

educational material, to integrate knowledge, to ensure its effectiveness and the ability to actively use it in a changed situation.

All of this makes it important to search for tools that would ensure continuity in the study of different topics and sections, and to establish a hierarchical order in the study of biological systems. Concept maps are an effective means of providing a holistic system of students' knowledge about nature, creating a unified scientific picture of the world based on the integration of content.

The author has found out that the conceptual reflection of a content or problem includes analysis, creation of new knowledge, generalisation of key concepts, interrelations and their hierarchy.

During biology teaching, the formation of knowledge on the topic occurs through the methods of visual representation of information and generalisation of content, which increases the level of metacognition.

Forming holistic knowledge through the use of concept maps requires adherence to the principles of science and systematicity, unity of theory and practice, accessibility and visibility, consistency, durability, consciousness and activity of learning. The author substantiates the need to observe intra-subject and inter-subject connections, which help in the implementation of the principles of systematicity and integrity of knowledge. The article describes the features, functions, principles of content filling of concept maps and their importance in the development of students' metacognitive strategies.

The author concludes that conceptual maps are a means of forming a holistic knowledge of the peculiarities of biological systems at different levels of organisation and an effective mechanism for creating a scientific picture of the world.

Key words: *conceptual maps, holistic knowledge, cognitive visualization of information, concepts, notions, biological systems, biology teacher, biology lesson.*

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WAYS OF APPLICATION OF HEALTH CARE TECHNOLOGIES IN MODERN PRIMARY SCHOOL

The purpose of the article – to reveal and consider the essence of health care technologies; to determine and propose pedagogical conditions for the use of health care technologies in a modern primary school; to ensure a comprehensive process of implementation of health care technologies.

In the course of studying the specified problem, we used the following methods: analysis of the source base, substantiation of the conceptual and categorical apparatus; determination of pedagogical conditions for the use of health care technologies in a modern primary school, observation, study of the possibilities of a comprehensive approach to the implementation of health care technologies.

For the successful implementation of health care technologies in the educational process of a primary school, in our opinion, it is important to comply with certain pedagogical conditions, which we include: enrichment of educational subjects with health content and ensuring the interaction of all participants in the process of

influencing the child. In the experimental classes, the school day begins with morning meetings, during which pupils exchanged compliments, encouraged each other, and mentally sent kind words to their relatives and friends.

Key words: *junior schoolchildren, educational process, health care technologies, pedagogical conditions.*

Introduction. Over the past half century, health requirements have increased significantly. The meaning of the very concept of health has changed, so the somatic one has been replaced by its complex definition. In this regard, all its components (physical, mental, social, spiritual) were included in the essence of the concept of “health”. A person began to be considered as the most complex bio-cultural-social system open to external influences, and the state of health as a dynamic process that can improve or deteriorate (Kvashnina, 2000).

The state of war, psychological tension, unfavorable emotional atmosphere – these are the present of Ukraine and the factors of the increase in the number of diseases and mortality of the population.

Concern for the population’s health on the part of the state is reflected in the main legal documents: the Constitution of Ukraine, the Laws of Ukraine “On Health Protection”, “On Ensuring the Sanitary and Epidemic Welfare of the Population”, the Convention on the Rights of the Child, the Convention on National Education, etc. “A person, his life and health, honor and dignity, inviolability and security are defined as the highest value in Ukraine” – it is proclaimed in Article 3 of the Constitution (Constitution of Ukraine, 1996; Semenova, 2007; Levchuk, 2007).

Among the factors contributing to the decrease in the level of children’s health, the most important role belongs to the stressful state and the educational load during the war, which lead to maladjustment syndrome with neurotic reactions of varying degrees of severity. That is why one of the main tasks of the educational process in a modern school is to preserve, strengthen and reproduce the pupils’ health. Integration of Ukraine into the European educational community dictates the necessity of transition from traditional reproductive educational technologies to intensive, innovative ones, among which the following groups are distinguished: technologies of personality-centered learning and upbringing; traditional pedagogical technologies based on activation and intensification of pupils’ activities; pedagogical technologies based on increasing the efficiency of management and organization of the educational process; pedagogical technologies based on didactic improvement and material reconstruction; separate subject pedagogical

technologies; alternative pedagogical technologies; pedagogical technologies of developmental learning and pedagogical technologies of author's schools (Dubogai, 2005; Opanasenko, 2004; Kazakevich, 2004).

Analysis of current research. Modern author's technologies, developmental programs are aimed at the holistic process of pupils' harmonious development: technology of physical education by M. Yefimenko, technology for activating the sensorimotor development of preschoolers (group of authors: I. Shylkova, A. Bolshev, Yu. Silkin et al.), technology for the formation of the spiritual foundations of the child's personality in the motor activity by L. Hlazyrina and other various technologies of psychophysical development.

When creating these technologies, fundamental developments in the theory of physical education, medical physical culture, medical control, applied kinesiology, pedagogy and psychology were used, which guarantees their health and educational effect (Navolokova, 2009).

The purpose of the article – to reveal and consider the essence of health care technologies; to determine and propose pedagogical conditions for the use of health care technologies in a modern primary school; to ensure a comprehensive process of implementation of health care technologies.

Research methods. In the course of studying the specified problem, we used the following methods: analysis of the source base, substantiation of the conceptual and categorical apparatus; determination of pedagogical conditions for the use of health care technologies in a modern primary school, observation, study of the possibilities of a comprehensive approach to the implementation of health care technologies.

Research results. Based on these scientific investigations, we determined their essence and content of health care technologies:

- medical and hygienic technologies – compliance with the relevant conditions of education and training;

- physical culture and health technologies – physical development that takes place through hardening, training of strength, endurance, speed and other qualities;

- ecological health technologies – education of junior schoolchildren's love for nature, the desire to take care of it, etc.;

- technologies for guaranteeing life safety – definition and implementation of the recommendations of experts in various fields in the educational process;

- health care educational technologies – the use of psychological and pedagogical methods, techniques and approaches to problem solving;
- socially adaptive and personal development technologies – formation and strengthening of the health of schoolchildren;
- medical and recreational – implementation of ideas of medical pedagogy and medical physical education.

For the successful implementation of health care technologies in the educational process of a primary school, in our opinion, it is important to comply with certain pedagogical conditions, which we include: enrichment of educational subjects with health content and ensuring the interaction of all participants in the process of influencing the child.

Enrichment of educational subjects with health content is aimed at familiarizing and expanding the ideas of primary school pupils about the essence of a healthy lifestyle as the most effective and accessible factor in preserving health. Expanding the content of educational subjects with information about maintaining health and a healthy lifestyle takes place within the framework of interdisciplinary interaction. At the same time, each type of connection performs a certain didactic function of a holistic idea of the value of health. Taking into account the psychophysiological characteristics of children of primary school age, it is necessary to use fragments of the content of a healthy lifestyle in lessons on various educational subjects. This approach contributes to the involvement of pupils in the process of learning and awareness of the importance of a healthy lifestyle in health care.

During the experimental study of the use of health care technologies, interactive forms and methods of education were provided. The most effective of them are: “Microphone”, “Brainstorming”, “Take a position”, “Work in pairs”, “Work in groups”, “Two – four – together”, “Circle of ideas”, “Aquarium”, “Press”, “Unfinished sentences”, “Associative bush”. Pupils are equal partners in the lesson who learn to generate ideas, take care of their health, take care of their bodies, and strengthen their physical health. Involvement of children in project activities provides an opportunity to independently find the necessary information using various sources, to form health care skills, to understand their capabilities and to realize their own importance in health care. In the course of achieving the result through mutual efforts, pupils develop adequate self-esteem, communication skills, create an atmosphere of understanding and goodwill, which, in turn, helps to strengthen both the physical and mental health of children.

In the experimental classes, the school day begins with morning meetings, during which pupils exchanged compliments, encouraged each other, and mentally sent kind words to their relatives and friends. During the implementation of health care technologies, non-standard lessons are also used: trips, competitions, quizzes, fairy tales, trainings, projects, games, dialogues, press conferences, research, binary and integrated lessons. Conducting non-standard lessons contributes to the optimal assimilation of knowledge by junior schoolchildren about the essence of health and a healthy lifestyle. In the lessons, multimedia presentations are widely used, which, combining high-quality image, sound and dynamics, contributed to better assimilation of the educational material.

Junior schoolchildren are characterized by the mastery of a significant amount of knowledge, abilities and skills in enriching the experience of social behavior. The first, relatively stable value orientations are formed in primary school pupils, the development of feelings takes place – moral, intellectual, aesthetic. Thanks to information about the essence of health care, junior schoolchildren gain ideas about:

- the need for a harmonious existence of man and nature through familiarization with natural factors that affect health (air, water, sun, soil, plants);

- rhythmicity of processes in nature (change of day and night, seasons) and of the human body (change of activity and rest, rhythmic work of the heart, lungs, gastrointestinal tract and other internal organs);

- dependence of the state of health on everyday lifestyle.

The introduction of health care technologies into the educational process of primary school, unfortunately, cannot fully solve the problem of pupils' health. Taking into account the fact that the educational influence on junior schoolchildren is carried out not only in the educational process, but also in extracurricular time, it is appropriate not only to increase the amount of information about health care when using health care technologies, but also promote cooperation of teachers, parents, psychologists, school medical workers. Such activity becomes most effective thanks to the use of health care technologies with traditional and non-traditional methods of recovery; taking into account the individual and age characteristics of children of primary school age; instilling in junior schoolchildren the skills of observing the main components of a healthy lifestyle, personal and public hygiene, necessary in everyday life, study and work; improving the organization and

methodology of conducting physical education classes, which would ensure the development in primary school pupils of basic physical qualities, physical readiness for educational activities, etc.

The main task of health care technologies is formation of primary school pupils' knowledge about health and a healthy lifestyle through:

- establishing relationship between the individual and the natural, man-made and social environment;
- teaching safe behavior;
- ensuring a psychologically comfortable environment for pupils;
- creation of favorable conditions for their development and self-development;
- improvement of the functional state of the body;
- increasing adaptation capabilities and forming motivation for a healthy lifestyle;
- fostering the need for health as an important vital value.

One of the primary tasks is to create a comfortable environment for any pupil in the classroom. For this, the requirements of DSaPiNu 5.5.2.008-01 should be taken into account: the color of the classroom walls is beige, the ceiling is white. A favorable microclimate should be created in the classroom: optimal lighting, temperature regime, regular ventilation, compliance with hygiene rules.

Single desks provide an opportunity to simulate various positions during lessons, in particular the organization of group and pair work, etc. When placing children at desks, the following criteria should be used: state of health (sight, hearing, back), height, psychological compatibility. Separate chairs and the space of the classroom make it possible to conduct training lessons, during which junior schoolchildren learn to cooperate in groups, see each other, communicate casually, move actively, following self-established rules. The formation of the skills of a healthy and safe lifestyle is also facilitated by the design of the classroom on the subject of the "Basics of Health" course. In the phytotherapy corner, in the absence of contraindications, with the appropriate permission and recommendations of a doctor, in order to prevent various colds and viral diseases, pupils are offered to use vitaminized anti-inflammatory herbal tea. Periodic preventive aromatherapy with the use of aromatic oils that have an antiviral effect, in particular a mixture of pine, mint and lavender scents, helps to almost completely restore the microflora of the room during the day. During rest, the children are asked to pass a bag of herbs (mint, juniper) to each other. As

a result, the incidence of acute respiratory and viral infections among schoolchildren significantly decreases.

Insufficient awareness of the participants of the educational influence on the problem of protecting the health of pupils led to the involvement in their training of medical workers, psychologists, physical education teachers, innovators on this problem and a selection of scientific and methodological literature. In addition, the activities of the selected group of participants are aimed at creating, with the help of parents, of suitable conditions for pupils to fully independently observe the main components of a healthy lifestyle.

The main task of the school's medical staff is to conduct an annual in-depth medical examination of all junior schoolchildren. As a result of the examination, the doctor forms a comprehensive conclusion regarding the state of health of each pupil (taking into account the data of specialist doctors). For weakened children and those who have deviations in physical development, groups are created for physical education according to certain programs, medical and health-improving measures are prescribed for children with different levels of physical development. The results of each in-depth medical examination are reviewed in detail at the pedagogical council, where the doctor provides correct advice and instructions regarding health measures, the work and rest regime of the schoolchild, which is recorded in the individual medical cards of the pupils. Weakened children and those with chronic diseases are under special dispensary supervision. Thus, the main aspects of school medical workers' activity include: the organization of a preventive examination, determination of the nature and scope of health care, creation of individual recommendations for the correction of physical condition, phytotherapy, therapeutic physical culture, hardening, increasing the level of health literacy of the family.

The field of activity of school psychologists includes psychocorrection, psychotraining with junior schoolchildren who have a high level of anxiety, aggressiveness, problems in relationships with teachers, parents and peers. Psychologists, together with medical workers, carry out diagnostics of the emotional state of children, the level of their working capacity and fatigue, cognitive sphere; determine biological maturity, state of health, features of psychophysical development; create optimal opportunities for preserving and strengthening the psychophysical condition of children in the educational process; contribute to the creation of conditions for the safety of the child

and his inclusion in the process of forming a healthy lifestyle, preserving, strengthening and reproducing one's own health.

In order to find out the moral climate in the children's team, monitoring of the psychological state of pupils was used. A mood calendar was used for this purpose. The children filled out this calendar on their own when they came to school. Information about the child's mood in the morning period was used to teach children to monitor the psychological state of friends and try to improve their mood, which contributes to the formation of a healthy team. This information was also used by the teacher as a kind of indicator of the psychological climate in the family and school.

Physical education teachers, specialists in health techniques advise pupils, parents, teachers, explain the methods of using traditional and non-traditional methods of health improvement, introduce pedagogical situations that stimulate the motor activity of junior schoolchildren both during school and outside school hours, conduct briefings on the rules for observing the main components of a healthy lifestyle, monitor changes in anthropometric indicators of junior schoolchildren.

An important aspect of the study was the partnership between teachers and parents of pupils. In order for parents to establish cooperation with teachers, the school organized pedagogical comprehensive training for parents and convinced them of the need to lead a healthy lifestyle together with their children and thus set a personal example; prove the dependence of successful learning, harmonious development of the child on the state of his health. The basis of this unity is the teaching staff of the school. Conversations are held for parents, information corners are arranged, conferences are held, exhibitions of pedagogical and popular science literature are organized, and periodicals on the issue of preserving and strengthening health and a healthy lifestyle are offered. It is the family that has the opportunity to successfully implement a personal approach in the education of a schoolchild, because parents know better than others the individual characteristics of their children, their interests, needs, strengths and weaknesses, problems in education that often go unnoticed by others.

Constant interaction with pupils' families, parents' meetings at which children's health issues were discussed, joint health-improving events, in particular sports holidays, sports games, helped to avoid conflicts and improve emotional relationships in the family. Joint work with pupils' families on the promotion of a healthy lifestyle contributed to the

improvement of their health, led to a decrease in colds, a decrease in the level of anxiety, fear, aggressiveness; development of various educational and cognitive interests, psychological readiness for an active life. Health educational technologies in primary school are also implemented through extracurricular activities, in which parents are also active participants. They help with weekend hikes, excursions, sports competitions, and health days.

The proposed complex of health care technologies in the educational process of primary school makes it possible to systematize and combine pedagogical, medical, psychological and family interaction, to timely and comprehensively use all objective and subjective possibilities of preserving children's health. This approach includes learning, extracurricular work with pupils, hygienic upbringing in the family and appropriate self-education of junior schoolchildren. Within each of these elements, different forms and methods of pedagogical influence are used.

We believe that the educational process in primary school should be aimed both at preserving and strengthening the health of schoolchildren and have a therapeutic and preventive effect on the physical, mental, intellectual and emotional state of the child, ensuring the formation of a harmoniously developed personality.

Conclusions and prospects of further research. Taking into account the results of the conducted research, we can state that in modern conditions, solving the problem of preserving and improving the health of junior schoolchildren requires close attention of all those interested in this: teachers, medical workers, parents, psychologists, and representatives of community. But a special place and responsibility in the health activities of primary school pupils is given to a properly planned educational process, where health care technologies are of primary importance.

The conducted research does not cover all the aspects of the outlined problem. We consider the study of foreign experience in the application of health technologies in the educational process of the primary level of education as a promising direction for further scientific research.

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АНОТАЦІЯ

Кондратюк Світлана. Шляхи застосування здоров'язберезувальних технологій у сучасній початковій школі.

Входження України до європейської освітньої спільноти диктує необхідність переходу від традиційних репродуктивних освітніх технологій до інтенсивних, інноваційних, серед яких виділяють наступні групи: технології особистісно-орієнтованого навчання й виховання; традиційні педагогічні технології на основі активізації та інтенсифікації діяльності учнів; педагогічні технології на основі підвищення ефективності управління та організації навчального процесу; педагогічні технології на основі дидактичного вдосконалення та реконструювання матеріалу; окремі предметні педагогічні технології; альтернативні педагогічні технології; педагогічні технології розвивального навчання та педагогічні технології авторських шкіл.

Мета статті полягає у розкритті сутності здоров'язберезувальних технологій; визначенні і обґрунтуванні педагогічних умов застосування здоров'язберезувальних технологій у сучасній початковій школі.

У ході дослідження зазначеної проблеми ми використовували наступні методи: аналіз джерельної бази, обґрунтування понятійно-категоріального апарату; визначення педагогічних умов застосування здоров'язберезувальних технологій у сучасній початковій школі, спостереження, вивчення можливостей комплексного підходу впровадження здоров'язберезувальних технологій.

Практичне значення дослідження полягає у впровадженні здоров'язберезувальних технологій у освітній процес початкової школи. Дотримання певних педагогічних умов., до яких ми відносимо: збагачення навчальних предметів здоров'язберезувальним змістом та забезпечення взаємодії у цьому процесі всіх учасників впливу на дитину ефективно впливає на збереження здоров'я молодших школярів.

Збагачення навчальних предметів здоров'язберезувальним змістом спрямовано на ознайомлення і розширення уявлень учнів початкових класів про сутність здорового способу життя як найбільш дієвого та доступного чинника збереження здоров'я. Розширення змісту навчальних предметів інформацією про збереження здоров'я, здоровий спосіб життя відбувається у межах міжнаукової взаємодії. При цьому кожен вид зв'язку виконує певну дидактичну функцію цілісного уявлення про цінність здоров'я. Беручи до уваги психофізіологічні особливості дітей молодшого шкільного віку, потрібно використовувати фрагменти змісту здорового способу життя на уроках з різних навчальних предметів. Такий підхід сприяє залученню учнів до процесу освоєння і усвідомлення значущості здорового способу життя у здоров'язбереженні.

Зважаючи на результати проведеного дослідження можемо стверджувати, що у сучасних умовах вирішення проблеми збереження та покращення стану здоров'я молодших школярів полягає у правильно

спланованому освітньому процесу, де здоров'язбережувальні технології мають першочергове значення.

Проведене дослідження не вичерпує всіх аспектів окресленої проблеми. Перспективним напрямом подальших наукових пошуків вбачаємо вивчення закордонного досвіду застосування здоров'язбережувальних технологій в освітньому процесі початкової ланки освіти.

Ключові слова: *молодші школярі, освітній процес, здоров'язбережувальні технології, педагогічні умови.*

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РОЛЬ ПІДГОТОВЧИХ ВПРАВ ДЛЯ ОСВОЄННЯ З ВОДОЮ У ПОЧАТКОВОМУ НАВЧАННІ ПЛАВАННЯ ДІТЕЙ МОЛОДШОГО ШКІЛЬНОГО ВІКУ

У статті висвітлюються організаційно-методичні особливості навчання плавання дітей 9-12 років. Акцентується увага на важливості застосування вправ для освоєння з водою у процесі початкового навчання. Розкрито оздоровчий вплив плавання на організм людини, зокрема, дитячий. Вказано на головні помилки, яких припускаються батьки під час самостійного навчання плаванню дітей в умовах природного водоймища. Обґрунтовано роль та значення підготовчих вправ для освоєння водою. Розроблено методичні рекомендації для батьків щодо застосування спеціальних вправ для початкового навчання дітей плавання в домашніх умовах та в умовах природного водоймища.

Ключові слова: *плавання, здоров'я, вода, вправи для освоєння з водою.*

Постановка проблеми. Відомо, що плавання є одним із найпотужніших засобів оздоровлення, загартування, фізичного розвитку, особливо дитячого організму. Завдяки своїм унікальним фізичним, термічним, хімічним, механічним властивостям водне середовище створює найбільш безпечні і сприятливі умови для виконання різних рухів і фізичних вправ. Завдяки підйомній силі води вага тіла людини зменшується майже в 10 разів, відповідно знижується гравітаційне навантаження на суглоби, хребет, м'язово-зв'язковий апарат, а отже, ризик отримання травми під час виконання різних локомоцій у воді практично відсутній. Окрім того, фахівці