



# Innovative methods and technologies for training future teachers and social workers in the context of the covid-19 pandemic

Nelli Tarasenko<sup>1</sup>  
Olha Rasskazova<sup>2</sup>  
Valeriia Hryhorenko<sup>3</sup>  
Olena Shkola<sup>4</sup>  
Valeriy Zhamardiy<sup>5</sup>  
Inna Davydchenko<sup>6</sup>  
Nadiia Shevchenko<sup>7</sup>

Journal for Educators, Teachers and Trainers, Vol. 12 (3)

<https://jett.labosfor.com/>

Date of reception: 10 Feb 2021

Date of revision: 08 May 2021

Date of acceptance: 07 Aug 2021

**Nelli Tarasenko, Olha Rasskazova, Valeriia Hryhorenko, Olena Shkola, Valeriy Zhamardiy, Inna Davydchenko, Nadiia Shevchenko (2021). Innovative methods and technologies for training future teachers and social workers in the context of the covid-19 pandemic. *Journal for Educators, Teachers and Trainers*, Vol. 12(3). 21 – 29.**

---

<sup>1</sup> Ph.D. in Pedagogics, Associate Professor of the Department of Social Work, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>2</sup> Doctor of Pedagogical Sciences, Professor, Head of the Department of Social Work, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>3</sup> Ph.D. in Pedagogics, Associate Professor, Associate Professor of the Department of Theory and Technologies of Preschool Education and the Art Disciplines, H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

<sup>4</sup> Ph.D. in Pedagogics, Professor, Head of the Department of Physical Education, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>5</sup> Doctor of Pedagogical Sciences, Associate Professor of the Department of Physical Education and Health, Physical Therapy, Ergotherapy with Sports Medicine and Physical Rehabilitation, Poltava State Medical University, Poltava, Ukraine.

<sup>6</sup> Ph.D. in Pedagogics, Head of the Educational Department, Lecturer of the Department of Ukrainian Linguistics, Literature and Teaching Methods, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>7</sup> Associate Professor of the Department of Theory and Technologies of Preschool Education and the Art Disciplines, H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.



## **Innovative methods and technologies for training future teachers and social workers in the context of the covid-19 pandemic**

**Nelli Tarasenko<sup>1</sup>, Olha Rasskazova<sup>2</sup>, Valeriia Hryhorenko<sup>3</sup>, Olena Shkola<sup>4</sup>, Valeriy Zhamardiy<sup>5</sup>, Inna Davydchenko<sup>6</sup>, and Nadiia Shevchenko<sup>7</sup>**

<sup>1</sup> Ph.D. in Pedagogics, Associate Professor of the Department of Social Work, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>2</sup> Doctor of Pedagogical Sciences, Professor, Head of the Department of Social Work, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>3</sup> Ph.D. in Pedagogics, Associate Professor, Associate Professor of the Department of Theory and Technologies of Preschool Education and the Art Disciplines, H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

<sup>4</sup> Ph.D. in Pedagogics, Professor, Head of the Department of Physical Education, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>5</sup> Doctor of Pedagogical Sciences, Associate Professor of the Department of Physical Education and Health, Physical Therapy, Ergotherapy with Sports Medicine and Physical Rehabilitation, Poltava State Medical University, Poltava, Ukraine.

<sup>6</sup> Ph.D. in Pedagogics, Head of the Educational Department, Lecturer of the Department of Ukrainian Linguistics, Literature and Teaching Methods, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council, Kharkiv, Ukraine.

<sup>7</sup> Associate Professor of the Department of Theory and Technologies of Preschool Education and the Art Disciplines, H. S. Skovoroda Kharkiv National Pedagogical University, Kharkiv, Ukraine.

Email ID: nellishka@gmail.com, olgarasskazov69@gmail.com, plvaleri@ukr.net, alesikk1974@gmail.com, Shamardi@ukr.net, davidchenkoid@ukr.net, n0678102030@gmail.com

### **ABSTRACT**

The article presents the author's interpretation and published the experience of using innovative methods and technologies of distance learning for future teachers and social workers in the context of the COVID-19 pandemic with subsequent implementation in professional activities to preserve the health of children of different age groups in educational institutions. Innovative methods (web quests, webinars) and information and communication technologies for distance learning of future specialists are characterized, developed and tested in practice. Presented the author's classification of innovative teaching methods (by composition and number of participants, by level of creativity, by form of activity, by type of activity, by nature of communication, by degree of complexity) and information and communication technologies (online testing, working in the cloud, online tools for creating quizzes, tests, puzzles, anagrams, QR-codes, comics, etc.) to train future professionals to work in the field of health preservation. Provened the effectiveness of the developed innovative methods and technologies of teaching future teachers and social workers to implement their professional activities to form a healthy lifestyle for children of different age categories in educational institutions in the context of the COVID-19 pandemic

**Keywords:** innovative methods, ICT technologies, health preservation, future teachers and social workers, COVID-19.

### **INTRODUCTION**

In modern conditions, one of the priorities of a democratic, economically developed society is the issue of educating a healthy nation. This task is particularly relevant given the deployment of the global coronavirus disease pandemic 2019-2020, which has led to a change in human perceptions of interpersonal hygiene, alternatives to conventional medical strategies for health preservation and treatment in the absence of vaccines and specific antiviral drugs. Dissemination of health information in society and access to ICT tools have become the most important factors in the health preservation of the nation and the development of society as a whole.

Traditionally, the state tries to regulate and regulate the solution of urgent health problems with the help of national and targeted programs. In particular, the main approaches to the formation of a healthy lifestyle of

children and youth are defined in the Law of Ukraine «Fundamentals of the legislation of Ukraine on health care», the Law of Ukraine «About physical culture and sports», Concepts of the national target social program «Healthy Nation», Order «About approval of the procedure for interaction of centers for social services for families, children and youth with health care institutions on various aspects of HIV / AIDS Prevention», National doctrine of development of physical culture and sports, etc. However, recent research on the health of the Ukrainian nation has highlighted the negative trend of increasing chronic morbidity and mortality, the spread of addictive behavior and socially dangerous diseases in society. According to WHO statistics, negative social phenomena (smoking, alcoholism, drug addiction, begging, criminal and risky sexual behavior) are spreading among children of different ages and lack of spirituality and aggression are growing.

These manifestations of lack of social and spiritual well-being of children have a negative impact on the level of their psychic and physical health, triggering the pathogenetic mechanisms of diseases caused by the deterioration of the ecological situation in the country, increasing the number of genetically determined diseases of Ukrainians. Against this background, domestic society and state institutions, including the education system, were not ready to solve many problems, associated with the COVID-19 coronavirus pandemic, which the UN estimates has become the largest global health crisis of our time, as well as the greatest challenge to humanity since World War II.

Pandemic quarantine measures have changed human perceptions of the main sources of information, forms of communication, ways and means of preparation for professional activity and education in general, shifting the emphasis on the use of distance learning, the use of information and communication technologies in the educational process. Innovations in the life of society, in education and upbringing of the younger generation are no longer perceived by the educational community and society as exclusive thing. The whole system of education has become innovative, and accordingly the professional activity of teachers, educators, employees of the psychological service of educational institutions, which includes a social worker / social pedagogue. Modern innovative educational technologies, as well as distance learning methods using ICT tools have become extremely relevant in the training and work of such professionals.

At the same time, in the conditions of a pandemic and wide introduction of quarantine measures there is a need to solve numerous problems connected with need of strengthening of educational influence on a way of life of children. This led to increased scientific and practical attention to the issue of training future teachers and social workers to introduce innovative educational services, implementation of educational, upbringing, socialization functions in order to ensure the health preservation of children of different ages in the process of their socialization in the education system, preparation for life in new conditions for humanity to combat the pandemic.

Analysis of recent research and publications shows the relevance of developing various aspects of training of future teachers, educators, social workers, in particular in the field of health preservation, for example: strategies for the formation of professional competencies of future specialists in preschool and primary education (Petukhova et al., 2020) use of modern techniques and technologies in the process of professional training of teachers (Sokol, 2014), use of the educational environment of the institution of higher education on the basis of information and communication technologies for preparation of future teachers for professional activity (Gurevich et al., 2011), meeting the needs of students in a healthy lifestyle (Bida, 2017; Donchenko et al., 2020; Griban et al., 2020; Ponomarev et al.; Rasskazova, 2014), the use of health preserving technologies in the training of primary school teachers (Karapuzova, 2015; Kiprych et al., 2020), educators of preschool education institutions, social pedagogues, social workers (Vasylenko, 2016), revealing the potential of the quest as an innovative method of training social professionals to form a healthy lifestyle for different categories of the population (Tarasenko, 2013; Yermolenko et al., 2016), expediency of development and implementation of computer programs for monitoring the physical condition of children of different ages by physical education teachers (Borysova et al., 2014; Kornosenko et al., 2021; Shkola et al., 2020; Zhamardiy et al., 2020), the use of purposeful training with the help of a video-technical forum-theater in the process of training students (Hakkarainen et al., 2011), specifics of professional training of social educators for the implementation of medical and social assistance to children in an inclusive education (Grigorenko et al., 2016), the content of training future social educators to use innovative technologies in professional activities (Pakhomova et al., 2020).

So, the issue of developing various aspects of the professional training of future teachers, educators, social workers, in particular in the health sector, has already found its theoretical justification and practical verification in the studies of domestic and foreign scientists. All these aspects are quite progressive and relevant. Therefore, in connection with the need to rethink and improve the process of professional training of future teachers and social workers, the introduction of innovative educational methods and technologies is required. At the heart of an innovative approach in distance learning, it became possible to use web quests and webinars. This issue is becoming urgent and requires a new scientific and practical assessment.

## MATERIALS AND METHODS

The aim of the study is to substantiate, develop and experimentally verify innovative teaching methods using ICT (web quest and webinar) in preparing future teachers, educators and social workers for the health preservation of children of different ages in the context of the introduction of quarantine measures in preschool and general secondary education institutions in connection with the coronavirus disease pandemic 2019–2020. Based on the overall purpose of the article, the main research objectives were:

1. Substantiation of expediency of application of innovative methods with use of ICT in training of future teachers and social workers in the context of the need to increase the attention of scientists and practitioners to the health preservation of the younger generation.
2. Highlighting the specifics of the use of such innovative methods as web-quest and webinar in the context of distance training of future teachers and social workers.
3. Creation of the author's classification of innovative methods and information and communication technologies of preparation of future specialists for work in the field of health preservation.
4. Proving the effectiveness of the developed innovative methods and ICT in the preparation of subjects of health preservation of children in the context of COVID-19 pandemic.

In our study we used *theoretical* (analysis of medical, psychological, pedagogical, socio-pedagogical literature, periodicals; method of theoretical generalization and systematization, generalization of research results), *empirical* (online testing to assess lifestyle in terms of health, determining the index of health attitudes; surveys, interviews to determine the level of readiness to form a healthy lifestyle for children of different ages; study of documentation on the organization of the educational process of the HEI; questionnaires of the teaching staff, etc.), *statistical* (mathematical methods of statistical processing of experimental data) methods for evaluating the effectiveness of innovative methods and information and communication technologies in the formation of future teachers and social workers as components of professional readiness for the implementation of activities for the formation of a healthy lifestyle of children of different ages in educational institutions.

The study materials were collected during March – June 2020 and January – February 2021 and included data on the level of professional preparation for health preservation activities with children of different ages in educational institutions. The experiment involved 124 students of 3 and 4 courses of study of the specialties «Preschool Education», «Primary Education (physical education)» and «Social Work») in Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv Regional Council and H. S. Skovoroda Kharkiv National Pedagogical University; 23 scientific and pedagogical and pedagogical workers; 3 employees of the psychological service of higher education institutions.

## RESULTS AND DISCUSSION

In the process of generalizing analysis of scientific works (Petukhova, 2017; Bida, 2017; Rasskazova, 2014; Karapuzova, 2017; Vasylenko, 2015; Borysova et al., 2014; Grigorenko, 2016; Pakhomova et al., 2020; Donchenko et al., 2020; Griban et al., 2020; Kiprych et al., 2020; Kornosenko et al., 2021; Shkola et al., 2020; Zhamardiy et al., 2020) and experience of professional training of future teachers, educators, social workers in Kharkiv Humanitarian Pedagogical Academy and H. S. Skovoroda Kharkiv National Pedagogical University, the following scientific facts were substantiated:

– training of future specialists for health preservation activities with children of different ages in modern conditions, in particular during the introduction of quarantine measures in educational institutions in connection with the coronavirus pandemic is a complex multifaceted process, which is carried out not only in traditional forms of education, but also involves the predominant use of distance education based on the latest information and communication technologies;

– training is based on the use of innovative methods of education, which should ensure the formation of students a set of competencies (informational, communicative, productive, moral and personal), necessary for future subjects of health preservation activities with children in the context of the spread of the coronavirus pandemic and the introduction of quarantine measures in preschool and general secondary education institutions.

*Information competence* combines the ability to master information and communication technologies and a set of knowledge in psychology, pedagogy, social pedagogy, culturology, sociology on health as a social phenomenon and a practical phenomenon of life, as well as skills and abilities to spread new ideas and practices of health preservation, formation of a healthy lifestyle in children of different ages, in particular the ability to process different types of information, skills of work with various information sources, the ability to quickly receive and process information, adapt it to the age of children and the goals and objectives of the educational process.

*Communicative competence* includes the ability to initiate and maintain communication, including virtual, with children of different ages in the introduction of quarantine measures in preschool and general secondary education; discuss complex topics, including issues related to the implementation of quarantine restrictions, loss of health and death of loved ones; to speak in an accessible way, to initiate a dialogue, creating a space of communication without restrictions.

*Productive competence* as the ability to effectively use educational innovations and ICT tools to achieve results in the formation of children's priorities of health behavior, motivate minors to positive and consistent compliance with hygiene restrictions; set personal goals for a healthy lifestyle and be responsible for achieving them, be an example for students.

*Moral and personal competence* is one of the most important components of professional competence of subjects of health preservation, which indicates the formation of a system of professional and personal characteristics necessary for work on the formation of knowledge of children of different ages, skills, skills for a healthy lifestyle and health preservation in the context of the spread of the coronavirus pandemic.

In the course of scientific research, we confirmed that a reliable result in the process of formation of these competencies can be achieved by using in the training of future teachers, educators, social workers innovative methods of education, based on the use of ICT technologies, primarily interactive and relevant during quarantine measures and the transition to online learning methods like webinars, web quests, etc. We define such methods as a set of traditional educational and the latest information and communication tools and technologies, used in the educational process in order to intensify the research and educational activities of students.

Let us consider the essence and specifics of methods of training future teachers and social workers to the formation of a healthy lifestyle for children, as well as reveal their practical meaning and effectiveness on the example of web-quests and webinars.

Such a method as a *webinar* is becoming a fundamentally necessary new method of training future professionals for health care activities with children in educational institutions, which requires the use of information and communication technologies.

The webinar is a «virtual» seminar organized with the help of Internet technologies, which preserves all the advantages of the traditional seminar in higher education institutions, even with the possibility of «behind-the-scenes» communication between «visitors» (in a separate chat), in addition to direct communication between listeners and the speaker (Bida, 2017). Pedagogical communication in the case of using a webinar always involves indirect contact through the use of information and communication technologies. Webinar is a format of on-line communication, in the process of which all its participants have the opportunity to obtain the necessary information, perform the tasks of the speaker, ask your own questions or answer the questions of others in the format of on-line communication.

All organizational aspects of webinar preparation, such as: creation of registration forms for listeners, instructions for setting up audio and video communication, ensuring uninterrupted broadcast of the webinar on the appropriate platform, etc. greatly facilitated by the use of modern ICT tools, such as *Google tools*, *Power-Point presentation tools* and many others.

It should be noted that today developers provide a wide range of modern and convenient information platforms and programs, with which you can optimize webinars, achieve high quality audio, video broadcast, display «desktop» of the speaker; provide a «chat» connection between the speaker and the listeners, the listeners among themselves; record a webinar that allows those who could not participate to view it online. In addition to the Zoom program, which is well known to Ukrainian teachers and has become wildly popular in educational circles since March 2020, there are other equally convenient and useful resources: from more «chamber-type» like MyOwnConference platform, which allows you to attract up to 20 participants and three presenters without additional software, to massive like Freeconferencecall.com platform for online meetings, video conferencing with the ability to connect up to 1000 participants and the resource of Microsoft Teams, which provides the ability to conduct online audio, video, web conferencing, and broadcast and record large-scale webinars for an audience of up to 10,000 participants. And both the first and the last, having the convenient interface, a wide set of tools for display of everything necessary during a webinar, simplified registration procedure, create an opportunity to show materials on the screen, presentations and comment on them, download files and use tools to highlight important parts of the report, etc. (Online platforms for events. Legal Gazette).

The use of modern ICT technologies gives the teacher the opportunity to make your webinar as saturated and bright as possible. With the help of the «Crowdcast» program, you can turn webinars into interactive events, providing ample opportunity to ask questions to speakers, conduct surveys of listeners. Similar opportunities are provided by the «Blackboard» application, designed for interactive learning, creating study groups and sharing knowledge. The «CenturyTech» platform also provides all the necessary tools for distance learning (Online platforms for events. Legal Gazette; Online learning platforms and tools).

The use of modern *media technologies* helps to increase the efficiency of webinars, which ensures timely notification of the potential audience about the date and time of the webinar; increases the possibility of preliminary test checks of all systems, ensures compliance with the regulations of the event; creates motivation for listeners even before the discussion of the questions; helps maintain student motivation from event to event.

For example, you can use Google Hangouts to hold video conferences and broadcast webinars to a wide audience with the ability to stream in parallel and then post on a YouTube channel. Opportunities to increase international mobility are created for teachers by the online platform ClickMeeting, which works without downloading an additional program, through a browser service, and has a chat that supports the translation

function in fifty-two languages, while providing the ability to conduct surveys directly during the event, etc. (Online platforms for events. Legal Gazette; Online learning platforms and tools).

The organization and holding of webinars may be preceded by information and emotional preparation of the audience by the method of *performance* (other names are «event communication», «performance communication», «script approach» and «event series formation»), when the pedagogical content is projected and finds its expression in special events and actions that provide artificial, purposeful creation of events, winning situations that promote certain ideas in the social environment (Pakhomova, 2020). Such an event can also be held on-line, and then distribute the recording of the event.

Built-in interface of many platforms and resources for visualization (icons, comics, flash cards, book trailers, memes, visual quotes) (Pakhomova, 2020), which can be applied during the webinar, are also able to interest students in the use of innovative technologies in health preservation activities with children of different ages in educational institutions.

The advantages of the webinar, as a method of training future professionals for health care activities with children in educational institutions, include: minimum material costs for the organization and conduct of this event; high accessibility for students; opportunity to reach a large audience; significant savings in time for the organization; ease of perception of information in a familiar environment, without extraneous activities; possibility of interactive interaction between the speaker and listeners, and also listeners among themselves.

In the process of preparing future teachers, educators and social workers for the formation of a healthy lifestyle in children, the topics of reports at webinars, in addition to health preservation activities with children in the context of the coronavirus pandemic in 2019-2020, may be various problems of society, for instance: relations between family members, problems of representatives of different nations, cultures, problems of HIV-infected people, people with disabilities, issues related to healthy lifestyles, prevention of drug addiction, alcoholism, etc. In general, the webinar as a method of preparing future teachers, educators, social workers to form a healthy lifestyle in children can solve informative and motivating tasks, allows students to provide the necessary information, enrich their knowledge of how to stay healthy, to get acquainted with the risk and protection factors, the causes and results of the use of harmful substances, to encourage the development of their own algorithm of life, the formation of behavior that would help maintain health in modern conditions, etc.

An equally important innovative method of preparing future teachers, educators, social workers, in particular for health preservation activities with children in educational institutions, is a *web-quest* as an independent search activity aimed at achieving the goal by following the Internet route, consistently moving from one stage to the next (Yermolenko, 2016; Dodge; 2001).

The methodological basis of the web-quest is active learning, which creates the preconditions for the transformation of new information received by students into new knowledge that they can use.

According to Sokol (2014), there may be two options for understanding web quests:

– first, a web-quest as a «project method», which traces the main stages of project activities: all participants are grouped into several groups (research, design, literature, etc.); each group receives its own task, as well as a set of web resources with which they will work; each group must create a new web product (website, blog, virtual dictionary, etc.). The main focus in this type of web-quest is to solve a problem / task by analyzing web resources and creating a new web product;

– secondly, a web-quest as a «competition», when the presenter creates an interesting plot, and students (individually or collectively, according to the plot) pass the task (search for information, disclosure of secrets, etc.), all tasks are performed to obtain a common goals like game goal (guess the password, find treasures, etc.) or educational goal (gain new knowledge, skills). The main emphasis in this type of web-quest is the search for answers through the analysis of Internet sources.

The main elements to focus on when organizing a web-quest in the process of preparing future teachers, educators, social workers to form a healthy lifestyle for children are: introduction, in which the terms of the work must be indicated and the initial situation or task is provided; links to network resources, which contains the necessary material for the web-quest: e-mail addresses, thematic forums about health, books or methodical manuals from library funds, covering the issue of forming a healthy lifestyle for people of different ages, etc.; step-by-step description of the task execution process with an explanation of the principles of information processing, additional accompanying questions, causal schemes, tables, diagrams, graphs, etc.; conclusions, which should contain an example of registration of the results of the task or their presentation, ways of further independent work on this topic and the field of practical application of the results and skills.

Web quest is implemented in stages (initial, main, final). At the initial stage students get acquainted with the tasks and basic information on health, healthy lifestyle, theoretical terms, statistical data on the level of health of the population of Ukraine and the population of foreign countries, the regulatory framework governing the preservation and strengthening of the population's health in Ukraine and abroad, receive information on the spread of coronavirus disease in Ukraine and the world, experience in combating pandemics, etc. During the implementation of the main stage of the participants carry out an independent search for information about health, its components, components of a healthy lifestyle, the impact of various factors on human health, the

impact of human lifestyle on the level of human health, develop guidelines for maintaining health in the context of coronavirus disease and infographics on the spread of the pandemic in Ukraine and the world, etc. At the final stage, students under the guidance of a teacher work on formulating conclusions about the need to preserve and strengthen their own health and health of others, adherence to the norms of a healthy lifestyle, determine the negative impact of bad habits on the human body, distribute developments (booklets, memos, infographics, etc.) in social networks, popular among educators and students, in the educational microenvironment of children. The main criteria for the quality of the web-quest are its originality, logic, integrity, subordination to a particular plot, lesson topic.

We believe that the web-quest has the potential not only to form in students theoretical knowledge about the formation of a healthy lifestyle for children in today's global health challenges, but also to develop intelligence, erudition, creative abilities of the future specialist for further creative and informal activities in the field of health preservation of children of different ages in preschool and general secondary education. The web-quest acquires special appeal for young people in the presence of spontaneity, nonlinearity of a plot, freedom of choice.

Summarizing the experience of research activities in higher education institutions, we note that the proposed methods of training higher education can be classified according to the following characteristics:

- by composition and quantity of participants (individual web-quests are designed to perform an individual task; group web-quests performed by a group of higher education);
- by level of creativity (reproductive - webinars of theoretical content; creative – webinars like master classes, web-quests of search of scientific content);
- by form of conduct (real, virtual, combined);
- by type of activity (passive, active);
- by degree of complexity (simple; complex).

In conclusion, we emphasize that various versions of web-quests, as well as other innovative teaching methods, especially webinars, can be effectively implemented in the training of future teachers, educators, social workers to health preservation activities with children in educational institutions.

Focusing on this typology, we have developed criteria (motivational, cognitive, behavioral and action), indicators and tools for assessing the effectiveness of innovative methods and information and communication technologies in the preparation of future teachers and social workers for the formation of a healthy lifestyle of children of different ages (Tab. 1).

**Table 1: Criteria, indicators and methods for assessing the level of preparation of future teachers for the formation of a healthy lifestyle of children of different ages**

Criterion	Parameters	Diagnostic techniques
Cognitive	Knowledge of a healthy lifestyle (content, essence, factors, components, etc.) and knowledge of the peculiarities of learning a healthy lifestyle (forms, methods, age specifics, etc.).	Online questionnaire.
Motivational	Understanding the importance of forming a healthy lifestyle in children and the desire to teach a healthy lifestyle.	Online questionnaire.
Behavioral and action	Pedagogical skills (skills and abilities to form a healthy lifestyle in children) and the ability to apply innovative methods of teaching a healthy lifestyle.	Observation of educational practice in secondary schools.

To test the effectiveness of innovative methods and information and communication technologies in preparing future teachers, educators, social workers for their future activities in a pandemic, the results were analyzed according to certain criteria and indicators.

The analysis of the results of research experimental work showed a positive trend in the levels of formation of the corresponding readiness of teachers and social workers. Table 2 presents quantitative indicators before and after the pedagogical experiment, where H is a high level, M is a medium level, and L is a low level.

**Table 2: Comparison of the levels of readiness of future teachers, educators, social workers for children's health preservation activities before and after the experiment (given in %)**

Levels	Criteria					
	Motivational		Cognitive		Behavioral and action	
	Before	After	Before	After	Before	After
H	6.3	27.5	6.8	27.8	6.3	28.0
M	43.0	52.5	37.0	41.2	42.5	50.5
L	50.7	20.0	56.2	31.0	51.2	21.5

In this way the analysis of the results obtained indicates certain levels of students in teaching using ICT technologies (respectively, according to the motivational criterion: from 50.7% at the beginning of the experiment and 20.0% at the end - a low level, 43.0% and 52.5% - medium, 63% and 23.5% - high). The application of the Kolmogorov-Smirnov criterion ( $p \leq 0.05$ ) revealed differences in the distributions of students according to the levels of formation of their practical knowledge, abilities and skills according to the identified criteria. The high efficiency of the implemented teaching methods using ICT technologies in the conditions of a distance period was attested.

As a result of the professional training of future teachers, educators and social workers, a pronounced interest in the educational process with a clearly formed motivation to ensure the health and safety of pupils has become a dominant characteristic. In the process of a formative experiment for the formation and functioning of health preservation of children of different ages in the future professional activity in the learning process, the developed teaching methods with ICT technologies provided social and pedagogical support, physical and psychological training in order to adapt to the conditions of the educational process of an educational institution in a pandemic. Such results made it possible to train students in a stressful situation (for example, Covid-19) and contributed to the formation of students' readiness to counter the influence of information challenges and threats. The main activities for the training of future teachers, educators and social workers were: functioning of a special library at the departments of higher educational institutions; ensuring the activity of students of the use of situational and dialogical teaching methods when teaching sports-pedagogical and humanitarian academic disciplines; using a script method; using discussions, quests and webinars.

Thus, the results of the experiment indicate positive changes, which is confirmed by the qualitative dynamics of the levels of readiness of future teachers, educators, social workers to preserve the health of children during a pandemic, and their analysis gives grounds to assert the effectiveness of the proposed innovative methods and technologies of ICT.

## CONCLUSION

In general, a scientific study of the use of web-quests and webinars as methods of training future teachers, educators and social workers to the formation of a healthy lifestyle of children of different ages allows us to note their advantages (minimal material costs for the organization and conduct; high accessibility for students; significant savings in time for the organization; ease of perception of information; the possibility of distant interaction) and the prospects of using future specialists in the training of higher education institutions.

Each of these methods has its own specifics of implementation, but common is their educational focus: formation of cognitive (formation of theoretical knowledge about health, healthy lifestyle, its components), motivational (formation of the desire to follow a healthy lifestyle as a necessary and determining component of health) and behavioral (formation of appropriate health behavior in applicants) components of professional training of future teachers, educators and social workers to form a healthy lifestyle for children of different ages. The study does not claim to be a comprehensive solution to the problem of finding and using information methods of training future teachers, educators and social workers to the formation of a healthy lifestyle of children of different ages and requires experimental testing of the effectiveness of each of the represented methods.

## REFERENCES

1. Petukhova, L. Ye. (2017). Strategies for the formation of professional competencies in the field of pre-school and cob education. Collection of articles on the materials of the All-Ukrainian scientific and practical online conference «Training of future teachers in the context of standardization of primary education». Berdyansk. pp. 20–25. [in Ukrainian].
2. Sokol, I. M. (2014). Classification of quests. *Pedagogy of formation of creative personality in higher and secondary schools*. 36, pp. 369–374. [in Ukrainian].
3. Gurevich, R. , Gordlychuk, G., Konoshevskiy, L. , Konoshevskiy, O. & Shestopal, O. (2011). Educational environment for training future teachers by means of ICT. Vinitnya. 158 p. [in Ukrainian].
4. Bida, O. A. (2017). Meeting the needs of students in a healthy lifestyle. Proceedings of the All-Ukrainian Scientific and Practical online conference: Collection of articles on the materials of the All-Ukrainian scientific and practical online conference «Training of future teachers in the context of standardization of primary education». Berdyansk. pp. 196-198. [in Ukrainian].
5. Working with children and youth in inclusive and integrated educational environments (compiler GF Ponomarev and others). Kharkiv. 221 p. [in Ukrainian].
6. Rasskazova, O. I. (2014). Theory and practice of social development of students in an inclusive education (Abstract Doctoral dissertation). Lugansk. 44 p.[in Ukrainian].
7. Karapuzova, N. D. (2015). Health saving technologies in the training of future primary school teachers. *Pedagogics, psychology, medical-biological problems of physical training and sports*. 19(1), pp. 39-45.



8. Vasylenko, O. M. (2016). Preparation of future social teachers for the use of health technologies in working with preschoolers (Abstract Ph.D. thesis). Slovyansk. 20 p. [in Ukrainian].
9. Tarasenko, N. V. (2013). Formation of a healthy way of life of adolescents by means of social street work (Ph.D. thesis). Sloviansk. 164 p. [in Ukrainian].
10. Yermolenko, S. P. & Tarasenko, N. V. (2016). Quest as an innovative method of formation of healthy lifestyle of teenagers. *Pedagogical science. Physical education and sport*. 136, pp. 76-78. [in Ukrainian].
11. Borysova, Yu. Yu. & Vlasyuk, E. A. (2014). Computer technology as a pedagogical innovation in physical education of schoolchildren. *Pedagogics, psychology, medical-biological problems of physical training and sports*. 18 (11), pp. 8-12.
12. Hakkarainen, P. & Vapalahti, K. (2011). Meaningful Learning through Video-Supported Forum-Theater. *International Journal of Teaching and Learning in Higher Education*. 23 (3), pp. 314-328.
13. Grigorenko, V. L., Rasskazova, O. I. & Rasskazova, P. I. (2016). Professional training of social educators for the implementation of medical and social assistance to children in inclusive education. Bulletin of Luhansk National University Taras Shevchenko name. *Pedagogical sciences*. 6(303), pp. 6–17. [in Ukrainian].
14. Pakhomova, L. V. (2020). Preparation of future social teachers for the use of innovative technologies in professional activity (Doctoral dissertation). Kharkiv. [in Ukrainian].
15. Online platforms for events. Legal Gazette. URL: <https://yur-gazeta.com/golovna/onlayn-platformi-dlya-provedennya-zahodiv.html> (Last accessed: 24.01.2021).
16. Online learning platforms and tools. Online Law School URL: <http://aphd.ua/platformy-ta-instrumenty-dlia-navchannia-onlain/> (Last accessed: 24.01.2021).
17. Dodge B. J. FOCUS : Five rules for writing a great Webquest. *Learning & Leading with Technology*, 2001. 28 (8), pp. 6-9.
18. Donchenko, V. I., Zhamardiy, V. O., Shkola, O. M., Kabatska, O. V. & Fomenko, V. H. (2020). Health-saving Competencies in Physical Education of Students. *Wiadomości Lekarskie*. Tom LXXIII, nr 1, pp. 145–150.
19. Griban, G., Prontenko, K., Zhamardiy, V., Tkachenko, P., Kruk, M., Kostyuk, Y. & Zhukovskyi, Y. (2018). Professional Stages of a Physical Education Teacher as Determined Using Fitness Technologies. *Journal of Physical Education and Sport*. 18 (2), pp. 565–569.
20. Kipyrych, S., Donets, O., Kornosenko, O., Khomenko, P., Zhamardiy, V., Shkola, O., Binetskyi, D., Kasich, N., Serhiienko, V. & Bloschynskyi, I. (2020). Evaluation of Interconnection of Special Working Capacity and Response of Single Combat Sportsmen’s Cardiorespiratory System at the Stage of Direct Training for Competition. *International Journal of Applied Exercise Physiology*. 9 (7), pp. 115–123.
21. Kornosenko O., Denysovets T., Danysko O., Synytsya S., Voloshko L., Zhamardiy V., Donchenko, V., Shkola, O., Prystynskyi, V. & Otravenko, O. (2020). System of Preparation of Future Fitness Coaches’ for Health-Improving Activity in the Conditions of Rehabilitation Establishments. *International Journal of Applied Exercise Physiology*. 9 (8), pp. 33–41.
22. Kornosenko, O., Khomenko, P., Taranenko, I., Zhamardiy, V., Shkola, O., Tolchieva, H., Saienko, V., Batiieva, N. & Kyzim, P. (2021). Professional competencies as a component of professional training of a fitness trainer-teacher in higher education institutions. *Journal for Educators, Teachers and Trainers*. Vol. 12 (1), pp. 72–81.
23. Shkola, O., Zhamardiy, V., Saienko, V., Tolchieva, H. & Poluliashchenko, I. (2020). The Structure Model of Methodical System Usage Fitness-Technology in Student Physical Education. *International Journal of Applied Exercise Physiology*. 9 (10), pp. 89–96.
24. Zhamardiy, V., Shkola, O., Tolchieva, H. & Saienko, V. (2020). Fitness Technologies in the System of Physical Qualities Development by Young Students. *Journal of Physical Education and Sport*. Vol 20 (1), Art 19, pp. 142–149.
25. Zhamardiy, V., Shkola, O., Otravenko, O., Momot, O., Andrieieva M., Andrieieva O., Mudryk, V., Slusarev, V., Broslavska, H. & Putiatina, G. (2020). Dynamics of the Functional State of Students in the Process of Powerlifting in Higher Education. *International Journal of Applied Exercise Physiology*. 9 (10), pp. 24–35.