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FORMATION OF HEALTH-SAVING COMPETENCE IN A GENERAL SECONDARY EDUCATION INSTITUTION

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The paper reveals the problem of forming health-saving and health-developing competencies in the process of implementing a health-saving educational environment through the use of advanced health-saving technologies in a modern general secondary education institution. The methodology of the study was based on the works of I. Anokhin, K. Huz, O. Vashchenko, V. Ilchenko, V. Maslov, I. Pidlasyi, L. Rybalko, N. Tamarska, A. Khutorsky, A. Cymbalaru. Scientists and educators have focused their studies on the formation of students' health-saving competence and the directions of health-saving activities proposed by teachers in educational institutions and the construction of a health-saving environment.

The primary sources of the definition of health-developing competence are analysed, and our interpretation of the concept of "health-saving competence" is formed. In our study, we define health-saving competence as a dynamic combined ability of a student to apply health-saving knowledge, skills, attitudes, values, ways of thinking, views, and personal health-saving life experience acquired during the educational process; the ability to implement their own health-saving behaviour to their own health-saving lifestyle, which in turn preserves and develops their own health and the health of others, thus enhancing the quality of one's own life and the life of society as a whole.

The practical experience of applying health-saving technologies that directly ensure the formation of health-saving and health-developing competencies is revealed. It is clear that the formation of health-saving and health-developing competencies largely depends on the organisation of physical education and health-saving activities in the educational institution. It is emphasized that the formation of health-preserving and health-developing competences provides a physical, mental, social and spiritual-moral component, the integrity of the approach in the work system for acquiring competences for leading a healthy lifestyle, preserving and strengthening the state of health and environmental education of students, compliance with the principle of continuity, systematicity, consistency in the approach to the formation of relevant competencies and is not an alternative for other pedagogical systems, technologies, methodological approaches. It is therefore essential that in the educational process of a general education institution, the formation of health-saving and health-developing competencies should become a priority.

Key words: *health-saving competence, health-developing competence, students' health, health-saving educational environment, health-saving technologies.*

Дудко С. Г. Формування здоров'язбережувальної компетентності в закладі загальної середньої освіти

У статті розкрита проблема формування здоров'язбережувальної та здоров'ярозвивальної компетентностей у процесі впровадження здоров'язбережувального освітнього середовища шляхом використання передових здоров'язбережувальних технологій у сучасному закладі загальної середньої освіти. Методологію дослідження становили праці І. Анохіна, К. Гуз, О. Ващенко, В. Ільченко, В. Маслова, І. Підласого, Л. Рибалко, Н. Тамарської, А. Хуторського, А. Цимбалару. Науковці та педагоги у своїх дослідженнях неодноразово звертали увагу на формування здоров'язбережувальної компетентності в учнів і напрями здоров'язбережувальної діяльності учителів закладів освіти та побудови здоров'язбережувального середовища. Проаналізовано першоджерела визначення здоров'ярозвивальної компетентності, сформовано наше уточнення поняття «здоров'язбережувальна компетентність». Розкрито практичний досвід застосування здоров'язбережувальних технологій, які безпосередньо забезпечують формування здоров'язбережувальної та здоров'ярозвивальної компетентностей. Відзначено, що формування здоров'язбережувальної та здоров'ярозвивальної компетентностей значною мірою залежить від організації фізкультурно-оздоровчої роботи освітнього закладу. Акцентовано, що формування здоров'язбережувальних і здоров'ярозвивальних компетентностей забезпечує фізичну, психічну, соціальну та духовно-моральну складові частини, цілісність підходу в системі роботи з набуття компетентностей щодо ведення здорового способу життя, збереження, зміцнення стану здоров'я й екологічної освіти учнів, дотримання принципу наступності, системності, послідовності в підході до формування відповідних компетентностей і не є альтернативою для інших педагогічних систем, технологій, методичних підходів.

Наголошується на тому, що формування здоров'язбережувальної та здоров'ярозвивальної компетентностей має стати пріоритетним напрямом в освітньому процесі загальноосвітнього закладу.

Ключові слова: *здоров'язбережувальна компетентність, здоров'ярозвивальна компетентність, здоров'я учнів, здоров'язбережувальне освітнє середовище, здоров'язбережувальні технології.*

Introduction. Over the past few years, Ukrainian legislation has seen some changes in the field of education: reforms have begun, the New Ukrainian School is being implemented, and the entire educational community is working to create a new educational environment. The new State Standards require each student to master eleven general competencies and nine instructional areas [6; 7]. The relevance of the topic of the presented study stems from existing problems in the field of general primary education, as well as in the fields of basic and high school, related to the deterioration of the health of students in general educational institutions of Ukraine, a decrease in the level of physical, mental, and social health of schoolchildren, as noted by both teachers and doctors. The problem of children's health is also relevant today due to the spread of the COVID-19. Statistics of medical institutions indicate an annual deterioration in the health of school-age children. An analysis of pedagogical research and pedagogical experience [3; 8; 9] shows that during the educational process, students can form their own health-saving life-affirming image of the world and their health-saving competence, which can significantly improve the health of students throughout their lives. Technologies that promote and preserve health, ensure equal access to quality education for different categories of students according to their individual aptitudes, needs and health status, and improve the quality of general secondary education by providing students with a more thorough and specialised education.

Literature review. Domestic and foreign scientists and educators pay considerable attention to the issues of schoolchildren's health. Thus, the problem of preserving and promoting children's health in the educational environment is addressed in the scientific works of M. Bashmakov, S. Pozdniakov, Y. Berehovyi, N. Lutsenko, H. Spichenko, V. Shypko, V. Kovalko, M. Malashenko, and medical and pedagogical research by V. Bazarnyi. The works of N. Hundarov, V. Kriukov, O. Sakhno, and L. Sushchenko examine the philosophical and social aspects of a healthy lifestyle as the main condition for maintaining human health. Also, researchers have studied the pedagogical conditions of lyceum students' health improvement (A. Katashov); formation of a health-saving educational environment in primary school (A. Tsymbalaru); healthy lifestyle of teenagers in children's and youth sports schools (S. Svyrydenko); the impact of physical education and health saving activities on children's health (L. Rybalko); theory and practice of designing the activities in an institution for the rehabilitation and recreation of children (M. Nakaznyi); formation of the concept of a healthy lifestyle in primary school students (H. Holoborodko); hygienic substantiation of measures to optimize the health of urban primary school students (V. Nikolaienko).

The theoretical and methodological foundations, psychological and pedagogical aspects of the issues of saving the health and maintaining a healthy lifestyle of schoolchildren and the conditions for their optimization are formulated in the works of O. Balakireva, O. Vashchenko, O. Sakovych, T. Andreeva, O. Artiukh, P. Duplenko, G. Kovhanych, N. Pohorila, S. Svyrydenko, T. Boichenko, V. Orzhekhovska, O. Yezhova and others. Practitioners such as T. Filchuk (Zhytomyr), L. Dudko (Poltava), and V. Dorosh (Cherkasy) made a significant contribution to the improvement of schoolchildren's health.

Objectives. The purpose of the paper is to reveal the directions of formation of health-saving and health-developing competencies in the process of introducing a health-saving educational environment with the use of advanced health-saving technologies in a modern general secondary education institution.

Method. The modern didactics paradigm proposes an environmental approach as a theoretical and technological framework for the direct regulation (through the environment) of the processes of formation and development of the student's personality. This approach may be conceived of as a system of actions undertaken by the managerial subject with the objective of transforming the environment into a means of designing and analysing the educational result. The contemporary accumulation of data indicates that the educational environment represents a significant risk factor for student health, due to the prevalence of information overload and the intensification of the educational process [3; 6].

The necessity of establishing a secure and salubrious educational setting, conducive to the well-being of students, has been a recurring theme in the scientific literature. This includes works by prominent figures such as M. Bashmakov, Y. Beregovyi, O. Vashchenko, S. Dudko, L. Rybalko, G. Meshko, A. Tsymbalaru, and others. The formation of students' health-preserving competence, directions of teachers' health-saving activities are revealed in the works of N. Abaskalov, I. Anokhin, O. Alekseev

and D. Voronin, T. Zheleznova, N. Tamarska, A. Khutorskiy, V. Serhienko, O. Savchenko, V. Omelchenko, G. Meshcheriakov, I. Nikolaiev. In their respective works, the authors elucidate the definition of health-saving competence and propose methodologies for its formation.

The literature contains several definitions of the term "health-saving competence". In particular, T. Andryushchenko considers health-saving competence as a readiness to independently solve problems related to the maintenance, strengthening and preservation of health, both one's own and others [1]. In our study, we define health-saving competence as a dynamic combined ability of a student to apply health-saving knowledge, skills, attitudes, values, ways of thinking, views, and personal health-saving life experience acquired during the educational process; the ability to implement their own health-saving behaviour to their own health-saving lifestyle, which in turn preserves and develops their own health and the health of others, thus enhancing the quality of one's own life and the life of society as a whole [4].

The practical experience of the author of the paper on the use of health-saving technologies to develop health-saving competence of schoolchildren proves the effectiveness of this approach to solve this problem [2]. The created health-preserving educational environment in the primary school of the Poltava Secondary School № 24 of the Poltava City Council of the Poltava Region, Ukraine and in other school's experimental classes with the introduction of innovative health-saving technologies in such an environment, contributed to the formation of a health-saving image of the world, health-saving competence of students and significantly improved the state of physical, mental, social as well as moral and spiritual health.

The formation of students' health-saving competence after the introduction of health-saving technologies was as follows. For example, classes were conducted in the mode of changing dynamic postures, for which special height-sized furniture with an inclined surface – tables and desks – was used [1; 2]. The student sat at the table for part of the lesson, and stood at the desk on a massage mat for the rest. During the lesson, children changed their posture every 10 minutes. The children not only stand on the mats, but also do some exercises during physical education breaks. This way, students develop health-saving competence: during classes in the mode of changing dynamic poses, the body's vertical, spine, posture, which are the basis of the human body's energy, are preserved and strengthened, the massage mat not only massages the feet, but also has a healing effect on the whole body – the student's general health improves, active points and zones of the feet are stimulated, and the internal powers of the body are mobilized. This massage is an excellent remedy for flat feet.

In order to increase the effectiveness of the educational process, to form competence to influence the development of visual-motor reaction, visual-motor search activity, speed of orientation in space (visual-motor and bodily coordination), sensory-coordinating simulators were used with the changing visual-signal plots. The methodology of using sensory-coordinating simulators is as follows: in the four upper corners of the classroom, sensory-coordinating crosses with figurative and plot images are placed. In reading lessons, for example, you can use scenes from fairy tales, landscapes, and animal life. Together, the pictures form a single story. Standing on the massage mats, the children begin to fix their eyes on the corresponding number, image, or colour according to the command. The counting mode is set in a random sequence and changes after 30 seconds. The total duration of the exercise is one and a half minutes. Using this technology, the teacher focuses students' attention on the positive health-promoting effects of physical activity.

In order to mitigate the adverse effects of the closed room factor and limited space in each primary school classroom, visual-coordination simulators (according to V. Bazarnyi) were applied and used on the ceiling [1]. To do this, a diagram of certain colours is applied to the ceiling: the outer oval is red, the inner oval is green, the cross is brown and gold, and the figure eight is bright blue. Each element of the figure has an arrow that indicates the direction for the child's eyes to move. During the physical education minutes, the students stand in a circle around the perimeter of the image. Children move their eyes (without the help of the body), head, and then the whole body in the direction of the arrow. While practicing this health-saving technology, children learn that in this way they train their eye muscles, and such eye exercises help to prevent the development of myopia.

In order to expand visual horizons, develop speech, creative imagination, master figurative and logical thinking, and holistic perception of the environment, we used artistic and environmental panels during primary school lessons. Children learn about the world through visual and imaginative modelling, in the mode of visual perspective. Depending on the season, a suitable image is hung on the wall. The children themselves supplement this image with various drawings – animal and human characters. That is, the lessons are carried out in a playful way.

A cat can catch fish, and children count them, birds can come in the spring and bring a word, snowflakes can come with slits in them with tasks and guesses. Indeed, the use of seasonal images brings a huge variety to the developmental and health-saving environment.

Experience has shown that such activities as teaching literacy, arithmetic, familiarization with the environment, art education, and role-playing games are effective when using the above technology. The most important thing about such health-saving technologies is that in response to each question, children make dozens of searching movements with their eyes, head, and torso. This improves children's performance and reduces fatigue, and ensures the harmonious formation of visual perception and sensory-motor functions, and most importantly, that students develop health-saving and health-developing competencies.

To develop vegetative and psychomotor rhythms in grades 1–4, forming health-saving and health-developing competencies, it is useful to introduce writing with fountain (ink) pens, based on a clear understanding of the mechanisms of interaction between the brain and organs of the human body. In the case of writing without lifting the pen (with a ballpoint pen), a first grader holds his breath, trying to complete a group of elements without taking his hand off. At the same time, oxygen stops entering the body, and the heart beats in an accelerated rhythm to replenish the supply of oxygen. A few minutes of such work – and the child will begin to develop angina pectoris. And nobody thinks about the stress the child is under. The work with a fountain pen coincides with the child's heartbeat, breathing, and the impulses sent by the brain to the hand. For eight years now, students of Poltava Secondary School No. 24 in grades 1–4 have been writing with ink pens. This has allowed the students to acquire good calligraphy and develop such character traits as neatness, consistency, and concentration. But before writing the first word in ink, it is necessary to carry out preparatory work. This stage of work includes colouring, pencil shading, finger graphics, drawing and writing with a wet brush, exercises on an artistic and graphic simulator, and graphics with an ink pen. When working in a notebook during the first grade, we recommend using only a pencil.

Thus, for the formation of health-saving and health-developing competencies in the educational process of secondary school, it is reasonable to use the following technologies and methodological technologies: thematic organization of motor activity in the classroom under the guidance of the teacher (with the help of educational markers); posture verticalization during the educational process (with the help of tables and desks) with the use of massagers or massage mats; use a pencil and a fountain (ink) pen for writing, sensory-coordinating simulators, visual-coordinating simulators, environmental panels.

In the course of physical and health care education, it is necessary to provide students with knowledge about the system of hygienic skills and habits necessary for the normal functioning of the body, as well as the norms of behaviour aimed at improving the skills and habits of caring for oneself, clothes, place of residence, and environment; pay attention to the observance of the daily routine and nutrition, rotation of work and rest, which helps to prevent the development of bad habits, functional disorders of the body and diseases; in the course of physical and health care education, it is necessary to provide students with knowledge about the system of hygiene skills and habits necessary for the normal functioning of the body.

Therefore, physical education of school students should include health-saving teaching technologies that are directly aimed at strengthening and preserving the health of persons, because an important social task is to preserve, form, and strengthen the health of children.

Solving the problems of modern physical education and health improvement of school students requires the organization of children's life activities aimed at helping them to develop their life guidelines to choose a healthy lifestyle, to develop responsibility and activity in saving their health.

By S. Tsvek, the main directions of optimization of the children's physical education system include changing the content of the physical education program, as well as improving the existing and creating new organizational and methodological approaches (traditional and innovative) that meet the actual needs of society and ensure positive results in students' health improvement, upbringing and education.

The school is of the firm belief that physical education and sports clubs, sections and electives should be organized during extracurricular time. The experience of Poltava Secondary School № 24 proves that in the second half of the day, children should have classes that include outdoor games, sports sections, clubs aimed at children's physical activity, general developmental exercises, sports events, and competitions. Every year, the school holds a school-wide Health Day with the involvement of children, teachers, and parents, which has a positive impact on the health of students and helps to strengthen their health competencies.

Conclusion. This approach to organizing the formation of health-saving and health-developing competencies ensures the physical, mental, social, spiritual and moral component, the integrity of the approach in the system of work on the development of competencies in leading a healthy lifestyle, preserving, strengthening health and environmental education of students, observance of the principle of continuity, systematicity, consistency in the formation of relevant competencies and is not an alternative to other pedagogical systems, technologies, methodological approaches.

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