



**15TH INTERNATIONAL CONFERENCE OF
EDUCATION,
RESEARCH AND
INNOVATION**

CONFERENCE PROCEEDINGS

7-9 NOVEMBER 2022
iated.org/iceri

Published by
IATED Academy
iated.org

ICERI2022 Proceedings
15th International Conference of Education, Research and Innovation
November 7th-9th, 2022
Seville, Spain

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DOI: 10.21125/iceri.2022
ISBN: 978-84-09-45476-1
ISSN: 2340-1095

Book cover designed by J.L. Bernat

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These proceedings are published by IATED Academy. The registered company address is: Plaza Legión Española 11, 46010 Valencia, Spain.

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
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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 Multiculturalism.

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.

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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
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ICERI2022 Keynote Speakers

Keynote Speakers

Tracey Tokuhamma-Espinosa – *Harvard University Extension School, United States*

Manu Kapur – *ETH Zurich, Switzerland*

Tracey Tokuhamma-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 Tokuhamma-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.

Conference Tracks & Sessions

The ICERI2022 conference program is available online at <https://iased.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
e-Assessment
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
STEM 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

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DYNAMIC ASSESSMENT OF E-LEARNING IN FOREIGN LANGUAGES PROGRAMS IN SUSTAINABLE AND EMERGENCY DIGITIZATION FORMATS

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Abstract

The global pandemic and subsequent quarantine measures and restrictions have posed an array of challenges to the structure and procedure of higher education workflow, which influenced significantly the scope of individual experiences, projected outcomes and estimated quality of higher education in countries across the world. The subsequent warfare in Ukraine has brought forth emergency digitization measures called to adapt and adjust digital learning formats to the technological, emotional and educational challenges of the active warzone. This study focus is the in-depth assessment of the progress in individual digital and hybrid learning experiences by students of different tiers (Bachelor's level, Master's level, Graduate school level) in Oriental (Mandarin Chinese, Japanese) and European (French, Italian, Spanish, English, German) Languages university level programs at Borys Grinchenko Kyiv University of Ukraine through the span of educational activities in the time-frame of COVID-19 quarantine measures (sustainable digitization) of 2020-2021 and the timespan of active warfare (emergency digitization measures) of 2022. The comparative survey benchmarking and analysis of different e-learning dimensions is used to assess the progress and challenges of individual quality and efficiency of translation of the real life Foreign Languages Acquisition practices into digital and hybrid format, involving activation of interoperable skills and cross-sectorial activities, facilitated by digital tools.

Keywords: digital learning; hybrid learning; digital literacy; Oriental languages; European Languages; progress; quality assessment; sustainable digitization; emergency digitization; survey study.

1 INTRODUCTION

Transformative shifts in the knowledge economy of the XXI century, Industry 4.0 development [17] and elaboration of networked society, emergency digitization due to quarantine measures has imposed pressing revisions onto interdisciplinary and cross-sectorial job market demands of Liberal Arts university graduates' skillsets, upon entering the workforce. This, in turn, stipulates reevaluation of the interdisciplinary approaches to comprehensive professional competences in foreign languages acquisition, education, and application [15].

The COVID-19 pandemic induced amplified digitalization measures in the higher education sphere [13; 14; 16], informed by the need to take quick comprehensive action in order to achieve the overarching result to transform educational scenarios into interdisciplinary digital, blended, and hybrid frameworks.

Taking into account the context of the erupted military intervention on Ukraine in February 2022, and the ensuing information warfare in varying digital environments (social media, news coverage, digital communications), the specific value of the learning outcomes and outputs is allocated to the digitally enhanced foreign languages education as a tool of the internationally broadcast strife of Ukraine for freedom and sovereignty.

The consequent functional tasks to meet this challenge in the educational sphere are estimated as:

- 1 To adapt the existent educational scenarios to digital, remote and hybrid formats;
- 2 To upgrade ICT competence and digital literacy of all participants of the educational process under extreme duress;
- 3 To activate complex interdisciplinary (soft and hard) skillsets, otherwise latent or underutilized in the educational process.

The study objective is the in-depth assessment of the progress in individual digital and hybrid learning experiences by students of different tiers (Bachelor's level, Master's level, Graduate school level) in Oriental (Mandarin Chinese, Japanese) and European (French, Italian, Spanish, English, German) Languages university level programs at Borys Grinchenko Kyiv University of Ukraine through the span of

educational activities in the time-frame of COVID-19 quarantine measures (sustainable digitization) of 2020-2021 and the timespan of active warfare (emergency digitization measures) of 2022.

2 METHODOLOGY

The study **methodological design** includes the following steps:

- 1 The modelling of interoperability between various competency principles, derivative of twenty-first-century skills [1; 3; 4; 22] and projected digital literacy requirements for Foreign Languages Education (FLE) across core digital literacy frameworks (European e-Competence Framework [7], UNESCO ICT Competence framework for educators [20] and European Commission Digital Competence Framework: DigComp 2020 [6]);
- 2 The survey method application for diagnostic analysis of different digital literacy [5] components and dimensions, as well as digital skills implementation, used to assess the parameters of efficiency of transforming real-life linguistic education practices into the emergency digital and hybrid format.
- 3 The identification of the correlation between various groups of applied digital skills and soft skills, instrumental to develop interdisciplinary professional competence of FLE students.

3 RESULTS

3.1 E-learning dynamic modelling

The following grid of groundwork concepts is applied to profile the Foreign Languages Education (FLE) in the study:

- INTERDISCIPLINARITY;
- INTEROPERABILITY;
- COMPLEX SKILLS;
- VIRAL DIGITAL SKILLS.

The meaning of INTERDISCIPLINARITY is synthesized for the purpose of this study as an agglomeration of two or more fields of knowledge into one scope/goal of study, inquiry or activity [2; 8; 9; 12; 13].

The concept of INTEROPERABILITY is disclosed across different lens [11; 18] as a characteristic of an object, product or system, that allows its interface to be comprehensible, to work with other objects, products or systems.

As applied to Foreign Languages Education, the concept of interoperability represents the property of functional, dynamic interconnectivity between the source and target domains of linguistic content, linguistic theory content, related areas of scientific and universal knowledge, and domains of professional and social application.

Interoperability for FLE skills is ensured by the communicative nature [1] of interdisciplinary skills. The core cross-sectorial domain that is referential for primary skills (social skills, emotional intellect, collaboration, communication, ICT-literacy), necessary for educational goals achievement, is estimated to be COMMUNICATION.

A COMPLEX SKILL is defined as a skill requiring to process lots of information and make lots of decisions simultaneously [21].

VIRAL DIGITAL SKILLS for the purpose of this study are defined as rhizomatic capabilities of interoperable manipulation of digital data, tools, and communication formats, acquired institutionally, intuitively or on the peer-to-peer basis.

Given the nature of increasingly digitalized context of foreign languages education and communicative application ("the Technospheric shift" [16], it is suggested to consider the different types of information source and information destination (human and machine/computer/program, accordingly) in the structure of the groundwork Communication Model [19], when communication is approached as the core factor of interoperability of source and target knowledge and application domains in FLE.

Subsequently, a model of soft skills paradigms and digital literacy frameworks INTEROPERABILITY in FLE is suggested:

- 1 European E-competence Framework Guideline (European Commission, 2020 [7]), customized according to European Professional Competence Framework, accommodates the following soft skills in terms of digital competence requirements for vocational activity in FLE: service orientation; attention to detail, learning strategies, leadership and social influence, cognitive creativity and flexibility, coordination and time-management; human resources management;
- 2 UNESCO ICT Competence framework (UNESCO, 2018 [20]), customized for pre-service teachers of foreign languages, accommodates the following types of soft skills in terms of digital competence requirements: collaboration, team-work, problem-solving, reasoning and ideation.
- 3 Digital Competence 2020 framework (European Commission, 2020 [6]) for general public, accommodates the following soft skills in terms of digital competence requirements for efficient digital citizenship: Communication and collaboration, creativity and adaptability, learning and innovation, trustworthiness, emotional intelligence, complex problem solving.

3.2 E-learning in Foreign Languages Programs in Sustainable and Emergency Digitization Formats

The survey analysis is further applied for in-depth, comprehensive diagnostics of interoperable digital literacy components, used to assess the parameters of efficiency of transforming real-life FLE education practices into the digital and hybrid format in the COVID-19 timeframe (March 2020 – January 2021) for students of Asian languages and European languages major programs.

Three consecutive online surveys of Oriental and European Languages programs provide for disclosure of the following dimensions:

- 1 Progressive dynamics of student satisfaction with digitalized foreign languages education;
- 2 Assessment of systematized individual experiences and changes in quality estimation of e-learning and hybrid learning in the framework of COVID-19 lockdown and wartime through the years 2020-2022;
- 3 Assessment of changes in individual experiences and quality of e-learning and hybrid learning in the framework of COVID-19 lockdown as compared to both traditional, face-to-face learning formats and emergency digital learning in the warzone for foreign languages;
- 4 Dynamic quality assessment of learning process design, dynamic development of programmed learning outcomes and projected competences for university programs of Oriental and European languages in the framework of 2020-2021 quarantine measures and emergency digitization measure in the wartime of 2022.

The **survey sample** consists of over 700 respondents of 7 Foreign Languages Programs (Italian, Spanish, French, English, German, Mandarin Chinese and Japanese) across 3 tiers of FLE study (Bachelor's, Master's, Graduate) in the universities of the capital city (Kyiv, Ukraine) in the timeframe of COVID-19 emergency digitization measures of 2021 and wartime emergency digitization measures of 2022 in Ukraine.

The online questionnaire for all benchmarking iterations was identical and comprised of 21 questions total, divided into such dimensions:

- 1 Questions that disclose the generic evaluation of individual experiences of digital education for Foreign Languages Programs in the global lockdown measures;
- 2 Questions that disclose the comparison of individual experiences and quality of individual experiences of digital education and traditional, face-to-face learning for Foreign Languages Programs;
- 3 Questions that disclose the individual quality assessment of the pandemic induced digital education design and workflow, learning outcomes and acquired skills in HEI programs of Oriental and European languages.

4 CONCLUSIONS

The worldwide pandemic and ensuing quarantine have influenced profoundly the structure and procedure of higher education, which informed the fundamental shifts in the range of experiences, learning outcomes and projected quality of higher education in the domain of Foreign languages acquisition in Ukraine.

The survey results on the individual experiences and quality assessment of e-learning and hybrid learning in the framework of the pandemic yield comprehensive data on the parameters and challenges of digital learning and hybrid learning transformation of Oriental and European languages programs, common for students of higher educational institutions of the capital city of Ukraine - Kyiv.

In general, the dynamic quality evaluation of digital learning and hybrid learning experiences in the timespan of initial and ongoing pandemic measures (March 2020 – November 2021) for university programs of Foreign languages are estimated as steadily progressing from average (agreeable) to most agreeable by all groups of students across educational levels.

The qualitative assessment of the digital learning and hybrid learning was conducted through the retrospective iterative evaluation of respondents' individual experience that helped identify the comparative coordinates of positive and negative dimensions of the latter. The invariant positive quality indicators for digital learning and hybrid learning across all groups of students, through both timespans surveyed are the opportunity for multitasking, digital skills improvement and lack of commute expenditure. The invariant negative quality indicators for digital learning and hybrid learning across all groups of students through both timespans surveyed are the lack of interpersonal communication, technical impediments and negative psychological states (fatigue, burnout, stress).

The contrastive exposure of individual experiences and quality of e-learning and hybrid learning in the framework of COVID-19 lockdown as contrasted to traditional, in-presence learning formats identify digital learning and hybrid learning as increasing from mostly to fully comparative in quality for foreign languages stakeholders at Borys Grinchenko Kyiv University of Ukraine through the time period of 2020 to 2021.

The evaluation of digital education design, learning outcomes and acquired skills in Foreign Languages programs in the timeframe of the pandemic helped disclose the dynamics in socio-psychological challenges that prevent efficient transformation of learning process into online and hybrid mode for all groups of respondents that were consistently surveyed.

The overall positive dynamics of the evaluation of identified challenges of efficient digital educational adaptation is informed by the arrangement of factors:

- 1 Consistently improved level of digitalization of the teaching resources and implementation of a functional e-learning environment in the form of a digital campus;
- 2 Consistently improved and adapted level of digital literacy of students (implemented through flexible digital literacy training at the university for all stakeholders);
- 3 Consistent professional psychological, communicative, technological and organized peer support to ensure the alleviation of challenges and impeding factors of foreign languages programs adaptation to digital and hybrid format. These elements of educational procedure and management at Borys Grinchenko Kyiv University can be scaled to serve as best practices and recommendations to ensure sustainable quality of Oriental and European Languages programs transformation into digital, blended and hybrid format in capital city universities as well as regional universities of Eastern Europe.

The study limitations stem from the content and range of the iterative survey results. The limitations therefore are determined by the facets of quality evaluation of digital and hybrid learning for Foreign languages programs in the capital city of Ukraine, informed by emergency (2020) and ongoing (2021) pandemic digitization measures.

The perspectives of the study include fine-tuned estimation of dynamics in subjective quality assessment and subsequent efficiency assessment of hybrid and e-learning in different regions of Ukraine; contrastive case studies of Oriental and European languages programs emergency digital distance format adaptations to the pandemic and warfare measures in universities of regional and national status; sustainable best practices of Oriental and European languages programs transformation to hybrid and digital learning format in countries of Asia and Europe upon alleviation of the pandemic restrictions.

ACKNOWLEDGEMENTS

Empirical findings and survey procedures have been conducted under the auspices of Integrated Research framework of Romance Languages and Typology Chair of Borys Grinchenko Kyiv University European languages and literatures development in cross-communication context (0116 U 006607) and Integrated Research framework of Oriental Languages and Translation Chair of Borys Grinchenko Kyiv University Oriental Studies development in the framework of Higher Education Internationalization (0116U007073). Special gratitude is extended to the Armed Forces of Ukraine for providing security to complete this study.

REFERENCES

- [1] Abbott, S. *The Glossary of Education Reform*. 2013 Retrieved from Edglossary: <http://edglossary.org/hidden-curriculum>
- [2] Callaos, N., & Marlowe, T. "Inter-Disciplinary Communication Rigor", *Rigor and Inter-Disciplinary Communication: Intellectual Perspectives from Different Disciplinary and Inter-Disciplinary Fields*. TIDC, LLC, pp. 4-29, 2020.
- [3] Davies, A., & Fidler, D. *Future Work Skills 2020*, 2011. Retrieved from Institute for the Future for University of Phoenix Research Institute: https://www.iftf.org/uploads/media/SR-1382A_UPRI_future_work_skills_sm.pdf
- [4] DosReis, A. "To Be a (Blended) Teacher in the 21st Century - Some Reflections", *International Journal of Research in E-learning*, 1(1), pp. 11-24, 2015.
- [5] DQ Global Standards. *World's first global standard for digital literacy, skills and readiness launched by the Coalition for Digital Intelligence*. 2019. Retrieved from DQ Global Standards Report: <https://www.dqinstitute.org>
- [6] European Commission. *Digital Competence 2020*. 2020. Retrieved from European Commission: <https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework>
- [7] European Commission. *European E-Competence Framework Guideline*. 2020. Retrieved from European Commission: <https://www.ecompetences.eu/>
- [8] Frodeman, R. (Ed.). *The Oxford Handbook of Interdisciplinarity (2 ed.)*. Oxford: Oxford University Press, 2017.
- [9] Holbrook, J. B. "What is interdisciplinary communication. Reflections on the very idea of disciplinary integration", *Synthese*, 190(11), pp. 1865–1879, 2013.
- [10] Hymes, D. H. "Communicative competence", *Sociolinguistics: selected readings*. Harmondsworth: Penguin, pp. 269–293, 1972.
- [11] Interoperability Working Group. *Definition of Interoperability*. 2021. Retrieved from Interoperability Working Group: <http://interoperability-definition.info/en/>
- [12] Jacobs, J., & Frickel, S. "Interdisciplinarity: a critical assessment", *Annual Review of Sociology*, 35, pp. 43–65, 2009.
- [13] J. Peterlin, V. Dimovski, M. Meško, V. Roblek. "Cultivating Management Education Based on the Awareness of Students' Multiple Intelligences", *SAGE Open*. vol. 11, issue 1, 2021.
- [14] Kulinich, T. Y. Lisnievska, Y. Zimbalevska, T. Trubnik, and S. Obikhod, "Digitalization of economies of low and middle income countries in the context of digital transformation", *Amazonia Investiga*, vol. 11, no. 51, pp. 300-311, Apr. 2022.
- [15] R. Makhachashvili, A. Bakhtina, and I. Semenist, "La función de la inteligencia emocional en la educación digital como el sustrato de la validez de la vida on-line", *Amazonia Investiga*, vol. 10, no. 45, pp. 20-30, Oct. 2021.
- [16] Makhachashvili, Rusudan, Semenist, Ivan. "Digital Distance And Blended Learning Quality Assessment In Oriental And European Languages University Programs: Regions Of Ukraine Survey Study", *Proceedings of 9th International Conference on Information and Education Technology, ICIET 2021*, 1. pp. 149-156, 2021.

- [17] R. Debopriyo "Media Design and Technical Writing with Industry 4.0 Towards Developing Entrepreneurial Thinking in EFL Learners: A Pilot Study", *Proceedings of 9th International Conference on Information and Education Technology, ICJET 2021*, 1. pp. 98-109, 2021.
- [18] Slater, T. *Cross-Domain Interoperability*. 2013. Retrieved from Network Centric Operations Industry Consortium - NCOIC: [https:// www.ncoic.org](https://www.ncoic.org)
- [19] Shannon, C. E. A "Mathematical Theory of Communication", *Bell System Technical Journal*, 27 (3), pp. 379–423, 1948.
- [20] UNESCO. *ICT Competency Framework for Teachers*. 2018. Retrieved from UNESCO: <https://unesdoc.unesco.org/ark:/48223/pf0000265721>
- [21] Wulf, G., Shea, G. "Principles derived from the study of simple skills do not generalize to complex skill learning", *Psychonomic Bulletin & Review*, 9, pp. 185–211, 2002.
- [22] World Economic Forum. *The Future of Jobs Report*. 2020. Retrieved from World Economic Forum: http://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf