ICHTML 2022 – Education under attack

Vita Hamaniuk1,∗, Serhiy Semerikov1,**, and Yaroslav Shramko1,***

1Kryvyi Rih State Pedagogical University, 54 Gagarin Ave., Kryvyi Rih, 50086, Ukraine

Abstract. This is an introductory text to a collection of papers from the ICHTML 2022: 3rd International Conference on History, Theory and Methodology of Learning, which held in Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine, on the May 16-17, 2022. It consists of short introduction, conference review and some observations about the event and its future.

1 At a glance

The International Conference on History, Theory and Methodology of Learning (ICHTML, https://ichtml.org) is a regular peer-reviewed international conference [1–3], which covers interdisciplinary research on education, learning and training, and applications of theories and philosophies used in the sciences of learning and adjacent sciences.

The ICHTML occupies contributions in all aspects of epistemology, psychology of learning, learning theories, learning technologies and tools, paradigms and models and related fields of interest with a emphasis on human and machine learning. The main problematic field of the conference is the current and future issues of modern pedagogical science: psychological and pedagogical, philosophical, socio-cultural aspects of education, learning and training, modern theories, technologies and teaching aids, the emergence of which is determined by globalization, integration processes, social transformations, humanitarian and scientific and technological development. There is urgent general need for principled changes in postclassic education elicited by current theories, models, tools, services, networks and communications.

This volume contains the papers presented at ICHTML 2022: 3rd International Conference on History, Theory and Methodology of Learning held on the May 16-17, 2022 in Kryvyi Rih, Ukraine.

There were 34 submissions. Each submission was reviewed by at least 3 program committee members. The committee decided to accept 18 papers.

2 Program committee

Dr. George Abuselidze, Professor of Economics and Business, Department of Finance, Banking and Insurance, Batumi Shota Rustaveli State University, Batumi, Georgia

George Abuselidze, from the Batumi Shota Rustaveli State University (in 2001) and Ivane Javakhishvili Tbilisi State University, Georgia, in 2005, and a Doctor of Economics Sciences degree (Dr. habil.) from the National Academy of Sciences of Georgia, in 2005. Since 2002, he has been working in the Finance and Banking at the Ivane Javakhishvili Tbilisi State University, since 2006 - Batumi Shota Rustaveli State University where he is currently Head department of Finance, Banking and Insurance. His research interests include Economics, Econometrics, Finance and Social Sciences (miscellaneous). He has published a number of papers in international journals and volumes in book series, is a member of editorial or/review boards of Oeconomia Copernicana, Journal of Financial Economic Policy, International Journal of Economics and Finance, journal of Science and studies of accounting and finance: problems and perspectives, Management Studies and etc. He also played instrumental role in different prestigious internal collaborative research project with USA, Canada, Lithuania, Poland, Ukraine, Turkey and etc.

WWW: https://orcid.org/0000-0002-5834-1233
in their professional activities. Present research interests include the project-based learning, STEM education and social media in education. She has published a number of papers in international journals.

WWW: http://kafinfo.org.ua
e-mail: andvera80@gmail.com

Dr. Liudmyla Bilousova, Full Professor, Independent researcher, Kharkiv, Ukraine.

Liudmyla Bilousova got a M.A. in Radio-physics from Kharkiv State University, USSR (1959), and PhD in physical-mathematical science from Kharkiv State University, USSR (1970). Liudmyla Bilousova headed Computer Science Department at G.S. Skovoroda Kharkiv Na-
Dr. Olga Bondarenko, Candidate of Pedagogical Sciences, Associate Professor, Department of Economic and Social Geography and Methods of Teaching, Kryvyi Rih, Kryvyi Rih State Pedagogical University Kryvyi Rih, Ukraine

Olga Bondarenko, born in 1979, in 2001 graduated with honors from the geographical faculty of Krivoy Rog State Pedagogical University, majoring in Pedagogy and Methodology of Secondary Education. Geography and Biology, acquired Bachelor Degree. In 2002 she received a Master Degree with honors in the major Pedagogy and Methodology of Secondary Education. Geography, qualified as a teacher of geography. In 2009, she successfully defended her PhD thesis at the Republican Higher Educational Institution “Crimean Humanities University” (Yalta) and received a PhD in Pedagogical Sciences. Since 2005 he has been working at Kryvyi Rih State Pedagogical University. Author of a number of scientific publications on vocational education, training of future teachers for pedagogical activity. Her research interests include teacher training, the use of ICTs and GIS technologies in the educational process.

WWW: https://kdpu.edu.ua/personal/ovbondarenko.html
e-mail: bondarenko.olga@kdpu.edu.ua

Ing. Helena Fidlerová, Ph.D., a senior researcher at the Slovak University of Technology in Bratislava, Faculty of Materials Science and Technology in Trnava, Institute of Industrial Engineering and Management, Slovakia

Ing. Helena Fidlerová, Ph.D. received her Ph.D. degree in the field of Industrial Management in 2006. Her research aims at issues of education, STEM education, digital competences, Industry 4.0, Education 4.0, industrial engineering, sustainable competences, and the application of statistical methods. Since her study has extensive experience in domestic research projects under Slovak Ministry of Education VEGA, KEGA), and international projects e.g. ALTECS - Knowledge exchange in the framework of alternative economic systems for the promotion of sustainable regional development; International Visegrad Fund No. -21810100: Academic Research Consortium integrating databases, robotics, and language technologies. He is a project leader for Slovakia in Erasmus + KA2 project: Knowledge Alliance for Business Opportunity Recognition in SDGs. She is a member of the Slovak Statistical and Demographic Society (SDSS), a member of the International Association of Engineers (IAENG and member of the editorial board of Acta Logistica.

WWW: https://orcid.org/0000-0002-3426-5803
e-mail: helena.fidlerova@stuba.sk

Dr. Irina Georgescu, Lecturer of Computational Intelligence, Department of Informatics and Economic Cybernetics, Bucharest University of Economics, Bucharest, Romania

Irina GEORGESCU holds a PhD in Economics from Turku Centre for Computer Science, Turku, Finland. Currently she is a lecturer at the Department of Economic In-
informatics and Cybernetics, Bucharest Academy of Economic Studies. Her research interests lie in the areas of fuzzy economics, computational intelligence and econometrics. She is the author of about 40 journal papers and 2 books published in Springer Verlag.

e-mail: irina.georgescu@csie.ase.ro

Prof. Dr. Yüksel Gökta, Ataturk University, Turkey
WWW: https://yukselgoktas.com/

Dr. Liudmyla Gryzun, Full Professor of Information System Department at Simon Kuznets Kharkiv National University of Economics, Ukraine.

Liudmyla Gryzun earned a M.A. in Applied Mathematics from the Kharkiv State University, USSR (1986); PhD and Second Doctoral Degree in Pedagogical science from G.S. Skovoroda Kharkiv National Pedagogical Uni-

versity (Ukraine). The sphere of her research is focused on the curriculum and educational content design in higher education, the process of curriculum disciplines structur-

ing, based on scientific knowledge integration; AI application to pedagogical problems solution; IT tools for inquiry-based and holistic learning etc. She is an author of more than 120 scientific and methodical works including 1 monograph, 2 collective monographs, and 6 tutorials. Liudmyla Gryzun has delivered a number of Keynote pre-
sentations at the International conferences: 2018 ICTEL (Rome, Italy), 2018 ICRTEL (Barcelona, Spain), 2019 ICSTR (Rome, Italy), 2020 ICSTR (Berlin, Germany; Paris, France; London, UK) and others. She is also a reviewer of the foreign journals (Universal Journal of Educational Research (USA); Athens Journal of Education, IJIRES (International Journal of Innovation and Research in Educational Sciences)). Liudmyla Gryzun is a PC member of International Workshop CTE and ICon-MaSTEd 2020.


e-mail: Lgr2007@ukr.net

Dr. Yasemin Gülbahar, Professor of Computer Education and Instructional Technologies (CEIT), Ankara University, Ankara, Turkey

Dr. Gülbahar has got her BS degree from Department of Mathematics of Science Faculty at Middle East Technical University (METU) in 1992. Same year she started working as a programmer at METU Computer Center. Then, in 1998, she became a research assistant to the Department of CEIT in the Faculty of Education, METU while studying her MS degree at the same department. She earned his MS degree in the field of Science Education at METU Graduate School of Science in 1999 and she received her PhD in Department of CEIT from Graduate School of Sciences in 2002. After, she worked for Bakent University Faculty of Education Department of CEIT for about 9 years. Since 2011 she is a faculty mem-

ber of Ankara University. Dr. Gülbaht has got her Asso-
Yasemin Gülbahar has lectured on many topics such as programming languages, problem solving and algorithms, instructional technologies, instructional design, material design and development, distance learning, web design, measurement and evaluation, research methods, teaching methods, software development, technology integration and planning both in undergraduate and graduate level. She has also many national and international publications as books, book chapters, journal articles and proceeding papers.

WWW: http://cv.ankara.edu.tr/gulbahar@ankara.edu.tr

e-mail: gulbahar@ankara.edu.tr

Vita Hamaniuk, Professor of German, Literature and Didactics, Department of German, Literature and Didactics, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine

Vita Hamaniuk, born in 1965, 1995 received a Candidate of Pedagogical Sciences degree (Dr. ped.) from the Kharkiv State Pedagogical H. Scovoroda University, in 2013 - a Doctor of Pedagogical Sciences degree (Dr. habil.) from the East-Ukrainian National Volodymyr Dahl University. In 2001 she received his habilitation as the Docent (Assoc. Prof.) at the Department of Foreign Languages of Kryvyi Rih State Pedagogical University. In 2015 she received his habilitation as the Professor (Full Prof.) at the Department of German, Literature and Didactics of Kryvyi Rih State Pedagogical University. From September 1995 until now Vita Hamaniuk worked as a head of Department of Foreign Languages, as an Associate Professor, Head of Department, Full Professor of Department of German, Literature and Didactics. From April 2017, she works as vice-rector for research at Kryvyi Rih State Pedagogical University. Her research interests include foreign languages teaching and learning, didactics of multilingualism, e-learning, blended learning, comparative researches in Education. She has published a number of papers in Ukrainian and international journals, actively participates in international conferences and projects.

WWW: https://kdpu.edu.ua/personal/vagamanuk.html

e-mail: vitana65@gmail.com

Dr. Anna Iatsyshyn, Senior Researcher, Department of Civil Protection and Innovation, State Institution The Institute of Environmental Geochemistry of National Academy of Sciences of Ukraine, Kyiv, Ukraine.

Anna Iatsyshyn, born in 1984, received a Candidate of Pedagogic Sciences degree from the Ivan Ziaziun Institute of Pedagogical and Adult Education of the National Academy of Educational Sciences of Ukraine, in 2010. A. Iatsyshyn is actively engaged in scientific activities in such areas as ICT in education and research, digitalization of education, adult education, electronic libraries, electronic social networks, training of future PhD, scientometrics. She has published a number of papers in international journals and monographs, is an associate member of editorial board of journal Information Technologies and Learning Tools and a member of editorial board of journal Education and Development of Gifted Personality.

WWW: http://www.nas.gov.ua/EN/PersonalSite/Statuses/Pages/default.aspx?PersonID=0000030359

e-mail: anna13.00.10@gmail.com

Dr. Arnold Kiv, Ben-Gurion University of the Negev, Israel

Arnold Kiv received the D. Sc. (Dr. Hab.) degree in solid state physics from Tartu Institute of Physics, Tartu, Estonia, in 1978. From 1964 to 1982, he was a Senior Researcher and a Head of the Laboratory of Radiation Effects, Institute of Nuclear Physics, Academy of Sciences, Tashkent, Uzbekistan. From 1983 to 1998, he was a Head of the Department of Theoretical Physics, South-Ukrainian National Pedagogical University,
Odessa, Ukraine. In 1997, he was an Invited Professor, Western Ontario University, Canada. From 1999 to the present, he is a Professor-Researcher in the Department of Materials Engineering, Ben-Gurion University of the Negev, Israel. In 1996 and 2011 he was co-Director of NATO Advanced research Workshops and an Editor of two NATO Series books. He has about 200 publications, three monographs and three Invention Certificates in the field of radiation effects in solid state electronics. His research interests include mechanisms of formation of radiation defects in solids, interaction of fast particles with materials, radiation methods in microelectronics, including computer simulation, analytical calculations and experimental studies.

Dr. Oleksandr Kolgatin, Professor of Informatics, Department of Information Systems, Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine

Oleksandr Kolgatin, born in 1966, received a Candidate of Technical Sciences degree (Dr. phil.) from the Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine, in 1995, the field of scientific interests was computational modeling of the heat and mass transfer processes. Since 1990, he worked in the field of teaching informatics and using information technologies in education and received a Doctor of Pedagogical Sciences degree (Dr. habil.) from the Institute of Information technologies and Learning Tools of the National Academy of Pedagogical Sciences of Ukraine, in 2011. His research interests include computational modeling, pedagogical diagnostics, information systems and technologies in education. He has published a number of papers in international journals and volumes in book series, is a member of editorial boards of Journal of Information Technologies in Education and associate editor of Information Technologies and Learning Tools.

WWW: http://www.is.hneu.edu.ua/?q=node/294
e-mail: kolgatin@ukr.net

Dr. Svitlana Kovpik, Doctor of Philological Sciences, Professor of the Department of the Ukrainian and World Literatures, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine.

Svitlana Kovpik, born in 1977, received the Candidate of Philological Sciences degree (Dr. phil.) from Kherson State University in 2005, and Doctor of Philological Sciences degree (Dr. habil.) from Taras Shevchenko National University of Kyiv, in 2011. Since 2001, she has been working in the field of Philology at Kryvyi Rih State Pedagogical University, where she is currently a Professor. Her research interests include poetics of fiction. She has published a number of articles in international journals and she is the editor-in-chief of the scientific journal Literatures of the World: Poetics, Mentality and Spirituality.

e-mail: kovpiks@ukr.net
Dr. Nadiia Kozachenko, Kryvyi Rih State Pedagogical University, Ukraine

Dr. Nadiia Kozachenko is former chair of Department of Philosophy at Kryvyi Rih State Pedagogical University. She got PhD in logic from the Institute of Philosophy of the NAS of Ukraine in 2010. The main directions of Dr. Kozachenko research is logic and philosophy of information society.

WWW: https://kdpu.edu.ua/personal/n_p_kozachenko.html

Dr. Tetiana Kramarenko, Associate Professor of the Department of Mathematics and Methods of its Teaching, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine

Tetiana Kramarenko received a Candidate of Pedagogical Sciences in speciality 13.00.02 Theory and methods of studies (Mathematics) degree (Dr. phil.) from the National Pedagogical Dragomanov University, Kyiv, Ukraine, in 2008. Associate Professor (2011). Scientific interests: Education, Math education, STEM education, ICT in education, Methodology for teaching Mathematics, Probability theory, Mathematical statistics.

WWW: https://kdpu.edu.ua/personal/tkramarenko.html

e-mail: kramarenko.tetyana@kdpu.edu.ua

Dr. Volodymyr Kukharenko, Professor of Technical Cryophysics Department, National Technical University “Kharkiv Polytechnic Institute”, Kharkiv, Ukraine

Volodymyr Kukharenko, born in 1947, received a Candidate of Technical Sciences degree from Physical Technic Institute of Low Temperature National Academy of Sciences of Ukraine. Since 1976, he has been working in the field of low temperature at the National Technical University "Kharkiv Polytechnic Institute", where he is professor of Technical Cryophysics Department and academician of International Academy of Refrigeration UD. His research interests include distance learning. He has published a number of papers in international journals and six books from creating distance courses, about tutor, blended learning.

WWW: https://dl.khpi.edu.ua

e-mail: kukharenkovn@gmail.com

Dr. Olena Kuzminska, Professor of Department of Information Systems and Technologies, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine


Olena Kuzminska, born in 1970, received a Candidate of Pedagogic Sciences degree (PhD) from the National Pedagogical Dragomanov University (Kyiv) in 2008 and a Doctor of Pedagogic Sciences degree (Dr. habil.) from the State Institution nTaras Shevchenko National University of Luhanszk, in 2020. Since 2008, she has been working at the National University of Life and Environmental Sciences of Ukraine. She research interests include design and integration of scholarly communication tools to digital educational environment of university; use of technologies of inquiry-based and project-based activities and implementation of teamwork approaches as a tool for development of digital competences; transfer and modification of education methods to specialized teaching of research masters’ programs and courses of e-learning management and scholarly communication. She has published a number of papers in international journals and volumes in book series, is a member of editorial boards of Physical and Mathematical education.

e-mail: o.kuzminska@nubip.edu.ua

Dr. Olena Lavrentieva, Full Professor, Professor of the Department of Innovative Technologies in Pedagogy, Psychology and Social Work, Alfred Nobel University, Dnipro, Ukraine

Olena Lavrentieva, born in 1968, received a Candidate of Pedagogical Sciences degree (Dr. phil.) from the Lesya Ukrainka East European National University, Ukraine, in 2005 by specialty 13.00.09 nTheory of Education, and a Doctor of Pedagogical Sciences degree (Dr. habil.) from the Institute of Teacher Education and Adult Education of the National Academy of Sciences of Ukraine by specialty 13.00.04 nTheory and Methods of Professional Education, in 2015. During 2003-2020 she was working in the Kryvyi Rih State Pedagogical University, now she is working in Alfred Nobel University. Her research interests include didactic and methodology issues of vocational training process. She has published a number of papers in international journals and volumes in book series, is a member of editorial boards of Physical and Mathematical education.

e-mail: lavrenteva.o@duan.edu.ua

Prof. Olena Lokshyna, Dr. Sc., Head of the Department of Comparative Education, Institute of Pedagogy of the National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine

Olena Lokshyna, born in 1959, received a Candidate of Educational Sciences degree (Dr. phil. in Education) in 1992, and a Doctor of Sciences degree (Dr in Education) from the Institute of Pedagogy of the National Academy of Educational Sciences of Ukraine, in 2011. She has been working in the area of comparative and international education at the Institute of Pedagogy of the National Academy of Educational Sciences of Ukraine since 1990. She received her Professor rank in 2015 and was elected as a Corresponding Member of the National Academy of Educational Sciences of Ukraine in 2019. Her research interests focus on developmental trends and innovations in education in Ukraine and abroad through the lens of comparison, with special interest in reforms, curricula, competences, students assessment, education quality monitoring, VET, methodology of comparative education research, education policy analyses. Olena Lokshyna is an author/co-author of about 300 works monographs and analytical studies, textbooks and course outlines, journal papers and conference abstracts. She teaches courses on comparative and international education for PhD students at the Institute of Pedagogy and at Borys Grinchenko Kyiv University. She is a member of the editorial boards of the Ukrainian Pedagogical Journal, Education Modern Discourses Journal and Studies in Comparative Education Journal.

WWW: http://undip.org.ua/
Iryna Mintii, Ph. D., associate professor of Computer Science, Department of Computer Science and Applied Mathematics, vice dean of Faculty of Physics and Mathematics, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine.

Iryna Mintii received a Candidate of Pedagogical Sciences degree (Ph. D.) from the National Pedagogical Dragomanov University, Kyiv, Ukraine, in 2013. Her research interests include ICT in education. She has published a number of papers in international journals.

WWW: https://kdpu.edu.ua/personal/ismintii.html
e-mail: irina.mintii@kdpu.edu.ua

Olga Moreno-Fernández, has a degree in Humanities and a Diploma in Primary Education. D. from the Universidad Pablo de Olavide with international mention and extraordinary prize for the work "Environmental education and education for citizenship from a planetary perspective. Study of experiences in Andalucía". She is currently Researcher in charge of the Research Group on Education: Health, Environment and Citizenship (HUM-1027) and editor-in-chief of the journal ESAMEC. Education Journal: Health, Environment and Citizenship. She has participated as a researcher in several research projects, both national and international, related to Citizenship Education. She has published in journals indexed in databases such as SJR or JCR, as well as in publishers indexed in SPI.

WWW: https://investigacion.us.es/sisius/sis_showpub.php?idpers=18069
e-mail: omoreno@us.es

Dr. Pavlo Nechypurenko, Associate Professor of Department of Chemistry and Methods of its Teaching, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine.

Pavlo Nechypurenko, born in 1981, received a Magister of Teaching of Chemistry from Kryvyi Rih State Pedagogical University, Ukraine, in 2004, and a Candidate of Pedagogical Sciences degree (Dr. phil.) from the Luhansk Taras Shevchenko National University, Ukraine, in 2017. Since 2004, he has been working in the field of analytical chemistry and method of solving chemical problems at the Kryvyi Rih State Pedagogical University. His research interests include using of ICT on Chemistry education, Analytical Chemistry, Technique of chemical experiment. He has published a number of papers in Ukrainian and international journals and developed a series of virtual laboratory work to teaching chemistry.
Dr. Yulia Nosenko, Leading Researcher, Department of Cloud-Oriented Systems of Education Informatization, Institute of Information Technologies and Learning Tools of NAES of Ukraine, Kyiv, Ukraine

Yulia Nosenko, born in 1984, received a Candidate of Pedagogical Sciences degree (Dr. phil.) in 2011. In 2010-2015 worked at Taras Shevchenko National University of Kiev (part time). Since 2010 has been working at the Institute of Information Technologies and Learning Tools of National Academy of Educational Sciences of Ukraine, where she is currently leading researcher. Her research interests relate to implementation and use of cloud services in education, formation and development of educators digital competence, use of ICT as a tool for supporting inclusive learning. She has published over 70 scientific papers, including articles in international journals, is a member of editorial board of peer-reviewed e-journal Information Technologies and Learning Tools.


e-mail: nosenko@iitlt.gov.ua

Dr. Vasyl Oleksiuk, PhD (pedagogical sciences), associate professor of the Department of Computer Science and Teaching Techniques, Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine

Vasyl Oleksiuk, born in 1980, received a Candidate of Pedagogical Sciences degree (Dr. phil.) from the National Pedagogical University, Kyiv, Ukraine, in 2007. Since 2003, he has been working Department of Computer Science and Teaching Techniques at Ternopil Volodymyr Hnatiuk National Pedagogical University, where he is currently associate professor. His research interests include computer networks, cloud computing, e-learning, electronic libraries. He has published a number of papers in Ukrainian and international journals, is a member of editorial boards of the journals Information Technologies and Learning Tools (Institute of Information Technologies and Learning Tools of NAES of Ukraine) and The Scientific Issues of Ternopil Volodymyr Hnatiuk National Pedagogical University (Series: pedagogy).

WWW: http://tnpu.edu.ua/faculty/fizmat/oleksyuk-vasil-petrovich.php

e-mail: oleksyuk@fizmat.tnpu.edu.ua

DSc. Kateryna Osadcha, Professor, Department of Computer Science and Cybernetics, Bogdan Khmelnitsky Melitopol state pedagogical university, Melitopol, Ukraine

Kateryna Osadcha, born in 1977, received a Candidate of Pedagogical Sciences (PhD in Education) from the Vinnytsia State Pedagogical University named after Mykhailo Kotsiubynsky, Ukraine, in 2010 and received a Doctor of Pedagogical Sciences (PhD in Education) from the Classic Private University (Zaporizhzhia), Ukraine, in
2020. Since 2011, she has been working as an Associate professor of the Department of Computer Science and Cybernetics at the Bogdan Khmelnitsky Melitopol state pedagogical university. Her research interests include: computer science, network technology, programming, ICT, e-learning, engineering education, educational technology, tutoring. She is author of about a hundred scientific works, including textbooks, monographs, author’s certificates. She is a member of editorial boards of "Ukrainian Journal of Educational Studies and Information Technology” (Ukraine), "International Conference on Higher Education Advances” (Spain), "Transactions of Kremenchuk Mykhailo Ostrohradskyi National University” (Ukraine), "Professional Education: Methodology, Theory and Technologies” (Ukraine), nComputing Conference 2021z (United Kingdom).

WWW: http://osadcha.mdpu.org.ua
e-mail: okp@mdpu.org.ua

Dr. Viacheslav Osadchyi, Professor of Department of Computer Science and Cybernetics, Bogdan Khmelnitsky Melitopol state pedagogical university, Melitopol, Ukraine

Viacheslav Osadchyi, born in 1975, received a Candidate of Pedagogical Sciences (PhD in Education) from the Vinnytsia State Pedagogical University named after Mykhailo Kotsiubynsky, Ukraine, in 2006, and a Doctor of Pedagogical Sciences from the Vinnytsia State Pedagogical University named after Mykhailo Kotsiubynsky, Ukraine, in 2013

Since 1999, he has been working in the field of information technology and vocational education at the Bogdan Khmelnitsky Melitopol state pedagogical university. Now Head of the Department of Computer Science.

His research interests include: computer science, information networks, ICT, programming, software development, information systems, data science. He has published a number of papers in international journals.

He is a member of editorial boards of ”Ukrainian Journal of Educational Studies and Information Technology” (Ukraine), ”Computing Conference (formerly called Science and Information (SAI) Conference)” (UK), Intelligent Systems Conference (IntelliSys) (The Netherlands), ”International Conference on Higher Education Advances” (Spain), ”Transactions of Kremenchuk Mykhailo Ostrohradskyi National University” (Ukraine), ”Information Technologies and Learning Tools” (Ukraine), ”Scientific papers of Berdyansk State Pedagogical University Series: Pedagogical sciences” (Ukraine).

WWW: http://osadchyi.mdpu.org.ua/
e-mail: poliform55@gmail.com

Dr. Nataliia Ovcharenko, Professor of Music Art and Pedagogy, Department of Music Education, Vocal and Choir Conducting, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine

Nataliia Ovcharenko, born in 1965, received a Candidate of Pedagogical Sciences degree (Dr. Phil. (Music Art)) from H.S. Skovoroda Kharkiv National Pedagogical University, USSR, in 1994, and a Doctor of Pedagogical Sciences degree (Dr. habil.) from Borys Grinchenko Kyiv University, Ukraine, in 2016. Since 1990, she has been working in the field of music art and pedagogies at Kryvyi Rih State Pedagogical University. Her research interests include vocal performance, pedagogies and inclusive music education. She has published the papers in international journals and monographs in Ukraine, is a member of National All-Ukrainian Musical Association.

WWW: https://kdpu.edu.ua/personal/naovcharenko.html
e-mail: shvager77@gmail.com

Dr. Liubov Panchenko, Professor at the Department of Sociology, National Technical University of Ukraine Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine
Liubov Panchenko was awarded a Candidate of Pedagogical Sciences degree (Dr. phil.) from H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine, in 1995, and a Doctor of Pedagogical Sciences degree (Dr. habil.) from the Luhansk Taras Shevchenko National University, in 2012. Since 1993, she has been working in the field of information and communication technology in education. Since 2016 she has been a Professor at the Department of Sociology, National Technical University of Ukraine Igor Sikorsky Kyiv Polytechnic Institute. Her research interests include information and communication technology in education, universitys educational environment, MOOCs, data analysis and multivariate methods in scientific research, digital storytelling, adult education. She has published a number of papers and text books (Computer data analysis, Data analysis practicum, Mathematical and statistical methods of sociological informations analysis) and is an editorial board member of the Ukrainian journals Information Technologies and Learning Tools (associated editor), e-Environment of Modern University, and Humanization of the educational process.

e-mail: lubov.felixovna@gmail.com

Dr. Stamatios Papadakis, Postdoc researcher, Department of Preschool Education, University of Crete, Greece

Stamatios Papadakis has been a postdoctoral researcher in Educational Technology, with emphasis on mobile learning, at the Department of Preschool Education at the University of Crete, Greece since 2016. He has worked as an adjunct Lecturer in Education teaching Didactics in Programming (2017-2018) at the Department of Computer Sciences, School of Sciences and Engineering at the University of Crete, Greece. Since 2017 he worked as an adjunct Lecturer in Education teaching Informatics (2017-2018) at the Department of Preschool Education, School of Education, University of Crete, Greece. His scientific and research interests include the study of mobile learning, especially on the use of smart mobile devices and their accompanying mobile applications (apps) in the use of Preschool and Primary Education, focusing on the development of Computational Thinking and students understanding of numbers. Furthermore, he currently investigates how a STEM learning approach influences learning achievement through a context-aware mobile learning environment in the preschool classroom and to explain the effects on preschoolers’ learning outcomes.

WWW: https://www.researchgate.net/profile/Stamatios_Papadakis
e-mail: stpapadakis@uoc.gr

Dr. Oksana Pershukova, Professor of Aviation English Department, National Aviation University, Kyiv, Ukraine
Oksana Pershukova received a Candidate of Pedagogical Sciences degree (Dr. phil.) from the Institute of Pedagogy of the NAPS of Ukraine (Kyiv) in 2002, and a Doctor of Pedagogical Sciences degree (Dr. habil.) from the Institute of Pedagogical Education and Education of Adults of the NAPS of Ukraine (Kyiv), in 2016. Since 1995, she has been working in the field of comparative education in the Institute of Pedagogy, Kyiv. Since 2017 she works at the National Aviation University, Kyiv, at the position of a Professor of Aviation English Department. Her research interests are related to improving the quality of bilingual and multilingual education, developing and preserving multilingualism in the context of the educational space of European countries and the US. She has been analyzing the opportunities and finding ways to apply positive experiences in these fields in Ukraine. The range of her scientific interests also includes features of mastering a foreign language at the university level (especially ESP), as well as peculiarities of forming students autonomy and finding the ways to increase students’ motivation for foreign languages learning.

e-mail: pershoks@gmail.com


Currently the experience in teaching is 25 years. Since 2005 I work in the Institute of Information Technologies and Learning Tools of the NAES of Ukraine. I worked on the implementation of the tasks of the scientific research works Scientific and methodological foundations use of computer oriented tools in teaching natural and mathematical subjects in profile School, Scientific and methodological principles of organization of distance learning environment in secondary schools”, “Methodology of design network resource centers of distance education of secondary schools". Formation of information and educational environment for learning high school students through technology electronic social networks (Head of Scientific Research), "System of computer modeling of cognitive tasks for the formation of competencies of students in natural and mathematical subjects”. I have more than 80 published scientific works, the author of collective monographs, manuals. I also obtain the post of co-editors-in-chief of "Information Technologies and Learning Tools", a peer-reviewed e-journal in educational sphere, publishing full-text articles online with immediate open-access.

WWW: http://iitlt.gov.ua/

e-mail: opinchuk@iitlt.gov.ua

Dr. Nataliia Ponomarova, Professor of Department of Informatics, H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine

Larysa Petrenko, Habilitated doctor, Doctor of Pedagogical Sciences, Department of vocational and higher education of the University of Educational Management, Kyiv, Ukraine

Larysa Petrenko, born in 1951, received a Candidate of Pedagogical Sciences degree (Ph.D.) in 2006 from the Institute of Pedagogy of the National Academy of Educational Sciences of Ukraine, and a Doctor of Pedagogical Sciences from the Institute of Vocational Education of NAESU in 2014. Since 2019, she has been a professor in the field of vocational and higher education at the University of Educational Management. Her research interests include the informational culture, information and analytical competence of pedagogical, scientific-pedagogical staff and heads of educational institutions of various types. She has published a number of articles in domestic and foreign collections of scientific papers and monographs were published. She is also a member of the editorial board of researchers digest Scientific Herald of the Institute of Vocational Education and Training of NAESU. Professional Pedagogy.

WWW: http://umo.edu.ua/institutes/cippo/struktura/kafedra-upop/sklad

e-mail: laravipmail@gmail.com

Dr. Nataliia Ponomarova, Professor of Department of Informatics, H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine
Nataliia O. Ponomarova, born in 1972, received a Candidate of Pedagogical Sciences degree (Dr. phil.) from the H. S. Skovoroda Kharkiv National Pedagogical University, in 1998, and a Doctor of Pedagogical Sciences degree (Dr. habil.) from the H. S. Skovoroda Kharkiv National Pedagogical University, in 2018. Since 2005, she has been working in the field of preparation of teachers of informatics at H. S. Skovoroda Kharkiv National Pedagogical University, where she is currently Dean of Department of Physics and Mathematics. Her research interests include innovative pedagogical technologies; use of information and communication technologies in education; theoretical and methodological foundations of professional training of future teachers of informatics; career guidance of students. She has published a number of papers in international journals and volumes in book series.

Dr. Volodymyr Proshkin, Professor of Department of Computer Science and Math, Borys Grinchenko Kyiv University, Kyiv, Ukraine

Expert of the National Agency for Higher Education Quality Assurance. Deputy Chairman of the Specialized Academic Council (Borys Grinchenko Kyiv University), member of the specialized Academic Council (Donbass State Pedagogical University). Executor of the international project High school teacher competence in changes with the assistance of the Visegrad Fund and the Ministry of Foreign Affairs of the Netherlands. Author of 10 articles in journals included in the databases Scopus, WOS. Member of editorial boards of journals: Open educational e-environment of modern University, Cybersecurity: Education, Science, Technique (Borys Grinchenko Kyiv University), Transactions of Kremenchuk Mykhailo Ostrohads’kyi National University. WWW: http://fitu.kubg.edu.ua/pro-fakultet/kafedry e-mail: v.proshkin@kubg.edu.ua

Dr. Oleg Pursky, Professor of Computer Science and Information Systems, Head of Department of Computer Science and Information Systems, Kyiv National University of Trade and Economics, Kyiv, Ukraine

Oleg Pursky, born in 1967, received a Candidate of Sciences in Physics and Mathematics degree (Dr. phil.) from the Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine, in 2001, and a Doctor of Sciences in Physics and Mathematics degree (Dr. habil.) from the Taras Shevchenko National University of Kyiv, Ukraine, in 2010. His research interests include informational systems development, computer simulation and modeling of socioeconomic systems. He has published a number of pa-
pers in international journals, monographs and volumes in book series, is a member of editorial board of International Journal of Economic Theory and Application, reviewer of scientific journals International Journal of Modern Physics (B) and Heat Transfer and certified Data Science&Machine Learning specialist. He is a member of Scientific Council section of Ukrainian Ministry of Education and Science on the specialty "Informatics and Cybernetics". Currently, he is working as a Head of Department of Computer Science and Information Systems, Kyiv National University of Trade and Economics.

WWW: https://knute.edu.ua/blog/read/?pid=12695&uk

e-mail: Pursky_O@ukr.net

Dr. Serhiy Semerikov, Professor of Computer Science and Educational technology, Kryvyi Rih State Pedagogical University, Ukraine

Serhiy Semerikov is professor of Department of Computer Science and Applied Mathematics at Kryvyi Rih State Pedagogical University. He got both PhD and DSc in education (informatics) from the National Pedagogical Dragomanov University in 2001 and 2009, respectively. The main directions of Dr. Semerikov research is methods of learning and educational technology.

WWW: https://kdu.edu.ua/semmerikov/

e-mail: semerikov@gmail.com

Dr. Yevhenii Shapovalov, Chief specialist in Ministry of Digital Transformation of Ukraine and Researcher in National Center Junior Academy of Science of Ukraine

Yevhenii Shapovalov was born in 1992, received Ph.D. in 2020 from the National University of Life and Environ-
Dr. **Yaroslav Shramko**, Professor of Logic and Philosophy, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine

Yaroslav Shramko, born in 1963, received a Candidate of Philosophical Sciences degree (Dr. phil.) from the Lomonosov Moscow State University, USSR, in 1990, and a Doctor of Philosophical Sciences degree (Dr. habil.) from the Institute of Philosophy of the National Academy of Sciences of Ukraine, in 1998. Since 1990, he has been working in the field of logic and analytic philosophy at the Kryvyi Rih State Pedagogical University, where he is currently rector. His research interests include non-classical logic and analytic philosophy. He has published a number of papers in international journals and volumes in book series, is a member of editorial boards of *Studia Logica, European Journal of Mathematics, Logic and Logical Philosophy*.

WWW: https://kdu.edu.ua/shramko/yse.htm

Dr. phil. **Oleksandra Sokolyuk**, Acting Deputy of Scientific Secretary Institute of Information Technologies and Learning Tools of NAES of Ukraine, Kyiv, Ukraine

Oleksandra Sokolyuk, born in 1962, received a Candidate of Pedagogical Sciences degree (Dr. phil.) from the National Pedagogical University named after M. Drahomanov, Kyiv, Ukraine. Senior Researcher in specialty 13.00.10 - information and communication technologies in education (2014). His research interests include IKT in education, educational research, is a member of editorial boards of "Information Technologies and Learning Tools".

WWW: http://iitlt.gov.ua/eng/structure/

Vladimir N. Soloviev received the D. Sc. (Dr. Hab.) degree in solid state physics from Institute of Physics of the National Academy of Sciences of Ukraine, in 1993. From 1992 to 2000 and from 2016 to the present head of the Department of Informatics and Applied Mathematics of Kryvyi Rih State Pedagogical University. In the period from 2000 to 2016, he carry out research on critical and crisis phenomena in the financial markets at various universities in Kyiv, Cherkassy and Kryvyi Rih. He has about 300 publications in the field of solid state physics, complex systems and quantitative methods of constructing precursors of crisis phenomena in systems of different nature.

![Vladimir N. Soloviev](image)

Oleg Spirin, Doctor of Pedagogy, Full Professor, Corresponding Member of the National Academy of Pedagogical Science of Ukraine, Vice Rector for Research and Digitalization of the University of Educational Management, Kyiv, Ukraine


![Oleg Spirin](image)
Dr. Andrii Striuk, Ph.D., Head of Simulation and Software Engineering department of Kryvyi Rih National University, Kryvyi Rih, Ukraine

Andrii Striuk, born in 1979. In 2000 he graduated from the Kryvyi Rih Technical University with a degree in Automated Systems Software. In 2001, he received a master’s degree in computer science. Has been working at the Department of Modeling and Software of Kryvyi Rih National University since 2000. Combines educational activities with practical, developing and implementing educational software products. In 2011 he defended his Ph.D. thesis. From 2014 to 2017 he is studying at the doctoral program in Institute of Information Technologies and Learning Tools of the NAES of Ukraine (Kyiv, Ukraine). In 2017, he was awarded the Prize of the President of Ukraine for young scientists. Heads the Simulation and Software Engineering department of Kryvyi Rih National University since 2018. Field of scientific interest: professional training of software engineers, mobile learning technologies, the use of augmented reality technologies in education.

WWW: http://mpz.knu.edu.ua/pro-kafedru/vikladachi/224-andrii-striuk
e-mail: andrii.striuk@knu.edu.ua

Dr. Tetiana Vakaliuk, professor, professor of the department of Software Engineering, Zhytomyr Polytechnic State University, Zhytomyr, Ukraine.

Tetiana Vakaliuk, born in 1983, received a Candidate of Pedagogical Sciences degree from the National Pedagogical Dragomanov University, Ukraine, in 2013, and a Doctor of Pedagogical Sciences degree from the Institute of Information Technologies and Learning Tools of the National Academy of Sciences of Ukraine, in 2019. Since 2019, she has been working in the field of information technologies at the Zhytomyr Polytechnic State University. Her research interests include information technologies, ICT in Education, Cloud technologies. She has published a number of papers in international journals, is a member of editorial boards of Information Technologies and Learning Tools, Zhytomyr Ivan Franko State University Journal: Pedagogical Sciences, Collection of Scientific Papers of Uman State Pedagogical University.
WWW: https://sites.google.com/view/neota
e-mail: tetianavakaliuk@gmail.com

Dr. Maryna Vardanian, Full Professor of Childrens Literature and Comparative Literature, Faculty of Foreign Languages, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine

Maryna Vardanian, born in 1979, received a Candidate of Philological Sciences degree (PhD in Philology) from
Dr. Vladyslav Velychko, Associate Professor of Methods of Teaching Mathematics and Methods of Teaching Computer Science, Faculty of Physics and Mathematics, Donbas State Pedagogical University, Sloviansk, Ukraine

Vladyslav Velychko, born in 1973, received a Candidate of Physical and Mathematical Sciences degree (Dr. phil.) from the Kyiv Taras Shevchenko National University, Ukraine, in 2006, and a Doctor of Pedagogical Sciences degree (Dr. habil.) from the Donbas State Pedagogical University, in 2019. Since 1994, he works in the field of algebra, methods of teaching computer science, the use of information and communication technologies in education at Donbas State Pedagogical University, where he is now head of the department. Research interests – quasi-ideals of semigroups, algorithms on algebraic structures, free software, open electronic educational resources. He has published a number of articles in international journals and made presentations at international conferences and seminars.

Dr. Kateryna Vlasenko, Professor of Maths, Department of Mathematics and Modeling, Donbas State Engineering Academy, Kramatorsk, Ukraine

Kateryna Vlasenko, born in 1966, received a Candidate of Pedagogical Sciences degree (PhD) from the National Pedagogical Dragomanov University, Ukraine, in 2004, and a Doctor of Pedagogical Sciences degree (D.Sc. in Educational Science) from the Bohdan Khmelnytsky National University of Cherkasy, in 2011. Since 2008, she has been working in the field of mathematical and pedagogical modeling at Donbas State Engineering Academy. Her research interests include the issues of mathematics education. She has published a number of papers in international journals and volumes in book series, is a member of editorial boards of Innovative Solutions in Modern Science, Topical Issues of Natural and Mathematical Education Sumy State Pedagogical University named after A. Makarenko.

WWW: http://formathematics.com/tutors/kateryna-vlasenko/
e-mail: vlasenkokv@ukr.net

Nataliia P. Volkova, Doctor of Pedagogy, Professor, Head of the Department of Innovative Technologies in Pedagogy, Psychology and Social Work, Alfred Nobel University, Dnipro, Ukraine

Leading expert in pedagogy of higher education in Ukraine. Chairperson of Specialized Academic Board on PhD dissertations in Theory and Methodology of Professional Education. Author of more than 170 printed works, three monographs, two textbooks with a stamp of the Ministry of Education and Science of Ukraine, three study
guides with a stamp of the Ministry of Education and Science of Ukraine. 12 educational and practical study guides, articles in leading Ukrainian and foreign journals. Author of Pedagogy, Professional-Pedagogic Communication the textbooks now fundamental in many leading institutions of higher education in Ukraine.

e-mail: npvolkova@yahoo.com

Dr. Yuliia Yechkalo, Associate professor, Department of Physics, Kryvyi Rih National University, Kryvyi Rih, Ukraine

Yuliia Yechkalo, born in 1981, received a Candidate of Pedagogical Sciences degree from the Kirovograd State Vladimir Vinnichenka Pedagogical University, Ukraine, in 2013. Since 2005, she has been working at the National Metallurgical Academy of Ukraine. She has been working at the Kryvyi Rih National University since 2012. Her research interests include theory and methods of education (physics) and information and communication technologies in education.
e-mail: uliaechk@gmail.com

3 ICHTML 2022 overview

3.1 History of Learning and Education

5 talks were presented at this section. The article “Training to professional fulfillment: the history of womens education in Ukraine (at the end 19th early 20th centuries)” [4] by Nataliia Avsheniuk, Olena Anishchenko, Kateryna Hodlevska and Nataliya Semenikhyna (figure 2) is focused on the findings of the research of women’s professional education in the context of their self-fulfillment opportunities in Ukraine at the end of 19th-beginning of the 20th century. The current state of research on pedagogical theory’s chosen topic is outlined. The peculiarities of training women in professional educational institutions of different profiles and
levels were determined considering the socio-economic, socio-political events in Ukraine and specific purposes, tasks and functions, and foreign trends in women’s professional education. The government impact, charity and educational societies focus on women’s professional education in Ukraine has been analyzed. The main emphasis has been placed on the problem of special education for representatives of national minorities, deprived children, and orphans. The theoretical analysis of constructive ideas of women’s professional education experience of the late 19th – early 20th century in the new context of Ukraine’s socio-economic development is substantiated.

Figure 2. Presentation of paper [4].

This article highlights further research by the authors, begun in [5–7].

The article “To the origins of social education in Ukraine (the 1920s): humanism or proletarian expediency?” [8] by Nataliia Dichek and Oksana Kravchenko (figure 3) analyses the phenomenon of social education (sotzvykh) in Ukraine in the 1920s as a purpose of Soviet power to change the previous imperial system of education. In general, at that time sotzvykh reflected the aspiration of power for upbringing the new generation of educated proletarians with communist views, but in reality, there were efforts to feed, clothe and provide the elementary medical care to the host of different types of children and teenagers under 15. Until the early 1930s, the sphere of education in Ukraine developed differently than in Russia. The emphasis was placed on the imminent death of the family as a social institution, and therefore the education of children and youth should have become the task of the society. In addition, professionalization of school education was recognized as a priority. The aim of the article is to highlight the first in the world’s education history phenomenon (sotzvykh) – both the pedagogical and social – of organising life of children in the post-war country. The goals and ways of implementation Ukrainian sotzvykh in the context of social, ideological and pedagogical aspects of the time are analysed. It is considered that sotzvykh carried out both political and life-saving pedagogical tasks of protecting the child population. Within the framework of sotzvykh in the conditions of poverty and ruin of the post-revolutionary period the general 7-year school education and elimination of illiteracy were carried out.

Figure 3. Presentation of paper [8].

This article highlights further research by the authors, begun in [9–11].
The article “Non-government organisations as a basis for sustainable development of education” [12] by Kateryna V. Vlasenko, Iryna V. Sitak, Iryna V. Lovianova, Vitaliy V. Achkan and Tetiana S. Armash (figure 4) examines the experience of team work of scientists-members of a non-government organisation (NGO) “Smart Math”. The analysis of the advantages of scientists’ collaboration and communication are offered in the current research. The paper presents the findings of scientific collaboration and cooperation of researchers, whose activity is represented on the open educational platform “Higher School Mathematics Teachers”. The areas of activity of a team of researchers, which brings together teaching staff of Ukrainian universities, and tackling the issue of developing on-line courses are described in the present article. The outcome of such collaboration of the members of “Smart Math” in 2020 is the increase by 4.7 in the average citation index in scientometrical databases publications.

![Figure 4. Presentation of paper [12].](image)

This article highlights further research by the authors, begun in [13–15].

The relevance of the article “Technologizing youth training for entrepreneurship to fulfil sustainable development goals” [16] by Liudmyla Yershova, Svitlana Aliksieieva, Natalia Kulalaieva, Halyna Odnoroh and Mykola-Oleg Yershov (figure 5) can be justified by the requirements for youth entrepreneurship training defined by sustainable development goals. In particular, these requirements are expected to promote the continuous, comprehensive and sustainable economic growth of the country, as well as full and decent employment for all. The article also presents a modelled algorithm of the simultaneous introduction of the author’s technologies (motivating future specialists towards business activity, improving their financial literacy and capacity for project activity and effective self-management) in educational institutions. The effectiveness of this method has been verified during a pedagogical experiment. This experiment aimed to prove the positive dynamics in the levels of future specialists’ entrepreneurship competence.

![Figure 5. Presentation of paper [16].](image)

This article highlights further research by the authors, begun in [17, 18].

The article “New educational space in New Ukrainian School” [19] by Oksana Kravchenko, Tetiana Kochubei and Antonina Shturba (figure 6) reveals the basic princi-
amples of creating an effective renewed educational space in the context of education reform in Ukraine and the creation of the New Ukrainian School. Modern educational environment means multifunctional flexible spaces that promote various forms of work, motivate to learn. An important factor in the renewal of the school is the creation of a modern educational space that will motivate the child to learn something new, stimulate different activities, and evoke positive emotions. Civic competence is one of the key skills enshrined in the Education Law in Ukraine. Along with the social, they are linked to the ideas of democracy, justice, equality, human rights, prosperity and healthy lifestyles, with an awareness of equal rights and opportunities. They include cooperation with others to achieve a common goal, activity in class and school life, respect for the rights of others, the ability to resolve conflict situations. One of the tools used by teachers to develop these competencies in primary school is the creation of “Class Rules” – the first “law” in the lives of first-graders. Creating a motivational educational space contributes to the principles of reforming primary and general secondary education and global trends: personality-oriented education, child-centeredness, competence and activity approaches.

This article highlights further research by the authors, begun in [20–22].

3.2 Learning Theories

5 talks were presented at this section.

Spiritual education of a child is one of the most difficult and important areas of educational research. The way of family life has always been reflected in the moral character of a person. The emotional and moral atmosphere reigning in the family, the desire to share responsibility, the level of mutual understanding and mutual respect, parental love and reciprocal feelings of a child, family traditions – all these lay the foundation for spirituality. Teachers who work with younger students often observe their interactions with their parents. Each child and each parent is individual, and relationships between them develop differently. In the article “Cultivating a childs love for parents as a spiritual practice: pedagogical aspect” [23], Luydmyla Moskalova, Sergiy Gurov and Svitlana Podplota (figure 7) reflect on teachers’ role in cultivating love, where the theoretical concept of “from child to parent” is the basis for study. The article identifies the types of a child’s love for parents, reveals the markers of manifestation of a child’s love for parents, which is positively associated with the cultural and social environment. In addition, the basic pedagogical characteristics for cultivating a child’s love for their parents in the context of the school are proposed.

This article highlights further research by the authors, begun in [24–26].

Contemporary challenges of society, its dynamic development cause changes in all spheres of life, particularly in education. To obtain a university education in the Ukrainian state, higher Education Standard in specialty 012 Preschool Education for the second (master’s) level of higher education (2020) was approved, which provides for the formation of relevant competencies. The purpose of the article “Innovations in professional activity: what students of specialty Preschool Education think about it” [27] by Liubov Lokhyvtska and Nataliia Martovytska (figure 8) was to analyze the essence of innovations in the professional activities of teachers of preschool educational institutions (PEI). To find out the attitude of students to the
implementation of innovations in professional activities, a thematic survey was conducted. The selection of questions and respond options is based on all competencies of the Standard and the materials of theoretical analysis. The sample of the online survey covers the students’ responses from two state universities of Ukraine (n = 159), who are obtaining the second (master’s) level of higher education on the educational-professional program “Preschool Education”. Respondents were grouped according to the mode of study. The obtained quantitative and qualitative data revealed the influence of the experience of practical experience in the PEI on the choice of the respond. This determined the necessity to teach students the educational component “Innovation activities in PEI” and the development of corresponding tasks during their teaching practicum in the system of preschool education.

This article highlights further research by the authors, begun in [28–30].

The role of preventive education in averting negative behaviours in preschoolers has been considered in the article “Preventive pedagogical work on negative manifestations of preschool children’s behaviour” [31] by Tetiana Kochubei, Olha Melnykova and Olha Svrydiuk (figure 9). It has been justified that preventive work with the children prone to negative behaviours will enhance harmonious development of preschoolers’ personalities, provided that effective forms, methods and techniques have been implemented into preventive education of children with negative behaviours during interpersonal communication (preschool teachers – child – family). It has been proved that the realization of the proposed model of interpersonal communication within preventive work with children prone to negative behaviours in preschools provides positive results, indicating the importance of cooperation among all subjects of the education process in these institutions. The need for primary or early preventive work highlights the significance of primary preventive education, since only early socio-pedagogical prevention of children’s negative behaviours is an effective means of coping with destructive phenomena in the children’s environment. The main factors for children’s negative behaviours and the most essential indications of the need to implement senior preschoolers’ preventive education have been identified. Methodical guidelines on effective preventive education of senior preschoolers prone to negative behaviours have been outlined. The forms, methods and techniques of preventive work that promote constructive behaviours in children have been implemented and verified; the level indicators of development of a sustainable and responsible attitude towards negative behaviours in preschoolers during interpersonal communication have been determined.
the concept is suggested on their basis. Presents its own classification of modern visualisation tools. It describes the author’s organizational and methodological model of shaping reading comprehension by visualization means, as well as the work done by the author on shaping of scrupulous reading comprehension by visualization means among primary school students. The research involved a set of theoretical (analysis of scientific literature, legal framework, synthesis, generalisation, systematization) and empirical methods (expert assessment, modelling; questionnaires, interviews, monitoring of the educational process, method of mathematical statistics).

This article highlights further research by the authors, begun in [34–36].

The article “Development of ecological consciousness of future primary school teachers in the process of professional training” [37] by Valentyna Shpak, Iryna Moysiyenko and Tatyana Ninova (figure 11) emphasizes that among the current and promising problems of modern pedagogical science of particular importance is the need to develop ecological consciousness of future primary school teachers in the process of their training. Focusing on modern theories of primary education, philosophy of education, the authors substantiate the acute general need for fundamental changes in the ecological consciousness of future primary school teachers in postclassical education. This is due to the influence of the latest models, tools and services in the context of primary education reform. The essence and the basic contradictions proving necessity of development of ecological consciousness of the future teachers of elementary school in educational process of higher school are considered. The analysis of the concept of “ecological consciousness” is carried out, the structure of ecological consciousness of the future primary school teacher is defined. The presented results of research and experimental work with the involvement of first-third year students of the first (bachelor’s) level of higher education in specialty 013 “Primary Education” present factual data for the diagnosis of levels of development of environmental knowledge and environmental awareness. The pedagogical conditions that will promote more effective development of ecological consciousness of future primary school teachers in the process of professional training in accordance with globalization changes in the ecological sphere, integration of domestic higher education in the European educational space, social transformations on the way to scientific and technological progress are identified.

This article highlights further research by the authors, begun in [38].

3.3 Learning Methodology

8 talks were presented at this section.

The article “Remote study for the humanities and social sciences: digitization and coaching” [39] by Inna
Onikienko, Liudmyla Bratchenko, Iryna Mintii and Oksana Chaika (figure 12) analyzes research on remote study in the areas of the humanities and social sciences, which strongly links to formation of key competences by means of digital technologies and coaching. The results of the survey are analysed and presented according to the feedback of students on the emotional and value attitude to remote study associated with the humanities and social sciences, which specify both the advantages and disadvantages of this form in education. The article suggests considering a number of initiatives for remote study in the mentioned connection and strongly encourages their implementation in higher education. The experience of structural distribution of remote study is described, in which the research findings reveal that digital technologies and communication with and between students and teachers in a coaching format enable classes to achieve a significant increase in the social and entrepreneurship competences. It is also proposed to look at feasibility and prospect development of a remote study strategy at Kryvyi Rih State Pedagogical University and the National University of Life and Environmental Sciences of Ukraine, in particular. The development plan includes three-factor support for active learning: assessment support, emotional support and information support. The recommendations accompany the development introduction of such digital and coaching competences for students.

This article highlights further research by the authors, begun in [40–42].

The article “Training techniques in the education of simultaneous interpreters using specialised equipment” [43] by Svitlana Amelina, Rostyslav Tarasenko, Serhiy Semerikov and Liying Shen (figure 14) deals with the search for ways to improve the training of simultaneous interpreters in accordance with modern requirements for their professional activities. It has been suggested that special training should be incorporated into the training of these professionals to develop and improve a range of specific abilities, skills and attitudes. They are classified into five groups (linguistic, cognitive, psychological, physical, technical). Particular attention is paid to the technological support for the work of the simultaneous interpreters. A training programme for simultaneous interpreters has been developed and its effectiveness has been tested. It is proposed to conduct training sessions under the modelling of real working conditions of simultaneous interpreters.

![Difficulties with the skills of working with systems to support simultaneous interpreting](image)

Figure 13. Presentation of paper [43].

This article highlights further research by the authors, begun in [44–46].

The article “Computer-assisted interpreting systems in the education of simultaneous interpreters” [47] by Rostyslav Tarasenko, Svitlana Amelina, Serhiy Semerikov and Liying Shen (figure 14) deals with the analysis of the potential of existing terminology support systems for simultaneous interpreting and the experience of their use in universities. Based on the study the possibilities of their use in the educational process of domestic institutions of higher education in the training of interpreters were identified. It is proposed to choose the software products InterpretBank, Interplex, Interpreter’s Help for training simultaneous interpreters. It has been found that the proposed programmes contribute to the students’ ability to create their own glossaries on specific subjects, fill them in in different ways and use them directly when interpreting. The feasibility of practising CAI tools in a specialised simultaneous interpreting laboratory has been proved.

This article highlights further research by the authors, begun in [48–50].

The article “Future biology teachers training for professional activity on the basis of sustainable development” [51] by Alla Stepanyuk, Halyna Zhyrska, Natalia Mishchuk and Tetiana Olenadr (figure 15) deals with the idea of possible ways of modernization of pedagogical education in Ukraine in order to train teachers of the new generation and to provide conditions for the formation and development of modern alternative models of teachers’ professional and personal growth on the principles of sus-
tainable development. The ideas and ways of integrating education for sustainable development and Biology teachers professional training have been determined. It has been substantiated the methodological system of Biology teachers training for professional activity on sustainable development ideas. Its system-forming factor is the idea of combining the activity approach to acquiring knowledge with their ethical reflection, comprehension of personal value in professional and everyday life. The content of the suggested methodological system is made up of the following academic disciplines: compulsory – “Methods of Teaching Biology and Fundamentals of Health Studies” and elective. The efficiency of the corresponding methodological system of Biology teachers training on the basis of quality indicators of the knowledge acquisition (completeness, awareness, consistency and systematicity) has been proved.

This article highlights further research by the authors, begun in [52–54].

An important basis for information support of educational activities is the effective presentation of knowledge and standardization of training tasks based on ontological models of learned subject areas. The competence approach to the organization of the educational process and the requirements for the training of specialists from the point view of enterprises and organizations, in which they will carry out their professional activities, requires the development of a comprehensive model of educational processes and objects that are participating in them, based on high-level abstractions. On the basis of the results obtained in the article “Categorical-ontological approach to information support of educational activities” [] by Oleksandr Tarasov, Pavlo Sahaida, Sergey Podlesny and Liudmyla Vasylieva (figure 16), the methodology of informational support of educational activities was further developed on the basis of: organizing the educational process and standardization of education based on a categorical-ontological approach; construction and use of relevant ontologies and knowledge bases; automation of data processing by forming and executing queries to the content of ontological models. The use of the results of categorical-ontological modeling allowed to reconcile the interests of active agents of the organization-technical systems, the subjects of educational activity and the ability of students to acquire the necessary knowledge and skills.

This article highlights further research by the authors, begun in [56–58].

The article “Modeling of ecophobic tendencies of consciousness of higher education students” [59] by Oksana V. Klochko, Vasyl M. Fedorets, Oleksandr V. Mudrak,
Tamara S. Troitska and Vasyl V. Kaplinskyi (figure 17) reveals the peculiarities of the formation of strategies for the development of ecological consciousness (ecophilic educational strategies) of higher education students on the basis of digital models of ecophobic tendencies (intentions, values). Based on the application of the developed “Fedorets-Klochko mini-questionnaire “Ecophobic consciousness of the industrial epoch”’ an experimental study of ecophobic and ecophilic intentions and values of higher education students. This mini-questionnaire reveals the environmental aspects of consciousness by actualizing the culture and psychology of everyday life. Based on the application of digital and mathematical modeling, ecological and value comprehension of the results of experimental research conducted using this mini-questionnaire, a model of “Archaic ecophobic intentions and values” was formed. This model contains the following digital models: “Matrix of coefficients (weights) for determining ecophobic intentions and values” and “Cluster model of ecophobic intentions and values”. Based on the application of these digital models, the concept of sustainable development and other concepts and approaches, three ecophilic educational strategies have been developed: “Synergistic strategy of personal security through care for the Earth”; “Strategy for harmonization of needs based on care for the Earth”; “Strategy for harmonization of human-Earth interaction”. When using the “Matrix of coefficients (weights) to determine ecophobic intentions and values” determines the system-organizing value and the dominant influence of the “Synergistic strategy of personal security through care for the Earth”. This strategy has a genetic and semantic connection with the basic vital value – food security (individual and collective). The application of this strategy can be relevant in educational theory and practice and in everyday life (life, work) to optimize and minimize human needs.

This article highlights further research by the authors, begun in [60–62].

The article “Methodological aspects of revealing the metacognitive potential of a teacher in the context of the development of his health-preserving competence” [63] by Vasyl M. Fedorets, Oksana V. Klochko, Vitalii I. Klochko, Tamila I. Berezhna and Halyna A. Ivanystsia (figure 18) presents the results of a study aimed at improving the methodology and techniques for developing metacognitive strategies in postgraduate education as important aspects of health competence of physical education teachers. The concept of “Logos of health-preserving competence of a physical education teacher” has been developed. The logo of health-preserving competence of a physical education teacher is presented as a developed and professionally oriented metacognitive sphere of a teacher for the effective implementation of student health. An important component of the logo is the development of reflexive, self-reflexive, prognostic, goal-setting intellectual skills and stereotypes. The Logos of Physical Education Teacher’s Competence Logos includes the Logos-Narrative constitutive competence. The “Logos Narrative” reveals the main ideas, values, algorithms, interpretations, visions, the purpose of the strategy of professional health care. To study “Methods of integrative use of metacognitive and archetypal phenomena to improve the health competence of physical education teachers”, two questionnaires were used to study the meta-cognitive strategies of physical education teachers. All issues had an axiological dimension and are doctrinal and institutional. The issues highlight the role of humanism and charity as determinants of the relevant modern Ukrainian Eurocentric trends in education reform. Wilcoxon’s T-test was used to process the test results. The positive dynamics of learning outcomes aimed at updating the goals of cognitive strategies is determined.

Figure 17. Presentation of paper [59].

This article highlights further research by the authors, begun in [64, 65].

Educational emigration of young people is today one of the most pressing topics, taking into account the place and role of this socio-demographic group in the processes of economic and socio-cultural reproduction of society. In
order to clarify the scale and nature of migration sentiments in the field of education, the life plans of young people, Olena Liseienko, Liudmyla Kalashnikova, Nataliia Nikon and Viktoriia Chorna (figure 19), the authors of the article “Analysis of life plans and emigration intentions of pupils and students of border regions of the South of Ukraine (experience of empirical sociological research)” [66] within the framework of the grant project “Common Language: public dialogue on the Law of Ukraine “On Education” in the Odessa region” conducted two empirical sociological research: 1) a formalized interview of students, students and their parents; 2) in-depth interviews with representatives of local authorities and self-government bodies, heads of schools and other educational institutions, school teachers, pupils, their parents, students, representatives of public organizations, ethnic communities, employers and representatives of local political parties. Despite the prevailing migration sentiments among some of the respondents, most of them associate their future with Ukraine. The mood for educational emigration is most pronounced among student youth, this is due to the fact that getting an education in foreign countries facilitates the possibility of their employment, including on the international labor market. The authors emphasize the importance of further scientific understanding of topical problems associated with the implementation of educational reform in Ukraine, which has hidden the development of transnational curricula.

This article highlights further research by the authors, begun in [67–69].

4 ICHTML 2022 Statement on Ukraine

The ICHTML 2022 community appeal to academics from around the world to spread awareness about the beginning of hostilities on the part of the Russian Federation on the territory of sovereign Ukraine, starting on February 24, 2022. This war, unleashed by the political and military leadership of the aggressor country, is aimed to destroy the Ukrainian state, the right of the people of Ukraine to freely choose their own future, the faith of the Ukrainian people in their own strength, courage and, eventually, into their inevitable victory.

At one point, the lives of all Ukrainians were divided into before and after the war periods. Currently, people are resisting the Russian aggression, violence, and mighty blows from heavy weapons and ammunition. At this very moment, it is next to impossible for Europeans to imagine the feeling of fear, despair and anger that does not leave the hearts of the civilian population of our country. The devastating humanitarian situation around the East and South of Ukraine, the main regional centres of Kharkiv, Mykolaiv, Kherson, Mariupol and other Ukrainian cities will be forever engraved in the memory and hearts of our citizens as a nightmare.

Today, most of the population of Ukraine worries about their lives and the lives of the loved ones, hiding in bomb shelters and basements, forced to pray and hope for the best. Thousands of women, mothers and children fear for their husbands, sons and fathers, who must fight on the battlefields for peace in Ukraine.

Every effort must be made to stop this criminal war of Russia against Ukraine as soon as possible. We hope that our country will take its place in the family of free European nations.

EDP Sciences, the voice of the academic publishing industry, strongly condemns the actions of the Russian government against Ukraine, and stand in solidarity with all the people of Ukraine whose lives are threatened by this war: “The global exchange of scholarly knowledge is essential for democracy, and we especially stand by our colleagues, the Ukrainian academics and librarians whose rights are being violated by these actions. Additionally, we pay our respects to the Russian scientific community which opposes the military actions in Ukraine. We support every effort to immediately end this action.” [70]

5 Conclusion and outlook

The vision of the ICHTML 2022 is to create a leading interdisciplinary platform for researchers, practitioners and
educators, to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of learning.

The conference is a successfully performing forum to transferring and discussing research result among the academicians, students, teachers, government, private sector or industries. Participants and presenters from several countries have attended the conference to share their significant contribution in research related to the History, Theory and Methodology of Learning.

We are thankful to all the authors who submitted papers and the delegates for their participation and their interest in ICHTML as a platform to share their ideas and innovation. Also, we are also thankful to all the program committee members for providing continuous guidance and efforts taken by peer reviewers contributed to improving the quality of papers provided constructive critical comments, improvements and corrections to the authors are gratefully appreciated for their contribution to the success of the conference. Moreover, we would like to thank the developers and other professional staff of Academy of Cognitive and Natural Sciences (https://acnsci.org) and Not So Easy Science Education platform (https://notso.easycience.education), who made it possible for us to use the resources of this excellent and comprehensive conference management system, from the call of papers and inviting reviewers, to handling paper submissions, communicating with the authors etc.

We are looking forward to excellent presentations and fruitful discussions, which will broaden our professional horizons. We hope all participants enjoy this conference and meet again in more peaceful, hilarious, and happiness horizons. We hope all participants enjoy this conference and meet again in more peaceful, hilarious, and happiness horizons.

References


[58] L. Vasyliieva, O. Procenko, S. Chmykhun, REVISTA ROMANEASCA PENTRU EDUCATIE MULTIDIMENSIONALA 13, 382 (2021)

[59] O.V. Klokho, V.M. Fedorets, O.V. Mudrak, T.S. Troitska, V.V. Kaplinskyi, SHS Web of Conferences p. 03006 (2022)


[64] R.S. Gurevych, O. Klokho, V. V. Klokho, I. M.M. Kovtoniyuk, N.R. Opushko, INFORMATION TECHNOLOGIES AND LEARNING TOOLS 75, 122 (2020)


[66] O. Liseienko, K. Kalashnikova, N. Nikon, V. Chorna, SHS Web of Conferences p. 03008 (2022)


[70] EDP Sciences Statement on Support for Ukraine (2022), https://tinyurl.com/4v7tex3u