

**Abstracts
and
Conference Materials
for the
20th European Conference on
e-Learning**

**A Virtual Conference hosted by
University of Applied Sciences HTW
Berlin, Germany**



28-29 October 2021

A conference managed by ACL UK

aci

Abstracts of Papers

Presented at the

20th European Conference on e-Learning

ECEL 2021

a Virtual Conference

Supported by

University of Applied Sciences HTW Berlin

Germany

28-30 October 2021

Copyright the authors, 2021. All Rights Reserved.

No reproduction, copy or transmission may be made without written permission from the individual authors.

Review Process

Papers submitted to this conference have been double-blind peer reviewed before final acceptance to the conference. Initially, abstracts were reviewed for relevance and accessibility and successful authors were invited to submit full papers. Many thanks to the reviewers who helped ensure the quality of all the submissions.

Ethics and Publication Malpractice Policy

ACIL adheres to a strict ethics and publication malpractice policy for all publications – details of which can be found here:

<http://www.academic-conferences.org/policies/ethics-policy-for-publishing-in-the-conference-proceedings-of-academic-conferences-and-publishing-international-limited/>

Self-Archiving and Paper Repositories

We actively encourage authors of papers in ACIL conference proceedings and journals to upload their published papers to university repositories and research bodies such as ResearchGate and Academic.edu. Full reference to the original publication should be provided.

Conference Proceedings

The Conference Proceedings is a book published with an ISBN and ISSN. The proceedings have been submitted to a number of accreditation, citation and indexing bodies including Thomson ISI Web of Science and Elsevier Scopus.

Author affiliation details in these proceedings have been reproduced as supplied by the authors themselves.

The Electronic version of the Conference Proceedings is available to download from DROPBOX <https://tinyurl.com/ECEL21>. Select Download and then Direct Download to access the Pdf file. Free download is available for conference participants for a period of 2 weeks after the conference.

The Conference Proceedings for this year and previous years can be purchased from <http://academic-bookshop.com>

E-Book ISBN: 978-1-914587-19-1

E-Book ISSN: 2048-8645

Book version ISBN: 978-1-914587-18-4

Book Version ISSN: 2048-8637

Published by Academic Conferences International Limited
Reading, UK

www.academic-conferences.org

info@academic-conferences.org

Contents

Paper Title	Author(s)	Page No	Guide no.
Preface		vii	xiv
Committee		viii	xvi
Biographies		xi	xxi
Keynote Outlines			
Research papers			
A Competency-Based Approach to Support e-Learning During the Covid-19 Situation	Dina Adinda	1	1
Dilemmas in Designing e-Learning Experiences for Professionals	Mobyen Uddin Ahmed, Ioanna Aslanidou, Jakob Axelsson, Shahina Begum, Leo Hatvani, Anders Olsson, Sebastian Schwede, Carina Sjödin, Jan Skvaril and Valentina Zaccaria	10	2
Remote Learning: Students' Satisfaction and Perspectives in Higher Education	Paulo Alves, Carlos Morais, Luísa Miranda, Maria João Pereira and Josiana Vaz	18	3
Remote Teacher Training During COVID Lockdown by e-Learning Lab (University of Crete)	Panagiotes Anastasiades, Konstantinos Kotsidis, Christos Synnefakis and Alexia Spanoudaki	27	4
A Review of Podcasts as a Learning Medium in Higher Education	René Holm Andersen and Susanne Dau	34	5

Paper Title	Author(s)	Page No	Guide no.
Going Online: Student Perspectives in a Problem-Based Learning Environment During the Pandemic	Eskil Andersen, Hans Hüttel and Dorina Gnaur	42	6
Game-Based Learning for Cybersecurity Awareness Training Programmes in the Public Sector	Maria Lourdes Bacud and Sten Måses	50	7
Building Better Online Communities in the Post Pandemic World	Wendy Barber, Robert Harrison, Roland VanOostveen and Elizabeth Childs	59	8
Challenges in Educating Student Art Teachers in Technology Comprehension	Mie Buhl and Kirsten Skov	66	9
Building Organisational Capacity for Blended Learning: An Evidence-Based Approach	Tim Cappelli and Alisdair Smithies	73	10
Connecting the Dots: Putting Instructional Design Theory to Practice in Online Courses	Paula Charbonneau-Gowdy and Caro Galdames	80	11
Exploring the fit Between Learner Characteristics and Learning Environments	Lee Yen Chaw and Chun Meng Tang	89	12
Comprehending Entrepreneurship Learning Through the Lens of Innovative Teaching Pedagogy: India Vs Germany	Sakshi Chhabra and Lubna Ambreen	98	13

Paper Title	Author(s)	Page No	Guide no.
Learning L2 Through the use of Technology Outside Class	Adam Christopher	105	14
Innovative Remote Laboratory to Enhance Remote Learning for HE Digital Electronics Subjects	Ben Clark, Alford Chauraya and Sheryl Williams	112	15
Reflecting on the Experience of Forced Transition to Distance Learning During the COVID-19 Pandemic	Liudmila Daineko, Inna Yurasova, Viola Larionova and Natalia Karavaeva	119	16
The Fourth Industrial Revolution and Higher Education in Africa: A Systematic Review and Implications	Ayanda Pamella Deliwe	130	17
Developing Training Materials for Entrepreneurial Skills: Identifying Processes, Principles and Core Skills Through Case Studies	Yanqing Duan, Yongmei Bentley, Patricia Wilson and Olena Iarmosh	139	18
An Augmented Reality Mobile Learning Experience Based on Treasure Hunt Serious Game	Mariella Farella, Davide Taibi, Marco Arrigo, Giovanni Todaro, Giovanni Fulantelli and Giuseppe Chiazzese	148	19
Distance Higher Education Learning and Professional Pedagogy: Training the Trainers	Maria Fragkaki and Stylianos Mystakidis	155	20

Paper Title	Author(s)	Page No	Guide no.
Onboarding Challenges in Online and Blended Courses: Reviewing Virtual Cross-Country Collaboration of Student Teams in Higher Education	Leonore Franz, Elke Mähltitz-Galler and Michael Herzog	164	21
Conceptual Recommendations for Collaborative and Experience-Based Learning in Virtual Environments	Regina Frieß and Florian Gnadlinger	172	22
Social Presence in Times of COVID-19 Distance Teaching	Sonja Gabriel	181	23
Narratives in Gamification: Considerations for Supporting Digital Literacy of the Elderly	Carolin Gellner and Ilona Buchem	188	23
On-Demand Placement Test Options Within a Moodle Environment	Thomas Goetz	195	25
Student Perspectives on the Digital Learning Experience During COVID-19 Lockdown	Rolando Gonzalez, Tomas Sandnes and Siri Fagernes	203	26
Enhancing Pedagogy to Andragogy in the Redesign of Teacher Training Courses on Programming	Niklas Humble and Peter Mozelius	210	27
Speculative Design as a Method of Inquiry in an Online Workshop Setting	Helene Husted Hansen, Sara Paasch Knudsen and Rikke Ørngreen	218	28

Paper Title	Author(s)	Page No	Guide no.
Creation of Interactive Educational Trail by Secondary Education Students	Imrich Jakab, Lucia Szabová, Katarína Skokanová and Jarmila Čameková	227	29
Future Teachers' Attitude Toward Using Digital Technology in Instruction: Questionnaire Survey Results	Tomas Javorcik and Tatiana Havlaskova	233	30
Inclusive Multimodal Designs in Language Classroom: Three Empirical Studies	Henrik Kasch	240	31
Peer Observation and Evaluation of Synchronous Online Tutorials	Iain Lambie and Bobby Law	248	32
Self-Paced Learning in Virtual Worlds: Opportunities of an Immersive Learning Environment	Madlene Leißau, Sven Hellbach and Christoph Laroque	257	33
IT as a Career Choice for Girls: Breaking the (Self-Imposed) Glass Ceiling	Birgy Lorenz, Kaido Kikkas and Tiia Sömer	266	34
Factors Impeding South African Libraries, Archives and Museums From Collaborating for Digitisation Purposes	Kagiso Mabe and Andrea Potgieter	275	35
Features of e-Learning in the System of Studying Social Responsibility of Students	Knissarina Malika Maksatovna, Syzdykbayeva Aigul Dzhumanazarovna, Baikulova Aigerim Meirkhanovna, Zhumaliyeva Gulmira Sainovna and Makasheva Aliya Maratovna	282	36

Paper Title	Author(s)	Page No	Guide no.
Analysis of the Curriculum of Secondary Technical Education Based on the Reflection of ICT Competencies	Josef Malach, Veronika Švrčinová, Dana Vicherková and Milan Chmura	289	37
The Changing Landscape of Digital Technologies for Learning	Dagmar Monett, Claudia Lemke, Amanda Jefferies, Gert Faustmann and Tom Brandherm	296	39
Improved Students' Intake and Better Conceptualization in a Flipped Classroom on-line	Marie Myers	305	40
The Development of Critical Thinking Disposition During two Online Styles of Learning	Minoru Nakayama, Satoru Kikuchi and Hiroh Yamamoto	314	41
Designing Rubrics for Consistency of Marking in Large STEM Classes	John Noll, Joanna Rawska and Mariana Lilley	321	42
Creative Audio-Visual Approaches Applied in Online and Hybrid Educational Designs	Rikke Ørngreen, Birgitte Henningsen and Heidi Hautopp	329	43
Art-Inspired Instructional Strategies in Online Education	Nichole Parker and Beth Perry	339	44
Using Arts-Based Instructional Strategies in Hybrid, Face-to-Face, and Online Nursing Courses	Nichole Parker, Beth Perry, Katherine Janzen and Margaret Edwards	347	45
Learning Through Social Distancing: WhatsApp as a Community of Inquiry	Sweta Patnaik	355	46

Research Paper Abstracts

overcome the identified barriers to collaboration. This paper can thus be utilised to help raise awareness of the hindrances to collaboration for digitisation purposes. Additionally, the study identifies ways to overcome some of these hindrances and foster more collaborations between South African LAMs for digitisation purposes. Conducting this study was essential, as these three institutions are houses of indigenous knowledge. Hence, the digitisation of their collections is critical for facilitating e-learning for the public space.

Keywords: digitisation, e-learning, collaboration, LAMs, impediments

Features of e-Learning in the System of Studying Social Responsibility of Students

Knissarina Malika Maksatovna¹, Syzdykbayeva Aigul

Dzhumanazarovna², Baikulova Aigerim Meirkhanovna²,

Zhumaliyeva Gulmira Sainovna¹ and Makasheva Aliya Maratovna¹

¹West Kazakhstan Marat Ospanov Medical University, Aktobe city, Kazakhstan

²Abai Kazakh National Pedagogical University, Kazakhstan, Almaty, Kazakhstan

uku_malika@mail.ru, sizdikbaeva-aya@mail.ru,

aigerim.baikulova@mail.ru, gulmirasaiynkyzy@mail.ru, www.aliya@bk.ru

DOI: 10.34190/EEL.21.125

Abstract: The article discusses the features of e-Learning in the system of studying the social responsibility of students in the framework of the scientific project IRN No. AR09058126 "Social responsibility of students in the conditions of professional training in universities of Western Kazakhstan", funded by the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan since 2021. Scientific works on corporate social responsibility contributed to the development of this research (F.Rosati, R.Costa, A.Calabrese, J.Lee, M.Cho, etc.). Of scientific and methodological value is the work of S. L. Davis, L. M. Rives, and S. Ruiz-de-Maya on the need to develop a concept of social responsibility that includes behaviour of the individual as a modern citizen. The study of J. C. R. Sousa, E. S. Siqueira, E. Binotto, L. H. N. Nobre on the perception of the subjects of the educational process of social responsibility, depending on the degree of discussion and the level of socialization of students, is significant. C.Roofe believes that the problem of social responsibility is not given much attention, which leads to a

constant decline in the moral and spiritual component of education in the country. The testing tool included one author's questionnaire, revealing the degree of awareness, personal attitude of teachers to the problem of the lack of social responsibility of students. The questionnaire "Ideas about social responsibility" was validated by specialists of the Biostatistics sector. The sample consisted of 103 respondents in random order, regardless of the age and teaching experience of the participants, as well as the academic disciplines taught. Next questions - 1, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15 when rounding, we gave the value of Alpha-Cronbach-0.7 (Alpha-Cronbach: 660927 and Standardized. Alpha: 669767), which corresponds to the required norm and confirms the validity and reliability. The features of e-Learning allow us to adjust our activities in a timely manner to achieve the goals set in the system of studying the social responsibility of students. We believe that e-Learning contributes to the personal development of students, thereby optimizing their process of developing social responsibility.

Keywords: university student, distance learning, e-Learning, responsible education, personal social responsibility, social responsibility of students

Analysis of the Curriculum of Secondary Technical Education Based on the Reflection of ICT Competencies

Josef Malach, Veronika Švrčinová, Dana Vicherková and Milan Chmura

University of Ostrava, Faculty of Education, Department of Education and Adult Education and Department of Technical education, Ostrava, The Czech Republic

josef.malach@osu.cz; veronika.svrcinova@osu.cz;
dana.vicherkova@osu.cz; milan.chmura@osu.cz

DOI: 10.34190/EEL.21.070

Abstract: The paper presents the results of the analysis of the assessment of the acquisition of digital competencies of students of secondary vocational schools with a focus on the field of engineering in terms of: their importance for meeting the profile of the graduate; employability of graduates in the field; requirements of Industry 4.0; the difficulty of their acquisition at a secondary vocational school. The research team performed analysis of the implementation of the Framework Educational Program for the field of education 23-41-M / 01 Mechanical engineering in the conditions of secondary vocational school. The main tool of the quantitative research survey was an online questionnaire distributed to the

Surname	First Name	Institution	email
Sun	Chiyao	University of Chinese Academy of Sciences, Beijing, China	sun_chiyao@163.com
Szabová	Lucia	Constantine the Philosopher University in Nitra, Slovak Republic	lucia.szabova@ukf.sk
Szeles	Albina	Coventry University, UK	ab1244@coventry.ac.uk
Tagharobi	Hassan	Hochschule für Technik und Wirtschaft Berlin, Germany	hassan.tagharobi@htw-berlin.de
Taibi	Davide	National Research Council of Italy - Institute for Educational Technology, Palermo, Italy	davide.taibi@itd.cnr.it
Tang	Chun Meng	James Cook University Singapore, Singapore	chunmeng.tang@jcu.edu.au
Tyczynski	Diane	The Michener Institute of Education at UHN, Toronto, Canada	dtyczynski@michener.ca
Ulovec	Andreas	University of Vienna, Austria	Andreas.Ulovec@univie.ac.at
Van Niekerk	Johan	Noroff Education AS, Kristiansand, Norway	johan.vanniekerk@noroff.no
Van Wyk	Norman	Noroff Education AS, Kristiansand, Norway	norman.van.wyk@noroff.no
Vaňková	Petra	Pedagogická fakulta, Univerzita Karlova, Prague, Czechia	petra.vankova@pedf.cuni.cz
Virkkula	Minna	Oulu University of Applied Sciences, Finland	minna.virkkula@oamk.fi
Vold	Tone	Inland Norway University of Applied Sciences, Rena, Norway	tone.vold@inn.no
Walaszczyk	Ludmila	LUKASIEWICZ Research Network - Institute for Sustainable Technologies, Radom, Poland	ludmila.walaszczyk@itee.lukasiewicz.gov.pl
Walsh	Elaine	University of Limerick, Ireland	elaine.walsh@ul.ie
Wan	Kelvin	Centre for Holistic Teaching and Learning, Hong Kong Baptist University, Hong Kong, China	kelvinwan@hkbu.edu.hk
Weiss	David	Weiss International Ltd, Toronto, Canada	david.weiss@weissinternational.ca
Wendler	Tilo		
Williams	Sheryl	Loughborough University, UK	S.R.Williams@lboro.ac.uk
YAMAGUCHI	TAKANE	Shumei University, Tokyo, Japan	takane46@gmail.com

The importance of paper citations and Google Scholar

As an academic researcher you will know the importance of having access to the work of other researchers in your field as well as making your own work available to others. In the area of academic publishing this is achieved through citation indexing. There are a number of bodies that undertake this task including Thompson ISI, Elsevier Scopus and Google Scholar – to name just a few.

At ACI we do all we can to ensure that the conference proceedings and the journals that we publish are made available to the major citation bodies and you can see a list relevant to this conference on the home page of the conference website.

However, it is also important for you, the author, to make sure that you have made your work available for citation – particularly with organizations such as Google Scholar. We are providing you here with the simple steps you need to take to do this and we would ask you to take the time to upload your paper as soon as you can.

Step one: Extract your paper from the full proceedings that you have downloaded from the Dropbox link provided to you.

Step two: Upload your paper to your own website, e.g.,

www.university.edu/~professor/jpdr2009.pdf; and add a link to it on your publications page, such as www.university.edu/~professor/publications.html.

Make sure that the full text of your paper is in a PDF file that ends with ".pdf",

The Google Scholar search robots should normally find your paper and include it in Google Scholar within several weeks. If this doesn't work, you could check if your local institutional repository is already configured for indexing in Google Scholar, and upload your papers there.

More information is available from

<http://scholar.google.com.au/intl/en/scholar/inclusion.html>

We will separately upload the proceedings to Google Books which is also searched – but evidence has shown that individual upload results in quicker indexing by Google Scholar.

Your own institution may also subscribe to an institutional repository such as <http://digitalcommons.bepress.com/> or <http://dspace.org/>

Providing the original reference of your paper is included you have our permission as publishers to have your paper uploaded to these repositories.

Sue Nugus ACIL

Academic Conferences International

*Facilitating excellence in scholarship
through double blind peer reviewed
conferences on eight topics*

Vision and Mission

Our vision is that there is an ever increasing need for high quality research in most if not all aspects of 21st century society. Universities are the primary provider of quality research education.

Quality research education requires the participation of both established faculty, newly appointed staff and research students. There is also the requirement for academe to reach out to the general society as comprehensively as possible.

As the university sector becomes increasingly focused on research excellence there is a need to provide more fora, primarily in the form of peer reviewed conferences, for academics to exchange ideas, questions, problems, and achievements concerning their personal research activities. These fora provide opportunities to exchange ideas, to experience critiques and to obtain some recognition for individuals' progress towards research excellence. The more international the forum the more effective it is.

Although publishing in highly rated indexed academic journals is still the most prized form of academic communication, the conference medium has become a significant outlet for research findings as well as an important facilitator to achieving this goal. All papers submitted to ACIL conferences are double blind peer reviewed and accepted papers are published in a book with an ISBN and ISSN. These conference proceedings are indexed by a number of authorities, including WOS, Scopus, Proquest, etc.

Our mission is to facilitate the creation of global academic research communities by providing all the administrative and management functions required to deliver a comprehensive academic conference experience.

This is supported by the provision of seminars, workshops and the publishing of suitable books, monographs and proceedings.

It is also supported by 5 academic journals three of which are indexed by Elsevier Scopus.

ACIL's conference activities

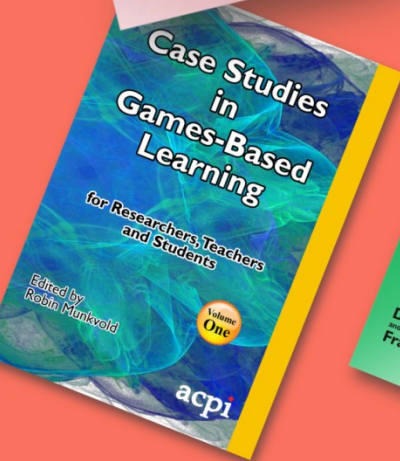
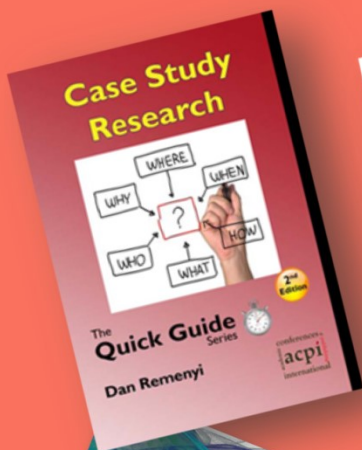
For over 20 years we have facilitated conferences globally. Originally our focus was only on ICT. Over the years we have broadened the scope, but there is still a strong leaning towards ICT. Currently there are 16 conferences run in various parts of the world which are attended by approximately 1,500 conference participants annually. Global reach is one of the dimensions that differentiates us. At any given conference there are regularly participants from 30 or more countries. Some of the conferences are accompanied by master classes in their associated field which are run on the day before the conference.

Seven conferences are associated with Excellence Awards for which we appoint judges, accept nominations, conduct evaluations and award prizes. The Games Based Learning Conference runs an established annual competition. Details of these events are contained in our website at www.academic-conferences.org

Contact information

If you would like to host a conference, facilitate a workshop or have a book published please contact louise@academic-conferences.org

Academic Bookshop!



Get 20% discount on our bookshop

USE CODE: BKSHP20

WHEN PROMPTED AT CHECKOUT TO CLAIM THE DISCOUNT



Indexed by Elsevier Scopus

EJKM

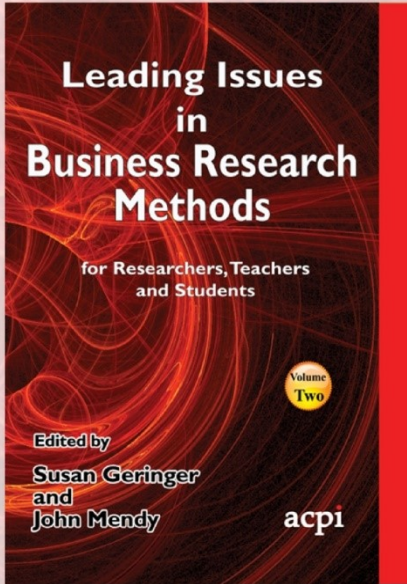
**THE ELECTRONIC JOURNAL OF
KNOWLEDGE MANAGEMENT**

view, download and read the issues from
www.ejkm.com/main.html

**An Open Access Journal following a continuous
Publication Model**

LEADING ISSUES IN BUSINESS RESEARCH METHODS

FOR RESEARCHERS, TEACHERS AND STUDENTS



Since it started publishing academic research and project-type papers in 2002, the Electronic Journal of Business Research Methods (EJBRM) has covered enormous ground on research perspectives, processes and issues. Through its publications, the journal has sought to continuously and constantly shed light on Business and Management issues and it is anticipated that the current second volume of Leading Issues in Business Management Research will build on from the first volume and add to the contributions of EJBRM.

In selecting the current papers, the editors have sought to cover a representative set of papers from both quantitative and qualitative strands. Papers that set out what research methods were adopted, their epistemological and philosophical positions, considerations of alternative research methods (interviews, surveys, the Web, focus groups...) and epistemological positions (positivism, interpretivism, constructivism...), why these might not have been chosen and what contributions were made to the field have generally been selected for the current volume. It is the editors' view that established and early career researchers as well as students learning to do research will benefit from the selection.



Susan
Geringer



John
Mendy

AVAILABLE AT : WWW.ACADEMIC-BOOKSHOP.COM

acpi