tr>
<tr>
<td>de Carvalho Ayres Junior, R. Landau Paiva de Medeiros, V. Ferreira</td>
<td></td>
</tr>
<tr>
<td>de Lucena Junior</td>
<td></td>
</tr>
<tr>
<td>DISTANCE LEARNING MODEL FOR EXERCISE INTERVENTION IN ADOLESCENTS</td>
<td>5360</td>
</tr>
<tr>
<td>WITH ANGINA PECTORIS</td>
<td></td>
</tr>
<tr>
<td>M. Guan, B. Pu, R. Cao, H. Jingbo</td>
<td></td>
</tr>
<tr>
<td>CLASSROOM MANAGEMENT WITHOUT TEARS: SOCIAL EMOTIONAL LEARNING AS</td>
<td>5366</td>
</tr>
<tr>
<td>SUSTAINABLE APPROACH TO BEHAVIORAL CHANGE</td>
<td></td>
</tr>
<tr>
<td>R. Pelton</td>
<td></td>
</tr>
<tr>
<td>THE IMPACT OF A FIRST-YEAR ORIENTATION TEAM BUILDING EXERCISE</td>
<td>5367</td>
</tr>
<tr>
<td>J. Smallwood, C. Allen</td>
<td></td>
</tr>
<tr>
<td>FOREST PEDAGOGY AS ONE OF THE APPROACHES TO SUSTAINABLE DEVELOPMENT</td>
<td>5374</td>
</tr>
<tr>
<td>IN EDUCATION</td>
<td></td>
</tr>
<tr>
<td>D. Kollárová, S. Borisová</td>
<td></td>
</tr>
<tr>
<td>ADAPTATION OF TEACHING METHODOLOGIES IN ADULT EDUCATION:</td>
<td>5381</td>
</tr>
<tr>
<td>APPLICATION IN THE SENIOR CLASSROOM OF THE UNIVERSITY OF MURCIA</td>
<td></td>
</tr>
<tr>
<td>A. Martinez Serrano</td>
<td></td>
</tr>
<tr>
<td>THE EFFECTIVENESS OF LEARNING MODEL GAWI MANUNTUNG TO INCREASE</td>
<td>5389</td>
</tr>
<tr>
<td>HIGH ORDER THINKING SKILLS AND DIGITAL LITERACY SKILLS ELEMENTARY</td>
<td></td>
</tr>
<tr>
<td>SCHOOL STUDENTS</td>
<td></td>
</tr>
<tr>
<td>A. Suriansyah, A.R. Agusta, N. Ngadimun, I. Sin, M.F. Mohd Yaakob, A.</td>
<td></td>
</tr>
<tr>
<td>Aslamiah, D.A. Pratívi, N. Noorhapisah, R. Purwanti, B.B. Wiyono</td>
<td></td>
</tr>
<tr>
<td>SUSTAINABILITY CHALLENGE AS A MOTOR FOR THE DEVELOPMENT OF</td>
<td>5401</td>
</tr>
<tr>
<td>TRANSVERSAL SKILLS IN MATERIALS SCIENCE AND UNDERGRADUATE THESIS IN</td>
<td></td>
</tr>
<tr>
<td>CHEMISTRY: SUSTAINABLE MATERIALS FOR WIND TURBINES</td>
<td></td>
</tr>
<tr>
<td>I. Moreno Benítez, A. Veloso, M. Azkane, C. Calabrese, A. Lasheras,</td>
<td></td>
</tr>
<tr>
<td>I. Ayesta, I. Usabiaga, J.L. Vilas-Vilela, L. Ruiz Rubio</td>
<td></td>
</tr>
<tr>
<td>ENGINEERING INNOVATIVE WAYS TO SUSTAIN LEARNING FOR PRE-SERVICE</td>
<td>5405</td>
</tr>
<tr>
<td>ECONOMIC AND MANAGEMENT SCIENCE TEACHERS IN CURRICULUM PRACTICE</td>
<td></td>
</tr>
<tr>
<td>M. Mphuthi, M. Tshelane</td>
<td></td>
</tr>
<tr>
<td>ANALYSIS OF THE TRANSITION FROM ONLINE EDUCATION TO FACE-TO-FACE</td>
<td>5413</td>
</tr>
<tr>
<td>EDUCATION AFTER THE COVID 19 PANDEMIC</td>
<td></td>
</tr>
<tr>
<td>A. Buhu, L. Buhu</td>
<td></td>
</tr>
<tr>
<td>THE RELATIONSHIP BETWEEN BULGARIAN PRIMARY TEACHERS’ EMPATHY AND ITS</td>
<td>5419</td>
</tr>
<tr>
<td>“PROFESSIONAL EMPATHY” IN THE ASPECT OF DESIGN THINKING AS AN</td>
<td></td>
</tr>
<tr>
<td>EDUCATIONAL APPROACH</td>
<td></td>
</tr>
<tr>
<td>N. Kaloyanova, D. Donev</td>
<td></td>
</tr>
<tr>
<td>PERCEPTION OF THE EFFECTIVENESS OF CHEMISTRY TEACHERS’ E-</td>
<td>5420</td>
</tr>
<tr>
<td>COMMUNICATION WITH STUDENTS, PARENTS AND COLLEAGUES</td>
<td></td>
</tr>
<tr>
<td>S. Milković Šipek, D. Černi, O. Martinis</td>
<td></td>
</tr>
<tr>
<td>CREATING ACCESSIBLE ACADEMIC SUPPORT PROGRAM ACCOMMODATIVE OF THE</td>
<td>5427</td>
</tr>
<tr>
<td>NEW NORMAL IN CURRICULUM PRACTICE FOR PRE-SERVICE TEACHERS</td>
<td></td>
</tr>
<tr>
<td>M. Mphuthi, M. Tshelane</td>
<td></td>
</tr>
<tr>
<td>IN FAVOR OF CHANGE: USING THE COM-B MODEL TO CHARACTERIZE TRAINERS’</td>
<td>5428</td>
</tr>
<tr>
<td>BEHAVIOR DURING THE DIGITIZATION PROCESS OF VOCATIONAL TRAINING</td>
<td></td>
</tr>
<tr>
<td>J. Birke, M. Taslarmut, I. Friedrich, S. Zeiner-Fink, A.C. Bullinger</td>
<td></td>
</tr>
<tr>
<td>AMBIPOLAR RADIOFREQUENCY APPLICATIONS FOR THE NEXT GENERATION OF</td>
<td>5437</td>
</tr>
<tr>
<td>MICROWAVE ENGINEERS</td>
<td></td>
</tr>
<tr>
<td>F. Pasadas, A. Medina-Rull, A. Toral-Lopez, F. G. Ruiz, A. Godoy, E.</td>
<td></td>
</tr>
<tr>
<td>G. Marin</td>
<td></td>
</tr>
</tbody>
</table>
IMPLEMENTING UNIVERSAL DESIGN FOR LEARNING TO PROMOTE LANGUAGE PARITY IN ONLINE COURSES: A PILOT TRANSLATION INITIATIVE
M. Redmon, S. Wyatt, W. Howard

AUTOMATION OF KAHOOT! BY THE HUMANOID ROBOT PEPPER
A. Dannecker, D. Hertig

INCLUSIVE PEDAGOGY IN PRACTICE: THE POINT OF VIEW OF TEACHERS
M. Passarelli, F.M. Dagnino, S. Ivanov, D. Persico

EDUTAINMENT TECHNOLOGIES IN PRIMARY SCHOOL EDUCATIONAL PRACTICES
B. Shao

THE ROLE OF PRE-SCHOOL TEACHERS IN PROMOTION OF CHILD MENTAL HEALTH
S. Skočić Mihić, K. Babić Milih, R. Ćepić

PROJECT-BASED LEARNING TO UNDERSTAND THE STERIC EFFECT OF CHEMICAL LIGANDS BY A WEB-SERVER
A. Poater

INTEGRATING CITIZEN OBSERVATORIES INTO SCHOOL ENVIRONMENTAL EDUCATION FOR SUSTAINABILITY: DESIGN AND EVALUATION OF A CASE STUDY
M. Daskolia, M. Pappa, A. Joly, P. Bonnet, R. Arias, J. Piera, K. Soacha

PERCEIVED TEACHERS’ INCLUSIVE COMPETENCIES AND PROFESSIONAL DEVELOPMENT
S. Skočić Mihić, K. Jurčić Malinarić, R. Ćepić

THE FUTURE OF EAP IN HIGHER EDUCATION: AN ITALIAN PERSPECTIVE
A. Romagnuolo

THE INCREASE IN ACTIVE TEACHING METHODOLOGIES AND THEIR DOCUMENTARY FRAMEWORK
M.M. Silva, M.J. Ferreira, D.R. Alves

SCHOOL DROPOUT: CHARACTERIZATION OF THE CONDITIONS OF STUDENTS AT A PORTUGUESE HIGHER EDUCATION INSTITUTION
M. Lopes, P. Sismeiro Pereira, P. Fortunato Vaz

METHODS OF TEACHING USING SOFTWARE APPLICATIONS AND TRUE EFFECTS OF THESE METHODS
J. Jánský, J. Jekl, V. Růžička

UNIVERSITY SUPPORT, STUDENTS’ SKILLS AND ENTREPRENEURIAL INTENTIONS: A PLANNED BEHAVIOUR APPROACH
C.S. Marques, C.P. Marques, C. Leal

HOW DO ACADEMICS PERCEIVE THE BENEFITS AND COSTS OF COLLABORATING WITH INDUSTRY?
C. Marques, C.S. Marques, C. Leal

ROMANIAN AS A MOTHER TONGUE AND AS A FOREIGN LANGUAGE - COMPARATIVE STUDY ROMANIA - REPUBLIC OF MOLDOVA
G. Ciobotaru

“STUDY FRIENDS”: AN INNOVATIVE TUTORING INTERVENTION PROJECT IN MIDDLE SCHOOLS
I. Coppola, C. Rivella, F. Lagomarsino, A. Modugno, N. Rania

THEMES OF NATURE IN CHILDREN’S PHILOSOPHICAL LITERARY STORIES AS ONE OF THE POSSIBILITIES OF FORMING A RELATIONSHIP WITH NATURE
S. Borisová, G. Pintes

FROM MOTIVATION TO INTENTION TO BE AN ENTREPRENEUR – DOES THE UNIVERSITY SUPPORT MATTER?
C. Leal, C. Marques, C.S. Marques

FRONT WINNERS A PROJECT FOCUSED ON THE RESKILLING PROCESS OF MENTORS FOR STUDENTS WITH DISABILITIES
M. Potes Barbas, P. Matos, E. Casimiro

DESIGNING A CONSTRUCTIVIST PROBLEM BASED-LEARNING (PBL) STRATEGY THROUGH VIDEO IN PATHOPHYSIOLOGY
TEACHING INTEGRATED MUNICIPAL SOLID WASTE MANAGEMENT TO PEOPLE IN THE HUERTO ROMA VERDE, CDMX, MEXICO 5559
D. Linares Ramírez, P. Barandiarán, B.E. Gutiérrez Barba, Y. Cuetero Martínez, J. Rodríguez Gutiérrez, R.F. da Silva

BEE-BOT & BLUE-BOT: FROM MINDLESS TAPPING TO ALGORITHM CREATION 5565
K. Kilianova, P. Kočková, P. Bohacková, L. Klubal, K. Kostolanyova

FLIPPING THE CLASSROOM IN ADVANCED COURSES: IS IT EFFECTIVE? 5573
G. Abío, M. Alcañiz, C. Patsot, M. Gómez-Puig, G. Rubert, M. Serrano, A. Stoyanova

THE IMPACT OF COVID-19 ON ENGINEERING STUDENTS IN ITALY: PROFILE AND PERFORMANCE CHANGE FROM 2019 TO 2021 5578
E. Bottani, G. Casella, S. Filippelli, B. Bigliardi

E-LEARNING EXPERIENCES FOR THE ENTREPRENEURIAL EDUCATION OF STUDENTS 5587
E. Pecheanu, A. Cocu, I. Susnea, L. Kevelaerts

DESIGN & DEVELOP A SMART LEARNING CITY ENVIRONMENT FOR SUSTAINABILITY 5595
M. M. Marques, L. Pombo

A SERVICE-LEARNING EXPERIENCE BASED ON SUSTAINABLE DEVELOPMENT GOALS IN SECONDARY AND HIGHER EDUCATION 5602

EMPLOYABILITY OF UNIVERSITY GRADUATES IN CHANGING LABOUR MARKET CONDITIONS: CASE OF LATVIA 5611
I. Jaunzeme, S. Busule

TEACHING INTERCULTURAL COMMUNICATION AS A PATH TO INCLUSIVE AND OPEN SOCIETY: ANALYSIS OF TEXTBOOKS AND CURRICULA 5612
A. Romanovska, T. Bogdanovica

REALIZATION OF AN APPLIED LEARNING GAME FOR A WORK TASK SIMULATION SUPPORTING TRAINING OF WORK DESIGN SKILLS DURING QUALIFICATIONS-BASED LEARNING 5620

APPROACHING THE ANALYSIS OF TEACHING ACTIVITY THROUGH COLLABORATIVE SELF-REFLECTION FROM THE PERSPECTIVE OF TEACHERS’ SOCIAL INTERACTIONS 5630
A.M. Cioloca, L.I. Verdeş, M. Bocoş

IMPACTS OF INCLUSIVE MAKER PROGRAMMING ON STUDENTS’ ENGINEERING KNOWLEDGE AND INTEREST 5637
S. Gardner, A. Woods, L. Jackson, A. Riccio, W. Martin

CRITICAL THINKING AND RAISING SOCIAL AWARENESS REGARDING REFUGEE CRISIS IN ENGLISH LANGUAGE TEACHING THROUGH DIFFERENTIATED INSTRUCTION– A CASE STUDY BASED ON “THE BEST WE COULD DO” BY THI BUI 5645
C. Tziouva, V. Gofinopoulou, S. Kaldí

EVIDENCE-BASED GOOD TEACHING SUCEEDS FACE-2-FACE AND ONLINE 5650
A. Dannecker, U. Hanke

WEB-BASED INTERVENTION TO HELP NURSES TO MANAGE WORK-RELATED STRESS (WBI-WRS) IN SAUDI ARABIA: A FEASIBILITY STUDY 5657
Y. Allehyani, H. Wharrad, H. Blake

UNDERGRADUATE TEACHER TRAINING FOR WORKING WITH A DYSLEXIC PUPIL 5658
J. Petrová, M. Fasnerová

POP-ITS IN EARLY CHILDHOOD EDUCATION TO ENCOURAGE THE DEVELOPMENT OF MATHEMATICAL LOGICAL THINKING 5666
A.A. Magreñán, L. Orcos, I. Palacios, D. Lapresa

INCARCERATED STUDENTS’ EXPERIENCES ON FACTORS INHIBITING EFFECTIVE LEARNING IN A COMPREHENSIVE OPEN DISTANCE E-LEARNING INSTITUTION IN SOUTH AFRICA 5676
M.G. Mlambo

CO-CREATING DIGITAL SOLUTIONS FOR ALZHEIMER INFORMAL CAREGIVERS: A PILOT TRAINING COURSE 5685
C. Soares, R. Madeira, G. Colaco, P. Macedo
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A REVISITED PARETO ANALYSIS FOR RANKING STUDIES, JOURNALS AND AUTHORS</td>
<td>5686</td>
</tr>
<tr>
<td>IN SYSTEMATIC LITERATURE REVIEWS</td>
<td></td>
</tr>
<tr>
<td>E. Bottani, G. Casella, S. Filippelli, B. Bigliardi</td>
<td></td>
</tr>
<tr>
<td>THE INFLUENCE OF FREQUENT QUIZ-BASED EXAMS ON LEARNING PERFORMANCE</td>
<td>5693</td>
</tr>
<tr>
<td>AMONG COMPUTER SCIENCE STUDENTS</td>
<td></td>
</tr>
<tr>
<td>I. Pesovski, V. Trajkovik</td>
<td></td>
</tr>
<tr>
<td>TEACHING APPLIED THROUGH REMOTE BOOT CAMP: AN EXPERIENCE REPORT</td>
<td>5700</td>
</tr>
<tr>
<td>A.M. Loureiro, V. Brengartner, L.M. Silva, P.S. Fernandez</td>
<td></td>
</tr>
<tr>
<td>PROTOCOL FOR RESEARCH-ORIENTED FINAL PROJECTS</td>
<td>5705</td>
</tr>
<tr>
<td>M.M. Capobianco-Uriarte, J. Tarifa Fernández, E. Carmona Moreno</td>
<td></td>
</tr>
<tr>
<td>DEVELOPMENT OF AN INITIAL MATHEMATICS COURSE FOR STUDENTS OF THE FIRST YEAR OF TEACHER OF PRIMARY EDUCATION DEGREE</td>
<td>5706</td>
</tr>
<tr>
<td>A.A. Magreñán, L. Orcos, M.A. Hernández-Verón, J. A. Ezquierro</td>
<td></td>
</tr>
<tr>
<td>ROBOTSOLUTION: A KIT FOR THE DEVELOPMENT OF COMPUTATIONAL THINKING SKILLS IN HIGH SCHOOL STUDENTS</td>
<td>5716</td>
</tr>
<tr>
<td>D. Marinho, V. Brengartner, A. Loureiro, L. Silva</td>
<td></td>
</tr>
<tr>
<td>TRANSDISCIPLINARITY AND INTERDISCIPLINARITY IN THE TEACHING OF PSYCHOLOGY</td>
<td>5723</td>
</tr>
<tr>
<td>M.V. Zerbes, V.S. Neamu, L.G. Popescu, A. Olteanu</td>
<td></td>
</tr>
<tr>
<td>ENHANCING STEM EDUCATION THROUGH PROJECT-BASED LEARNING COMBINED WITH VIRTUAL AND AUGMENTED REALITY</td>
<td>5730</td>
</tr>
<tr>
<td>P. Petrov, T. Atanasova</td>
<td></td>
</tr>
<tr>
<td>INCLUSIVE TEACHING AND LEARNING FOCUSED ON PUPILS WITH CONDUCT DISORDERS</td>
<td>5737</td>
</tr>
<tr>
<td>M. Kaleja, E. Satinská</td>
<td></td>
</tr>
<tr>
<td>START IT: ENTREPRENEURSHIP AND DIGITAL SKILLS</td>
<td>5738</td>
</tr>
<tr>
<td>SUSTAINABLE URBAN MOBILITY WORKSHOP FOR YOUNG PEOPLE</td>
<td>5742</td>
</tr>
<tr>
<td>H. Gonzalo-Orden, M. Miguel-Borge, A.M. Aguilar López, H. Pérez-Acebo</td>
<td></td>
</tr>
<tr>
<td>WORKLOAD ALLOCATION: THE CASE OF THREE SOUTH AFRICAN HIGHER EDUCATION INSTITUTIONS</td>
<td>5752</td>
</tr>
<tr>
<td>B. Masiye, L.L. Lalendle, M. Molapo, S. Ndlovu</td>
<td></td>
</tr>
<tr>
<td>INCLUSIVE HIGHER EDUCATION SYSTEM: IS IT A QUESTION OR A CHALLENGE?</td>
<td>5757</td>
</tr>
<tr>
<td>M. Kaleja, E. Satinská</td>
<td></td>
</tr>
<tr>
<td>DEVELOPMENT OF A PROJECT TO IMPROVE THE NUTRITIONAL MODEL OF CHILDREN IN A PRESCHOOL INSTITUTION IN ROMANIA</td>
<td>5758</td>
</tr>
<tr>
<td>M.V. Zerbes, F. Brudea, L.G. Popescu, A. Olteanu</td>
<td></td>
</tr>
<tr>
<td>NEUROTECHNOLOGY AND ITS ETHICAL IMPLICATIONS FOR TEACHING AND RESEARCH IN DIVERSE EDUCATIONAL ENVIRONMENTS</td>
<td>5765</td>
</tr>
<tr>
<td>M.M. Capobianco-Uriarte, G.M. Marin Carrillo, J.M. Berbel Pineda, J.M. Ramírez Hurtado, M.P. Casado Belmonte</td>
<td></td>
</tr>
<tr>
<td>DESIGN AND IMPLEMENTATION OF A WEB-BASED TOOL TO INTEGRATE NATURAL LANGUAGE FEEDBACK IN AUTOMATED ASSESSMENT</td>
<td>5769</td>
</tr>
<tr>
<td>R. Bimazubute</td>
<td></td>
</tr>
<tr>
<td>MUSICAL MIRRORS AT GENERAL EDUCATION SCHOOLS IN POLAND – AN EXPERIMENTAL STUDY</td>
<td>5775</td>
</tr>
<tr>
<td>V. Cohen, G. Konkol, A. Kalarus</td>
<td></td>
</tr>
<tr>
<td>A CASE STUDY APPROACH FOR IT HONOURS STUDENTS TO ENGAGE WITH CORPORATE ENVIRONMENTS REGARDING SOFTWARE DEVELOPMENT METHODOLOGIES</td>
<td>5776</td>
</tr>
<tr>
<td>L. Drevin</td>
<td></td>
</tr>
<tr>
<td>PERSPECTIVES OF LEARNERS AND EDUCATORS REGARDING THE INCLUSION OF PREGNANT LEANERS IN MAINSTREAM EDUCATION</td>
<td>5786</td>
</tr>
<tr>
<td>P. Tsilo, A. Makura</td>
<td></td>
</tr>
<tr>
<td>COMMUNITY INVOLVEMENT IN PUPILS’ LEARNING IN RESPONSE TO COVID-19 CRISIS: A CASE OF AKU-IED EA’S INTERVENTIONS IN SOUTHERN TANZANIA, LINDI REGION</td>
<td>5787</td>
</tr>
</tbody>
</table>
EDUCATIONAL TASKS IN THE PRACTICAL TEXTBOOK FOR TEACHING ABOUT FOREST WITH CONNECTIONS TO BLOOM'S TAXONOMY OF COGNITIVE GOALS
D. Kollárová, A. Nagyová

5796

PUPILS WITH DUAL EXCEPTIONALITY
K. Jůzová, D. Jirotková

5802

PIVOTING ONLINE DURING COVID-19: LESSONS LEARNED INFORMING STELLENBOSCH UNIVERSITY’S HYBRID LEARNING STRATEGY
A. Van Der Merwe, D. Ramjugernath

5807

TEACHING ABOUT FOREST – INNOVATIVE TEACHERS' EDUCATION AS A TOOL FOR PROFESSIONAL COMPETENCIES IMPROVEMENT
D. Kollárová, A. Nagyová

5808

EVALUATING A QUALITY ASSURANCE INSTRUMENT IN THE ADVENT OF REMOTE TEACHING, LEARNING AND WORKING ENVIRONMENTS
L.L. Lalendle, R. Tsephe, I. Naidoo

5816

COVID19 IMPACT ON ELEARNING AS AN ECOLOGICAL SYSTEM
F. Chacon, J. Shaw

5824

IDENTIFICATION OF PREDICTIVE FACTORS FOR STUDENT FAILURE IN STEM ORIENTED COURSE
V. Čotić Poturić, I. Dražić, S. Čandrić

5831

THE IMPLEMENTATION OF SCHOOL FEEDING PROGRAM IN A CONTEXT OF FREE-Education Policy to Enhance Early Childhood Learning: A Case of Two Primary Schools in Iringa Municipal, Tanzania

5838

OPEN EDUCATIONAL RESOURCES: USERS, PLATFORMS AND METADATA
O. Größlinger, J. Schindler, A. Parschalk

5847

INTERPROFESSIONAL EDUCATION FOR OCCUPATIONAL THERAPY, PHYSICAL THERAPY, AND CONSTRUCTION MANAGEMENT STUDENTS IN DEFINING HOME
D. Todorov, C. Sunderlin, R. Panetta

5855

IMPLEMENTATION OF A MOOT TRIAL AS AN EXPERIENTIAL LEARNING FOR ENVIRONMENTAL ENGINEERS
S. Todorov

5862

VALUED CHARACTER STRENGTHS OF A LEADER AS REFLECTED IN MILITARY TRADITIONS AND MEMOIRS
O. Heřman, D. Ullrich

5863

ARTIFICIAL NEURAL NETWORK MODEL FOR FORECASTING STUDENT FAILURE IN MATH COURSE
V. Čotić Poturić, A. Bašić-Šiško, I. Lulić

5872

INTERDISCIPLINARY TEACHING: A MONTESSORI APPROACH TO UNIVERSITY CLASS ASSIGNMENTS

5879

TEACHING OBJECT ORIENTED PROGRAMMING: PROGRAMMING LANGUAGE CHALLENGE
D. Krpan, S. Mladenović, G. Zaharija

5880

FEEDBACK STRATEGIES FOR A SOCCER TRAINING SCENARIO IN VIRTUAL REALITY
A. Lozano-Tarazona, D.M. Rivera Pinzón

5888

DEVELOPMENTAL CONSIDERATIONS FOR DIGITAL PLATFORMS: EFFECT OF PERCEPTUAL BACKGROUNDS ON COGNITIVE TASK ENGAGEMENT

5894

THE IMPACT OF SELECTED FACTORS ON STUDENTS’ TEST SCORES DURING INTEGRATION OF ENGLISH LANGUAGE INTO MATHEMATICS LESSONS
J. Wossala, E. Kočařová

5895

UNIVERSITY-INDUSTRY COLLABORATION IN AN OPEN INNOVATION PERSPECTIVE: RESULTS FROM A BIBLIOMETRIC AND KEYWORDS ANALYSIS
B. Bigliardi, V. Dolci, S. Filippelli, A. Petroni, B. Pini, L. Tagliente

5904

DEVELOPMENT OF PUPILS’ MATHEMATICAL LITERACY OUTSIDE THE REGULAR CLASSROOM FROM THE PERSPECTIVE OF STUDENTS OF PEDAGOGICAL DISCIPLINES
J. Wossala, I. Mrňová

5913
CREATIVITY IS YOUR LIFELINE: THE HEALTH OF A NATION  
M.S. Rogers, J.P.D. Rogers  

A "SKETCHY PEOPLE" VIRTUAL WORKSHOP FOR CREATIVITY AND DESIGN THINKING  
W. Genereux, D. Satterfield  

TEACHING SEARCH ALGORITHMS FOR DIFFERENT AGE GROUPS IN ELEMENTARY SCHOOL  
G. Zaharija, M. Lača, S. Mladenović, D. Krpan  

VISUAL COMFORT FROM LIGHTING PERSPECTIVE IN WORK-FOCUS LEARNING' INTERIOR ENVIRONMENT  
N. Sami Abdeleziz Mahmoud  

INNOVATIVE START-UPS: THE HUMAN ROLE WITHIN AN OPEN INNOVATION APPROACH  
B. Bigliardi, V. Dolci, S. Filippelli, A. Petroni, B. Pini, L. Tagliente  

RED PAZ UNAL OR AN ORGANIZATIONAL TRANSFORMATIONAL LEARNING STRATEGY TO SUPPORT TERRITORIAL PEACE IN COLOMBIA FROM WITHIN THE UNIVERSITY  
D. Santos  

MANAGEMENT OF ACTIVE FAMILY - SCHOOL COLLABORATIVE PARTNERSHIP  
A. Klimentova  

UNIVERSITY PATENTING IN AN OPEN INNOVATION ECOSYSTEM  
B. Bigliardi, V. Dolci, S. Filippelli, A. Petroni, B. Pini, L. Tagliente  

PARENTS AND THE FLIPPED CLASSROOM APPROACH IN K-12 TEACHING  
M. Loizou  

THE INCORPORATION OF THE GENDER PERSPECTIVE IN THE TEACHING OF ARCHITECTURE  
M.I. Alba Dorado  

COMBAT MODEL SITUATIONS AS A DIDACTIC TOOL IN A VIRTUAL ENVIRONMENT  
M. Novák, D. Ulrich, J. Štrihrný  

COMBATING CYBERBULLYING AT THE UNIVERSITY  
T. Fisenko, R. Segol, O. Balion, O. Husak  

TEACHING TRANSMEDIA COMMUNICATION THROUGH WEB SERIES: A FRAMEWORK TO APPLY AT CLASSROOMS  
M. Cappelletti  

STUDENTS' ATTITUDES ON SOCIAL RESPONSIBILITY AS BUILDING BRICKS IN THE IMPROVEMENT OF ENTREPRENEURIAL EDUCATION  
B. Hegyi  

IMMEDIATE EFFECTS OF NUTRITION ON COGNITIVE FUNCTION UNDER STRESSFUL CONDITIONS; IMPLICATION FOR CIVILIAN AND MILITARY STUDENTS  
J. Štrihrný, D. Mac Gillav, D. Ulrich  

THE EFFECTIVENESS OF TEACHING COGNITIVE EMOTION REGULATION STRATEGIES ON REDUCING AGGRESSION IN A ROMANIAN DELINQUENT POPULATION: A PILOT STUDY  
L.M. Sabareanu, C.E. Oprea  

LEARNING-BY-CODING – CHALLENGES AND EXPERIENCES IN ESTABLISHING A CODING LAB FOR CHILDREN  
E. Krainz, H. Schwab, F. Niederl, K. Kotal  

COMPREHENSIVE MODEL IN DIGITAL PLATFORMS EDUCATION  
M. Zagar, K. Soric, N. Anticic, B. Mihaljevic  

MACHINE TRANSLATION AS AN AID FOR WRITING BY COMPUTER SCIENCE UNIVERSITY STUDENTS  
J.M. Arriola  

IMPROVING ATTITUDES TOWARD MATHEMATICS THROUGH GAMIFICATION  

INNOVATIVE START UPS, DIGITALIZATION AND OPEN INNOVATION: A REVIEW OF THE LITERATURE  
B. Bigliardi, V. Dolci, S. Filippelli, A. Petroni, B. Pini, L. Tagliente
FACE DRAWING: AN EXPERIMENTAL APPROACH TO DISTANCE LEARNING USING OPEN EDX
F. Antunes, P. Ferreira, H. Gallo, M. Tognon, H. Mendes Pereira

CREATIVITY AND DESIGN THINKING FOR STUDENT PROJECTS
D. Skokanová, P. Fanta

HOW DO ADOLESCENTS EVALUATE POSTS ON INSTAGRAM? MEDIA AND INFORMATION LITERACY IMPLICATIONS FOR LEARNING FROM SOCIAL MEDIA
M. Papageorgiou, E. Kyza

THE IMPORTANCE OF FOREIGN LANGUAGE SKILLS FOR UNIVERSITY GRADUATES CONCERNING SUCCESSFUL EMPLOYMENT ON THE LABOUR MARKET
A. Klimentova, K. Klimentova

THE SILVER LINING OF COVID-19: LOCKDOWN AS A WAY-UP. ACADEMIC PROJECT PRODUCTIVE ACTIVITIES AT THE JAPANESE STUDIES DEPARTMENT, SOFIA UNIVERSITY IN UNPRECEDENTED TIMES
S. Zhivkova, G. Petkova, V. Nikolova, M. Dimitrov

ASYNCHRONOUS ONLINE LEARNING ACTIVITIES IN ENGINEERING DEGREE APPRENTICESHIPS: A CASE STUDY
S. Fieldhouse, F.H. Villa-Lopez

FUTURE OF WORK IN TELECOMMUNICATION SECTOR: CHALLENGES FOR EDUCATION AND TRAINING
R. Preglej Garić, D. Tipurić, A. Aleksić

APPLICATION OF ANTCONC FOR DATA EXTRACTION BY UNDERGRADUATE STUDENTS OF ENGLISH STUDIES. A STEP TOWARDS DIGITAL HUMANITIES
Z. Vincela

THE DIVERSE PHILOSOPHY OF EXHIBITION DESIGN AS A DEVELOPMENT OF THE INTERIOR DESIGN CURRICULUM
G. Elsayed Ali Elsamanoudy

ON A BALANCE BETWEEN CLASSICAL MATHEMATICAL STUDY AND CONTEMPORARY TENDENCIES IN HIGHER EDUCATION FOR ENGINEERING STUDENTS
I. Dzenite, E. Ligere, S. Černajeva, T. Kabisa

FACTORS INFLUENCING THE FINANCIAL LITERACY OF YOUNG PEOPLE – STUDY FROM THE CZECH REPUBLIC
D. Kubíčková, V. Nulíček, I. Jindrichovska

POTENTIAL OF 3D AND 4D SIMULATION AS EDUCATIONAL RESOURCES TO OPTIMISE THE DESIGN, IMPLEMENTATION, AND CONTROL OF CONSTRUCTION SAFETY MANAGEMENT PLANS
A. González, M.E. Bulla-Ruiz, E. Cortés-Paez, A. Bustos, N. Escobar

THE CHAOS AND CATASTROPHIC IMPACT OF COVID-19: EXPLORING EDUCATIONAL INSIGHTS THROUGH BRAZILIAN AND UK INTERNATIONAL COLLABORATION
M.S. Rogers, A. Gruenewald Nichelle

SUSTAINABLE DEVELOPMENT GOALS FROM UNIVERSITY TO HIGH SCHOOL: A CASE OF SERVICE-BASED LEARNING
C. López, S. García-Marco, F. Revuelta, P. Almendros-Garcia

DECONTEXTUALIZATION OF BODY PERCEPTION IN MODERN SOCIETY: EXPRESSION OF FACTORS FROM THE PERSPECTIVE OF BIOPEDAGOGY
A. Laužonytė

ACADEMIC LITERACY AS STRATEGY AGAINST SCIENTIFIC FAKE NEWS

ASSSESSMENT OF SKILLS TO FACILITATE THE LEARNING OF READING AND WRITING: A STUDY IN THE 1ST YEAR OF SCHOOLING IN THE CONTEXT OF THE COVID-19 PANDEMIC
P. Fortunato Vaz, V. Gonçalves, C. Teixeira

TOWARD A MODEL FOR PRACTICING CULTURALLY AND LINGUISTICALLY RELEVANT TEACHING: A REVIEW OF RESEARCH-BASED TEACHING METHODS
H. Hanca

WORK-LIFE CONFLICT: PERCEPTIONS OF FEMALE ACADEMICS DURING COVID-19
C. Araneda Guirriman, G. Sepúlveda Páez
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFERENCES OF DISCUSSION AND LECTURE IN REMOTE, ONLINE, AND FACE-TO-FACE LEARNING DURING COVID AMONG GRADUATE AND UNDERGRADUATE NURSING STUDENTS</td>
<td>6160</td>
</tr>
<tr>
<td>IDEALISM OR CRISIS MANAGEMENT? CHALLENGES OF POLICY MAKING IN EDUCATION DURING REFUGEE CRISIS IN TURKEY</td>
<td>6161</td>
</tr>
<tr>
<td>FROM FACE TO FACE LEARNING TO REMOTE LEARNING AND BACK (TO THE FUTURE)</td>
<td>6162</td>
</tr>
<tr>
<td>GRAPHIC DESIGN AND SCIENTIFIC DISSEMINATION OF THE THEORIES OF THE MOLECULAR ORIGIN OF LIFE (PANSPERMIA AND ENDOSYMBIOSIS)</td>
<td>6167</td>
</tr>
<tr>
<td>MANAGING THE PEOPLE SIDE OF COLLABORATIVE PROJECT WORK</td>
<td>6172</td>
</tr>
<tr>
<td>MODERN INFORMATION, COMMUNICATION AND EDUCATIONAL TECHNOLOGIES IN TEACHER TRAINING</td>
<td>6182</td>
</tr>
<tr>
<td>APPLICATION OF THE SPARKPLUS TOOL IN LABORATORY CLASSES: A CASE STUDY OVER TIME</td>
<td>6189</td>
</tr>
<tr>
<td>KNOWLEDGE MANAGEMENT AS CONTRIBUTION TO INNOVATION IN THE PUBLIC SECTOR</td>
<td>6197</td>
</tr>
<tr>
<td>TEAMS AND GROUPS IN PHYSICAL ACTIVITY: INFORMAL LEARNING PROMOTING LIFE SATISFACTION</td>
<td>6198</td>
</tr>
<tr>
<td>DESIGN AND CREATION OF DIGITAL ENVIRONMENTS TO FAVOR EDUCATIONAL PROCESSES IN THE 4.0 CLASSROOM</td>
<td>6203</td>
</tr>
<tr>
<td>INTRODUCTION TO QUANTUM PHYSICS AND USE OF WAVE OPTICS ANALOGY BASED ON CURRENT LEARNING THEORIES</td>
<td>6204</td>
</tr>
<tr>
<td>ICONIC AND BLOCKS PROGRAMMING FOR TEACHING PROGRAMMING BASICS FOR PRIMARY SCHOOL PUPILS</td>
<td>6212</td>
</tr>
<tr>
<td>COVID 19 AND EMERGENCY REMOTE TEACHING: A COMPARATIVE EXPLORATORY STUDY IN PORTUGUESE AND BRAZILIAN HIGHER EDUCATION</td>
<td>6222</td>
</tr>
<tr>
<td>PROJECT-BASED LEARNING (PBL): APPLICATION OF ACTIVE METHODOLOGY IN THE ELECTRONIC WASTE INTEGRATION PROJECT</td>
<td>6227</td>
</tr>
<tr>
<td>A PRACTICE ACCEPTANCE MODEL BEYOND TECHNOLOGY WHEN PROGRAMMING AND MATHEMATICS CONVERGE</td>
<td>6228</td>
</tr>
<tr>
<td>DIGITAL LITERACY IN TIMES OF PANDEMIC, WHAT LEARNING? AN EXPLORATORY STUDY WITH SECONDARY SCHOOL STUDENTS</td>
<td>6238</td>
</tr>
<tr>
<td>INITIAL AND CONTINUING TRAINING COURSE IN EDUCATIONAL ROBOTICS IN BASIC EDUCATION</td>
<td>6239</td>
</tr>
<tr>
<td>LEARNING ABOUT THE INFLUENCE OF DEMOGRAPHIC FACTORS ON THE EMERGING MATERIALS DESIGN PROCESS</td>
<td>6240</td>
</tr>
</tbody>
</table>
THE MIT D-LAB PARTICIPATION TOOLKIT: A SUITE OF TOOLS FOR UNDERSTANDING, CHARACTERIZING AND IMPLEMENTING PARTICIPATION IN DEVELOPMENT AND HUMANITARIAN CONTEXTS
A. Smith, M. Thompson

ECO-INNOVATIVE SOLUTIONS BASED ON ACADEMIC RESEARCH PROJECTS
J. Alarcón, J. Brañes Alarcón, J. Brañes Alarcón

INTELLECTUAL PROPERTY AND AMERICAN HIGHER EDUCATION: AN ANALYSIS OF INTELLECTUAL PROPERTY UNITS AT SELECTED R1, R2, AND R3 INSTITUTIONS

SAFEGUARDING STUDENT MENTAL HEALTH: MINDFUL ASSESSMENTS FOR ART HISTORY SURVEYS DURING COVID
H. McCune Bruhn

BEYOND TECHNICAL SKILL: AUGMENTING STUDENT LEARNING THROUGH PLACE-BASED PEDAGOGY
J. Walker

CHALLENGES OF GOING BACK TO CLASS AFTER THE PANDEMIC
D. Morin, H. Al Maleh, J. Mondragon

TRAINING GRADUATE STUDENTS IN CO-CREATION TOOLKIT TO EXPAND PARTICIPATION IN THE HUMANITARIAN SECTOR
M. Thompson, A. Smith, K. Leith

A STRATEGY FOCUSED ON THE SOCIAL, EMOTIONAL AND MENTAL HEALTH OF STUDENTS
I. Pkhakadze, T. Kordzadze, R. Gvenetadze, M. Sturua

THE PERSISTENCE OF VACCINATION HESITANCY: AN ANALYSIS OF THE INFLUENCE OF SOCIAL DETERMINANTS AMONG AFRICAN AMERICAN FAMILIES AND YOUTH

PERFORMANCE EVALUATION IN SPECIALIZED TRAINING TOOL FOR SMES’ EMPLOYEES
E. Mitan

INTEGRATING FLOW THEORY IN FREIREAN PEDAGOGY BASED WORKSHOPS FOR FORMATIVE ASSESSMENT
W. Mahfouz, H.D. Wuttke

DEVELOPMENT OF A NEW COMPETENCE FRAMEWORK FOR AN “INNOVATION MANAGER +”
U. Kaschka, J. Kirch

CALIBRATING THE NEW NORMAL IN ACADEMIC EDUCATION - HOW DIFFERENT GROUP WORK METHODS CAN BE USED EFFECTIVELY IN VOLATILE ENVIRONMENTS
J. Kirch

AGGIORNAMENTI: A PROJECT FOR THE TRAINING OF JUNIOR HIGH SCHOOL TEACHERS

FACTORS THAT PROVOKE BURNOUT OF ARCHITECTURE STUDENTS AT UNIVERSIDAD JUÁREZ AUTÓNOMA DE TABASCO

CULTURAL CENTER FOR INDIGENOUS LANGUAGES: EDUCATION FOR THE CARE OF THE NATIONAL CULTURAL AND LINGUISTIC HERITAGE

TACIT KNOWLEDGE YIELDING TO EXPONENTIAL FUNCTION AT LOWER SECONDARY SCHOOL SCIENCE
L. Bartosovic, P. Demkanin, A. Slovak

LEARNING OUTSIDE THE SCHOOL, LEARNING BEYOND THE CURRICULA: THE LEARNING EXPERIENCE OF STUDENTS DURING THE COVID-19 EMERGENCY REMOTE SCHOOLING
R. Cachia, A. Velicu, S. Chaudron, R. Di Gioia
CONTRIBUTION OF ARTIFICIAL INTELLIGENCE IN LEARNING INDUSTRY
P. Teodorescu, E. Mitan

DEVELOPING ENVIRONMENTAL AWARENESS COMPETENCIES THROUGH A SENSORY ESCAPE ROOM
J. Reuter, G. Mello, M. Ferreira Dias, M. Amorim

RESPONSIBLE BIOSCIENCES: HOW ORGANIZATIONS IMPLEMENT EDUCATIONAL ACTIONS
D. Elster

DEVELOPING THE INDIVIDUALIZED LEARNING ENVIRONMENT IN FOREIGN LANGUAGE STUDY PROGRAMMES THROUGH MULTIMODAL STUDY SUPPORT
S. Pokrivcakova

DIGITAL MULTIMODAL COMPOSITIONS IN FOREIGN LANGUAGE TEACHER TRAINING
S. Pokrivcakova

THE DIGITAL COMPETENCE OF THE UNIVERSITY PROFESSOR: A SYSTEMATIC REVIEW
E. Flores

PROGRAM TO RAISE AWARENESS OF ETHICAL BEHAVIOR THROUGH THE USE OF TECHNOLOGICAL MEDIA
S. Montañez, E. Flores

THE VALUE OF BICHRONOUS ONLINE FACILITATION TO PROMOTE STUDENT ENGAGEMENT IN A TEACHER EDUCATION COURSE
R. Best

AI BASED GESTURE AND SPEECH RECOGNITION TOOL FLOW FOR EDUCATORS
H. Hübert, V. Taliaronak, H.S. Yun

ARCHITECTS NOT ILLUSTRATORS | DESIGN-BUILDS AS PEDAGOGICAL SYNTHESIS
J. Kroft, L. De Bartolo, J. Levy, A. Weiss, V. Hui

VALUING AND DECISION MAKING IN THE CONTEXT OF EDUCATION FOR SUSTAINABLE DEVELOPMENT
M. Ternieten, D. Elster

THE EFFECT OF INTERNET ADDICTION ON SOCIAL AND EMOTIONAL LONELINESS IN UNIVERSITY STUDENTS
G. Sart, F.H. Sezgin

ANALYSIS OF UNIVERSITY STUDENTS' PERCEPTIONS OF INNOVATIVENESS IN TERMS OF ENTREPRENEURSHIP LEVELS
G. Sart, F. H. Sezgin

DEVELOPING EDUCATIONAL LEADERSHIP IN THE CONTEXT OF LIBERAL ADULT EDUCATION – FINNISH CONTEXT
L. Snellman

THE CULTURAL QUOTIENT SCALE: IN SEARCH FOR A CONSISTENT PREDICTOR OF ACADEMIC PERFORMANCE
J.C. Del Ama, M. Mealy, Y. Kim

I'M A MILLIPEDE…. I'M DIFFERENT…. SO WHAT? - A PROPOSAL FOR TEACHING AND LEARNING STATISTICS
H. Campos, A. Matos, S. Ricardo

THE PERCEPTIONS OF SCHOOL TEACHERS ON THE IMPACT OF E-LEARNING AND PSYCHO-EMOTIONAL TOOLS AND METHODOLOGIES IN THEIR TEACHING PRACTICE: THE D-MANED ERASMUS+ PROJECT
D. Vlachopoulos, K. Kronenberg, M. Kokota, V. Grigoras, M. Namolosanu

PROSPECTIVE MATHEMATICS TEACHERS' TPACK IN PLANNING LESSONS INTEGRATING TECHNOLOGY: A CONTEXT OF AN INITIAL TEACHER EDUCATION EXPERIMENT
A. Henriques, R. Winicius da Silva Bueno

PRIMARY SCHOOL TEACHERS' VIEWS ON TRANSLANGUAGING IN THE ENGLISH AS A FOREIGN LANGUAGE CLASS IN VALENCIAN SCHOOLS
A. Cerveró-Carrascosa, C. Buenas Roig, C. Gómez-Lobo

USING PROBLEM POSING AS A MEANS TO ASSESS STUDENTS' UNDERSTANDING OF COMBINATORIAL OPERATIONS
R. Tomás Ferreira, M. Monteiro
USING SPREADSHEETS AND MONTE CARLO SIMULATION TO TEACH CRITICAL PATH ANALYSIS AND PROGRAM EVALUATION AND REVIEW TECHNIQUES IN PROJECT MANAGEMENT
F. Arteaga, M. Pérez-Bermejo, A. Cloquell, C. Moret

WHAT SOFTWARE ENGINEERS NEED TO KNOW ABOUT UX DESIGN – EXPERIENCES FROM ONE DECADE OF TEACHING
R. Pucher

TRANSFORMING THE HIGHER EDUCATION LANDSCAPE IN SOUTH AFRICA: THE ROLE OF PRIVATE HIGHER EDUCATION INSTITUTIONS
B. Van Wyk, W. Engelbrecht

FUTURE EDUCATION DEVELOPMENT
Y. Alhammadi

A CONCEPTUAL FRAMEWORK FOR DESIGNING IMAGE-BASED VIRTUAL FIELD TRIP IN GEOLOGY TEACHING
D.R. Awang Rambli, S. Sulaiman, S. Basri, A.I. Zainal Abidin, S. Mahamad, A.S. Mat Saad

INTERDISCIPLINARITY FOR FUTURE-ORIENTED EDUCATION: INSIGHT FROM EDUCATIONAL RESEARCH IN ENGLAND
S. Erduran, J. Chan

ENVELOPES OF SCIENCE AWESOMENESS: AN OPPORTUNITY TO SUPPORT ELEMENTARY TEACHERS AND STUDENTS DURING COVID-19 DISTANCE LEARNING
P.C. Pinner, J. Ray

MAPPING THE CHALLENGES OF UNDERGRAD ARCHITECTURE STUDENTS APPLYING SHAPE GRAMMAR INTERPRETERS TO GENERATE CHINESE LATTICE DESIGNS
M. Sedrez, Z. Li, J. Zhang, X. Liu, Y. Ma, J. Yao, Z. Sun, T. Shao, G. Godoi

ARCHITECTURE GRADUATES’ EMPLOYABILITY: THE CASE OF A BRITISH UNIVERSITY IN CHINA
M. Sedrez

LEARNING BY PLAYING: INNOVATIVE METHODS OF LEARNING AND DISSEMINATION OF CULTURAL HERITAGE
A. Bertini, T. Vitolo

A BREATHING EXERCISE WITH THE HUMANOID ROBOT NAO DESIGNED TO REDUCE STUDENT STRESS DURING CLASS: RESULTS FROM A PILOT STUDY WITH STUDENTS IN HIGHER EDUCATION
I. Buchem, E. Thomas

SUSTAINABLE MOBILITY ANALYSIS AND PROPOSAL FOR THE BISCAY CAMPUS
I. Alvarez Gonzalez, E. Alberdi Celaya

USING RELATIVE GRADING FOR REMOTE ONLINE EXAMINATIONS DURING COVID-19 PANDEMIC
C. Chiruta, M. Calin

TECHNOLOGICAL TOOLS FOR EDUCATION IN TIMES OF PANDEMIC: A STUDY OF ACCEPTANCE AND USER EXPERIENCE IN ITALIAN SCHOOLS
D. Agostini, E. Murgia

BENCHMARK OF THE GENERIC SKILLS OF THE ENGINEERING DEGREES AT THE UNIVERSITY OF ALMERIA
E. Salmerón-Manzano, A. Alcayde-García, A. Zapata-Sierra, F. Manzano-Agugliaro

GENERIC SKILLS ASSESSMENT IN THE MEDICINE DEGREE AT UNIVERSITY OF ALMERIA
E. Salmerón-Manzano, G. Castro-Luna, B. Nievas-Soriano, A. Alcayde-García, A. Zapata-Sierra, F. Manzano-Agugliaro

THE EFFECT OF CHANGES IN THE MODE OF TEACHING AND LEARNING AT UNIVERSITY FIRST YEAR LEVEL ON STUDENTS ATTITUDE AND BELIEFS ABOUT PHYSICS
P. Molefe, M.P. Rankhumise

REMOTE CARE: CURRICULUM DEVELOPMENT TO TEACH TELEHEALTH COMPETENCIES THROUGH CINEMEDUCATION
G. Gonzalez-Caminal, C. Gomar-Sanzco, J. Pique-Buisan, I. Cambra-Badii

DEVELOPING MATHEMATICAL MEANING THROUGH DISCOURSE IN DIFFERENT SOUTH AFRICAN MULTILINGUAL TEACHER EDUCATION CONTEXTS
A. Essien
A NEW INFORMATION TECHNOLOGY EDUCATION METHOD INTRODUCING JAPANESE NATIONAL CERTIFICATE INTO UNIVERSITY CURRICULUM IN DEVELOPING COUNTRY
Y. Miyamoto

SUPPORTING TEACHERS’ PROFESSIONAL SELF-AWARENESS WITH BIBLIOTHERAPY METHODS
N. Birta Szekely

CAREER RESOURCES IN HIGHER EDUCATION: CHARACTERIZATION AND DIAGNOSIS OF PSYCHOEDUCATIONAL NEEDS
S. Monteiro, F. Seabra, S. Santos, L. Almeida

EMPOWERING STUDENTS IN THE ASSESSMENT AND FEEDBACK OF WORK-INTEGRATED LEARNING: KEY STAKEHOLDER VIEWS
G. O’Neill

IMPORTANCE OF ENJOYMENT AND BEHAVIOURAL CONTROL WHEN ACQUIRING LEARNING TO LEARN COMPETENCE IN MARKETING UNDERGRADUATES
E. González-Gascón

UNDERSTANDING GENDER DIFFERENCES IN THE PERCEPTION OF THE RELATION BETWEEN ALUMNI & THEIR UNIVERSITY
P. Martínez Hague, A. Macarachvili, M. Lau

THE AGRICULTURAL ENGINEERING DEGREE AT UNIVERSITY OF HUELVA: TRANSVERSAL SKILLS ASSESSMENT
A. Zabalo Torrejón, E. Salmerón-Manzano, F. Manzano Agugliaro

TRANSVERSAL SKILLS ASSESSMENT OF THE ENVIRONMENTAL SCIENCES DEGREE AT UNIVERSITY OF HUELVA
A. Zabalo Torrejón, E. Salmerón-Manzano, F. Manzano Agugliaro

IMAGE EDUCATION BETWEEN DISTANCE AND PRESENCE: REFLECTIONS ON THE EXPERIENCE OF THE THREE-YEAR PANDEMIC
F. Zuccoli, A. De Nicola

MAPS MI: FIRST RESULTS OF A PARTICIPATORY SCIENCE PROCESS TO ACTIVATE THE EDUCATING COMMUNITY OF A SUBURB AGAINST BLACK CARBON
F. Zuccoli, A. De Nicola

STUDENTS’ MENTAL HEALTH AND TEACHER SUPPORT DURING THE COVID-19 PANDEMIC
D. Paić, J. Kudek Mirošević

FEAR OF MISSING OUT (FOMO) IN HIGHER EDUCATION: AN EXPLORATORY PERSPECTIVE FROM CENTENNIALS IN SPAIN
L.M. Cerdá Suárez

REDESIGNING COLLEGE-LEVEL TEACHING AND CLASSROOM MANAGEMENT FOR POST-PANDEMIC EDUCATION
M. Ben Ghalia

DEVELOPMENT OF A MOBILE APPLICATION FOR THE PERSONALITY ASSESSMENT OF STUDENTS UNDER THE MANAGEMENT OF THE KEDAH STATE ZAKAT BOARD (LZNK), MALAYSIA
A. Md Hashim

SUBJECTIVELY PERCEIVED PREPAREDNESS OF PRE-SERVICE VOCATIONAL SUBJECT TEACHERS FOR PROVIDING SECOND CHANCE EDUCATION
S. Barnová, L. Hasajová, L. Pasternáková, G. Gabrhelová, S. Krásna

DESIGN THINKING AS A METHOD FOR THE STUDENTS SOFT SKILLS TRAINING
B. Boorova, V. Orfánusová, R. Ševčíková

VIDEOS OF MADRID BRIDGES RECORDED BY STUDENTS, EDUCATION FOR CITY AND HERITAGE
J. Bernabéu-Larena, P. Hernández-Lamas, B. Cabau-Anchuelo

COLLABORATIVE CARTOGRAPHIES OF LINEAR PUBLIC WORKS, EDUCATION FOR TERRITORY AND LANDSCAPE
B. Cabau-Anchuelo, P. Hernández-Lamas, J. Bernabéu-Larena

DEVELOPMENT OF STUDENTS’ SOCIO-CULTURAL COMPETENCE THROUGH THE USE OF AUTHENTIC MATERIALS
E. Chelpanova, E. Bystray, V. Moshkovich, F. Zakirova, A. Shabalina
THE QUALITY OF UNDERGRADUATE VOCATIONAL SUBJECT TEACHER TRAINING IN
THE CONTEXT OF THE COVID-19 PANDEMIC 6732
S. Barnová, S. Krásna, L. Hasajová, G. Gabrhelová
THE EFFECTS OF ENGLISH CONVERSATION LESSONS IN VIRTUAL REALITY ON THE
CONFIDENCE OF JAPANESE LEARNERS OF ENGLISH 6737
Y. Satake, S. Yamamoto, H. Obari
ACQUISITION OF DIGITAL SKILLS OF UNIVERSITY TEACHERS: A MASSIVE
EXPERIENCE 6745
M. Sempere, F. Fernández
DEVELOPING EFFECTIVE ANDRAGOGY-BASED EDUCATIONAL ENVIRONMENT FOR
ADULT LEARNERS OF FOREIGN LANGUAGES 6750
M. Bolina, K. Bolshakova, L. Naumenko, I. Orlova, E. Shmidt
FLIPPED CLASSROOM IN THE CONTEXT OF METHODS OF TEACHING ENGLISH
STUDY 6754
M. Bolina, K. Bolshakova, L. Naumenko, I. Orlova, E. Shmidt
USING AR FEATURED COURSES COMBINED WITH ENVIRONMENTAL FILM
TEACHING TO PROMOTE ENVIRONMENTAL AWARENESS AND PROTECT THE
EARTH 6758
S.T. Wei
ASSESSING LEARNERS' WRITING DEVELOPMENT: THE ROLE OF FORMATIVE
FEEDBACK IN THE WRITING PROCESS 6766
N. Mather
SCAFFOLDING LEARNING DURING THE STAGES OF THE WRITING CYCLE: THE
IMPACT OF THE TEACHING STRATEGIES THAT TEACHERS ADOPT 6773
N. Mather
CHILDREN'S AGENCY: DIFFERENT PERSPECTIVES THROUGH A LITERATURE
REVIEW 6781
L. Luini
THE PEDAGOGICAL INTERNSHIP DURING THE LOCKDOWN: NARRATIVES OF
FUTURE TEACHERS 6788
I. Freire-Ribeiro, E. Mesquita, A. Sanches
ENTREPRENEURSHIP AS A FUNDAMENTAL TRANSVERSAL COMPETENCE IN FIRST-
YEAR STUDENTS OF THE DEGREE IN CHEMISTRY 6796
C.J. Pelegrín Perete, M.J. Mendoza Castro, J.J. Delgado Marín, A. García Juan, C. Gómez Pertusa, D.
Torregrosa Carretero, N.O. Grané Teruel, A. Jiménez Migallón, A. Juan Polo, A.C. Mellinas Ciller, I.
Solaberrieta Gomilet, J.J. Villora Picó, P. Romero Navarro, M.C. Garrigós Selva
PROMOTING CULTURAL DIVERSITY(IES) WITH CHILDREN: ACCOUNTS OF
LEARNING EXPERIENCES IN THE EDUCATION CONTEXT 6804
I. Freire Ribeiro, E. Mesquita, A. Sanches, C. Pimentel
BRIDGING THE GAP BETWEEN THE NEW ARTIFICIAL INTELLIGENCE CAPABILITIES
AND THE SKILLS OF JOURNALISTS IN DIGITAL MEDIA 6809
I. Otero
TOWARDS THE NEW EDUCATIONAL PARADIGMS IN THE 5TH WAVE OF ARTIFICIAL
INTELLIGENCE: A FOCUS ON JOURNALISM 6815
I. Otero
USE OF AN ONLINE SELF-LEARNING TOOL BEFORE AND DURING THE COVID 19
PANDEMIC IN MARKETING UNDERGRADUATES 6820
E. González-Gascón
THE WORKPLACE DISCRIMINATION OF WOMEN IN LEADERSHIP: A CASE OF
WATERBERG DISTRICT IN LIMPOPO PROVINCE 6827
S.J. Madela, T. Ngobeni, I. Phage
DEVELOP COMPUTATIONAL THINKING SKILLS FROM ARTIFICIAL INTELLIGENCE
CONCEPTS IN SECONDARY EDUCATION 6834
I.C. Muñoz, J.C. Giraldo, J.C. Durango, A.M. Cordero
IMPLEMENTATION OF THE "PIENSA-C" STRATEGY FOR THE DEVELOPMENT OF
COMPUTATIONAL THINKING WITH ARTIFICIAL INTELLIGENCE IN SECONDARY
EDUCATION 6842
ENHANCING STUDENTS’ MOTIVATION AND ACADEMIC RESULTS THROUGH INTERNATIONAL CYBERSECURITY COMPETITIONS
B. Bordel, R. Alcarria, M.A. Manso, T. Robles

INTERNAL FACTORS INFLUENCING THE INTENTION TO PARTICIPATE IN ONLINE LEARNING AMONG MALAYSIAN UNIVERSITY STUDENTS

BESPOKE ARCHITECTONICS: PRIORITIZING FABRICATION OVER VISUALIZATION
V. Hui, S. Agma, J. Levy, A. Halanytska, H. Deng

TOWARDS INCLUSIVE EDUCATION: ASSESSING READING SKILLS OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS
I. Bilbokaitė-Skiatūtienė, I. Kaffemanienė

IMPACT OF ICT ON THE SATISFACTION OF UNIVERSITY STUDENTS
A. Martín García, I. Gil-Saura, M.E. Ruiz-Molina, M. Bordian, R. Gil Saura

PERCEPTION TOWARDS ICT AND SATISFACTION AS SEGMENTATION VARIABLES OF UNIVERSITY STUDENTS
A. Martín García, I. Gil-Saura, M.E. Ruiz-Molina, R. Gil Saura, M. Bordian

NURTURING EMPLOYABILITY USING STRUCTURED MENTORSHIP FOR TECH STUDENTS IN KENYA
C. Mbogo, R. Waiganjo, A. Wasega, M. Nyaga

ANALYSIS OF THE SUBJECT STARTING POINT AND ASPECTS FOR IMPROVEMENT BASED ON THE RESULTS OF THE STUDENT SURVEYS
G. Gómez, P. Fernández, M. Martínez de Aguirre, H. González, S. Etxebarria, O. Pereira, A. Calleja, L.N. López de la Calle

APPLICATION OF ACTIVE METHODOLOGIES IN THE DESCRIPTIVE SUBJECT OF ‘MECHANICAL TECHNOLOGY’
M. Martínez de Aguirre, G. Gómez, P. Fernández, H. González, S. Etxebarria, A. Calleja, L.N. López de la Calle

INFORMATION AND COMMUNICATION TECHNOLOGIES SUPPORTING THE STANDARDISATION OF CREDENTIALS AMONG MOOC PROVIDERS
S. Terzi, K. Zourou, I. Stamelos

THE HEAD PROGRAMME IN NORTH MACEDONIA: PRINCIPALS BOOSTING INCLUSIVE SCHOOL POLICIES
M. Veldin, A. Mlekić

INTERACTIVE DIGITAL STORYTELLING FOR A PLAYFUL AND ENGAGING SCHOOL EDUCATION: THE INTERACTED ERASMUS+ PROJECT
P. Digkoglou, S. Falconi, E. Lykogianni, L. Profiri, D. Schina, D. Vlachopoulos

FOSTERING DELIBERATION AND ENVIRONMENTAL SUSTAINABILITY COMPETENCES IN VET THROUGH CITIZEN SCIENCE
S. Oikonomou, K. Zourou

LET’S TALK ABOUT SEX - THE VIEWS OF TRANSylvanian Hungarian Teachers ON THE SEXUAL DEVELOPMENT AND EDUCATION OF CHILDREN
N. Szállassy, N. Erős

ADAPTATION OF FOREIGN STUDENTS TO THE NEW EDUCATIONAL ENVIRONMENT IN THE CHANGING SOCIO-ECONOMIC CONDITIONS IN THE NORTH OF RUSSIA
P. Bessonov, N. Bessonova, V. Bessonova, A. Syrovatsky

DEVELOPING HABITS AND SKILLS IN THE EDUCATIONAL PROCESS IN TERMS OF COMPLIANCE WITH THE WORK SAFETY PRINCIPLES
M. Feszterova

CHALLENGES OF EDUCATING FOR INNOVATION AND ENTREPRENEURSHIP: THE ROLE OF THE HIGHER EDUCATION INSTITUTIONS
J. Miranda, G. Gonçalves, J. Reis

CITIZEN SCIENCE AND ENVIRONMENTAL ORAL HISTORY IN CLIMATE EDUCATION: INTEGRATING THE USE OF A CITIZEN OBSERVATORY FOR BIODIVERSITY MONITORING IN A CLIMATE CHANGE EDUCATION PROJECT
M. Daskolia, A. Trigatzi, J. Piera, S.M. Woods, P. Bonnet

THE SELF-EFFICACY OF TRAINEE TEACHERS RECOMMENDED FOR QUALIFIED TEACHER STATUS (QTS) IN ENGLAND DURING THE COVID-19 PANDEMIC: LOOKING FOR EXPLANATIONS
R. Tynan, A. Mallaburn
GENDER-RELATED DYNAMICS OF STEM-RELATED BELIEFS, GENDER STEREOTYPES AND CAREER PREFERENCES IN ADOLESCENCE
V. Ismatullina, T. Adamovich, I. Zakharov

DUAL LANGUAGE AND TRANSLANGUAGING: PRACTICES PROMOTING STUDENT BILITERACY
J. Villegas, C.R. Calderon-Diaz

HOW DO RUMORS AND INFORMATION ABOUT RESULTS AND EXPERIENCES IN THE PAST AFFECT CURRENT STUDENTS’ LEARNING?
B. Bordel, R. Alcarria, T. Robles

FROM RESEARCH TO PRACTICE: COMING TOGETHER TO BRIDGE THE GAP
R. Tamim

LEARNING A FOREIGN LANGUAGE REMOTELY DURING A PANDEMIC (EXPERIENCE FROM CROATIA)
I. Mikulaco

URBAN SHRINKAGE: LEARNING FROM DESSAU
R. Davids

THE SCHOOL – A SAFE ENVIRONMENT FOR CHILDREN. STUDY OF THE INTERACTION BETWEEN EDUCATIONAL AND SOCIAL INSTITUTIONS. QUALITY OF INTER-INSTITUTIONAL INTERACTION
D. Angelova

THE ROLE OF TEACHERS IN THE CONTEXT OF NEW TRENDS OF DIGITIZED AND PERSONALIZED EDUCATION
S. Bellomo

PROMOTION OF HEALTH LITERACY IN THE CONTEXT OF STEM CELL DONATION FOR LEUKAEMIA PATIENTS
D. Elster, J. Holzer

RESEARCH BASED LEARNING IN AGRICULTURAL ENGINEERING STUDIES

LEARNING STYLES AND RESEARCH BASED LEARNING IN ENGINEERING STUDIES

REFLECTIONS ON ONLINE LEARNING ECOSYSTEM IN ICE INSTITUTE
P. Pannen, R. Dwi Riyanti

PARTICULARITIES OF THE EDUCATIONAL PROCESS IN PENITENTIARY INSTITUTIONS (EXPERIENCE AND LEGISLATION OF THE REPUBLIC OF MOLDOVA)
A. Nastas, S. Cernomoreţ

THE POTENTIAL OF PSYCHOLOGICAL CAPITAL FOR PROMOTING WELL-BEING IN PRE-SERVICE AND IN-SERVICE TEACHERS: A RESEARCH-TRAINING PROJECT
A. Crescentini, M. Pettignano, A. D’Amato, L. Sciarioni

PAGARAMI, A NEW TOOL FOR SET UP YOUR OWN TV QUIZ IN CLASSROOM
R.M. Pagán, C. Ramírez

EDUCATIONAL INNOVATION IN INITIAL TEACHER TRAINING: AN EXPERIENCE BASED ON EXPERIENTIAL LEARNING
R. Mateu Pérez, P. Escobedo Peiró, M. García Baldán, R. Florea Buils

ART IN THE PROCESS OF INDUSTRIAL DESIGN
S. Nuere Menéndez-Pidal, A. Castell López, L. de Miguel Álvarez, C. Alía García, M. Ruiz Gómez

MOVING EXAM BOARD PROCESSES ONLINE - A CASE STUDY
H. Neal

LEARNING SCENARIOS IN SAFETY AT WORK IN THE SCOPE OF POLYTECHNIC HIGHER EDUCATION COURSES
F. Silva, J. Ribeiro, P.M. Barros

ENGAGING STUDENTS DURING THE PANDEMIC: THE UNIVERSITY OF MALAYA LIBRARY EXPERIENCE
Z. Saupi Udin, R. Hisham

CREATION OF VIDEOS BY STUDENTS AS A WAY TO PROMOTE LEARNING IN THE AREA OF MECHANICS: AN EXPERIENCE IN HIGHER EDUCATION
J. Ribeiro, F. Silva, P.M. Barros
FROM EASY COMMUNICATION TO DIFFICULT TEXTS: HOW TO INTEGRATE LITERATURE IN A NON-READING CLASSROOM
E. Poyntner, B. Huber

ANALYSIS OF SENSORS AFFECTING HARMFUL EMISSIONS FROM ROAD TRANSPORT APPLIED IN ENGINEERING EDUCATION
H. Kanevski, S. Lyubomirov

USING MOTION PICTURES TO FOSTER HISTORICAL THINKING: A PROPOSAL FOR HISTORY TEACHERS' EDUCATION
Y. Mathias

THE IMPORTANCE OF EDUCATION FOR SUSTAINABILITY IN THE DEVELOPMENT OF ENTREPRENEURIAL INTENTIONS, FOCUSED ON SUSTAINABLE DEVELOPMENT
C. Simut, D. Bac, R. Simut

(BIO)PRINTING IN MODERN MEDICAL EDUCATION
D. Shopova, A. Mihaylova, P. Kasnakova, A. Yaneva, M. Hristozova, Y. Shirkov, V. Sarafian, M. Semerdjieva, D. Bukova

STUDENTS' PERCEPTION ON CIVIC EDUCATION AND THE EFFICIENCY OF SCHOOLS IN SHAPING THE SOCIAL MENTALITY
F. Ortan, C. Simut, J. Kiss

STUDENT ASSISTANT PERSPECTIVE ON FLEXIBLE LEARNING SPACES: CHALLENGES AND SUCCESS FACTORS
A. Lazareva, C. Edelhard Tømte

INTERTWINED VOICES - A COMMUNITY PARTICIPATION PROJECT FOR YOUNG HIGHER EDUCATION STUDENTS
C. Figueiredo, F. Fialho, A. Alcântara, J. Matos

A PROBLEM BASED APPROACH TO MECHATRONICS USING FORMULA SAE
V. Lorenzi, B. Zappa, P. Righettiini, R. Strada

PSYCHOSOCIAL CHARACTERISTICS OF TWICE-EXCEPTIONAL STUDENTS IN COMBINATION OF SPECIFIC LEARNING DISABILITIES AND INTELLECTUAL GIFTEDNESS
P. Baranová, I. Márová

RESILIENT EDUCATION FOR COLLECTIVE WELL-BEING
D. Chiusaroli, G. Arduini

THE TEACHER'S PROFILE IN INCLUSIVE CLASSROOM MANAGEMENT
D. Chiusaroli

EVALUATION OF TEAMWORK COMPETENCE. VIEW OF TEACHERS AND EMPLOYERS
D. Martinez, B. Amante, N. Salán, M.C. Romero

EMPLOYABILITY, PROFESSIONAL SKILLS, AND JOB PLACEMENT: THE VISION OF SCIENCE STUDENTS
I. Solaberrieta Gonnet, A. Khalfi, A. Jiménez Migallón, M. Ramos

IT IS NOT WHAT IT SEEMS: BIOCHEMICAL BASIS OF INTERSEXUALITY (CONGENITAL ADRENAL HYPERPLASIA) AND ETHICAL CONSIDERATIONS
M. Alonso-Chamorro, M.C. Turpin, S. Álvarez Montero

A PHENOMENOLOGICAL EXPLORATION OF THE HOLISTIC EXPERIENCES OF STUDENTS OF AFRICAN DESCENT AT A POST-1992 UNIVERSITY IN ENGLAND
P. Seuwou, D. Sarwar, A. Pilkington

PROMOTING SCIENTIFIC RESEARCH AND COMMUNICATION IN ANIMAL PRODUCTION PREGRADEUATE STUDENTS
N. Formoso-Rafferty, P. Garcia-Rebollar, M.D. Carro, N. Nicodemus, T. de Evan, B. Velasco, P. Rebollar

SUSTAINABLE DEVELOPMENT GOALS AWARENESS IS IMPROVED AFTER INTRODUCTION OF RELATED ACTIVITIES IN HIGHER EDUCATION DEGREE SUBJECTS
M. Leiva-Brondo, N. Lajara-Camilleri, C. Lull

DEBATE: A USEFUL TOOL TO ENHANCE COMMUNICATION SKILLS IN AGRICULTURAL ENGINEERING STUDENTS
N. Formoso-Rafferty, N. Nicodemus, P. Garcia-Rebollar, T. de Evan, P.G. Rebollar, M.D. Carro
THE TEACHING STRATEGIES EMPLOYED IN THE TEACHING OF SCIENCE BY MULTIGRADE PRIMARY SCHOOL TEACHERS: A CASE OF TWO RURAL DISTRICTS IN LESOTHO
M. Phakisi, R. Bhagwande, A. Rambuda

PREPARING PRESERVICE ELEMENTARY TEACHERS TO TEACH MATHEMATICS AND COMPUTER SCIENCE SKILLS THROUGH PEDAGOGICAL APPROACHES INVOLVING GAME DESIGN LEARNING
C. Navarrete

TEACHING SYNTAX OF RUSSIAN AS AFOREIGN LANGUAGE AT PHILOLOGICAL STUDIES IN POLAND (PROBLEMS AND CHALLENGES)
A. Romanik

WRITING FLUENCY, AN ESSENTIAL YET OVERLOOKED COMPONENT OF COMMUNICATIVE COMPETENCE
I. Saad

EXPERIENTIAL LEARNING THROUGH EDUCATIONAL GAMIFICATION AND ORAL NARRATION: A PROPOSAL FROM NEUROSCIENCE
E. Hernández Pérez, M. Pena Garrido

THE USE OF SIMULATORS IN THE PHYSICS TEACHING IN PRIMARY SCHOOL: DESCRIPTIVE ANALYSIS OF EDUCATIONAL INNOVATION IN A PANDEMIC CONTEXT
C. Toro, S. Contreras

ANALYSIS OF TACTICS AND STRATEGIES TO INTEGRATE DIGITAL RESOURCES IN THE EDUCATIONAL MODEL IN SPAIN (SECONDARY EDUCATION AND BACCALAUREATE)
J. Garcia Alonso

EMPIRICAL RESEARCH ON HOW EFFICIENTLY DIGITALIZATION IS BEING INTEGRATED IN SECONDARY, BACCALAUREATE AND VOCATIONAL EDUCATION IN SPAIN
J. Garcia Alonso

A TECHNOLOGY-VALUE SYNERGY MODEL FOR LEARNING MATH THAT EVOKESES EMOTIONS AND CREATES THE BEST LEARNING MOMENTS
A. Cunska

ROBOT COMPETITION DESIGN FOR IMPROVING ENGINEERING STUDENTS' STEM SKILLS
M. Salah, A. Alghazo, A. Abu-aisha

ASSESSMENT OF DIGITAL LABORATORY EFFECTIVENESS IN THE BASIC ELECTRONICS SUBJECT

TEACHERS' ATTITUDES ON THE APPLICATION OF INNOVATIVE MODELS IN TEACHING OF BIOLOGY IN PRIMARY SCHOOL
V. Županec, T. Lazarević, T. Pribićević

COMBINATION OF PEER INSTRUCTION AND FLIPPED CLASSROOM METHODOLOGIES: A MURDER IN FORENSIC ANALYTICAL CHEMISTRY
M.C. Garrigós Selva, M. Ramos, R. Belhadj, C.J. Pelegrín Perete, A.C. Mellinas Ciller

WHY AND HOW TO IMPLEMENT A FLIPPED CLASSROOM MODEL IN BIOLOGY EDUCATION IN PRIMARY SCHOOL
V. Županec, Ž. Ilić, T. Lazarević, T. Pribićević

COMPREHENSIVE LEARNING OF DIGITAL ELECTRONICS THROUGH FPGAS

DIFFERENCES IN THE TEXT PROBLEM SOLUTION OF PRIMARY SCHOOL STUDENTS WHO WERE TAUGHT AND NOT TAUGHT TO REASON MATHEMATICALLY
N. Cibulskaitė, V. Grabauskienė, O. Moskaitytė - Rastenienė

MATHEMATICAL REASONING USING KNOWLEDGE OF NUMBER BONDS WHILE SOLVING ALGEBRAIC PROBLEM IN THE 4TH GRADE
N. Cibulskaitė, V. Grabauskienė, O. Moskaitytė-Rastenienė

DESIGN THINKING: IT'S A MARATHON AND A SPRINT
P. Lane, R. Lafforty
EFFICIENCY OF CONFERENCE CALLS AS AN EDUCATIONAL DELIVERY METHOD DURING COVID-19 IN ELEMENTARY SCHOOLS
G. Kerekes

THE ETHICAL CODE OF HIGHER EDUCATION INSTITUTIONS AS THE BASIS FOR THE UNIVERSITY’S CORPORATE CULTURE. CASE STUDY: HOW DO ETHICAL CODES WORK?
A. Nurutdinova, A. Bogdanova, A. Sayın

AN ONTOLOGY FOR EDUCATIONAL AND CAREER PROFILING BASED ON THE ROMANIAN OCCUPATION CLASSIFICATION FRAMEWORK: DESCRIPTION AND SCENARIOS OF UTILISATION
M.I. Dascalu, I. Marin, I.V. Nemoianu, I.F. Puskás, A. Hang

EXTENSION OF E-LEARNING DATA VISUALIZATION SYSTEM FOR DIFFERENT KNOWLEDGE REVIEWS DATASETS
B. Kovačić

MANAGER AS AN EDUCATOR: THE RISK OF BURNOUT
L. Kopac, A. Klein, H. Polat, B. Maier

MANAGER AS AN EDUCATOR: PREVENTION OF BURNOUT
L. Kopac, A. Muller, T. Eidenmüller, A. Massmann

THE FUTURE OF EDUCATION: CONSEQUENCES OF COVID-19 PANDEMIC ON THE EDUCATION SYSTEM
N. Jurina Babović, I. Jemrić Ostojić, T. Tolnauer-Ackermann

HOW TO CHOOSE ONE’S CAREER? A PROPOSAL FOR A SMART CAREER PROFILER SYSTEM TO IMPROVE PRACTICES FROM ROMANIAN EDUCATIONAL INSTITUTIONS

EDUCATION OF A PUPIL WITH MILD INTELLECTUAL DISABILITY IN STANDARD ELEMENTARY SCHOOL
V. Kolková

THE STUDENT PODCAST AS A PEDAGOGICAL STRATEGY OF EDUCATION FOR PEACE IN THE EL SANTUARIO NEIGHBORHOOD OF THE CITY OF BARRANQUILLA, COLOMBIA
H. Cerra

FARE: AN ONLINE APPLICATION FOR GRAPHICALLY DESIGNING FINITE AUTOMATA AND COMPUTING EQUIVALENT REGULAR EXPRESSIONS
Z.S. Tramparis, E. Papaoannou, C. Kaklamannis

NATURAL LANGUAGE PROCESSING APPLIED FOR TEACHING EVALUATION
S. Montalvo, M.A. Rodríguez, R. Cabido, D. Concha

RESEARCH IN VIRTUAL REALITY AND 3D PRINTERS IN EDIFICATION AND ENGINEERING
M. Valiente Lopez, S.L. Diez Sanz, M.C. Sanz Contreras

USE OF NITINOL-SHAPE MEMORY ALLOY IN THE REINFORCEMENT OF 3D CONCRETE PRINTING INDUSTRY
B. Ahadi, M. Valiente Lopez

THE SEARCH FOR LIFE IN THE UNIVERSE: DESIGNING AND IMPLEMENTING A COURSE FOR M.ED. SCIENCE TEACHERS
O. Eldar

THE SUSTAINABLE FEEDBACK CONCEPT FROM RESEARCHERS’ PERSPECTIVE: A NARRATIVE REVIEW
R. Faria, D. Pedrosa, B. Lopes, F. Ribeiro Faria

CONCEPTUAL OVERVIEW ON CORL: NARRATIVE LITERATURE REVIEW
F. Ribeiro Faria, D. Pedrosa, B. Lopes, R. Faria

A FRAMEWORK FOR THE DESIGN, IMPLEMENTATION AND EVALUATION OF AI BASED REAL-LIFE LEARNING SCENARIOS FOR COMPUTER SCIENCE NON-MAJORS
D. Meyer, S. Fausser

A SURVEY ON GRADING FORMAT OF AUTOMATED GRADING TOOLS FOR PROGRAMMING ASSIGNMENTS
A. Agrawal, B. Reed

A NEW APPROACH TO INTERDISCIPLINARITY: THE CASE OF THE MASTER’S DEGREE STUDY PROGRAMME "APPLICATIONS OF ARTIFICIAL INTELLIGENCE"
Z. Rutkuniene, B. Narkeviciene
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A CONTEMPORARY ADOLESCENT’S PRACTICAL MODEL OF UPBRINGING: PEGADOGICAL POSSIBILITIES OF NETWORKING</td>
<td>7516</td>
</tr>
<tr>
<td>N. Medina Brakamonte, O. Zayka</td>
<td></td>
</tr>
<tr>
<td>SIMULATION OF ENGINE MALFUNCTIONS AND THEIR IMPACT ON EMISSIONS WITH AN EMPHASIS ON ENGINEERING EDUCATION</td>
<td>7525</td>
</tr>
<tr>
<td>H. Kanevski, S. Lyubomirov, S. Asenov</td>
<td></td>
</tr>
<tr>
<td>DIALECTICAL VERSUS VIRTUAL/REMOTE LEARNING</td>
<td>7533</td>
</tr>
<tr>
<td>M. Klekovska, C. Martinovska</td>
<td></td>
</tr>
<tr>
<td>UNIVERSITY-WIDE SKILLS FRAMEWORK</td>
<td>7540</td>
</tr>
<tr>
<td>F. Vansweevelt, J. Notermans</td>
<td></td>
</tr>
<tr>
<td>GEOGEBRA IN ONLINE GEOMETRY COURSES FOR FUTURE MATHEMATICS TEACHERS</td>
<td>7541</td>
</tr>
<tr>
<td>A. Schmid, L. Korenova</td>
<td></td>
</tr>
<tr>
<td>DEVELOPING AND SCALING EUROPEAN HEIS’ INNOVATION VISION THROUGH LEARNING AND MENTORING PROGRAMS</td>
<td>7548</td>
</tr>
<tr>
<td>USAGE OF AUGMENTED REALITY APP TO DEVELOP THE MATHEMATICAL COMPETENCES OF CHILDREN IN PRIMARY EDUCATION</td>
<td>7553</td>
</tr>
<tr>
<td>N. Nevrelona, L. Korenova</td>
<td></td>
</tr>
<tr>
<td>DIGITAL SKILLS OF STUDENTS</td>
<td>7561</td>
</tr>
<tr>
<td>J. Hudáková, V. Papcunová</td>
<td></td>
</tr>
<tr>
<td>STUDENT FEEDBACK ON ONLINE LEARNING DURING THE COVID-19 PANDEMIC</td>
<td>7565</td>
</tr>
<tr>
<td>J. Hudáková, V. Papcunová</td>
<td></td>
</tr>
<tr>
<td>LIEM: INNOVATION LABORATORY FOR ENVIRONMENTAL EDUCATION</td>
<td>7570</td>
</tr>
<tr>
<td>J. Holgado Garcia</td>
<td></td>
</tr>
<tr>
<td>CATCH THE PLATE!</td>
<td>7574</td>
</tr>
<tr>
<td>V. Misiti, D. Ripovatii, F. Di Laura, P. Battelli</td>
<td></td>
</tr>
<tr>
<td>DEVELOPING KNOWLEDGE, ATTITUDES AND COMPETENCES OF STUDENTS IN RUSSIAN STUDIES THROUGH AN ACTION-ORIENTED APPROACH</td>
<td>7580</td>
</tr>
<tr>
<td>M. Karolczuk</td>
<td></td>
</tr>
<tr>
<td>DEVELOPMENT OF EFFECTIVE COURSE DESIGN INTEGRATING ACTIVE LEARNING AND ANALYSIS WITH NEAR-INFRARED SPECTROSCOPY FOR JAPANESE ENGINEERING STUDENTS</td>
<td>7585</td>
</tr>
<tr>
<td>R. Tobita</td>
<td></td>
</tr>
<tr>
<td>MOVIEIFICATION OF MATHEMATICAL WORD PROBLEMS: USING ENTERTAINMENT MECHANISMS TO SUPPORT LEARNER ENGAGEMENT</td>
<td>7590</td>
</tr>
<tr>
<td>J. Smith</td>
<td></td>
</tr>
<tr>
<td>BOARDGAMES PROPOSAL AS NEW PARADIGM IN EDUCATION GAMIFICATION: IDEATRIZ-X PROJECT</td>
<td>7597</td>
</tr>
<tr>
<td>J.D. Camo-Moreno, J. Cerdeño García de Blas, F.V. Sánchez Martínez, M.M. Recio Díaz, S. Nuere Menéndez-Pidal</td>
<td></td>
</tr>
<tr>
<td>DISTANCE CAREER INTERVENTION WITH PORTUGUESE HIGHER EDUCATION STUDENTS: PROGRAMME OVERVIEW</td>
<td>7602</td>
</tr>
<tr>
<td>F. Seabra, S. Monteiro, S. Santos, L. Almeida</td>
<td></td>
</tr>
<tr>
<td>DIGITAL-BASED INTERVENTIONS TARGETING SCHOOL FAILURE: A SYSTEMATIC REVIEW</td>
<td>7609</td>
</tr>
<tr>
<td>R. Azevedo, A. Costa, D. Moreira, A. Azevedo, I. Oliveira, A. Gonçalves, J. Casanova, P.C. Dias</td>
<td></td>
</tr>
<tr>
<td>HOW DEVELOPMENT ORIENTED IS THE UNIVERSITY FOR DEVELOPMENT STUDIES TAMALE-GHANA? FROM THE LENS OF SUSTAINABLE DEVELOPMENT GOALS (SDGS) A.M. Abdulai</td>
<td>7615</td>
</tr>
<tr>
<td>HOW TO BUILD AN ENTREPRENEURSHIP EDUCATION SYSTEM ACROSS EDUCATIONAL LEVELS? K. Kivisild</td>
<td>7623</td>
</tr>
<tr>
<td>E-WASTE EDUCATION AS A MOTIVATING FACTOR IN CHEMISTRY EDUCATION</td>
<td>7624</td>
</tr>
<tr>
<td>M. Feszterová, Z. Jenisová</td>
<td></td>
</tr>
<tr>
<td>DISCOVERING SCIENCE THROUGH COLORS</td>
<td>7632</td>
</tr>
<tr>
<td>S. Pisano</td>
<td></td>
</tr>
</tbody>
</table>
FULLY REMOTE CONTROLLABLE LAB SETUP FOR PRACTICAL TRAINING IN PHOTONICS HIGHER EDUCATIONS
F. Lukas, J. Domke, C. Henkel, J. Kretzschmar, F. Sojka, C. Helgert, T. Pertsch

EXTRACURRICULAR ACTIVITIES FOR STUDENTS’ SKILLS DEVELOPMENT
Ü. Kesli, L. Ariva

THE EXTREME-ENERGY EVENTS PROJECT: INTRODUCING PEOPLE TO SCIENCE THROUGH COSMIC RAYS
S. Pisano

THE MAIN ACTIVITIES AND OUTCOMES OF PROCESS PROJECT SO FAR
A. Kakko

ETHICAL PRINCIPLES IN INCLUSIVE EDUCATION: A SYSTEMATIC REVIEW
M. García-Parra, F. Negre Bennasar, S. Verger

THE USE OF THE MOBILE PHONE TO ACHIEVE A USEFUL AND FUN CONTINUOUS EVALUATION
A. Linares-Unamunzaga, H. Gonzalo-Orden, M. Rojo Arce, M. Miguel-Borge

INTRODUCING SYSTEMS THINKING SKILLS TO IMPROVE THE LEARNING PROCESS ABOUT COMPLEXITY AND COMPLEX SYSTEMS
G.L. Dugarte-Peña, E. Muñoz-García, N. Gordo-Herrera

THE VOICES OF FAMILIES AND CHILDREN IN SITUATIONS OF SOCIAL AND ECONOMIC VULNERABILITY: A REPORT OF A PROJECT
P. Fortunato Vaz, E. Mesquita, I. Freire-Ribeiro, R. Reichert

ARABIC LANGUAGE EDUCATION IN THE DISTANCE EDUCATION MODEL (FOR NON-NATIVE ARABIC LANGUAGE)
S. Karuko

RESHAPING THE STUDENT ADMISSION PROCESS: AN ANALYSIS OF THE CHANGES BROUGHT BY THE RECENT PANDEMIC
L. Patachi

FROM THEORY TO PRACTICE: DEVELOPING SOCIAL STUDIES TEACHERS’ CAPACITY FOR COMPUTER SCIENCE INTEGRATION BY RIDING THE SEMANTIC WAVE
P. Shank, R. Dovi, K. Franklin

THE USE OF SOCIAL NETWORKS AS A TOOL FOR FLIPPED CLASSROOM METHODOLOGY: A PRACTICAL EXPERIENCE IN HIGHER EDUCATION FRAMEWORK
M. Soler Porta, M. Rojas-de-Gracia, A. López, A. Esteban, F. Soares, M.J. Bentabol, M.D. Rodríguez-Ruíz, M. Muñoz, A. Bentabol, R. Caña-Palma

QUANTUM COMPUTING KNOWLEDGE PROVIDES AN EXPONENTIAL SPEEDUP TO HARD COMPUTATIONAL PROBLEMS: AN EXPERIENCE WITH ENGINEERING STUDENTS
E. Muñoz-García, G.L. Dugarte-Peña

MEASURING THE EFFECTS OF AN EMERGENT DISTANCE EDUCATIONAL PROGRAM ON THE APPROVAL RATINGS DURING THE COVID-19 PANDEMIC

REMOTE LAB SYSTEM FOR TEACHING ENGINEERING TOPICS RELATED TO MECHATRONICS
G. Soprano Machiado, W. de Souza Picanço, M. Melo de Carvalho, F.A. de Carvalho Ayres Junior, R.L. Paiva de Medeiros, V. Ferreira de Lucena Junior

OPEN-SOURCE AR/VR LEARNING APPLICATIONS FOR PHOTONIC QUANTUM EXPERIMENTS
J. Kretzschmar, S. Ritter, F. Eilenberger, C. Helgert, T. Pertsch

A SYSTEMATIC REVIEW ON IMPLEMENTING ACTIVE LEARNING AS A DESIGN LEARNING METHOD IN THE ARCHITECTURE STUDIO
M. Pirzadivari, Z. Akbari

CONNECTING THE DOTS: A REALITY-BASED LEARNING APPROACH IN A MASTER IN MANAGEMENT DEGREE
P. Ferreira, I. Maldonado, C. Miguens, S. Jayantilal

OPEN-SOURCE AR/VR LEARNING APPLICATIONS FOR PHOTONIC QUANTUM EXPERIMENTS
J. Kretzschmar, S. Ritter, F. Eilenberger, C. Helgert, T. Pertsch

A SYSTEMATIC REVIEW ON IMPLEMENTING ACTIVE LEARNING AS A DESIGN LEARNING METHOD IN THE ARCHITECTURE STUDIO
M. Pirzadivari, Z. Akbari

REMOTE LAB SYSTEM FOR TEACHING ENGINEERING TOPICS RELATED TO MECHATRONICS
G. Soprano Machiado, W. de Souza Picanço, M. Melo de Carvalho, F.A. de Carvalho Ayres Junior, R.L. Paiva de Medeiros, V. Ferreira de Lucena Junior
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACADEMIC ENGLISH: CURRENT AND FUTURE DIRECTIONS IN TEACHING ENGLISH TO UNIVERSITY STUDENTS</td>
<td>7741</td>
</tr>
<tr>
<td>N. Solovyeva</td>
<td></td>
</tr>
<tr>
<td>INDIGENOUS PERSPECTIVES: IS EQUITY UNFAIR TO THE MAYANGNA OF NICARAGUA?</td>
<td>7748</td>
</tr>
<tr>
<td>P. Lane, B. Mills</td>
<td></td>
</tr>
<tr>
<td>RESULTS OF THE ACTIVITIES PERFORMED WITH VET STUDENTS/LEARNERS AND AIMED AT TESTING THE PRODUCTS OF THE ERASMUS+ TRANSNATIONAL EDUCATION PROJECT “CHERISH - CULTURAL AND NATURAL HERITAGE: A SUSTAINABLE TOURISM VET INTEGRATED APPROACH”</td>
<td>7753</td>
</tr>
<tr>
<td>P. Ciccioli, R. Coratella, F. D'Esposito, P. Ragni</td>
<td></td>
</tr>
<tr>
<td>IMPLEMENTATION OF A VIRTUAL LIGHT LABORATORY</td>
<td>7764</td>
</tr>
<tr>
<td>M. Ibraymov, O. Petrov</td>
<td></td>
</tr>
<tr>
<td>COVID-19 TEACHING AND LEARNING EXPERIENCES PROJECT: USING THE GREX DASHBOARD TO INVESTIGATE ONLINE SKILL DEVELOPMENT DURING THE PANDEMIC</td>
<td>7772</td>
</tr>
<tr>
<td>M. McGravey, R. van Oostveen</td>
<td></td>
</tr>
<tr>
<td>FORMAL AND NON-FORMAL MUSICAL EDUCATION: THE SEARCH FOR WELL-BEING</td>
<td>7782</td>
</tr>
<tr>
<td>A. Lapinska, R. Bakutytė</td>
<td></td>
</tr>
<tr>
<td>THE SUMMER COMPUTER SCHOOL FOR STUDENTS WITH VISUAL IMPAIRMENT IN PREPARATION FOR UNIVERSITY</td>
<td>7789</td>
</tr>
<tr>
<td>M. Cujdikova, M. Stankovicova</td>
<td></td>
</tr>
<tr>
<td>AI EDUCATION AND INCLUSION IN K-12</td>
<td>7798</td>
</tr>
<tr>
<td>Qi. Xia, THOMAS, K.F. Chiu</td>
<td></td>
</tr>
<tr>
<td>DISTANCE LEARNING IN TIMES OF CRISIS: PREDICTING GRADUATE STUDENTS' SELF-EFFICACY THROUGH PERSONAL, OCCUPATIONAL AND ACADEMIC FACTORS</td>
<td>7799</td>
</tr>
<tr>
<td>S. Tsemach, A. Barth</td>
<td></td>
</tr>
<tr>
<td>CREATING THE NEW NORM EDUCATIONAL “MINDSET” THROUGH KNOWLEDGE MANAGEMENT CREATED DURING THE COVID-19 PANDEMIC</td>
<td>7800</td>
</tr>
<tr>
<td>B. Barrett</td>
<td></td>
</tr>
<tr>
<td>STRATEGIES EMPLOYED IN THE TEACHING OF SCIENCE BY MULTIGRADE PRIMARY SCHOOL TEACHERS IN LESOTHO</td>
<td>7808</td>
</tr>
<tr>
<td>M. Phakisi, R. Bhagwandeen, A. Rambuda</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION TO UNIVERSITY TEACHING – A TRAINING PROCESS FOR EARLY-CAREER ACADEMICS AT THE UNIVERSITY OF PORTO</td>
<td>7809</td>
</tr>
<tr>
<td>C. Sousa, M. Pinto, R. Sinde</td>
<td></td>
</tr>
<tr>
<td>THE IMPACT OF NEW TECHNOLOGIES ON THE SCAFFOLDING OF SIGNIFICANT LEARNING ABOUT SAFETY AND RISK MANAGEMENT IN THE CONSTRUCTION SECTOR IN COLOMBIA</td>
<td>7815</td>
</tr>
<tr>
<td>F. Lopez-Perez, S. Cubillos-Vanegas, M.E. Bulla-Ruiz, E. Cortés-Paez</td>
<td></td>
</tr>
<tr>
<td>FORMATION OF STUDENTS’ INTERCULTURAL COMMUNICATIVE COMPETENCE IN THE PROCESS OF TEACHING CHINESE LANGUAGE</td>
<td>7824</td>
</tr>
<tr>
<td>L. Makogon, L. Makogon</td>
<td></td>
</tr>
<tr>
<td>A COMPARISON OF TWO (NOT WELL KNOWN) EDUCATIONAL ROBOTIC KITS FOR TEACHING COMPUTATIONAL THINKING</td>
<td>7830</td>
</tr>
<tr>
<td>K. Miková, V. Fejková</td>
<td></td>
</tr>
<tr>
<td>THE DIFFICULTIES IN LEARNING CHINESE WRITTEN SPEECH AND THE WAYS TO OVERCOME</td>
<td>7838</td>
</tr>
<tr>
<td>L. Makogon, L. Makogon</td>
<td></td>
</tr>
<tr>
<td>DIGITAL CITIZENSHIP EDUCATION IN EUROPE</td>
<td>7843</td>
</tr>
<tr>
<td>E. Mesquita, M.R. Patricio, I. Freire-Ribeiro, A. Pereira</td>
<td></td>
</tr>
<tr>
<td>IMPACT OF DIGITAL COLLABORATIVE TOOLS ON THE DEVELOPMENT OF COMMUNICATION IN ENGLISH</td>
<td>7849</td>
</tr>
<tr>
<td>M. Martins, I. Araújo</td>
<td></td>
</tr>
<tr>
<td>AN ACTIVE LEARNING METHODOLOGY TO IMPROVE ENGLISH ORALITY DEVELOPMENT SUPPORTED BY AN ONLINE DIGITAL TOOL</td>
<td>7857</td>
</tr>
<tr>
<td>C. Cunha, P. Faria, I. Araújo</td>
<td></td>
</tr>
</tbody>
</table>
CATEGORIZING AND ANALYZING LEARNER BEHAVIOUR IN DIGITAL CONSTRUCTION TASKS
A. de Koning, R. van Oostveen

HEALTH SCIENCES LIBRARIANS’ TRAINING ON EVIDENCE-BASED MEDICINE AMID THE RECENT PANDEMIC
R. Hisham Shunmugam, Z. Saupi Udin, M.F. Hanzah, A. Michael, M.S. Abu Kassim

PROMOTING INTERAGENCY COLLABORATIONS FOR ENHANCING TRANSITION TO EMPLOYMENT FOR INDIVIDUALS WITH SPECIAL NEEDS
D. Zhang, E. Roberts, M. Orsag, R. Maddalozzo, Y.F. Li

SPATIAL SKILLS ENHANCEMENT AND 3D DIGITAL MODELLING TOOLS IN ARCHITECTURE AND CONSTRUCTION ENGINEERING: A LITERATURE REVIEW
P. Piumatti

T@SK PROJECT: BUILDING BRIDGES BETWEEN UNIVERSITY AND SOCIETY THROUGH SOCIAL WORK
G. Bulli, G. Mascagni, S. Moroni

THE BENEFITS OF PERSONAL DEVELOPMENT MODULES FOR HEALTH AND SOCIAL CARE LEARNERS WITHIN HIGHER EDUCATION
G. Maughan

HACKATHONS THRILLS NOT ONLY NERDS: BEST PRACTICES FOR A MULTICULTURAL AND MULTIDISCIPLINARY APPROACH
D. Meyer, R. Wyngaard, J. Njenga, J. Grinninger, J. Vogt, A. Bagula

PROVIDING TODAY’S STUDENTS WITH THE SKILLS THEY WILL NEED FOR TOMORROW’S TECHNOLOGY
D. Joseph

EMBODIED PEDAGOGY FOR A DEMOCRATIC SPACE
N. Ferri

PATRIOTIC UPBRINGING IN VOCATIONAL EDUCATION: DOCUMENT ANALYSIS IN LATVIAN CONTEXTS
J. Ozols, R. Bakutyte

THE ROLE OF ICT IN MULTICULTURAL EDUCATION POLICIES
K. Papaioannou, E. Papaioannou

THE EFFECT OF PRESCHOOL EDUCATION ON CHILDREN’S SCHOOL DROP OUT RATES IN MOROCCO - SPATIAL ANALYSIS
A. Ibourk, S. Raoui

SPECS IN THE EDUCATION OF CHILDREN WITH HEARING IMPAIRMENT IN AN INCLUSIVE SETTING OF MAINSTREAM PRIMARY SCHOOL
M. Štibrányiová

GLOBAL CLASSROOM AND THE DEVELOPMENT OF COMMUNICATION SKILLS
J. Cortés Vásquez, S. García Ángeles

INTEGRATING RESEARCH AND EDUCATION: “HYBRID AND FUSION PREDICTION OF THE FUNCTIONALITY OF ENERGY CONVERTING ELEMENTS” PROJECT
S. Stoyanova-Petrova, D. Stoyanova, N. Kafadarova, S. Sotirov

ACTIVE METHODOLOGIES AT UNIVERSITY: THE IMPORTANCE OF MAINTAINING MOTIVATION
A. Batllés de la Fuente, M.J. López Serrano, F.J. Castillo Díaz, E. Abad Segura

QUALITY ANALYSIS IN SHORT-TERM COURSES ON A PERSPECTIVE OF RAPID ENTERING THE LABOR MARKET
B. Wilges, A. Schwaab, D. Longo, V. Martins, G. Mateus, R. Cislaghi

SUPPORTING HIGHER EDUCATION STUDENTS DURING THEIR ERASMUS INCOMING/OUTGOING MOBILITIES: AN EXPERIENCE FROM A PSYCHOLOGY COURSE IN PORTUGAL
A. Gonçalves, I. Oliveira

GAMIFICATION IN TEACHING NATURAL AND TECHNICAL SCIENCES
Y. Daineko, M. Ipalakova, D. Tsoy

TEAMWORK AND EFFICIENCY IN CHEMISTRY PRACTICAL SESSIONS
J.J. Lull, C. Lull
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRACTICAL TRAINING OF STUDENTS - A MOTIVATING FACTOR FOR PSYCHOSOCIAL MUTUAL AID IN A DIGITAL ENVIRONMENT</td>
<td>7983</td>
</tr>
<tr>
<td>EFFICIENCY OF THE EDUCATION COST IN LOCAL GOVERNMENT: AN APPLICATION TO THE SPANISH CASE</td>
<td>7988</td>
</tr>
<tr>
<td>PROFESSIONAL COMPETENCE OF AN ONLINE LATVIAN LANGUAGE TEACHER FOR PUPILS FROM THE DIASPORA</td>
<td>7992</td>
</tr>
<tr>
<td>DIGITAL ART CREATION EDUCATION FOR THE ELDERLY WITH MILD COGNITIVE IMPAIRMENT THROUGH EXPRESSIVE ART THERAPY</td>
<td>7999</td>
</tr>
<tr>
<td>SALVADOR: HOW NETFLIX AND INSTAGRAM CAN INCREASE STUDENT MOTIVATION FOR AN ACTIVE LEARNING METHODOLOGY</td>
<td>8008</td>
</tr>
<tr>
<td>CURRICULUM DESIGN STRATEGIES FOR K-12 COMPUTER SCIENCE INTEGRATION</td>
<td>8016</td>
</tr>
<tr>
<td>PARENTAL UNDERSTANDING OF CAREER DEVELOPMENT SUPPORT FOR YOUTH IN LATVIA</td>
<td>8017</td>
</tr>
<tr>
<td>TEACHING AND LEARNING UNITS OF INQUIRY THROUGH ART</td>
<td>8023</td>
</tr>
<tr>
<td>LACK OF NORMALCY PLANNING IN HIGHER EDUCATION IN MEXICO</td>
<td>8024</td>
</tr>
<tr>
<td>INDIVIDUAL CAREER COUNSELLING IN GENERAL AND PROFESSIONAL EDUCATION INSTITUTIONS: CASE OF LATVIA</td>
<td>8033</td>
</tr>
<tr>
<td>PROBLEMS OF UNEMPLOYED YOUTH AND GRADUATES</td>
<td>8038</td>
</tr>
<tr>
<td>&quot;FROM OCCUPATION TO PARTICIPATION&quot;: STUDENT VOICE AND REFLECTIONS ON HOW TO RETHINK HIGH SCHOOL EXPERIENCE, CENTERED ON RELATIONSHIP, STUDENT’S ENGAGEMENT AND SCHOOL’S EDUCATIONAL DIMENSION</td>
<td>8046</td>
</tr>
<tr>
<td>THE IMPACT OF EDUCATION ON ECONOMIC DEVELOPMENT</td>
<td>8053</td>
</tr>
<tr>
<td>BUILDING PRACTICAL SKILLS TO FORMING RESILIENCE AMONG STUDENTS IN PANDEMIC</td>
<td>8060</td>
</tr>
<tr>
<td>INTEGRATING MULTI-DISCIPLINARY PAEDIATRIC PALLIATIVE CARE WITHIN THE UNDERGRADUATE TRAINING OF SOCIAL SERVICE PROFESSIONALS</td>
<td>8066</td>
</tr>
<tr>
<td>PROJECT-BASED LEARNING IN HIGHER EDUCATION: NEEDS AND EXPECTATIONS FROM ROMANIAN, PORTUGUESE, AND TURKISH TEACHERS</td>
<td>8074</td>
</tr>
<tr>
<td>VIRTUAL PATIENT: ARCHITECTURE OF AN EDUCATIONAL WEB PLATFORM FOR THE ASSESSMENT OF CONSULTATION AND DIAGNOSING SKILLS OF MEDICAL STUDENTS</td>
<td>8080</td>
</tr>
<tr>
<td>EFFECT OF COVID-19 PANDEMIC ON THE PUBLIC ACCEPTANCE OF PARENT-LED HOME-BASED EDUCATION – THE CASE OF CZECHIA</td>
<td>8085</td>
</tr>
<tr>
<td>DEVELOPMENT OF A PLATFORM TO PROMOTE PROJECT-BASED LEARNING IN HIGHER EDUCATION: CONTRIBUTES OF THE RESTART4EDU PROJECT</td>
<td>8086</td>
</tr>
<tr>
<td>IMPLEMENTING PROJECT-BASED APPROACH IN TEACHING ESL STUDENTS AT KAZAN FEDERAL UNIVERSITY</td>
<td>8092</td>
</tr>
</tbody>
</table>
EFFECTS OF AN AUTOMATIC ASSESSMENT TOOL ON THE MOTIVATION TO LEARN OF COMPUTER PROGRAMMING STUDENTS
H.D. Lozano Rojas, F. Restrepo Calle, J.J. Ramirez Echeverry

RAPID PANDEMIC RESPONSE: SIMPLE TECHNIQUES FOR CREATING VIRTUAL LABS
R. Drlička, M. Kotus, J. Macho

ESP TEACHERS’ PERCEPTION OF HOW THEY COMPLY WITH THE REQUIREMENTS OF DIGITAL FORMATIVE ASSESSMENT
K. Inozemtseva, E. Morozova

EMOTIONAL REGULATION IN THE COOPERATIVE WORK OF STUDENTS OF SCIENCE OF PHYSICAL ACTIVITY AND SPORT
L. Vega, A. Reyno, C. Hederich, M.A. Avalos

DESIGN BASED RESEARCH OF A SENSOR BASED MOBILE LEARNING COMPANION
H.S. Yun, A. Sardogan

DESIGNING A WEB-QUEST FOR STUDYING LANGUAGE AND CULTURE OF AUSTRALIA
K. Inozemtseva, N. Nurieva

ELEMENTS OF INFORMAL LEARNING IN TEACHING PROCESS IN GENERAL ENGLISH CLASSES AT KAZAN FEDERAL UNIVERSITY
D. Khakimzyanova, E.S. Khovanskaya

REDEFINING ASSESSMENT AND EVALUATION POLICIES AND PRACTICES: A CANADIAN PERSPECTIVE
M. Marchione, W. Barber, R. van Oostveen, J. Stokes

K. Ferreira Santos, A. Garcez, R. Moreira da Silva, F. Charrua-Santos

LINGUISTIC AUTOBIOGRAPHY AS AN EXAMPLE OF DEVELOPING DISCIPLINARY LITERACY AND ACADEMIC WRITING
I. Tragel, N.K. Teiva, L.M. Komissarov

SOCIAL AND EMOTIONAL SKILLS DEVELOPMENT IN PRESCHOOL CHILDREN IN THE FAMILY ENVIRONMENT
D. Apostolova

CHALLENGES OF EMPLOYING E-LEARNING FOR LEARNING ESTONIAN SPEAKING INTERACTION
M. Teral

THE INNOVATIVE EDUCATIONAL METHODS TO ENHANCE ENTREPRENEURIAL ABILITIES
V. Maier, A. Constantinescu-Dobra, M.A. Cotiu, O.P. Stan, C. Feniser

ASSESSMENT OF THE IMPACT OF EXTERNAL FACTORS ON LEARNING OUTCOMES
E. Benks, B. Ilyukhin, N. Serbina, E. Lepustina

MAJOR CHALLENGES OF VOCATIONAL EDUCATION IN GEORGIA - VOCATIONAL EDUCATION PROVIDERS’ PERSPECTIVE
I. Grdzelidze, R. Sanadze, S. Idadze, M. Boehner, H. Tegelbeckers, T. Hennige

TEACHERS’ APPROACH TO THE TOPIC OF DEATH IN THE TEACHING OF LITERATURE IN THE CZECH SCHOOLS
P. Bubeníčková

EXTRINSIC VERSUS INTRINSIC MOTIVATIONAL FACTORS IN THE CHOICE OF BACHELOR DEGREE IN CASE OF STUDENTS FROM DISADVANTAGED SOCIO-ECONOMIC GROUPS
D.M. Cismaru, R.S. Ciochina

FAIRY TALES AS AN EDUCATIONAL TOOL FOR TEACHING FOREIGN LANGUAGES
H. Li, L. Wang

E-LEARNING AT THE UNIVERSITY COLLEGE OF TEACHER EDUCATION VIENNA: A COMPARISON ON THE EVALUATION OF SUPPORTING E-LEARNING COURSES IN DIFFERENT SUBJECTS IN PHYSICAL EDUCATION
C. Rudloff
ADOLESCENT OFFENDERS WITH A MIGRANT BACKGROUND: EDUCATIONAL PATHS IN ITALIAN RESIDENTIAL CARE
A. Monniello

IDENTIFICATION OF THE INFLUENCE OF UNFORESEEN EXTERNAL INFLUENCES (COVID-19 PANDEMIC) ON EDUCATIONAL OUTCOMES IN THE GENERAL EDUCATION SYSTEM
E. Benks, B. Ilyukhin, N. Serbina

LESSONS LEARNED FROM INITIATIVES TO ROLL OUT DIGITAL CREDENTIALS IN EUROPE
M.L. Bruno, L. Morgado

ENHANCING STUDENTS’ SOFTWARE DEVELOPMENT SKILLS IN INTRODUCTORY JAVA-BASED PROGRAMMING COURSES WITH PROFESSIONAL COMMUNITY ACTIVITIES AND EXTERNAL RESOURCES
B. Mihaljević, A. Radovan, M. Žagar, D. Jureković

THE EFFECT OF THE COVID-19 PANDEMIC ON MEDICAL STUDENT ELECTIVES AT THE UNIVERSITY OF MANCHESTER, UK
I. Ioannou, A. Davis, A. Ahmed, S. Gupta, E. Ashton, M. Saint, T. Wasty

BENEFITS OF NEURODEVELOPMENTAL STIMULATION FOR CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDER
J. Mironova Tabachová, K. Vításková

E-LEADERSHIP: AN EXPLORATORY ANALYSIS OF THE SCIENTIFIC PRODUCTION

ONLINE LEARNING FOR WORKING ADULTS DURING COVID-19 PANDEMIC: ADVANTAGES AND CHALLENGES
P. Enciso

MONEY MAKES THE WORLD GO AROUND: THE ROLE OF PROBLEM SOLVING IN FINANCIAL LITERACY
H. Campos, D. Almeida

LEARNING FROM TEXT OR VIDEO: COMPARATIVE ANALYSIS ON LEARNING ACROSS MODALITIES
E. Dikbas Torun

AN INSIGHT ON THE TRANSFORMATION OF THE TRADITIONAL EDUCATIONAL EXPERIENCE TO A COMBINATION OF SYNCHRONOUS, ASYNCHRONOUS, AND TRADITIONAL LEARNING ENVIRONMENT
S. Shaw, O.A. Tapia

THE "CUBIST" DWELLINGS OF OLHÃO (PORTUGAL): A CASE STUDY ON DEVELOPING SKILLS IN ARCHITECTURAL REHABILITATION DESIGN THROUGH THE HISTORY OF ARCHITECTURE AND TRADITIONAL CONSTRUCTION TECHNOLOGIES
M. C. S. Nepomuceno, A. M. T. Martins Nepomuceno, Y. Gomez, V. Afonso

STEM PEDAGOGICAL INNOVATIONS FOR THE INCORPORATION OF SOCIAL JUSTICE IN UNIVERSITY EDUCATION: THE CASE OF THE UNIVERSIDAD DEL ROSARIO
R. Méndez-Romero, S. Carrerá-Martínez, M.A. Suavita-Ramírez

TOWARDS AN ADAPTIVE USE OF CONCEPT MAPPING CONSIDERING LEARNING STYLES
J. Bechara

STEM TRAINING AND ITS RELATIONSHIP WITH THE NEW MEXICAN SCHOOL EDUCATIONAL MODEL
C.P. Suarez Rodriguez, C. Zamora Pedraza

USING FLIPPED LEARNING IN ONLINE COURSES
M. Fazal, C. Navarrete

HISTORICAL ANALYSIS OF THE FORMATION OF ENGINEERING STUDENTS THROUGH THE DEVELOPMENT OF TECHNOLOGICAL PRODUCTS IN THE OPEN ROBOTICS WORKSHOP
L. Miranda-Cordero, R. García-García, Y. Minami, U. Peñuelas-Rivas

STRATEGY FOR TEACHING CLASSICAL GENETICS BASED ON AUGMENTED REALITY
D.M. Rivera Pinzón, S. Cuervo Guzman, Y.M. Gamboa Forero
ADDRESSING A LABOR MARKET NEED FOR HEALTH MANAGERS AND POLICY PROFESSIONALS: DEVELOPMENT OF A NON-CLINICAL HEALTH SCIENCE DEGREE PROGRAM FOR HEALTH POLICY AND MANAGEMENT
N. Rodríguez

DESIGN OF REMOTE REALIZATION PRACTICE TO IMPROVE STUDENT LEARNING IN EMERGENT SITUATIONS
A. Hernández, A.Y. Jiménez Rodríguez, Y. Minami

TECHNOCORAL CHARTS OF FOREIGN LANGUAGE CLASSES: TEACHING HOW TO MODEL AND IMPLEMENT
E. Chelpanova, E. Bystray, V. Moshkovich, F. Zakirova, A. Shabalina

KAGAN'S COOPERATIVE LEARNING STRATEGIES IN A HIGHER EDUCATION ESL CONTEXT: FOSTERING WILLINGNESS TO COMMUNICATE (WTC) IN A POST-PANDEMIC ENVIRONMENT
J. Fonseca-Chacana

COMMONLY MISPRONOUNCED WORDS IN ENGLISH FOR ACADEMIC PURPOSES
H. Vancova

THE ROLE OF PEERS IN IMPROVING ENGLISH PRONUNCIATION
H. Vancova

RECORDING AND EDITING EDUCATIONAL VIDEOS: COMPARATIVE EVALUATION OF AVAILABLE FREE SOFTWARE AND AN EXAMPLE OF USE
E. Romero, J. Remón

TRANSITIONING FROM THE PAPER TO THE TABLET: DO STUDENTS AT THE HIGHER EDUCATION LEVEL USE TABLETS FOR NOTE TAKING? ARE THEY AWARE OF THE DIFFERENT FEATURES AND POTENTIAL OF NOTE-TAKING APPLICATIONS?
J. Remón, E. Romero

DESIGN THINKING IN DEVELOPING INTEGRATED HOLISTIC EDUCATION THROUGH PROJECT WORK (PW)
H.F. Lee, T. Divenaran

REFORMING BUAYA DI BAWAH JAMBATAN ADAB AND MORAL VALUES BOARD GAME BASED ON TEACHERS’ FEEDBACK

DESIGNING OF LEARNING ASSISTANCE ENVIRONMENT WITH MULTI EDGE DEVICES FOR THE ERA OF COMPLEX MASSIVE NATURAL DISASTERS
S. Togawa, A. Kondo, K. Kanenishi

IMPACTS OF THE COVID-19 PANDEMIC ON THE AREA OF COMMUNICATION AND RESPIRATION IN PRE-SCHOOL AND YOUNGER SCHOOL-AGED CHILDREN OBSERVED BY TEACHERS IN THE CZECH REPUBLIC
E. Šlesingrová, K. Vítasková

THE IMPACT OF TEXT AND VIDEO-BASED CONTENT DELIVERY IN ONLINE FLIPPED LEARNING ENVIRONMENT ON STUDENTS’ ENGAGEMENT
M. Abuhmaid

THE CONCEPTUAL REPERTOIRE (CORE) IN THE CHEMISTRY TEACHING IN SECONDARY EDUCATION: ANALYSIS OF THE AMPLITUDE, DIVERSITY AND LEVELS OF REPRESENTATION IN ORGANIC CHEMISTRY CLASSES
S. Contreras

BETWEEN TEACHER TRAINING AND EDUCATIONAL INNOVATION. WHAT HAPPENED DURING DISTANCE EDUCATION BY COVID19?
N.P. Maldonado Reynoso, A.J. Rodríguez Aguirre

THE EFFECTIVENESS OF LEARNING MODEL GAWI MANUNTUNG BASED ON MULTIPLE INTELLIGENCES IN TERMS OF STATISTICAL LITERACY ABILITY AND SCIENTIFIC SKILLS OF ELEMENTARY SCHOOL STUDENTS

EVALUATION OF THE STATE OF EDUCATIONAL SCIENCES IN UNIVERSITIES AND HIGHER EDUCATION INSTITUTIONS OF IRAN
S. Khalijian, G. Shams

AN ACCESSIBLE AND INCLUSIVE FUTURE FOR TABLETOP GAMES AND LEARNING: PARADIGMS AND APPROACHES
CHALLENGES AND SCENARIOS FOR HIGHER EDUCATION IN THE POST PANDEMIC WORLD
N. Dominguez-Vergara

DRAWING ON ARTS-BASED METHODS FOR STUDENTS’ COLLECTIVE SENSE-MAKING OF THEIR GROUP-WORK LEARNING EXPERIENCES: A CASE STUDY FROM A UNIVERSITY-BASED HEALTH SCIENCE PROGRAM
S. Walsh, A. Morgan, C. Katay

EFFECTIVENESS EVALUATION INDICATORS OF ORGANIZATIONAL E-LEARNING COURSES
G. Shams, M. Zareisaroukolaei

ACTION RESEARCH WITHIN ERASMUS+
M.E. Cîmpean, V.A. Găzdac, M.D. Bocoș

DEVELOPING DIGITAL AND SUSTAINABILITY COMPETENCES THROUGH ETWINNING PROJECTS AND ERASMUS+ ACCREDITATION
M.E. Cîmpean, V.A. Găzdac, M.D. Bocoș

DIGITAL SKILLS IN UNIVERSITY EDUCATION: AN ANALYSIS OF ITS IMPLEMENTATION AMONGST STUDENTS
M.S. Valero-Gracia, J.S. Artal-Sevil

FIT FOR PURPOSE: POSTGRADUATE CERTIFICATE IN EDUCATION STUDENTS’ TEACHING PRACTICE
N.P. Caga, N. Majiba

EVALUATION OF THE IMPACT AND NECESSITY OF EDUCATIONAL (COMPUTER) PROGRAMS USED IN THE EDUCATIONAL PROCESS OF PRE-SCHOOL CHILDREN
I. Bilbokaitė-Skiatuerienė, R. Bilbokaitė

ACADEMIC ADJUSTMENT, PSYCHOLOGICAL WELL-BEING, AND FEAR OF COVID-19 AMONGST UNDERGRADUATE UNIVERSITY STUDENTS DURING THE COVID-19 PANDEMIC, IN SOUTH AFRICA
M. Tau, C. Mapaling, W. Tsabedze

FOSTERING STUDENTS’ AWARENESS IN CHOOSING UNDERGRADUATE STUDIES IN ARCHITECTURE @POLITO
M. Pavignano, U. Zich

URBAN SURVEY BETWEEN ON-SITE AND ON-LINE APPROACH IN THE BACHELOR’S OF ARCHITECTURE
M. Pavignano

EXPLORING THE EXPERIENCE OF PEOPLE WITH DEMENTIA IN VIRTUAL REALITY DRAWING CREATION BASED ON THE ARCS MODEL
P. F. Wu, K.Y. Fan, F.C. Wu, S.W. Yen

INVESTIGATING THE RELATIONSHIP AMONG SCHOOL CONNECTEDNESS, INTENSITY OF FACEBOOK USE AND SCHOOL ADAPTATION IN UKRAINIAN REFUGEE JUNIOR HIGH SCHOOL STUDENTS
T. Touloupis

ACADEMIC CHEATING BEHAVIORS AMONG ADOLESCENTS: THE ROLE OF MACHIAVELLIANISM AND MORAL DISSERGAGEMENT
T. Touloupis

THE INFLUENCE OF COOPERATIVE LEARNING TO FOSTER THE DEVELOPMENT OF EFL STUDENTS’ ENGLISH SKILLS
S. Anaguano, M. Zurita

COOPERATIVE LEARNING STRATEGY TO IMPROVE THE ATTITUDE OF STUDENTS TOWARDS EFL LEARNING AND OBTAIN BETTER RELATIONS AMONG PEERS
S. Anaguano, M. Zurita

INTEGRATION OF UKRAINIAN REFUGEE ATHLETES INTO THE OLYMPIC CHANEL OF THEIR NEIGHBORING COUNTRIES
G. Braniste

TEACHING BEYOND WORDS: NON-VERBAL CUES IN FOREIGN LANGUAGE LEARNING
A.M. Toma

TEACHERS PROFESSIONAL DEVELOPMENT USING NARRATIVE METHODOLOGY: IDEAS FOR LEADERSHIP CAPABILITY ISSUE
E. Seghedlin
DISTANCE LEARNING OF FOREIGN LANGUAGES BY IMMIGRANTS AND REFUGEES THROUGH 'LANGUAGE ON THE GO' MOBILE APP
P. Psomos

STUDENTS' VIEWS ON A MOBILE SERIOUS GAME THAT FOSTERS MATHEMATICAL SKILLS THROUGH MAGIC (SPELLS): A SURVEY STUDY
P. Psomos

INTELLIGENT TUTORS DESIGNED TO IMPROVE STUDENT LEARNING IN PHYSICS
V. Aravind, A. Kumar

PROFESSIONAL COMPETENCIES: AN ASSESSMENT OF LECTURERS AT A PRIVATE HIGHER EDUCATION INSTITUTE IN SOUTH AFRICA
C. Engelbrecht, W. Engelbrecht

AGILE, HYBRID TEACHING METHODS OF DISTRIBUTED PROJECT MANAGEMENT AND INTERCULTURAL SKILLS FOR GLOBAL SOFTWARE ENGINEERING DURING THE PANDEMIC
D.M. Marutschke, V. Kryssanov, P. Brockmann

DESIGN AND TESTING OF A MOBILE EXPERIMENTAL DEVICE IN THERMAL SCIENCES
E. Glakpe, S. Franco, C. Badiane

21ST CENTURY SKILLS: WHAT ELSE?

ALCOHOL ABUSE AS A NON-STANDARD SITUATION IN THE CARE OF WOMEN IN THE PRECONCEPTION PERIOD, DURING PREGNANCY, DURING CHILDBIRTH, AND IN THE Puerperium FROM THE MOTHER POINT OF VIEW: A CHALLENGE FOR HEALTH LITERACY EDUCATION
I. Otecká, A. Lemrová

REVIEW OF PEDAGOGICAL STRATEGIES EMPLOYED IN TEACHING TOURISM AND HOSPITALITY PROGRAMMES AT POLYTECHNIC COLLEGES IN ZIMBABWE
K. Ngwenya, S. Luggya, X. Khalo

EXPERIENTIAL DESIGN THINKING FOR ENTREPRENEURS AND INNOVATIVE MANAGERS IN THE DIGITAL AGE
S. Shcholokova, G. Laptev

BUILDING ACTIVE CITIZENS - STRATEGIES AND PRACTICES OF EDUCATION FOR CITIZENSHIP: TRAINING EXPERIENCES OF PRE-SCHOOL AND PRIMARY TEACHERS
C. Araújo, A. Osório

RELATIONSHIPS BETWEEN ROBOTICS, PROGRAMMING AND NARRATIVES IN PRE-SCHOOL AND PRIMARY EDUCATION
C. Araújo, A. J. Osório, A. P. Martins

QUALITATIVE EQUITABLE EARLY CHILDHOOD CARE AND EDUCATION FOR SUSTAINABLE DEVELOPMENT IN SELECTED EARLY CHILDHOOD DEVELOPMENT CENTRES IN SOUTH AFRICA
N. Tyilo, T. Matshoba

SELF-REGULATION AS A CONDUIT FOR PLAY-BASED LEARNING APPROACH FOR YOUNG CHILDREN BETWEEN 0-5 YEARS.
N. Tyilo

ENHANCING L2 WRITERS' ARGUMENTATIVE SKILLS WITH THE “THINK, PAIR, AND SHARE” ONLINE TOOL
J. Qin

THE OPINION OF TEACHERS ON EVALUATING AND MARKING PUPILS' ACHIEVEMENTS IN LOWER PRIMARY SCHOOL GRADES IN CROATIA
V. Valjan Vukić, S. Zrilić, M. Vunič

IMPACT OF ONLINE TEACHING AND LEARNING ON AT-RISK STUDENTS AT AN INSTITUTION OF HIGHER LEARNING IN SOUTH AFRICA: SMU CASE STUDY
NS. Mathiba, TA. Dandadzi, EL. Sesale, SM. Seeletse

THE CHALLENGE OF PEER ASSESSMENT IN HIGHER EDUCATION
P. Vossen, S. Ajit

CREATING BIOPLASTICS: A CO-DESIGNED EDUCATIONAL PRACTICE?
P. Enciso, C. Vignoli, S. Horjales, I. Marsicano, R. Mantaras, F. Palma
HYBRID/VIRTUAL PHYSICAL COMPUTING PROTOTYPING HANDS-ON LABORATORY DURING COVID-19 PANDEMIC

P. Perego, P. Bobrova

Design Department, Politecnico di Milano (ITALY)

Abstract

The Covid-19 pandemic has forced schools and universities to rethink the classic "Hic et Nunc" (here and now) model as the only valid teaching model.

Education in the third millennium no longer consists only of frontal activities in the classroom, with notes, texts, and notions, but integrates technological and interactive tools to involve and facilitate learning.

The pandemic has forced educators, at all levels of learning, to undertake a change that has already been underway for years, especially in business training: the use of the internet as the primary teaching tool. According to an ongoing study on virtual learning [1], a staggering 97% of students had switched to online education in June 2020. Of the current college students surveyed, 63% said the quality of education decreased when it moved online and 31% said it stayed online. Only 5% of students said the quality of their education improved. Despite this, according to the IPSOS survey of June 2020 [2], 65% of Italian students are in favor of planning mixed online / presence lessons because they are considered more usable. If in principle the change due to the first months of the lockdown was almost traumatic, passing from a model in presence to a completely synchronous online model (almost an e-learning), with the evolution of the pandemic situation and with the attenuation of the measure's containment, a controlled return in face-to-face was possible, from which the possibility of exploiting the situation to implement the so-called blended teaching.

If on the one hand, the pandemic has made it possible to discover many valuable tools for distance and blended learning, on the other hand in some disciplines it has drastically changed the way in which these were taught; an example is the interaction design and in particular, courses where the development of a physical prototype is required.

One of the fundamental aspects of these courses is in fact the hands-on on the various prototyping technologies and the constructive dialogue during the reviews in the classroom. Moreover, often these prototypes are made in groups, and the forced distancing compromises this part of cultural involvement and exchange of ideas among the students. In these two years of distance, hybrid and blended learning forced by the pandemic situation, various different attempts have been made to involve students in physical computing hands-on dynamics, from completely remote frontal lessons, up to the use of connected laboratories with remotely controlled physical prototypes.

This paper shows the hybrid didactic experience created for the prototyping course of the Digital and Interaction design school at the Politecnico di Milano, reporting all the pros and cons, and exemplifying all the fundamental aspects necessary for establishing a physical hands-on course in the distance.

Keywords: Physical Computing, Phygital prototyping, Hybrid learning, Distance learning, Teaching technologies.

1 INTRODUCTION

The Covid-19 pandemic has forced schools and universities to rethink the classic "Hic et Nunc" model (here and now) as the only valid teaching model. Education in the third millennium no longer consists only of frontal activities in the classroom, with notes, texts, and notions, but integrates technological and interactive tools to involve and facilitate learning.

The pandemic has forced educators, at every level of learning, to undertake a change that has already been underway for years, especially in business training: the use of the internet as the main teaching tool.

According to an ongoing study on virtual learning [1, 3], a staggering 97% of students had switched to online education in June 2020. Of the current college students surveyed, 63% said the quality of education decreased when they moved online and 31% said it stayed online. Only 5% of students said the quality
of their education improved. Despite this, according to the IPSOS survey of June 2020 [2], 65% of Italian students agree for planning mixed online / presence lessons because they are considered more usable.

If in principle the change due to the first months of lockdown was almost traumatic, passing from a model in presence to a completely online synchronous model (almost an e-learning), with the evolution of the pandemic situation and with the attenuation of the containment measures, a controlled return in presence was possible, from which the possibility of exploiting the situation to implement the so-called blended teaching.

If the definition is interpreted strictly, blended teaching consists of teaching in which a percentage of the lessons are carried out in physical presence in the classroom with the teacher, and a part instead takes place online. The format of the online part can take different formulations: from the simple online lesson (synchronous) to more complex laboratory, project or simply evaluation activities that can take on synchronous (in the presence of the teacher) or asynchronous connotations. Blended learning, as defined by Cronje [3] is an optimization of teaching based on the context. This means that the methodology to be applied cannot be unique but finalized according to the context, which may differ from the type of education (primary, secondary, university or company) or from the type of course (theoretical or laboratory course). The importance of blended learning is not in fact in the method used, but so much in the success it has in involving the student and consequently in passing the course. The objective of blended learning is therefore the student.

In the first period of the pandemic, schools focused more on synchronous distance learning, without however considering the benefits that digital technology can bring to learning. After this first phase, some studies [4] [5] [6] have shown that most of the difficulties for distance learning are related to the involvement of students. These difficulties are mainly related to the inability to interact directly with students and are particularly accentuated in laboratory and project courses, in which students usually work in groups and interact with the teacher to review their own project. These difficulties increase when the course is based on hands-on, laboratory course in which students learn by doing, getting their hands dirty with new materials and new technologies.

On the other hand, blended / mixed teaching consists of a hybrid approach with respect to face-to-face teaching and distance teaching; exploiting digital technologies, blended teaching combines the traditional frontal method in the classroom with activities mediated by computers and mobile devices for a better integration between student and teacher. In this way the teaching activity is no longer guided by the teacher, but also by the student who can adjust, through the asynchronous activity, the pace and time based on the learning method he has chosen. This type of teaching is more complex than the one faced during the first period of the pandemic; moving the same concept from face-to-face teaching to online teaching without any change has inherent problems mainly due to the impossibility of conducting about 60% of the activities that would be done in the classroom, this because this 60% is mainly done on physical support that is very complex to move online.

On the contrary, the use of digital technologies together with to the classic face-to-face teaching (blended teaching) is designed to encourage student involvement and at the same time improve results. Mixed teaching can be carried out using different models [7]:

1) **The rotational model**, in which students rotate through different learning modes, from completely face-to-face lessons to completely online activities.

2) **The flex model**, in which most of the activities are carried out online, but some are conducted face-to-face under the supervision of the teacher.

3) The a-la-carte model, in which students build the entire school experience, with some online courses that replace face-to-face lessons, with these however making up a significant portion of the entire training course. In this way, students continue to benefit from interactions with teachers and peers.
The enriched virtual model, in which students have 1-1 sessions with the teacher, but are free to complete the rest of the online course independently.

This type of teaching seems to take on a particularly interesting role for students who are co-stars of the teaching experience and who can take advantage of many aspects that blended teaching involves; Here are some examples:

- Assessments and self-assessments during the course
- Practical examples, especially related to technologies
- Visual elements
- Speed adjustment not only by the teacher, but also by the student.
- Production of multimedia documents
- Personalization and / or individualization of the training course

For this purpose, the technological equipment must be like a pen and pencil, or a simple and transparent tool that does not affect the delivery of the course. But how it is possible to implement these technologies in hands-on course? How can technologies assist teacher with online lessons which requires tangible objects to be carried on?

This paper reports the experience of two different classes: the first during the lockdown in the first semester 2020/21 (from September to December) in which lessons were fully online, and the second during the first semester 2021/22 (from September to December) during which low restrictions allow for a blended learning.

2 METHODOLOGY

Due to the Covid-19 pandemic situation and its evolution, to which the restrictive measures are linked country by country, even the Politecnico di Milano, a technical university in northern Italy and one of the most important in the country, was forced to change its teaching process. During the first Covid wave (March 2020) the change was drastic: after two / three weeks of forced suspension of lessons, the university decided to resume teaching activities thanks to online video-call platforms, such as Microsoft Teams and Zoom. The situation was the same during the second wave, in autumn 2020; with the relaxation of the restrictions during the summer of 2020, the Politecnico di Milano was able to organize itself to offer a better quality for the lessons streamed directly from the classroom, embedding new cameras, environmental microphone… but this was only possible for two / three weeks, after which, a further increase in Covid cases, forced the authorities to totally return to distance learning. In this semester we were forced to continue with online teaching also with hands-on; this paper reports the outcome of the “Hardware and Software technologies for design” class, a specialized course for digital and interaction design in which students face for the first time in their university career the physical computing, Arduino and other electronics and digital stuff, with the aim to learn how to build an interactive physical and digital prototype. From the description of this course, the problems that arise with online students who never see each other for the management of development and testing of a prototype are obvious. In the rosiest of situations, students of the same group lived in Milan and they were able to meet in person in their homes to study and implement their work as inhabitants of the same neighborhood; but in most cases, on the other hand, the groups were made up of students from various parts of Italy and of the world, often with people from completely different time zones, to make the management of lessons, revision and assignment even more complicated.

We used the first experience for gathering data regarding the two different modalities for teaching technical hand-on course. After the first semester experience of fully online class, we organized a focus group with teachers and students in order to evaluate the two different modalities and acquiring information and feedback for improving students’ engagement and satisfaction.

Thanks to this experience and all the data acquired by means of students’ feedbacks, the following year it was possible to prepare a better programming of the course, so that it was possible to do it with blended modality. In fact, thanks to the vaccination campaign and improved safety, the restrictions against Covid-19 have been loosened and it was possible to return in presence, while maintaining safety distances. Furthermore, in the case of contagions or forty, the lessons were not suspended, but it was possible to carry them online. This has allowed on the one hand greater safety on the continuity of teaching, and on the other to exploit what has been learned from the previous year and improve the aspects of a classic lesson in presence through the so-called "Flex Model".
2.1 Fully online class

The fully online class (except for the first two meetings which were held in person with the possibility of following the lesson in streaming) took place from September to December 2020, during the second wave of Covid-19 in Italy. This class was organized to be online, but with the same structure and arguments in presence. The lessons were delivered by means of Cisco WebEx, an online conference tool used for use for teaching. WebEx gives the possibility to share screen, exchange messages, draw on the screen with pencil but it does not implement any utilities for engaging students during lessons. In fact, one of the main problems underlined by students was the engagement; students were unable to get to know and interact, neither with each other nor with the teacher; because of this the lesson was perceived as boring and / or difficult to understand.

In order to get around this problem, we try to use new digital technology and new methods for feedback and engagement. In fact, being a hands-on course, one of the shortcomings of online teaching is precisely the impossibility of physically getting one’s hands on technologies and prototypes. We tried to solve this by using Thinkercad [7] and Labsland.com [8].

Thinkercad is a free-of-charge Web App by Autodesk which is used both for 3d modelling and electronics virtualization. Thanks to this second feature, it can be used both for teaching electronic and Arduino programming fundamental, but also for a first virtual prototype of the circuit. The graphical user interface of the program allows for easily understand and use it since the first approach, and it was a game change in the full online class because allow to teacher to show electronics components, their connections and uses, and to students to show the progress made on the prototype, even before buying the material and building everything.

Labsland is defined like “Real laboratories, on the internet”. This means that users can connect to somewhere on the world where a real laboratory with real instrumentation is installed and can be used interacting with it remotely though the internet. There are different type of labs, from biology, chemistry and physics, to engineering and robotics. For example, students can work on Arduino code, on their own computer or directly on Labsland, and then try it on a physical Arduino which is placed in laboratories around the world. These Arduino boards are used for robotics or connected to sensors, displays, buttons, LEDs so that students can try to interact with different components. Without buying components, thanks to Labsland, students were able to play and test with different solution directly online; the platform allows any user to use the “real lab” for a certain limited amount of time, so as not to preclude the use of the hardware also to other users. Figure 2 shows two examples of Labsland laboratory for Arduino based hardware class.

One of the other methods used to improve students’ engagement was gamification and rewards on assignment. During the entire semester, students had to complete three homework which consists in different steps of prototyping a phygital product. These assignments were evaluated by the teacher as part of the final score, but also from the students which, especially for the final prototypes, vote for the best solution. The winner receives a certificate signed by the professor as a reward for the commitment.

![Figure 2: Two examples of Labsland laboratory. On the left, the hardware for Arduino testing hardware with display, servo and other components; on the right the testing phase of a line follower robot with the soure code directly programmed online.](image-url)
2.2 Blended class

The blended class took place from September to December 2021. Unlike the online modality, the blended approach tries to take the pros from the first approach to insert them into the second, to improve the involvement of the student and increase learning results.

Blended class was 30/70; 30% online and 70% in presence. The online part was mainly used for theoretical lesson and groups revisions on the conceptualization of prototypes, while the part in the classroom was demanded to hands-on lessons and physical prototyping.

The use of tools like Thinkercad allows for first hands-on lesson also online but involving the students working on the same project and the same electronics circuit. Moreover, the use of Figma and Miro software, as well as the implementation of a new web learning platform based on Moodle, made it easier to exchange content and interact between students in the classroom and students, especially foreigners, who, for reasons related to the pandemic in their country, were unable to be physically present.

2.3 Focus group

The focus group took place after the first semester of fully online class. In addition to the staff taking part in the project, 8 students of the first year of the Digital and Interaction Design course at the Politecnico di Milano participated in the focus group. The students involved form a heterogeneous group that takes into consideration the following aspects:

- Bachelor's degree at the Politecnico di Milano;
- Bachelor's degree in another university;
- Italian students who participate physically to class (in presence);
- Foreign students who participate physically to class (in presence);
- Remote foreign students (who are not located in Milan).

To optimize the collection of opinions, students from outside the EU were also invited, and with different time zones (eg. China and South America). The focus group lasted about 2.5 hours and was divided into three parts:

1. Envisioning the experience of being a student in the academic year that is coming to an end.
2. Looking back on the semesters just passed, evaluate how efficient the teaching system has been.
3. What if? Comment some scenarios, each one based on innovative platforms for hybrid and blended classes and their functionalities.

For each of the parts, students, in teams or individually, carry out an analysis on the topic and elaborate thoughts and solutions, first writing it on a shared Miro board [7], and then illustrating it to all participants.

3 RESULTS

This paragraph reports results from both the students’ evaluation of classes and focus group. Students underline mainly three types of problem related to online classes: Social life, Timing, Workload.

3.1 Social life

Starting new experience in a new school, or a new academic year but with different classmate is always a challenge from the point of view of sociality; starting them fully online increases the level of difficulty even more, especially for foreign students who are approaching the Italian academic world for the first time. Here below are testimonies from students after the first fully online class:

“Creating relationships with classmates through chat is complicated, and even more so to relate to the teacher; even if it is an alternative method for those who are afraid to communicate.”

“Online group activities are a ‘mess’. It is difficult to create a group as in presence, where relationships often continue even after work”.

Social life quality obviously increases with blended teaching; students have the possibility to meet each other physically in the classroom for creating groups and work together on the project. To recreate the same “experience” of knowing each other in the physical world, during the online class we tried “Spatial.chat” [8]. Spatial is an online workspace for remote teams which sue the principle of synaesthesia:
it allows to move an avatar in a digital environment with tables, stages, and ear only people that are at the same table or close to the stage. This allows to recreate digitally what usually happens inside a room full of people: hear people around you and background rustle with the voice of distant people. The software gives the possibility to shout (through a virtual megaphone) so that everyone can hear. It is a virtual environment which properly reconstruct the environment and the dynamics of a class. Despite these attempts with new generation software, both Italian and foreign students still find in person meeting more useful and functional; they prefer to leave the online parts of their study to more suitable component, such as study together and the generation of ideas (brainstorming).

Figure 3: An example of Spatial virtual classroom.

3.2 Timing

Both focus groups and feedback from the online class underline the difficulties of the students relates to time management. Many students have pointed out that completely online lessons have changed the routines of students and teachers, who often find themselves taking long and non-stop lessons, mistakenly believing that online lessons are less burdensome than face-to-face lessons. Time management, with workload are considered by students to be the main cause of stress, especially during the final stages of the semester.

Here after are some testimonies from students gathered during the focus group:

“During the first phase of the pandemic we were in front of the computer 24/7.”

“Lectures are often done online as if they were in person: lectures with frontal presentations, with lots of text, difficult to follow. What’s more, there are often fewer breaks than when you are present.”

3.3 Workload

From the focus groups it emerged that the transition from face-to-face teaching to blended teaching resulted in an increase in workload as an automatism in most courses. In fact, not being able to view the work of the students in the presence, many teachers require presentations in order to understand how the student is progressing during the course. However, these continuous presentations require great resources from the students, who often return to having to prepare even 3/5 presentations a week, with the lessons taking up more than 80% of working hours. Furthermore, these presentations are for the most part seen quickly by teachers, also causing a strong sense of frustration in the student, who has spent time making them.

Some students underline the importance to use and create template and guideline for the material to be produced for deliveries and revisions. It is in fact highlighted how very often a lot of time is wasted in graphically preparing the material, thus subtracting important time from the drafting of the actual contents. From this point of view, the two-software mentioned in the previous paragraph (Figma and Miro) are very useful because they allow to share not only the contents but also templates, reviews, and comments, as well as motivate the involvement of students through votes on the contents created.

Here you can find some sentences recorded during the intervention of students in the focus group:

“It is difficult to manage the agenda because the load seems to have increased and finding moments of contact with those who take different courses is complicated.”
“Learning from others was really difficult, especially because of the lack of time; you do not have the opportunity to listen to other reviews. In still other cases the reviews were private, so it was not possible to follow.”

4 CONCLUSIONS

From the preliminary analysis and the results highlighted during the focus group, and from the feedback related to the two classes, main and secondary outcomes were extracted and reported here after.

4.1 Main outcomes

4.1.1 Engagement

The main problem of distance learning, and consequently of the online part of blended teaching, is the student's engagement. As highlighted by Gardner & Sosio [11], the emotions of the learner test for a course of study are very important: the student who enthusiastically discovers a new world and is stimulated in his curiosity, will learn more successfully and with less effort than to an imposed task that he considers uninteresting. In fact, the American academic argues that if you want to easily learn certain knowledge, you need to place it in a context capable of arousing emotions [12]. On the contrary, experiences without emotional appeals will be poorly involving and will soon fall into oblivion, leaving no mental representation behind them [12]. The acceptance or not of online teaching and the educational results related to it also depends on this.

It is therefore of fundamental importance for the teacher to insert a part of engagement during the design of the course (in different ways: self-assessments, quiz, gamification, awards ...).

4.1.2 Teaching materials

The Focus Group highlighted the appreciation of students for online material, in particular for the recordings of the lessons; These give the possibility to follow the course everywhere, listening to parts that had not fully understood or of which the notes were lost. On the other hand, sometimes the materials are too many and not very manageable, significantly increasing the load of studies. There is the need of tools that allow better management of both the teaching material and the material and the student will produce during the course.

By exploiting the production and organizational of the didactic material, the student becomes the protagonist of teaching and not a simple user. Students can thus create didactic material to be shared with the rest of the class for an interpersonal growth, and with this he can understand a lot about organization and teaching planning and create a new way of telling learning.

4.1.3 Tools and software

The didactic material that the student must produce is the last of the salient points underlined by the Focus Group and feedbacks. The production of material for the presentation of project progress is necessary when teaching is online, and the teacher cannot put his hand directly on the students' projects. However, the timing of the lesson give the student the opportunity to present only the outcome while the design choices, which are a fundamental part of the learning process, are most often left out. The adoption of software and tools that can facilitate this task is therefore important, giving the opportunity to share structured and quick access with the teacher. It is also important that the teacher provides not only structured and detailed information on the course and on the evaluation method (complete Syllabus), but also reviews templates that can speed up the drafting of presentations for reviews and deliveries.

4.2 Secondary outcomes

One of the problems most related to distance teaching and lessons with students that are half in presence and half online is mainly linked to group work. Students have difficulty, especially during the first half of the semester when many of them still do not ask themselves, in making knowledge and forming heterogeneous groups. The tools currently used for online teaching do not allow to use tools that favor these aspects. During various software tests we find out that a synaesthetic approach like that of Spatial.chat seems to give the student greater control over these aspects, but it can also lead to distractions that negatively affect learning. It is therefore essential on the one hand to choose the most appropriate tool, but on the other hand to train the student on the correct use of these. In fact, some
underlined the need to have a first phase of training, both for students and teachers, on the use of these specific software and tools.

ACKNOWLEDGEMENTS
The authors would like to thank all the students that participated to the classes and to the focus groups for their invaluable help.

REFERENCES