

ICHTML 2022 – Education under attack

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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 postclassical 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

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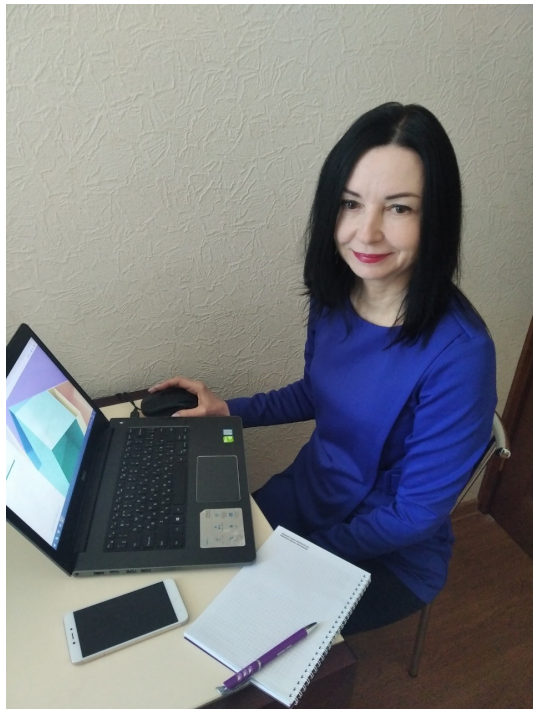
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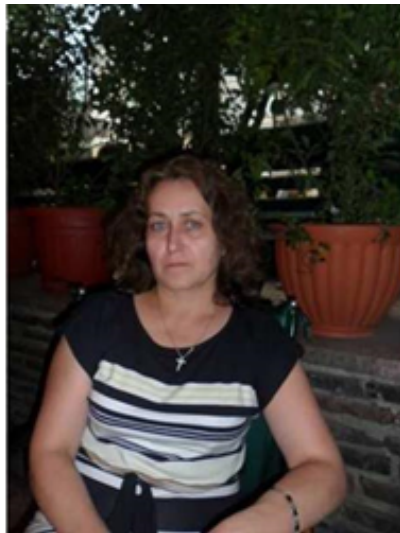
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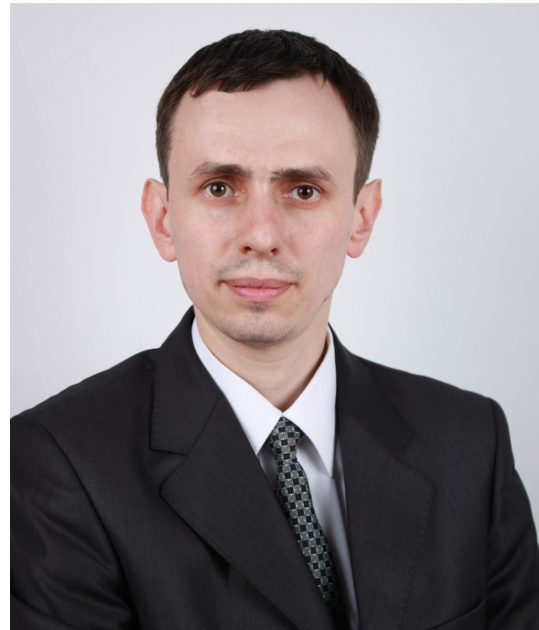
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Stamatios Papadakis has been a postdoctoral researcher in Educational Technology, with emphasis on mobile learning, at the Department of Preschool Education at the University of Crete, Greece since 2016. He has worked as an adjunct Lecturer in Education 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



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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.

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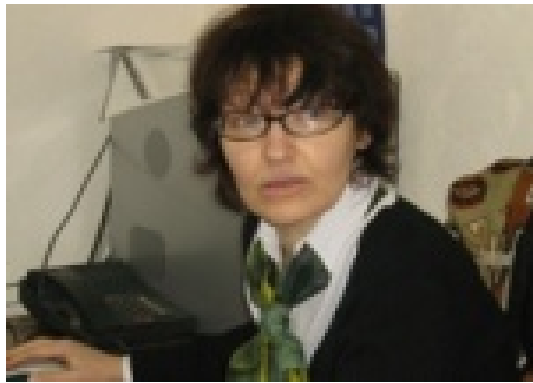
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Information Technologies in Education (2013). Prof. Spirin is an expert in the informatization of education and science and information training of students. He has published a number of papers in international journals and volumes in book series, is Deputy Editor-in-Chief of Electronic scientific edition Information Technologies and Learning Tools, member of the Editorial Boards of the specialized journals Information Technologies in Education, Computer in School and Family.

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3 ICHTML 2022 overview



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.

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Figure 1. ICHTML 2022 conference chairs: Vita Hamaniuk, Yaroslav Shramko and Serhiy Semerikov.

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

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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 Semnikhyna (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.

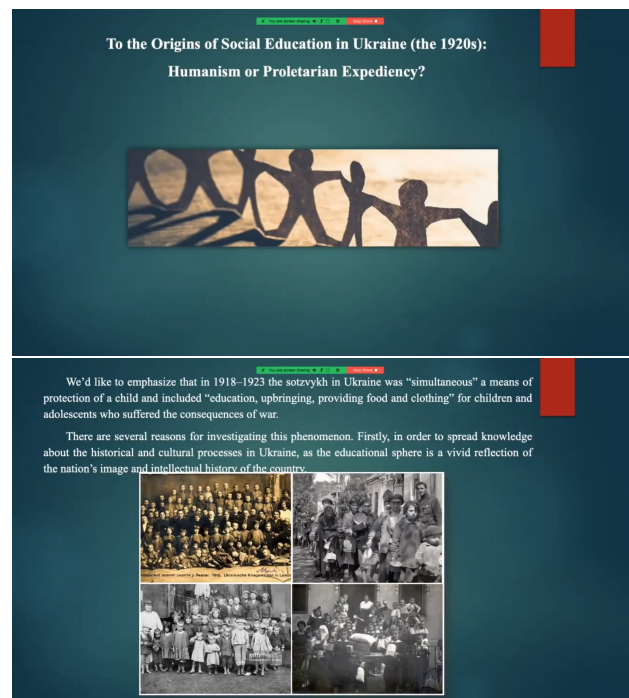


Figure 3. Presentation of paper [8].

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].

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 develop-

ment goals” [16] by Liudmyla Yershova, Svitlana Alieksieieva, 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.

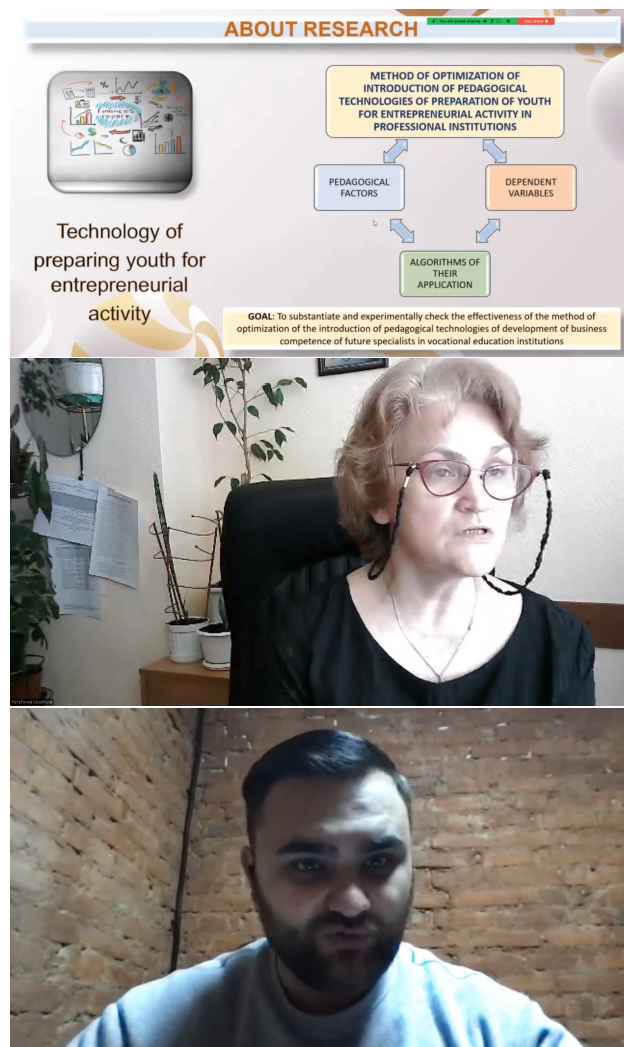


Figure 5. Presentation of paper [16].

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-

ples 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 child’s love for parents as a spiritual practice: pedagogical aspect” [23], Luydmyla Moskalyova, 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

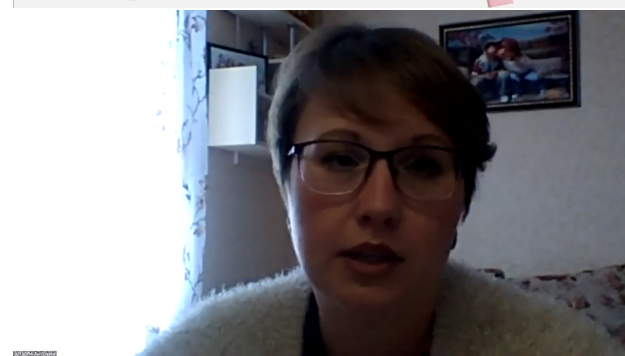
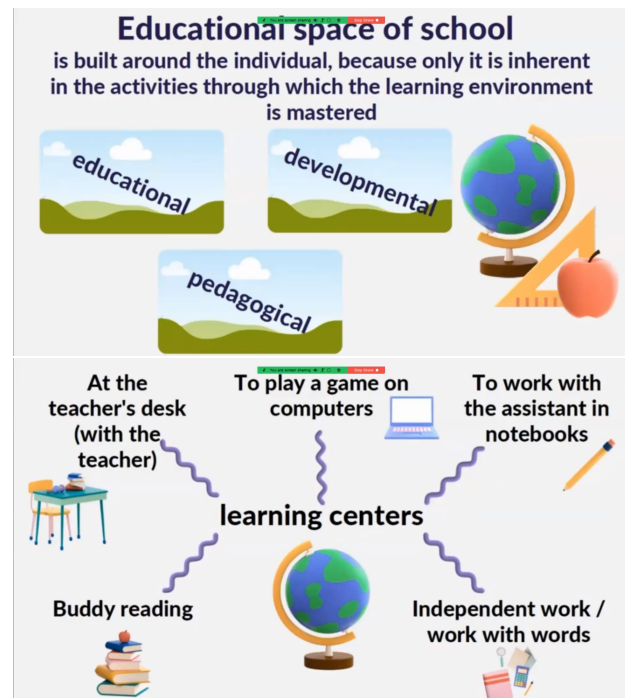


Figure 6. Presentation of paper [19].

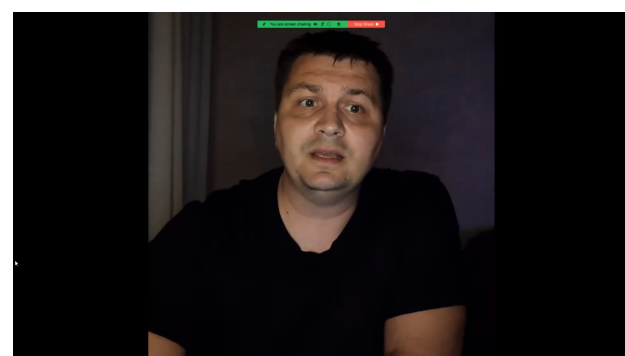


Figure 7. Presentation of paper [23].

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 Lokhvytska 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.

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.

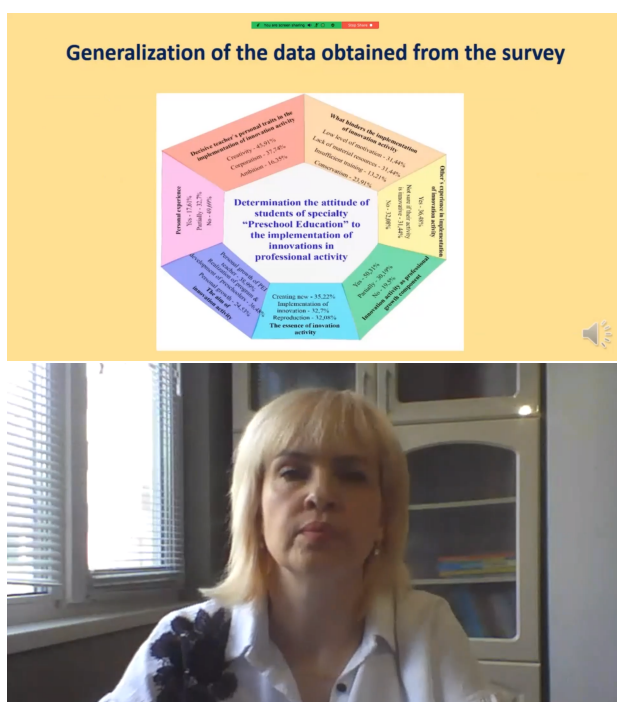


Figure 8. Presentation of paper [27].

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 childrens behaviour" [31] by Tetiana Kochubei, Olha Melnykova and Olha Svyrydiuk (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



Figure 9. Presentation of paper [31].

This article highlights further research by the authors, begun in [32].

The article "Formation of the reading comprehension skill in primary school students by visualization" [33] by Anastasia Hrechka, Olena Pavlyk and Liudmyla Lysohor (figure 10) describe the problem of shaping scrupulous reading comprehension in primary school students through visualisation tools and identifies its key factors. The scientific psychological and pedagogical and methodological literature, the current legal framework of primary education in Ukraine, educational experience of the research problems of foreign and domestic teachers, the results of the PISA research were analyzed. Foreign theories of interpretation of the term "reading comprehension" are reviewed and our own understanding of the essence of

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).

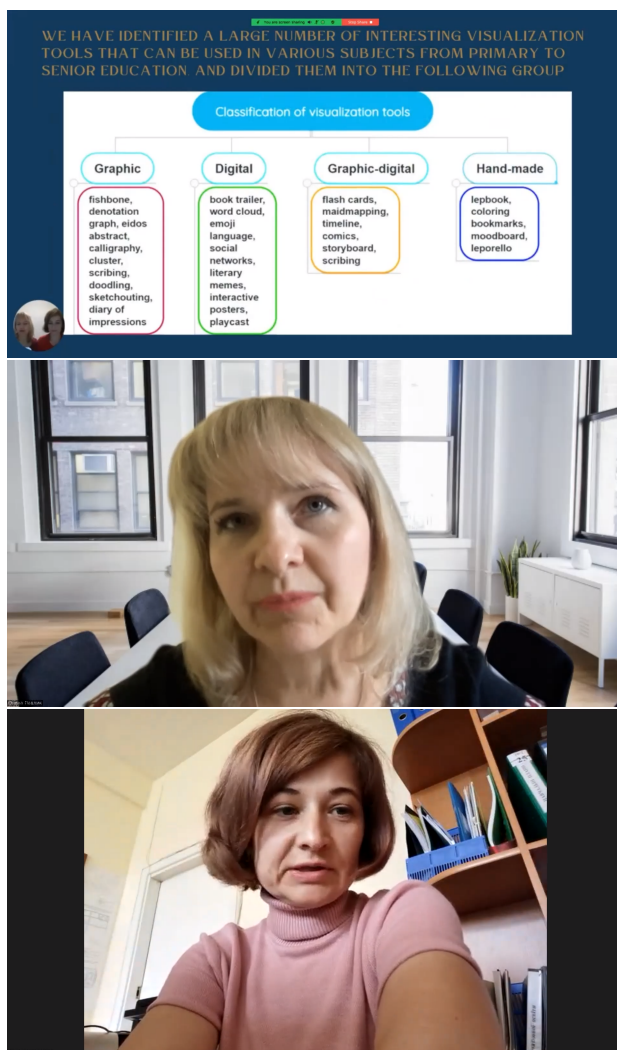


Figure 10. Presentation of paper [33].

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 Moysiienko 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 mod-

ern 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.



Figure 11. Presentation of paper [37].

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.



Figure 12. Presentation of paper [39].

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, Vasyl Shynkaruk and Jan apek (figure 13) 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.

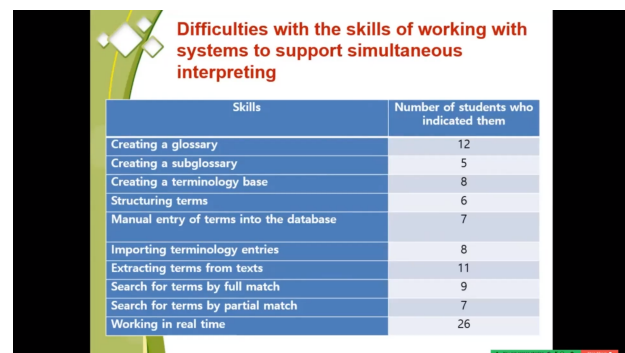


Figure 13. Presentation of paper [43].

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 Zhyska, Natalia Mishchuk and Tetiana Olendr (figure 15) deals with one of the 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-



Figure 14. Presentation of paper [47].

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.

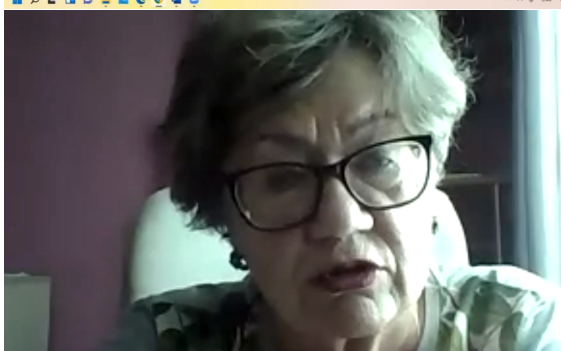
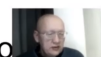


Figure 15. Presentation of paper [51].

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.

Categorical-ontological Approach to Information Support of Educational Activities



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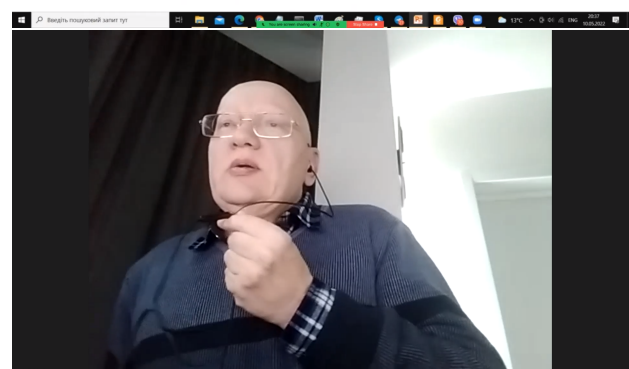


Figure 16. Presentation of paper [55].

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.



Figure 17. Presentation of paper [59].

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. Ivanytsia (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.

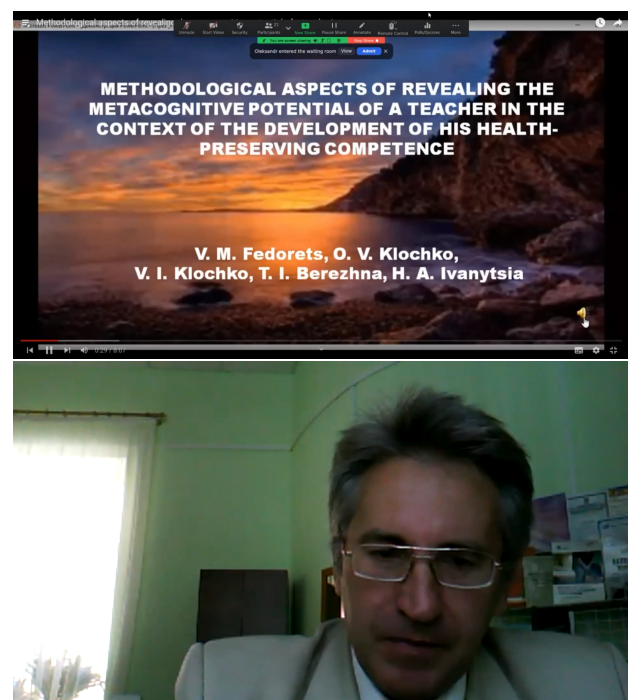


Figure 18. Presentation of paper [63].

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, Mykolayiv, 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

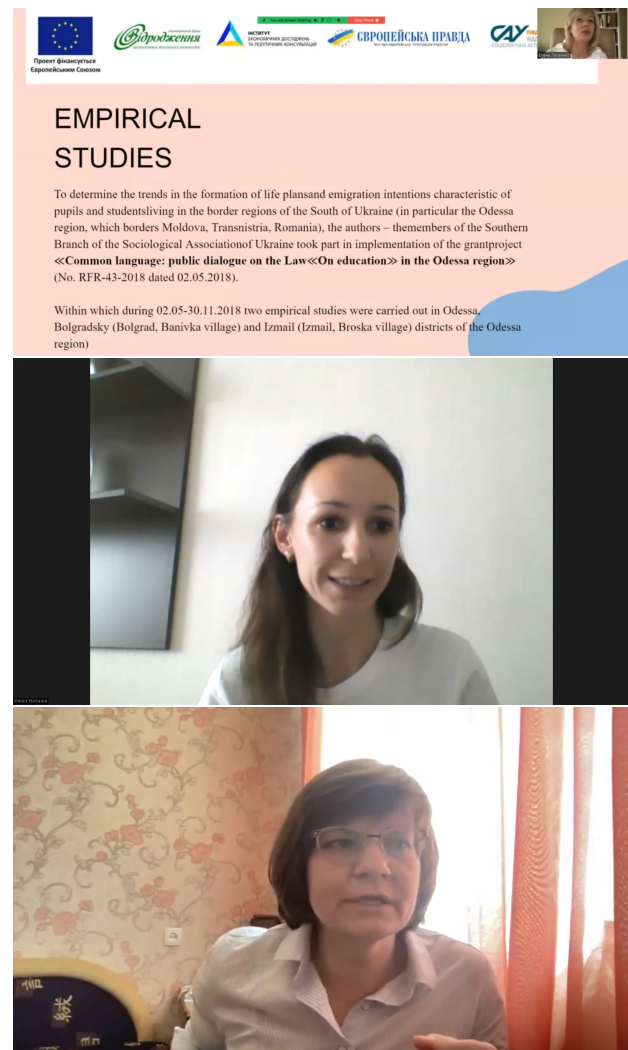


Figure 19. Presentation of paper [66].

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 academics, 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 improve 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.easyscience.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 of further ICHTML 2023.

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