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# OPTIMIZATION OF THE PROCESS OF PRIMARY SCHOOL AGE CHILDREN ADAPTATION: PRACTICAL EXPERTISE

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## Abstract

Introduction of innovative technologies to the system of primary education has made it possible to consider new mechanisms for the implementation of health-forming activities in the process of physical education, which greatly expands the arsenal of tools and methodological approaches to organize a process of physical education. Existing scientific progress in the issues of forming the health of primary school age children does not fully provide insight into the mechanisms of this type of activity and is limited in the complex influence on the process of children adaptation to school studying conditions. **The objective of the study is** to assess the effectiveness of practical expertise in optimizing the processes of primary school age children adaptation to the conditions of study. **Methods of research are** theoretical analysis of data from scientific, methodical and specialized literature, pedagogical experiment, assessment of the primary school age children adaptation to the conditions of study by T. I. Lyasota comprehensive method, mathematical statistics. **Research results.** The process of adaptation to school conditions of primary school children is analyzed. The author's concept of health-forming technologies in the process of physical education of

primary school age children is introduced, it is based on the use of active tourism means, the control function in the process of the concept implementation is defined. The directions of practical implementation of the author's concept are reviewed. The effectiveness of the proposed concept determined in the process of forming a pedagogical experiment was analyzed. 51 students of the first grade (23 boys and 28 girls) participated in the study, they were divided into control and experimental groups. The practical implementation of the concept of health-forming technologies in the process of physical education of primary school age children contributed to improving the processes of primary school age children adaptation to the conditions of school studying at EG students compared with CG students.

**Key words: health, health-forming technologies, primary school children, adaptation.**

**Introduction**. Starting school is a serious challenge for children. Changes of social roles and motor regimes, significant intellectual workload at early age – all this creates a stressful situation for a child. The formation of a new educational paradigm is based on the idea of humanism, which involves emphasizing the attention of the subjects of education on preserving the health of the younger generation [1, 6, 15, 15].

Innovative activity on reforming primary education in Ukraine by the implementation of the New Ukrainian School shows fundamentally new approaches to the educational process of children, by the introduction of a new content of education based on the formation of a child's competencies necessary for successful self-realization in society; construction of the over-arching educational process, which creates values; the introduction of education, based on a partnership between a student, a teacher and parents, etc. [9, 10].

Based on the key positions of the New Ukrainian School, in the process of physical education of school age children, one should not neglect and ignore the urgent issues related to the formation of the health at school age children and to widely introduce innovative approaches in the process of physical education of schoolchildren [5, 14, 17, 20].

Consideration of activating health-forming activity should be one of the priority directions in determining the strategic objectives of the physical education process and the educational process in general [7, 8, 15, 20].

Today, the system of national education focuses on the formation of children's health as the main value of society, which provides a stable development of the state in the long run.

The analysis of scientific researches of leading scientists in the field of formation of children's health in the process of physical education in institutions of comprehensive

secondary education [3, 4, 16, 19] allowed to create an idea about the insufficiency of the proposed methods of solving a problem of health forming at primary school children. It is connected to the limited use of integrated approaches to the implementation of health-forming technologies in the world of educational innovation.

Besides these problematic issues, the duration and details of the process of children adaptation to school studying conditions, which has a significant impact on the level of physical and mental health of the child in the future, are especially important for primary school age children [12].

The introduction of health-forming activities in the process of physical education at primary school age should be based on the defining details of the processes of adaptation to school studying conditions at first grade students, which will indicate a significant health effect in general.

**Objective of the research is** to assess the efficiency of practical expertise in optimizing the processes of primary school age children adaptation to the conditions of study.

**Methods of research are** theoretical analysis of data from scientific, methodical and specialized literature, pedagogical experiment, assessment of the primary school age children adaptation to the conditions of study by T. I. Lyasota comprehensive method, mathematical statistics.

Pedagogical experiment was conducted in two stages. 102 students of the first grade of comprehensive secondary education institutions in Sumy and Vinnytsia oblasts of Ukraine were involved into ascertaining stage. 51 students (23 boys and 28 girls) participated in the research at educational stage, they were divided into two groups – control group (CG) and experimental group (EG).

**Research results and discussion.** On order to have a general idea of the mechanism of adaptation of primary school age children to the conditions of studying at school ascertaining stage of pedagogical experiment was conducted.

The peculiarities of adaptation processes were studied with the help of T. I. Lyasota comprehensive method [16], which allowed following the dynamics of primary school age children adaptation to the conditions of study.

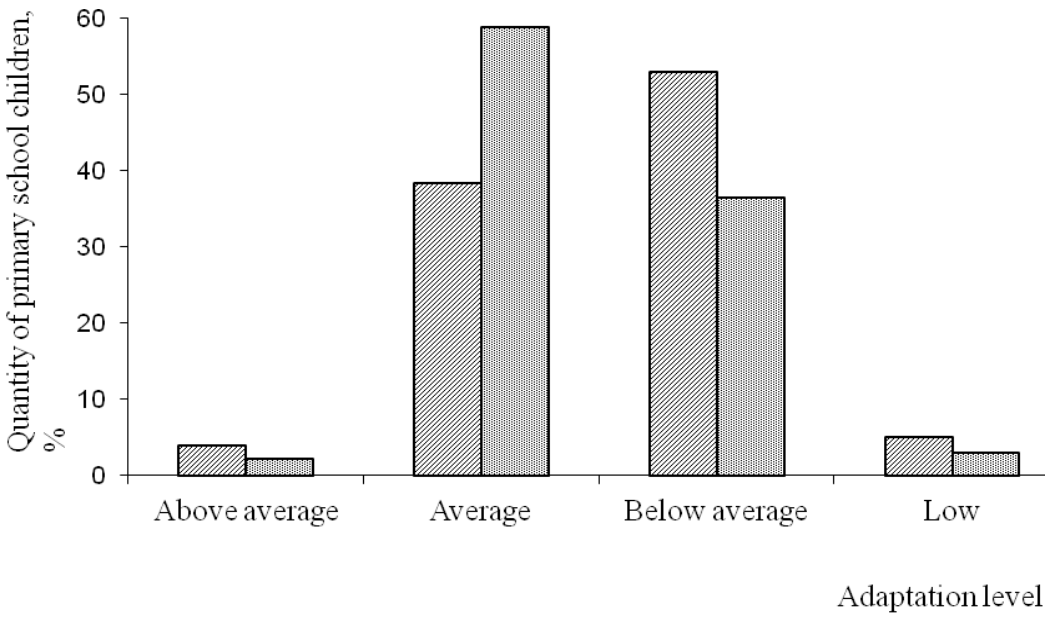


Fig. 1. Primary school children distribution by the level of adaptation to the conditions of studying at school, n = 102:

▨ - beginning of school year; ▨ - end of school year

It was found out that at the beginning of a school year the number of children with the adaptation level below average prevailed, which proves that there are problems with adaptation of children to school life, unreadiness of significant number of children for the conditions of studying at school.

It was proved that at the end of a school year number of children with average and above average school adaptation level reduced 1,96 % (n = 2) accordingly, number of children with the below average adaptation level reduced 16,67 % (n = 17). In return, number of children with average school adaptation level increased 20,59 %. It should be mentioned that statistically significant ($p<0,05$) increase of number of children with average level and statistically significant ($p<0,05$) decrease of number of children with below average school adaptation level was proved.

It is obvious that some children managed to get used to school routine to some extent, but still insufficient level of primary school age children adaptation to the conditions of study is proved, which directly indicates necessity to conduct extra activities to improve the process of children's adaptation to school.

It was found out that at the beginning of school year a number of girls with above average school adaptation level was 7,55 % bigger that a number of boys with the same school adaptation level. Accordingly, boys were 10,20 % more characterized with the low

level of school adaptation. But the difference between quantities of primary school children with the corresponding levels of school adaptation was not significant ($p>0,05$).

The research proved that at the end of school year number of girls with average level of school adaptation increased 11,32 %, owing also to 3,77% decrease of number of girls with above average level of school adaptation. As distinguished from the girls, the level of adaptation to school increased from average up to above average in 2,04% of boys. However, at this stage of investigation the number of girls with average level of school adaptation was 30,53% bigger than the number of boys with the same level, at the same time the number of boys with below average adaptation level was 28,19% bigger than the number of girls, and such difference is statistically significant ($p<0,05$).

The research proved that the vast majority of children at the beginning of school year were characterized by predicted favorable progress of adaptation processes, in return, the situation did not significantly change during the experiment, which detects insufficient attention from the teachers' side to the issues of children's adaptation to the conditions of studying at school during the academic year (fig.1).

Based on the theoretical analysis and the results of own investigations [5, 12] the concept of health–forming technologies in the process of physical education of primary age school children was introduced. Among the main direction of pedagogical influence within the functional frames of the introduced concept are: making up the lesson with the exercises in accordance with comprehensive development of a child's motional abilities, taking into account the mechanisms of the stages of development of a child's organism; differentiating physical activity in accordance with age peculiarities of primary school children and the progress of adaptation processes; taking into account motor regime, inherent in a child and correcting it in accordance with age norms of motor activity; increasing motivation to conduct regular physical and recreational activity; improving children's interrelation in a social group; controlling, which includes teacher's evaluation and self-evaluation.

Under practical implementation, the point of developed concept included the means of active tourism, which were implemented in different kinds of extra curriculum activities of primary age school children (exercises before the lessons, physical activity breaks, extended day physical activity, public sports events).

The special role in health-forming activity is played by a primary school teacher, who is able, depending on the peculiarities of his/her educational activity, to implement a set of educational means of health-forming interaction at primary stage of education on the basis of pedagogical design aiming at complex solution of the problem of protecting and improving

physical, mental and social health of school children, formation of their health-forming competence [18].

In order to study health-forming activity in the frame of the concept functioning, it is necessary to consider it as a guided process of transformations and directed influence on physical and mental conditions of primary school age children, which demands regular control. Taking into account that implementation of the concept of health-forming technologies into the process of primary school age children physical education is carried out in several directions it is necessary to assess the effectiveness of such changes in an integrated manner.

The indices were classified by the leading directions of educational influence in the process of health-forming activity, which created conditions for both analysis by particular indices and comprehensive evaluation of physical conditions: physical development, sickness rate, physical health level, adaptation abilities, attitude to own health, motivational proprieties of primary school children, level of engagement into health-forming activity.

In the process of research we developed criteria for assessing the effectiveness of health-forming technologies implementation, including adaptational, medical and biological, cognitive, activity and behavioral, axiological ones.


Fig. 2. Criteria to assess effectiveness of health-forming technologies implementation

The effectiveness of the proposed concept was checked by the forming pedagogical experiment, which involved 51 school children of the first grade, who were divided into CG and EG. 25 children (11 boys and 14 girls) from the CG studied in conditions of traditional

approach to the process of physical education of first grade students, and the children from EG (12 boys and 14 girls) – in conditions of the developed concept. The forming pedagogical experiment lasted 9 months. It should be mentioned that at the beginning of forming experiment primary school children did not have significant difference in indices ($p > 0,05$), which characterize adaptation to the conditions of studying at school.

The experiment proved effectiveness of implementation of the developed concept for optimization of the progress of adaptation processes of primary school age children and increasing the level of their adaptation to school conditions. During the experiment, the children of EG, as distinguished from the ones of CG, displayed positive dynamics in the level of adaptation to the conditions of school studies regardless the gender.

The number of children from CG with above average level of adaptation to conditions of studying at school reduced 8,0 %, while the number of children with below average level increased. It is obvious that the absence of health-forming activity caused worsening of primary school children's adaptation processes (Table 1).

*Table 1*

**Analysis of the level of school adaptation depending on school year period, n=51**

| Stage of research | Level of school adaptation | Experiment participants | | | |
|---|---|---|---|---|---|
| | | CG | | EG | |
| | | n | % | n | % |
| Beginning of research | above average | 3 | 12,0 | 2 | 7,69 |
| | average | 10 | 40,0 | 9 | 34,62 |
| | below average | 10 | 40,0 | 13 | 50,0 |
| | low | 2 | 8,0 | 2 | 7,69 |
| End of research | above average | 1 | 4,0 | 7 | 26,92 |
| | average | 10 | 40,0 | 16 | 61,54 |
| | below average | 12 | 48,0 | 3 | 11,54 |
| | low | 2 | 8,0 | - | - |

However, implementation of the developed concept and means of active tourism in extra curriculum activity of primary age school children turned out to be helpful for adaptation of primary school children of EG to the conditions of school studies and caused 19,23% increase in number of children with above average adaptation level and 26,92% increase among children with average adaptation level. Whilst the number of children with below average adaptation level 38,46% reduced and with low level – 7,69% reduced. It

should be mentioned that after the experiment there were 8,0% CG children with low adaptation level, but no children from EG with low level of adaptation to the conditions of school studies.

Advanced research proved that the tendency is applicable to both boys and girls. After the experiment 14,29% girls from CG moved from above average to average level of adaptation to the conditions of school studies, on contrary, in EG the number of girls with above average adaptation level increased 21,43%, and with average level increased 14,29%. It was found out that adaptation level of 18,18% CG boys dropped from average to below average, but in EG the number of boys with above average adaptation level increased 16,67%, and with average level of adaptation to the conditions of school studies – 41,67%.

**Conclusions and directions for future research.** Change of social role and motor regime, significant intellectual workload at early age create preconditions of stress for primary age school children, which becomes a threat for their health. Within the frame of humanization of educational process, which dominates in contemporary education, the subjects of educational process pay bigger and bigger attention to protecting health of young generations. One of the primary tasks of the system of primary education which demands urgent solutions the issue of children adaptation to the conditions of school studies, which can be sorted out by forming health of primary school children. Implementation of the developed concept of health-forming technologies in the process of physical education of primary age school children and means of active tourism contributed to increasing the level of primary age school children adaptation to conditions of school studies.

The area of future research covers investigating and implementing health-forming technologies in the process of physical education of middle school students.

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