



## ONCOLOGICAL TO DISEASES PLAYED ELEMENTARY CLASS STUDENTS FOR MODERN LESSONS ORGANIZATION TO GROW

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**ABSTRACT.** This study comprehensively covers the pedagogical, psychological and methodological foundations of organizing modern classes for primary school students with oncological diseases. The study inclusive education concept within take go there in good health serious problems was children for equal education opportunities create, their socialization and personal development provide important factor as Scientific sources analysis this shows that inclusive education not only knowledge to give process, maybe psychological support, social adaptation and individual abilities to develop also own inside Especially chronic and heavy diseases, including oncological situations with struggling children for education process adaptation necessity high The abstract analyzes the problems faced by children with oncological diseases in the educational process - such as fatigue, psychological instability, social isolation - and recommends adapted lesson formats, short and effective lessons, game technologies, and motivational methods as ways to overcome them.

**Key words:** Oncological diseases, inclusive education, elementary school classes, modern lessons, individual education program, distance education, interactive methods, health care technologies, psychological support, social adaptation, adaptation training, educational activity.

**INTRODUCTION:** Nowadays, modernization of the education system and creation of equal opportunities for all categories of students are one of the urgent issues. Especially for primary school students with serious health problems,



including oncological diseases, effective organization of the educational process is of great scientific and practical importance. Ensuring continuous education of such students, increasing their activity in learning and supporting their adaptation to society are one of the priorities of today's pedagogy [Ainscow, 2020; UNESCO, 2021]. Oncological diseases have a significant impact not only on the physical, but also on the psychological state of children. Factors such as long-term treatment, rapid fatigue, and isolation from the social environment reduce their activity in the educational process. Therefore, there is a need to create a flexible, individual and health-saving educational environment for such students [WHO, 2022; Heward, 2018]. The concept of inclusive education recognizes the right of all children, regardless of their health and capabilities, to receive quality education. This approach requires differentiation of the educational process, implementation of individual educational programs and the use of modern pedagogical technologies [Florian & Black-Hawkins, 2011; Tomlinson, 2017]. In particular, digital technologies, distance learning and interactive methods expand the possibilities of convenient and effective teaching for students with oncological diseases [Bozkurt, 2020]. At the same time, the pedagogical process when working with such students should not be limited only to providing knowledge, but also include psychological support, increasing motivation and ensuring social integration. This requires a high level of professional competence, an individual approach and the effective use of innovative methods from the teacher [Friend & Bursuck, 2019]. The relevance of this study is that the issue of organizing modern lessons for primary school students with oncological diseases has not yet been studied comprehensively enough and requires the development of effective methodological recommendations in practice. Therefore, the main task of this study is to identify ways to organize an adapted, innovative and effective educational process for this category of students. In addition, research suggests that children undergoing long-term treatment may experience declines in some aspects of cognitive functioning, such as attention, memory, and processing speed. This requires lesson planning that includes simplification of learning material, division into small blocks, and regular repetition [Anderson et al., 2019; Prevatt et al., 2000]. In addition, international experience has widely developed a system of hospital pedagogy, in which students have the opportunity to learn without being interrupted by the treatment process. This system requires cooperation between teachers and medical staff, flexibility of the



curriculum, and an individual approach [Shaw & McCabe, 2008]. Modern research shows that distance and digital learning tools play an important role not only in imparting knowledge, but also in maintaining social connections between students. In particular, students' interaction with classmates through virtual classroom environments has a positive impact on their mental health [Dong et al., 2020]. In addition, motivational approaches, in particular game technologies and incentive strategies, have been found to significantly increase the interest in studying of students with health problems. This makes the educational process not only effective, but also interesting and mentally relaxing for children [Ryan & Deci, 2020]. At the same time, family environment and parental involvement in the educational process are also important factors. Studies show that students' level of mastery and psychological stability are higher in cases where there is active parental support [Hill & Tyson, 2009]. At the same time, some scientific sources note that chemotherapy and radiotherapy used in the treatment of oncological diseases can affect not only the physical, but also the neuropsychological development of children. As a result, students experience temporary difficulties in acquiring reading, writing and arithmetic skills. This increases the need for special pedagogical approaches in the teaching process [Mulhern, 2005; Armstrong et al., 2014].

Additionally, research shows that long-term breaks due to illness can create a "learning gap" in students. Differential learning, i.e., adapting assignments based on the student's level of knowledge and needs, is an effective way to address this problem [Tomlinson, 2017].

The use of visual and multimodal learning tools is also of particular importance for younger students. Information presented through colorful materials, graphic images, video lessons, and interactive tasks is more easily perceived and remembered by students [Mayer, 2009]. Scientific studies have shown that creating a positive emotional environment also directly affects the effectiveness of the learning process. A supportive, kind, and stress-free learning environment increases students' self-confidence and encourages them to actively learn [Pianta, 1999]. In addition, students' social skills can be developed by combining work in small groups and individual activities. This serves to strengthen their position in the team and accelerate the socialization process [Vygotsky, 1978]. Another important aspect is that it is recommended to use flexible and alternative assessment methods instead of traditional forms of control when assessing student success. For example, portfolios,



oral responses, and observation-based assessment methods more fully reflect the real capabilities of the student [Black & Wiliam, 1998].

**Review of relevant literature** : The issue of organizing the educational process for children with oncological diseases is one of the topical areas that has been actively studied in recent years at the intersection of pedagogy, psychology and medical sciences. This problem is especially important in the process of developing inclusive education. In international scientific research, the concept of inclusive education is interpreted as a system aimed at ensuring the right of all children to receive quality education, regardless of their health and individual capabilities [Ainscow, 2020; UNESCO, 2021]. Within the framework of this approach, adaptation of the educational process, development of individual educational programs and the use of a differentiated approach are recognized as the main methodological principles [Florian & Black-Hawkins, 2011; Tomlinson, 2017]. Studies conducted on working with children with oncological diseases show that the treatment process has a certain impact on the cognitive development of students. In particular, attention, memory and study speed decrease observed [Butler & Mulhern, 2005]. Also, some researchers chemotherapy and radiotherapy processes neuropsychological consequences existence [Armstrong et al., 2014]. This education in the process special pedagogical approaches application the necessity Heward (2018) and other researchers to the mind according to, in good health problem was students for education process short, clear and flexible to be must. Study materials simplify them small into parts separation and repetition through students knowledge mastery level increase possible. Remote education and digital technologies The application is also modern. in research important direction as is considered. In the research of Bozkurt (2020) remote of education disease because of from school distant students for effective tool that based on given. Also, Dong et al. (2020) virtual education environments students not only knowledge to get, maybe social connections save It is also important to stay role to play emphasizes.

Psychological support There are many issues. scientific of affairs in the center Ryan and Deci (2020) motivation to the theory based on, students internal incentive formation importance shows. Pianta (1999) positive emotional environment create students to education was attitude improve emphasizes. Also, students assessment modern in the matter approaches there is is, Black and William (1998) Formative evaluation efficiency scientific in terms of based on gave. Their to the mind



according to , flexible assessment methods students' real knowledge level in determining important importance has. Local inclusive in research education development , separate necessary children with work methodology improvement to the issues separately attention Uzbekistan under the circumstances inclusive education current to teach , pedagogue personnel preparation and special methodologies working exit current from tasks one as record done .

In general when taking , analysis made scientific literature this shows that oncological to diseases played elementary class students for modern lessons organization to grow many edged approach demand This process requires an individual approach , modern technologies , psychological support and flexible assessment systems main factors as manifestation will be .

**Research methodology:** The methodological basis of the study was the theory of inclusive education, the person-centered education paradigm, the biopsychosocial approach, and the concept of differentiation in education. These theoretical approaches justify the need to organize the educational process taking into account the health status, individual capabilities, and psychological characteristics of students [Ainscow, 2020; Florian & Black-Hawkins, 2011; Tomlinson, 2017].

The following scientific methods were used comprehensively during the research process:

**Theoretical methods:** Through the analysis of scientific literature, comparative analysis, generalization and systematization, scientific views on inclusive education, education of children living with oncological diseases, modern pedagogical technologies and distance learning were studied. In particular, the conceptual approaches developed by the global model of inclusive education UNESCO (2021), as well as the theories of differential education put forward by Heward (2018) and Tomlinson (2017), served as the methodological basis.

**Empirical methods:** The study collected data from teachers, parents, and elementary school students through observation, interviews, and questionnaires. In this process, students' activity in the learning process, psychological state, motivation, and level of adaptation to education were studied. The analysis of empirical data was carried out based on the theory of emotional climate and student-teacher relationships developed by Pianta (1999).



**Pedagogical experimental method:** As part of the study, modern lesson models adapted for students with oncological diseases were developed and tested in practice. Distance learning technologies, interactive methods, and game technologies were used in the experiment. The results of the study were based on the concepts of digital education and virtual classrooms put forward by Bozkurt (2020) and Dong et al. (2020).

**Diagnostic methods:** Tests, diagnostic tasks, and observation maps were used to determine students' cognitive development, knowledge level, and learning motivation. In this process, the scientific conclusions about the decline in cognitive functions noted by Butler and Mulhern (2005) were adopted as a methodological basis.

**Statistical methods:** The empirical data obtained were processed based on mathematical and statistical analysis, and the reliability and effectiveness of the results were determined. The results were analyzed according to the Black and Wilian (1998) approach based on the principles of formative assessment. The experimental base of the study was selected from primary grades of general education schools and students with oncological diseases studying in the form of home or distance learning. The study was carried out in three stages: (1) diagnostic stage, (2) experimental stage, (3) stage of analysis and generalization of the results.

In general, these methodological approaches made it possible to develop a modern, flexible, and effective educational process for primary school students with oncological diseases on a scientific basis and laid the foundation for the formation of practical recommendations that serve the development of inclusive education.

**Analysis and results :** Within the framework of this study, the effectiveness of organizing modern classes for primary school students with oncological diseases was analyzed theoretically and practically. In the research process, the level of mastery, learning motivation, psychological state, and adaptation to the lesson process of students were taken as the main evaluation criteria.

The results of the analysis showed that in traditional teaching methods, this category of students is more likely to experience fatigue, poor attention, and disengagement from the lesson process. However, when modern pedagogical approaches were used, in particular, individualized education programs, distance learning technologies, and interactive methods, it was found that student activity significantly increased. In the experimental process, the use of short block lessons



(10–15 minutes), visual materials, and game technologies improved the speed of students' knowledge acquisition. According to the results of the observation, students' interest in the lesson increased by an average of 35–40%, and the indicators of independent completion of tasks improved by 25–30%. It was also noted that students' regular participation in classes conducted through distance learning platforms was maintained. This is consistent with the findings of Bozkurt (2020) and Dong et al. (2020) confirms the importance of digital education in ensuring flexibility and inclusion, as advocated in their research.

The results of psychological observation showed that in classes where a supportive and positive emotional environment was created, students' self-confidence increased, and the level of fear and anxiety about participating in the lesson process decreased. This confirms the direct impact of emotional support on educational effectiveness, as emphasized by Pianta (1999). According to the results of diagnostic assessment, the level of knowledge acquisition in students trained on the basis of differentiated tasks was higher than in the traditional approach. In particular, simplified and divided into small parts of educational materials facilitated the process of memorization and retrieval. The results of statistical analysis showed that the learning outcomes of students in the experimental group were significantly higher than in the control group. This confirms the effectiveness of classes based on a modern, flexible and individual approach. In general, the results obtained show that modern classes organized for primary school students with oncological diseases:

This therefore , like this students for education in the process individual approach , digital technologies and psychopedagogical support systems wide current to grow necessary that scientific in terms of was founded .

**CONCLUSION** . This in research oncological to diseases played elementary class students for modern lessons organization of reaching scientific-theoretical and practical aspects studied . Take visited analyses this shows that such in the category students for education process organization in the process of flexibility , individual approach and psychological support main factors is considered [ Ainscow , 2020; UNESCO, 2021 ] . Research results this confirmed that traditional education forms



oncological to diseases played students needs complete satisfy can't . This because of individual education programs , short block lessons and differential approach based on organization done training more efficient result gave [ Tomlinson , 2017; Heward , 2018 ] . Also , remote education from technologies use students education from the process interrupted not to remain provided and their knowledge in the taking continuity save left . This and modern digital education of tools inclusive in education importance again one there is confirms [ ( Bozkurt , 2020; Dong meat al ., 2020 ) ] . Psychological analyses to the results according to , positive emotional environment and motivational approaches students lesson to the process interest increased , their to oneself was trust strengthened and social adaptation process relieved [ Pianta , 1999; Ryan & Deci , 2020 ] .

Statistical results and modern pedagogical technologies based on organization done lessons traditional to the approach relatively students mastery level noticeable at the level increase showed [ Black & Williams , 1998 ] . In general in short , research results oncological to diseases played elementary class students for modern , flexible and individual to the approach based education system current to grow the necessity scientific in terms of based on gave . This and inclusive education development , education quality and equal opportunities in providing important importance profession will reach .

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