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ADDITIONAL EDUCATION OF CHILDREN AND DEVELOPMENT OF ATTITUDE TO COGNITIVE ACTIVITY

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Abstract

The article presents the materials of theoretical and empirical research of changes in the status of additional education of children in the new realities of modern society. The educational model is being transformed from "adaptive and universal" to "personalized and continuous". This model increases the potential for additional education. Today, the sphere of additional education helps a large number of children to successfully implement themselves in the modern world and adapt to the intensive development of modern technologies. In the digital educational environment, the forms, methods and content of additional education are changing. The resources of the digital educational environment help to solve the tasks put forward by the state and society to the education system at the present stage. The variability of studying tools, methods and forms of knowledge assessment, early career guidance routing based on individual interests of students, allows us to conclude that the digital educational environment has a multi-variant orientation of carrying out tasks to develop personal values and motives in the educational process. Using the resources of the digital educational environment will carry out the task to ensure the state-governed preparation of a future graduate as a person interested in individual growth and self-development. Future education should be based on the needs and personal interests of children, their own motivation and freedom of choice. The most important thing is to provide conditions for originative and creative initiatives designed to develop a motivational and value attitude to the cognitive activity of students.

1. Introduction

Increasing attention to additional (non-formal) education is observed all over the world. It is largely due to citizens' dissatisfaction with the narrow boundaries of content and the formalism of school education. In a broader sense, the educational model is being transformed from "adaptive and universal" to "personalized and continuous".

Currently, the state "from above" provides nominal accessibility of a standard set of educational services and seeks to create conditions for the development of all the specified unified results in a certain period of time. Education in the future should be based on the needs and interests of citizens themselves, based on their own motivation, freedom of choice, where the state is called to create conditions for the implementation of initiatives "from below" throughout a person's life.

High ratings of the potential of additional education for the individual and society are presented in the reports of international organizations and think tanks.

The system of additional education in Russia differs significantly from other types of education, and also has unique features in comparison with the education sectors that solve similar problems in foreign countries.

2. Problem Statement

Analysis of the program content and the changing conditions of the educational environment actualizes the dialogue between society and state on the optimal ways of developing the additional education system and leads to searching for its new forms, methods and content system in a digital learning environment. The problem of the research is to identify the conditions for the implementation of additional school education, aimed at forming a motivational and value attitude to the cognitive activity of students. Note that the motivational and value block is the personal education that is most susceptible to change. It is a set of personal orientations that serve as a basis for maintaining cognitive activity and practice at a high level, orients subjects in the learning process to set specific goals and is an effective means of improving the quality of studying (Kirillova & Bessonova, 2015).

Today, the sphere of additional education helps a large number of children to successfully implement themselves in the modern world and adapt to the intensive development of modern technologies. Developing the child's desire and ability to acquire new knowledge is the main task of the teacher (Artyukhina et al., 2018).

The most important thing is to provide conditions for constructive and creative initiatives designed to develop the spiritual and intellectual potential of all participants in the pedagogical process of additional education.

3. Research Questions

Traditionally, additional education has been understood as education and upbringing outside the main educational programs and, in many cases, outside of school, in specialized educational institutions. In modern conditions, the very meaning and significance of additional education acquire new content. On

the one hand, some unification of the school education process, which is to a certain extent embodied in the system of state final certification, objectively leads to a restriction of the opportunity field for students' creative self-realization in the framework of basic education. On the other hand, it is the intellectually active creative seeking individual who is the main and most valuable element of the national human capital of the most developed countries. To ensure maximum consideration of individual characteristics and needs of students, it is recommended to focus on the development of open educational space based on modern information and communication technologies through the network interaction of educational institutions of various types and forms.

It provides solutions to the following educational tasks:

- expanding the range of educational services provided for different categories of children, including gifted and with disabilities (Nikolaev & Shabanova, 2016);
- opportunities to meet individual educational needs, design and implement individual educational routes for students;
- ensuring sufficient choice of educational programs, their variability and compliance with the needs and requirements of students;
- achieving openness of additional education, increasing the availability of quality education, etc.

In the context of a digital educational environment, the educational process in schools is increasingly becoming a mixed type of education, including a classroom form and additional education in the framework of extracurricular activities using digital education tools within the framework of networking (Sanina et al., 2018). If we consider the process of education in a standard format, it is usually the transfer of information limited to the program, teacher, or standard of the subject being taught. When considering the educational process in a digital educational environment, in terms of network interaction, the basic category of learning is the activity of the student. It should be noted that the activity of a student in a digital educational environment can be directed by a teacher to solve educational and cognitive tasks. These activities can be actions related to obtaining information and its perception, actions aimed at searching for and processing the information found, working with models for searching and processing the information received, as well as setting control slices of knowledge and actions for self-checking or mutual verification. Any action performed must be motivated by the active interaction of all participants in the educational process. It should be noted that the network interaction of participants in the educational process is not only about obtaining knowledge, developing skills, and realizing creative potential but also fills the need for an objective, versatile assessment of students' abilities. Objective evaluation is achieved through feedback in a network environment.

Here we consider it necessary to explain that the digital educational environment can be used not in the context of network interaction, but as a tool for information and communication technologies in studying. But as soon as the tools of digital education are used for communication or link educational platforms, programs and applications together in a single educational space, in this case, we can state the presence of network interaction.

Data exchange between the listed elements of the digital environment makes it possible to make the educational process in compliance with the principle of interactivity at all its stages (Artyukhina et al.,

2019). Starting with the task statement, up to the control cross-section of knowledge. The ability to obtain data on knowledge assessment in different educational platforms allows you to create a multidimensional model of the knowledge assessment system, which does not depend on the factors of personal relationships between participants in the educational process. It significantly affects the motivation for cognitive activity. The process of finding ways to solve educational problems in the network interaction allows you to use the means of additional education as a formal element due to its availability in these conditions. With greater variability, additional education allows you to build an educational process with a wider choice of forms and methods for organizing the process as such. There are wide opportunities for adapting educational programs and forms of work taking into account the individual psychological and pedagogical characteristics of students.

The use of new forms of interaction within the educational process plays an important role in the subject-subject relationship between teachers and students. The development of digital space in the world, in general, and in education, in particular, transforms the educational space, bringing it to a new level. The interactivity of the educational process through the use of digital educational environment provides a basis for modeling the development of network forms of interaction. The term 'network interaction in the pedagogical environment' appeared in 2001. After the creation of the educational network "Evrika" by A.I. Adamskii. At the moment, network interaction means a system of connections "that allows developing, testing and offering innovative models of educational content and management to the professional-pedagogical community; this is a way of working on the joint use of resources" (Osyak et al., 2015, p. 4).

There are wide opportunities for adapting educational programs and forms of work taking into account the individual psychological and pedagogical characteristics of students. The degree of adaptability to changing educational conditions naturally increases. There is a need to update the content and achieve a new quality of educational services. Strong links between the educational process and society are established, and in this connection, a unique social institution of extracurricular education is being created. Today, the sphere of additional education for children has a special potential that allows students to successfully adapt to the modern world and improve in the conditions of new technologies. It is relevant and in demand today. Besides, given the crucial role of initiative, interest and motivation of students in the formation of a successful person of the future, it is extremely important to provide effective and up-to-date additional education. It is based on the students' free choice of the sphere of their educational efforts' application and is an effective tool for the socialization of children. At the same time, as already noted, for the success of additional education, children must be sincerely interested in it, highly motivated to any particular type of educational activity. The educational process is increasingly becoming a mixed type of learning, including a classroom form and additional education in the framework of extracurricular activities using the tools of digital education in the framework of networking.

4. Purpose of the Study

To solve this urgent problem, it is necessary to consider the theoretical and organizational foundations of innovations in the field of education, including additional education, from a scientific

point of view, as well as to analyze innovative practices in this area (both successful and possibly unsuccessful). The purpose of the research is to increase the personal interest of students in obtaining knowledge and forming their value orientations with the help of additional education based on individual passion using the tools of the digital educational environment.

For this purpose, an informal association of children of different ages was created – a Conversation club. The purpose of developing the program of the conversation club based on research studying in a digital educational environment was:

- the need for widespread implementation of digital educational environment tools in the educational process as a means to implement the principle of interactivity in teaching (Sungurova et al., 2016);
- the need to increase the level of motivation for students' cognitive activity;
- the need to replace the subject-object principle of education with the subject -subject one based on the principle of cooperation within the framework of a person-centered approach to learning (Dvoryatkina et al., 2018);
- using heuristic learning (research method), the purpose of which is to construct students' own meaning, purpose and content, organization and awareness of the need for learning.

5. Research Methods

Taking into account the above, to reveal the topic of this work, it is important to emphasize that additional education of children is a systemic dynamic phenomenon. Its study is carried out within the framework of the system approach, which, first of all, assumes that the individual elements of the system, combining and interacting with each other in the appropriate ("correct") way, generate a new system property, which they do not possess individually (the so-called "superadditivity" of systems). In the empirical part of the study, a multi-factorial experiment was conducted.

6. Findings

In the course of our research, we considered the mixed learning process in terms of introducing elements of additional education in extracurricular activities into an individual route and implementing a Conversation club program based on research activities in a digital educational environment. When developing the conversation club program, we implemented pedagogical conditions that have the most productive impact on the process of educating students' motivational and value attitude to cognitive activity.

First of all, the implementation of the principle of interactivity in studying allowed us to increase research interest.

Secondly, the introduction of the research method in studying has made it possible to expand the range of possible use of the digital educational environment.

Thirdly, using the tools of the digital educational environment, we were able to individualize the process of research studying as much as possible within the framework of the conversation club.

Individualization, interactivity and digitalization, the main principles that we used in the construction of pedagogical conditions for the education of motivational and value attitude to cognitive activity.

The entire research period, from the moment of theoretical development to testing, took 2,5 years. As a result of processing the received data, we have identified the following patterns. In experimental groups, in the educational process of which the above pedagogical conditions were implemented, the level of motivation for cognitive activity increased from 9 to 17 %, depending on the set of pedagogical conditions implemented in the learning process (Figure 1). In the E-1 group, all pedagogical conditions were implemented. In the other two groups, conditions were gradually eliminated. In group E-2, individual educational routes using means of additional education in extracurricular activities based on the leading type of intelligence. In group E-3, classes in the conversation club program based on research training in a digital educational environment.
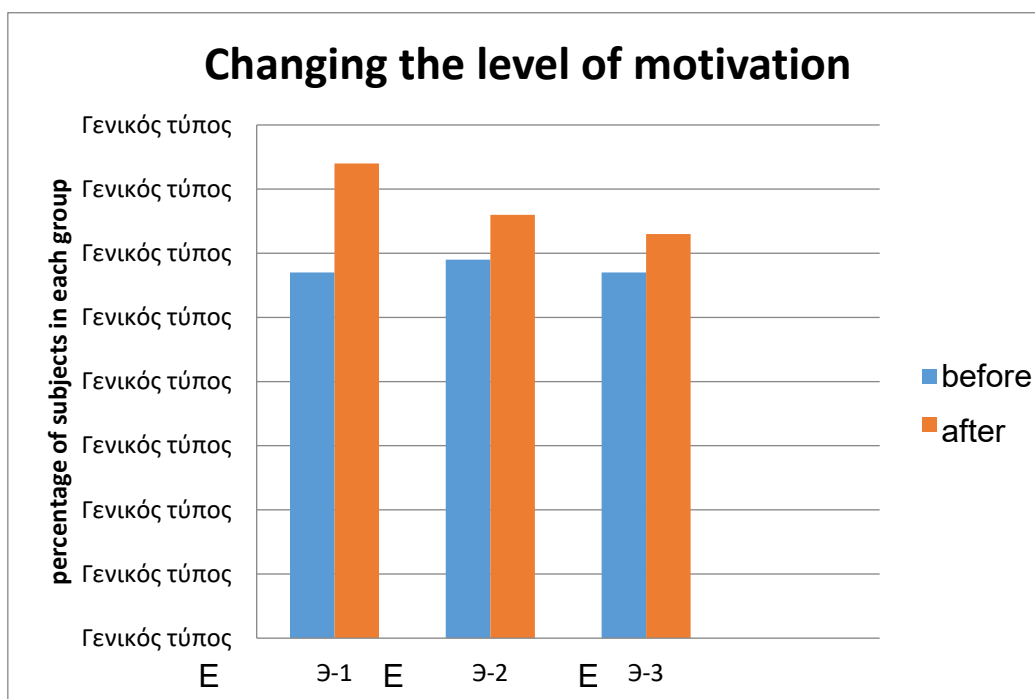

Figure 1. Changing the level of motivation

It is a significant indicator for students of secondary school age. Moreover, the majority of 8 to 13 % of students after the experiment had an increase in the level of formation of value orientations (Figure 2).
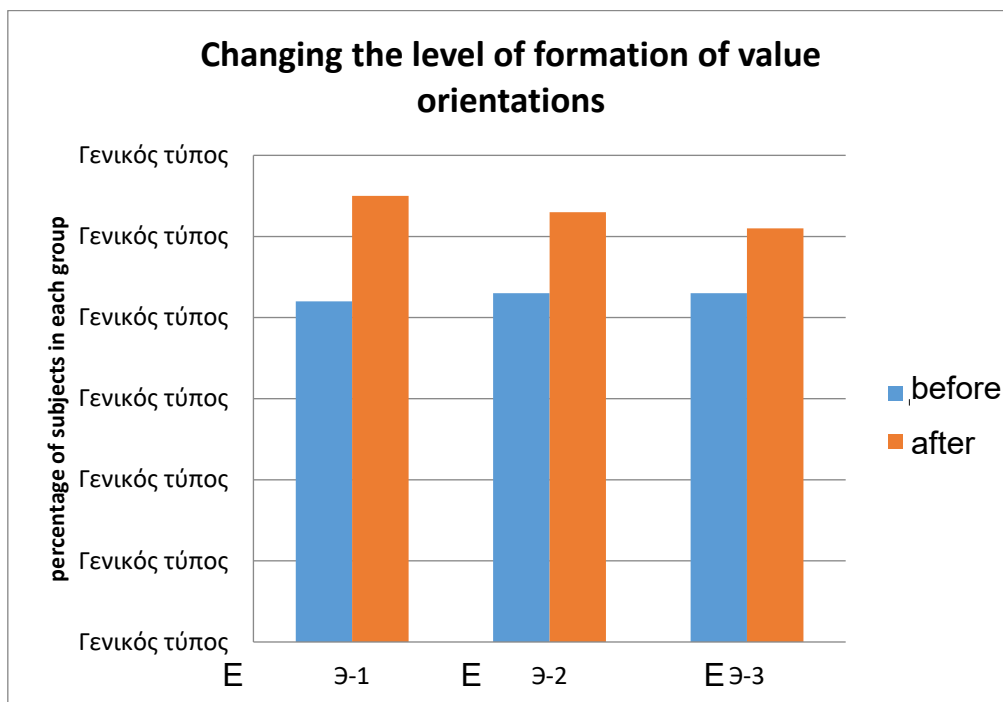
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Figure 2. Changing the level of formation of value orientations

Along with this, the direction of evaluating the value characteristics of a significant number of students has changed from a "self-orientation" to an orientation "to the world around".

Increasing the level of motivation for cognitive activity and increasing the level of formation of value orientations has a positive dynamics if the use of additional education resources in extracurricular activities is based on the differentiation of students taking into account their personal orientations.

7. Conclusion

The analysis of the external environment in which additional education functions allows us to conclude that a significant proportion of the necessary changes will be innovative (if only because scientific and technical development necessitates the introduction of innovations, both in the content and in the studying methodology). In this regard, the concept of the "educational environment" is changing. The digital educational environment and its resources help to carry out the tasks put forward by the state and society to the education system at the present stage. The variability of studying tools, methods and forms of knowledge assessment, early career guidance routing based on individual interests of students, allows us to conclude that the digital educational environment has a multi-variant orientation of carrying out tasks to develop personal values and motives in the educational process. Using the resources of the digital educational environment will help to solve the task of ensuring the state-governed preparation of a student as a person interested in individual growth and self-development.

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