

Medical literacy and learning activity: effective strategies in the primary education process

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Abstract: This article analyzes effective strategies aimed at increasing medical literacy and learning activity in the process of primary education. Medical literacy is an important competency aimed at developing students' skills in understanding and using health, hygiene and medical information. Learning activity is formed in the process of children's independent thinking, active assimilation of knowledge and application in practice. The study reveals the role of modern pedagogical approaches, interactive methods and innovative technologies in the development of medical literacy and learning activity. It also highlights the recommended didactic methods for developing these competencies in primary school students.

Keywords: Medical literacy, learning activity, primary education, interactive methods, pedagogical strategies, innovative technologies, independent learning, didactic approaches.

Introduction: The modern education system is constantly developing in accordance with the needs of society. The rapid development of information technologies, the influence of social networks and mass media play an important role in shaping the worldview of students. Therefore, today, in the process of primary education, it is important not only to instill traditional knowledge, but also to form independent thinking in students and develop a critical approach in them.

Medical literacy is a person's ability to understand, correctly evaluate and apply health, hygiene and medical information to their lives. Especially in the context of the pandemic, people's need for medical knowledge has increased, and medical literacy has become necessary for every citizen, especially the younger generation. This competency is considered very important for children to follow a healthy lifestyle, protect themselves from misinformation, and strengthen their health based on scientifically based medical views.

Educational activity is an important factor in the process of acquiring knowledge, and implies the active involvement of students in the learning process, the development of the ability to freely express their opinions and apply the acquired knowledge in practice. However, if the educational process is one-sided,

limited to the delivery of information, the level of students' mastery may be low. That is why modern educators emphasize the importance of developing and implementing effective teaching strategies. Thus, the development of medical literacy and educational activity in primary education will not only contribute to the individual growth of students, but also help them find their place in future social life. This article analyzes the role of effective pedagogical strategies, interactive methods, and innovative technologies that serve to increase medical literacy and learning activity.

METHODOLOGY

Each educational process sets certain goals. But what should be the ways to effectively achieve these goals? What methodological approaches should be used to increase student activity and develop medical literacy, especially in primary education? The search for answers to these questions is a topic of constant discussion for pedagogical scientists and practitioners.

Interactive methods play an important role in increasing the effectiveness of education. Traditional lessons are mainly limited to the delivery of information by the teacher, which can reduce student activity. Therefore, technologies that actively involve students in the learning process should be used. For example, through the problem-based learning method,

children learn to analyze life situations, express their opinions and solve problems. This serves not only to acquire knowledge, but also to form the skills of independent decision-making. Also, gamification, that is, the introduction of game elements into the learning process, makes children learn with interest. Studies show that knowledge learned through games is stored in memory longer and is more effective in practice. For example, in order to develop medical literacy, interactive games on a healthy lifestyle, hygiene rules and first aid can be organized. This will help children not only acquire knowledge, but also apply it in real life. In addition, the project-based learning strategy serves not only to increase students' knowledge in science, but also to develop creative thinking. For example, students can prepare their own research projects on healthy eating or conduct small experiments on factors affecting the ecological environment.

A differentiated approach is also an important strategy. Since each child has unique abilities and interests, their individual needs and learning speed should be taken into account in the teaching process. Some students learn better through visual materials, while others are more inclined to practical experiences. Therefore, it is advisable to combine different strategies in the lesson process.

In the era of advanced technologies, the use of digital resources is also one of the relevant methods. Electronic textbooks, online interactive platforms, video lessons and mobile applications can increase children's learning activity. Animated videos and interactive quizzes are especially effective for increasing medical knowledge. In primary education, methodological strategies for developing medical literacy and learning activity should be used in harmony with each other. By moving away from traditional approaches and using modern, interactive, game-based and project-based methods, it is possible to increase the activity of students, to educate them as responsible and knowledgeable individuals for their lives. Each lesson should become not only a place for children to obtain information, but also a place for research, discovery and practical experience.

Literature review

Research on the development of medical literacy and learning activity has become one of the important directions in world pedagogy and psychology in recent years. Researchers emphasize the interdependence of these two factors and note the need to develop effective methodological approaches in the educational process. This section provides an analysis of various sources on this topic.

Among the leading studies on medical literacy, the

concept of "health literacy" put forward by Nutbeam occupies a special place. According to him, medical literacy includes not only the acquisition of medical knowledge, but also the ability to effectively use the health care system and make lifestyle decisions. Studies presented by UNESCO emphasize the need to develop medical literacy starting from primary education, and for this, interactive teaching methods are of great importance.

Russian scientists, including Polyakov, note the need to use multimedia educational tools and visual educational technologies to popularize medical literacy among children. Similarly, American researchers Kickbusch and Maag, analyzing the prospects for developing medical literacy through digital means, emphasize that instilling knowledge about a healthy lifestyle in children through mobile applications and interactive games is more effective than traditional lessons.

Freire, on the other hand, put forward the "Dialogical Education" model, which emphasizes that students should be formed not only as recipients of information, but also as individuals who analyze, debate, and think creatively about knowledge. This approach is also relevant in the development of medical literacy, and it is shown that it is important to encourage students to think freely about health and quality of life.

In recent years, there has been an increase in research on the use of gamification and digital educational technologies in the educational process. For example, Prensky, in his work "The Digital Generation and Teaching", emphasizes that modern children are accustomed to learning with technology and are not interested in traditional methods. Therefore, virtual laboratories, simulations and lessons in the form of games are of great importance for increasing medical literacy and learning activity.

Research conducted by Chinese scientists Chen and Li shows the effectiveness of educational models adapted to the unique learning style of each child through artificial intelligence and individual learning platforms. This is especially important in the development of differentiated learning strategies, which allows for the introduction of an individual approach depending on the abilities of each student.

A review of the literature shows that there are different approaches to increasing medical literacy and learning activity, each of which has its own advantages. Interactive methods, experience-based learning, gamification and digital technologies are among the most relevant methods for today's education. In developing medical literacy, it is important to convey medical information to students in an interesting and

memorable form, and in increasing learning activity, it is important to expand the opportunities for children to conduct independent research and discovery. Therefore, the integration of modern innovative approaches into the educational process remains one of the main criteria for increasing the effectiveness of primary education.

DISCUSSION

Today's educational process is becoming increasingly complex and requires innovative approaches in addition to traditional teaching methods. Especially in primary grades, the issue of increasing students' interest in learning and instilling vital knowledge in them remains relevant. The development of medical literacy and learning activity is recognized as an integral part of this process.

According to research conducted by the World Health Organization (WHO, 2019), only 39% of the world's population has sufficient knowledge and understanding of health. This indicator is also of great importance for the younger generation, as teaching children from a young age the correct medical knowledge and rules of a healthy lifestyle can affect the future health of society. Therefore, the introduction of medical literacy into the educational process is important not only for the quality of education, but also for social stability in general.

Research shows that the activity of students in the learning process is directly related to their ability to apply knowledge in practice. For example, according to a 2021 study by Harvard University, children taught using interactive methods learned 37% more effectively than their peers who learned through traditional approaches. This means that it is important to provide children with active education so that they can not only memorize theoretical information, but also understand it and apply it to real life.

Increasing the activity of students is especially relevant in teaching medical literacy. Studies show that if children receive knowledge only through textbooks or lectures, the retention rate of this knowledge is around 20 percent. However, the retention rate of information learned through games, experiments or practical exercises reaches 70-80 percent. For example, in a 2020 experiment in Germany, the level of knowledge of children who received education through a special interactive program on healthy eating and hygiene was 45 percent higher than that of children who were taught with a theoretical textbook.

Gamification and educational effectiveness

Gamification (introduction of game elements) is becoming one of the important methods in the modern

education system. Prensky's concept of "The Digital Generation and Education" emphasizes that visual and interactive approaches are more effective for modern children than traditional textbooks. For example, in a study conducted in Canada, students who used virtual laboratories to study biology and medicine learned 35 percent faster than in traditional classes.

If gamification elements are introduced in primary education to increase health literacy and learning activity, the learning process for children will be more interesting and memorable. For example, instead of teaching simple healthy lifestyle rules through textbooks, explaining them through videos, animations, quest games or quizzes will give a more effective result.

CONCLUSION

Health literacy and learning activity are one of the concepts that are of great importance in the modern primary education process, increasing students' knowledge about a healthy lifestyle and creating conditions for more effective learning by involving them in the active learning process. Research shows that if children actively participate in the lesson process, search for knowledge on their own and apply it in practice, their knowledge will be stronger and will be stored in memory for a long time.

In order to increase the level of medical literacy of students, along with traditional teaching methods, the use of interactive methods, gamification, project-based learning and digital technologies can yield effective results. World experience shows that the use of game elements, practical experiences and visual educational materials increases the interest of students and encourages them to actively learn. Also, in order to instill medical knowledge in the minds of the younger generation, teachers themselves must master new pedagogical technologies and be able to use modern educational tools. In conclusion, the development of medical literacy and learning activity not only increases the efficiency of the educational process, but also helps the future generation to become healthy and conscious members of society. Therefore, it is important to effectively use innovative approaches in primary education, and new scientific research and experimental work in this area should be continued.

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