

## PROFESSIONAL TRAINING OF THE FUTURE TEACHERS FOR THE USE OF HEALTH-SAVING TECHNOLOGIES IN THE EDUCATIONAL PROCESS



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**Abstract.** The article states that one of the main directions of saving and strengthening health of the participants of the educational process is introduction of health-saving technologies. Health-saving technologies combine all the activities of the education institution concerning preservation and strengthening of students' health through the creation of favorable conditions for learning, optimal organization of the educational process, a fully-fledged and well-organized motor regime.

Taking into account the relevance of this problem, the task of the study has been determined: to clarify the essence of the concept of "health-saving technologies"; to classify health-saving technologies in relation to different healthcare approaches and various methods and forms of work; to determine the structure of health-saving technologies and peculiarities of their implementation in the educational process.

The analysis of recent research and publications on the problem of development and implementation of health-saving technologies has been conducted, as a result of which the essence of the concept of "health-saving technologies" is specified.

Considering the relevance of the study and the tasks set forth, the purpose of the article is defined, namely: to reveal the peculiarities of the future teachers' professional training for health-saving activities using health-saving technologies.

In accordance with different approaches to healthcare and various methods and forms of work, several groups of health-saving technologies have been identified: medical-hygienic; physical culture and health; ecological-health-saving; life safety technologies; health-saving educational technologies; preventive-protective; compensatory-neutralizing; stimulating; information and training technologies.

Taking into account the signs and features, the types of health-saving educational technologies have been identified: health-saving; health care; technologies of teaching health.

It is noted that implementation of health-saving technologies in the context of the personality-developing paradigm as a condition for actualization of free and creative self-expression of the individual is ensured by the use of interactive methods of teaching, dialogue, introduction of modern forms of learning (trainings, games, projects, disputes).

The means of realization of health-saving technologies are described through the outlined components: physical, social, mental and spiritual.

It is concluded that methodological training of the future teachers for the use of health-saving technologies is a complex, targeted, dynamic system, which is a set of interrelated elements that ensure formation of the future teachers' readiness to perform health-saving professional tasks. The further development of theoretical and methodological foundations of the future teachers' professional training for the use of health-saving technologies at various stages of the educational process is recommended.

**Keywords:** *health; health-saving technologies; future teachers; educational process; professional training.*

**The general definition of the issue and its connection with important scientific or practical tasks.**

Today, the problem of maintaining health in the educational process is particularly relevant and characterized by rethinking of the principles of health creation, the change of priorities from the analysis of attributes of the disease and implementation of mainly technocratic tasks to the study of the phenomenon of man and his health, taking into account the spiritual aspects, the interaction of man and nature, etc.

The National doctrine of education development in Ukraine in the 21st century states that the priority objective of the education system is to educate a person with a responsible attitude towards his/her own health and the health of others. At this should be aimed "health-saving technologies", which combine all the directions of the education institution's activities in preserving and strengthening of students' health through the creation of favorable conditions for learning (absence of stressful situations, adequacy of requirements, methods of teaching and upbringing); optimal organization of the educational process (according to age, gender, individual characteristics and hygienic norms); a fully-fledged and rationally organized motor regime, etc.

Considering the relevance of the problem, the following **research tasks** have been identified: 1. To clarify the essence of the concept of "health-saving technologies". 2. To classify health-saving technologies in relation to different healthcare approaches and various methods and forms of work. 3. To determine the structure of health-saving technologies and peculiarities of their implementation in the educational process.

**Analysis of basic research and publications.** Modern scholars emphasize that it is impossible to stop the tendency to decreasing the level of health of the population without changing the way people live. It is known that the most powerful factor of health is the way of life of a person, which depends, first of all, on the level of general culture of the personality and culture of health as its component. This fact is very important for the healthcare educational practice, since it proves convincingly that violations in the state of health are caused, first of all, by human behavior, his way of life, and, consequently, the solution of the problem of both individual health and health of the population as a whole from the medical area is increasingly moving into the educational area [5, p. 18]. A characteristic feature of social consciousness is the low level of awareness and competence in health matters, and as a consequence, the lack of readiness of the individual to assume responsibility for his/her health, the inability to cope with the slightest malaise. At the state level, the average person is seen as an object of the implementation of medical technologies, and not as a subject that is capable of creating his/her own health and being responsible for it. From the point of view of health practice, the concept of somebody's own responsibility for health is of key importance, since health is an individual activity [2, p. 37].

On the basis of psychological-pedagogical research it has been found out that a number of different factors hindered the formation of a healthy lifestyle, among which are: the phenomenon of "unrealistic optimism" (psychological factors, including lack of personal experience of illness, unwarranted belief that if there is no disease at the moment, then it will not arise in the future; groundless certainty that in the case of a disease it will be easy to handle with); inertia and non-obviousness of feedback (the result of work on somebody's own health does not immediately become noticeable, as well as the effect of harmful factors); lack of necessary knowledge about health or inability or unwillingness to apply them practically (knowledge of the general principles of a healthy lifestyle does not guarantee health promotion, and the degree of content-quality perfection of the textbooks, programme requirements and methodological recommendations is a necessary, but insufficient condition to provide a healthy lifestyle; the science of health, as well as physical culture, should be considered as a creative-practical activity aimed at active, conscious and purposeful use of knowledge, development of ability to apply them); the level of general culture of the person; social pressure (the role of reference groups in teenagers as a factor of their involvement in tobacco use, the use of alcohol or drugs); predisposition to imitation (example of

parents, behavior of other adults or peers and copying behavior, which is approved by the environment); lack of satisfaction with life (loss of meaning of life, spiritual discomfort, lack of opportunities for self-realization) [1], [3].

B. Dolynskiy emphasizes on the modern decline of the health prestige, which is primarily due to the lack of teachers' awareness of the problem of health and its peculiarities, as well as the ways of its preservation and strengthening. In most education institutions there are no necessary conditions that would promote awareness of the importance of individual health among students, lack of developed mechanisms for developing a responsible attitude to health as an important professional value and a prerequisite for achieving professionalism [6, p. 5].

Consequently, the latest findings of researchers have shifted the emphasis and stimulated the development of new projects, approaches and models of health promotion, which are being successfully implemented in Ukraine. An analysis of the studies of Ukrainian scientists on health problems (N. Bashavets, N. Bielikova, T. Boichenko, Yu. Boichuk, H. Voskoboinikova, M. Honcharenko, V. Yefimova, V. Orzhekhovska, and others), testifies to significant developments and creative achievements in the field of healthcare, formation of a health culture, value attitude to health, valeological education, training of specialists for health activities, which is relevant in the context of our research.

Modern scholars devote considerable attention to the implementation of health-saving technologies in education: H. Voskoboinikova, O. Mikhieienko, N. Terentieva, Yu. Shafran, and others.

Thus, the authors define health-saving technologies as a set of means, tools, methods, aimed at formation, restoration, improvement of health, increase of its level, increase of functional potential and reserves of protective forces of the human body using knowledge and information that reveal the essence and mechanism of their health-saving effect, organizational and methodological features of application [9, p. 210].

V. Vlasov proves the importance of developing pedagogical technologies for the preservation of the health of student youth as a set of well-organized actions of the teacher

and students in the organization of the educational process, which guarantees the effective implementation of a clearly defined educational goal and has such features as: conceptual, systematic, diagnostic character of definition of the goals and results, algorithmicity, controllability, efficiency, reproducibility, visualization and cost-effectiveness [4, p. 8].

Health-saving technologies operate on the principle of a vitalist concept of environmental compatibility, according to which the restoration and strengthening of health occurs by eliminating adaptive-compensatory complexes, which reduce the reserves of the body's health and worsen the quality of human life [7, p. 217].

**The purpose of the article** is to determine the peculiarities of the future teachers' professional training for health-saving activities using health-saving technologies.

**Presentation of the main research material.** Health-saving technologies are the leading means of health preservation in the educational process, which ensures maintaining and strengthening of the health of its participants. The essence of health-saving technologies appears in the comprehensive assessment of the conditions of education and training, which allow maintaining the current state of students, forming a higher level of their health, healthy lifestyle skills, monitoring of individual development indicators, predicting possible changes in health, and conducting appropriate psychological-pedagogical, corrective, rehabilitation measures in order to ensure the success of educational activity and its minimum physiological "value".

The concept of "health-saving technologies" includes the qualitative characteristics of any educational technology, which indicates how much this technology or pedagogical system implements the task of preserving the health of subjects of learning [8, p. 19]. On the other hand, the concept of "health saving" defines the direction of the actions and tasks that are solved in the process of achieving the main goal of the educational system and, thus, fixes the corresponding priority in the principles of pedagogical activity. If caring for students' health is one of the priorities of the entire

pedagogical team and is carried out on a professional basis, one can talk about the implementation in the education institution of health-saving technologies, and the result of their application is to protect the health of students and teachers from the influence of negative factors.

Among the health-saving technologies that are implemented in the education system, it is possible to identify several groups that use a different approach to health care, and, accordingly, a variety of methods and forms of work.

*Medical-hygienic technologies.* First and foremost, they include control and assistance in ensuring proper hygienic conditions, in accordance with the standards, as well as everything related to the medical office (vaccination organization, compulsory medical examination, counseling and emergency care, sanitary-hygienic measures of education of pupils, students and pedagogical staff, observing the dynamics of their health, etc.). Establishment in the education institution of the dental, physiotherapy and other offices, conducting exercises on medical physical education, organization of phyto-cafes – are also the elements of medical-hygienic technology.

*Physical culture and health technologies* are aimed at physical development of pupils and students: hardening of the body, training strength, speed, flexibility and other qualities that distinguish a healthy person from physically weak. It is realized at physical education classes and in the work of sports sections.

*Ecological-health-saving technologies* are aimed at creating environment-friendly, environmentally optimal conditions of life and activity, harmonious relationships with nature. This is an arrangement of the school territory, green plants in classes, recreation, a living corner, and participation in environmental events.

*Life safety technologies* are implemented by specialists in health care, emergency protection, architects, builders, etc., as healthcare is considered as a private case of the main task – life preservation, requirements and recommendations of these specialists are subject to obligatory registration and integration into the overall system of health-saving technologies.

*Health-saving educational technologies* should be recognized as the most significant

of all listed by their degree of influence on the health of participants in the educational process. Their main distinguishing feature is not the place where they are implemented, but the use of psychological-pedagogical techniques, methods, technologies, approaches to solving health problems. Their realization reaches the goal in full only if all the pedagogical staff of the education institution are aware of their responsibility for maintaining the health of all the participants of the educational process and obtaining the necessary professional training for work in this direction.

*Preventive-protective.* This group includes techniques, methods, technologies aimed at protecting people from adverse health effects. It is maintenance of cleanliness, carrying out of vaccinations for the purpose of prevention of infections; limiting the maximum level of training load to eliminate fatigue, etc.

*Compensatory-neutralizing.* Their main purpose is to supplement the lack of necessary things for a full-fledged life of the organism, neutralization of negative influence in cases where it is impossible to completely protect a person from them. These are physical training minutes and physical training breaks at classes that allow to some extent to neutralize the adverse effects of static activities, insufficiency of physical activity, emotional disorientation and rest moments, which allow neutralizing partially stressful influences and psycho-emotional loading.

*Stimulating* – technologies that allow intensifying the personal forces of the organism, using its resources to get out of an unwanted state. This is temperature hardening, physical activity, etc.

*Information and training.* Provide pupils and students with the necessary level of literacy for the effective health care; help them cultivate a health culture.

The priority of taking care of the health of participants in the educational process becomes a system-building factor and the principle of these technologies, in the frames of which it is possible to allocate such obligatory conditions as: scientific-methodological support of work, selection and training of the pedagogical personnel, and sufficient financial support.

Technologies are closely related, therefore, the main task of their implementation is organization of the educational process, in which quality education, development and

upbringing of students are accompanied by the principle of non-impairment of health of all the participants of the educational process.

The goal of health-saving educational technologies is to ensure the preservation of health during the period of study in the education institutions, to form the necessary knowledge, skills and habits of a healthy lifestyle, to teach to use the acquired knowledge in everyday life. The main mission of the future teachers is to care for the students' health, which should take place on a professional basis.

Health-saving educational technology – is such organization of the educational process, where quality education, development and upbringing are not accompanied by harm to health. This is a kind of "safety certificate" for health, a set of principles, tools and methods that complement traditional technologies of education, upbringing, and development [8, c. 27].

The main distinctive feature of health-saving educational technologies is reasonable care of health as a compulsory condition of the educational process, which determines the consistent formation in an education institution of health-preserving educational space, in which all the participants in the educational process agree on solving tasks related to caring for health and assume responsibility for the achieved results. By many other features, they occupy a common field with humanistic pedagogy, pedagogy of cooperation, personality oriented pedagogy and other similar educational systems.

There are several types of health-saving educational technologies: *health-saving* – technologies that create safe conditions for stay, study and work in an education institution, and those that solve the problem of rational organization of the educational process (taking into account age, gender, individual characteristics and hygienic norms), correspondence of educational and physical loadings to the possibilities of pupils and students; *health care* – technologies aimed at solving the problems of strengthening physical health of students, increasing the potential (resources) of health: physical training, physiotherapy, aromatherapy, hardening, gymnastics, massage, phyto-therapy, musical therapy; *technologies of teaching health* – hygienic education, life skills development (emotion management, conflict resolution, etc.), prevention of injuries and substance

abuse, sexual education; formation of a culture of health – formation of personal qualities that contribute to the preservation and strengthening of health, formation of ideas about health as a value, strengthening motivation to lead a healthy lifestyle, increasing responsibility for personal health and the health of others. These technologies are implemented through the inclusion of relevant topics in the subjects of the general educational cycle, introduction of new subjects in the curriculum, organization of optional education and additional education.

In the context of the competence and developing paradigm, health-saving technologies are aimed at creating a healthy and life-creative personality. Their implementation is ensured by humanistic, personality oriented and gender approaches that promote self-determination in the field of healthy lifestyle and safe behavior, interpersonal relationships, and the culture of health in general; development of the individuality and harmonious integrity of the personality, observance of equal rights and opportunities of both sexes, youth with special needs, acquisition of socially significant patterns of behavior and resistance to social risks, formation of a conscious attitude to his/her own health.

The peculiarity of organization of training on the basis of health-saving technologies is organization of the health maintaining function of education institutions, which involves creation of an environmentally safe, creative-developing, emotionally favorable environment in conditions of subject-subject interaction of all the participants of the educational process. Implementation of health-saving technologies in the educational process involves transformation of the educational space into a kind of "creative living laboratory" in which the student youth master the foundations of valeological culture.

Methodological training of the future teachers has its own specificity, related to the acquisition of skills of health-saving education. Implementation of health-saving technologies in the context of a personality development paradigm as a condition for the actualization of free and creative self-expression of the individual is ensured by the use of interactive teaching methods, dialogue, etc., by introduction of modern forms of learning (trainings, games, projects, disputes). An interactive approach to the acquisition of knowledge on the basics of health suggests

that most students learn the content of training by solving problem situations, performing didactic exercises in conditions of collective-group, discussion and situational learning, games, modeling of life situations and choosing a solution, etc. The interaction of a student with a teacher or a student with a student in the process of group interaction creates a spirit of partnership and it is aimed at activating the position of subjectivity and formation of health-saving competencies – socially recognized level of knowledge, skills, and attitudes that promote health in all branches of human life.

Properly compiled the schedule of classes, using at classes and during extracurricular time the techniques of motor activity, stress neutralization, organization of hot meals, connection of educational material with life, transferring of valeological and environmental knowledge to the future teachers – this is the daily valeological activity of the education institution. The effectiveness of the positive impact on the health of various health-saving measures is determined not by the chaos of the methods, but by systemic work in all directions. The process of forming of a conscious attitude towards somebody's own health requires a mandatory combination of information and motivational components from the practical activities of students, which will facilitate the acquisition of their necessary health-saving habits and skills.

The activity of the future teacher should be aimed at forming a stable position in students, which involves the definition of the value of health, a sense of responsibility for maintaining and strengthening of their own health, deepening knowledge and skills associated with all components of health (physical, social, mental, spiritual). The attitude of students to their health is the basis of health preservation, because through motivation for this attitude it is possible to carry out value-oriented activity of students to preserve and strengthen their own health.

Implementation of the *physical component* is carried out through: morning exercises, gymnastics, moving games, physical culture breaks (recreational motor activity); control and self-control over the correct posture during classes; the use of exercises to prevent scoliosis and hypodynamia; breathing exercises; gymnastics for eyes, learning how to use the national remedies for the improvement and prevention of diseases;

knowledge of your personal health; observance of the day, food, rest regime. Implementation of the *social component* is carried out through: the use of means that promote interest in the educational material; creation of conditions for self-expression of the personality; stimulating the argumentation of answers; encouragement of the initiative; development of intuition, creative imagination; focus on speech quality; the use at lessons of such means as: differentiated learning, problem learning, dialogue learning, reflexive learning, collective mental activity; use of interdisciplinary connections; use of material from other spheres of life; use of didactic material; provision of various levels of homework; initiation of various activities; implementation of mutual control; learning to observe the rules of communication; learning ability to avoid conflict situations; formation of humane attitude towards people with disabilities. The implementation of the *mental component* is carried out through: creating a favorable psychological climate in the classroom; creating success situations; adherence to positive thinking; demonstration of non-violent means of training; learning to manage own emotions and feelings; learning confidence in own abilities; self-assessment, self-control; the ability to analyze the effects of harmful habits, etc.; learning to refuse suggestions that are harmful to health; learning ability to make decisions independently in different situations. Implementation of the *spiritual component* is carried out through: teaching a benevolent attitude to others; learning responsibility for own actions and deeds; learning to express their views on a healthy lifestyle; learning the ability to see and perceive beauty in life, nature, art, literature; learning to distinguish between evil and good, spiritual and non-spiritual, to overcome the manifestations of evil in oneself; learning awareness of life values.

Implementation of health-saving technologies requires from the future teacher, firstly, preventing students' overloading, determining the optimal amount of educational information and how to provide it, taking into account the intellectual and physiological characteristics of students, the individual language characteristics of each student. The future teacher should try to plan such types of work that contribute to reducing

fatigue. Health-saving technologies include: change of activities, alternation of intellectual, emotional, motor activity; group and pair forms of work that contribute to increased motor activity and teach the ability to respect the opinions of others, express their own thoughts, rules of communication; games and gaming situations, non-standard lessons, and integrated lessons. Students have a developed

intuitive ability to feel the emotional state of the teacher, so at the lessons there should be created a climate of goodwill, positive emotional adjustment. It should be remembered that the psychological state and psychological health of students also affects physical health, therefore, it is necessary to work on the prevention of stress.

### Conclusions and perspectives of further research in this area.

Professional training of the future teachers for the preservation and strengthening of health of the participants of the educational process has its own specificity associated with the acquisition of skills in recreational activities. Among the main directions of health care is implementation of health-saving technologies.

Methodological training of the future teachers for the use of health-saving technologies is a complex, targeted, dynamic system, which is a set of interrelated elements that ensure formation of the future teachers' readiness to perform health-saving professional tasks.

We consider the prospects for further research in the study of theoretical-methodological foundations of professional training of the future teachers for the use of health-saving technologies in the system of post-graduate education and their professional self-improvement throughout their lives in order to ensure the competitiveness of a specialist in the modern conditions of a market economy.

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