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DIGITALIZATION OF THE RUSSIAN EDUCATION SYSTEM IN THE CONTEXT OF GLOBALIZATION

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Abstract

At the peak of popularity of digitalization in various areas, it is necessary to study ongoing transformations which should be effective for humanity and not so painful for new users. The article attempts to analyze goals of the education system through the prism of relations between the subjects, which affect the education process, as well as the process of digitalization in the modern world. Modern conditions create new goals for almost every subject. They must be taken into account in the educational process. The object of research is public relations in the education process. The article concludes that development of the education system should take into account a set of factors, the purposefulness of all subjects and predict consequences of changes. When improving the education system, it is necessary to focus on the relevance and popularity of those technologies that will be in demand in the future and taught to the younger generation.

1. Introduction

Modern trends associated with the technological development of the world create new conditions for man and society as a whole. Global competition makes the entire world community think about the need to implement the results of progress. It creates new demands that accelerate the transition to innovations, including in the education system. Exploring the field of technology education, it is advisable to study methods of rapid transition from the traditional form and focus on the elements, goals and objectives of the education system. Digitalization, as a process of introducing modern technologies into the education system, creates a need for research.

2. Problem Statement

Without studying the experience of previous generations, it is impossible to study technological transformations in pedagogy. In historic science, there is the concept of technocracy, which means a certain political class of specialists. For many years, education was based on the technocratic nature. In Russia, this direction was reflected in the works by Boldyrikhin (2017). In his opinion, it is impossible to achieve the necessary results by changing the economy; culture must also be changed. It is also undeniable that the historical development of technology, culture, economics and ideology was analyzed in terms of the Marxist doctrine. This fact confirms that the political directions of the country are closely related to the transformation process in various fields of education. In the education science, there are such concepts as computerization, informatization and digitalization. Skorodumova and Melamud (2005) define the concept of computerization as the implementation of electronic computing devices into all spheres. In turn, Lonsky (2015) defined informatization as a stage in creating conditions for satisfying the information needs of society.

According to Vartanova et al. (2017) "digitalization" is the transformation of information into a digital format and all the constituent elements of the education system. These definitions draw attention to the fact that there is no consensus in the scientific community about which of the concepts is broader. In our opinion, the concept of digitalization is broader than the concept of informatization, since digitalization is not only the transfer of data into a digital form, but also a change in the processes themselves with the help of a certain procedure for the use of digital data (Gulin & Uskov, 2017). The definitions do not give a clear understanding of the goals or objectives of the education system. It is noteworthy that many supporters of speedy digitalization of the education system in Russia belive that this is the main goal. For example, Kondakov (2020) says that personal development, preparation of each person for a successful life and work ... in a high-tech socio-cultural environment ... is the mission of education in the modern world. Goal setting is the engine of progress; in order to achieve goals, it is important to set them correctly. Lee-Ann Meredith says that ongoing reforms in the education system leave an imprint on the perception of goals (About Lee-Ann Meredith, 2014). She says that the goal of education is defined as the upbringing of future workers by many researchers and disagrees with this definition. Considering the goals of the education system in the context of globalization, through the prism of relations between the subjects of education, one should not forget the entire set of interested subjects. The goals of each subject deserve attention. The systematic approach to the study allows you to

get an idea of the upcoming transformations and models for the effective use of digital technologies in the education system. Reforming the education system belongs to the strategic direction of the national development. It is generally accepted that the goals of education are upbringing, training and development of individuals. Goal-setting plays the most important role in education, and it is aimed at structuring, controlling, organizing activities and making them accountable. Ivanov (2019) argues that modern education faces serious problems at the organizational and methodological level. We have analyzed the laws governing education and come to the following conclusions:

There are no clear goals of education at the federal level. For example, the goals of education were defined in the decree of the Government of the Russian Federation of 04.10.2000 No. 751 "On the national doctrine of education in the Russian Federation" for 2000–2025, but it was no longer valid.

Currently, the goals of education are partially reflected in various legal acts, but there is no clear definition.

When analyzing the state of affairs in the legal regulation of the educational process, the situation is ambiguous. In 2019, the Ministry of Education of Russia continued to develop a draft sectoral strategy for the development of education in the Russian Federation, taking into account the delineation of powers in education, established by the Decree of the President of the Russian Federation of May 15, 2018 No. 215 "On the structure of federal executive bodies". By order of the Ministry of Education of Russia No. 200 of April 23, 2019, the updated composition of the Interdepartmental Working Group for the Development of the Sectoral Strategy was approved. It involved representatives of federal executive authorities, including the Ministry of Education and Science of Russia, educational and scientific organizations, the Professional Union of Public Education and Science Workers of the Russian Federation, professional and expert communities. In order to implement an integrated approach and improve strategic planning documents in accordance with the powers of the Ministry of Education of Russia, it was decided to develop a draft strategy for the development of children education in the Russian Federation, which will include the provisions of the Strategy for the development of education in the Russian Federation up to 2025, as well as to take into account the national goals established in the Decree No. 204, and the provisions in the field of sustainable development up to 2030. In 2019, the main organizational and financial mechanisms for the implementation of the state policy in education were the FPED and the federal program "Patriotic education of citizens of the Russian Federation for 2016–2020" (approved by the Government of the Russian Federation of December 30 2015 No. 1493). The FPED meets the task established by Article 28 of Federal Law No. 172-FZ to achieve the priorities of socio-economic development and ensure the national security of the Russian Federation.

In accordance with the minutes of the meeting of the Presidium of the Council under the President of the Russian Federation for Strategic Development and Priority Projects No. 3 of March 22, 2017, the FPED has been implemented since 2018 through the project management mechanisms. In connection with the PVE development, in 2019, the structure of the FPED was brought into line with the PVE. The project section of the "pilot" FPED included events of federal PVE projects ("Modern School", "Success of Every Child", "Support for Families with Children", "Digital Educational Environment", "Teacher of the Future", "Young Professionals (Increasing the Competitiveness of Professional education)" (Young professionals),"Social elevators for everyone", "Social activity"), as well as the federal project

"Promoting the employment of women – creating conditions for preschool education for children under the age of three" of the national project "Demography", federal projects "Personnel for the digital economy" and "Digital culture" of the National program. The process section of the FPED included departmental target programs "Assistance in the development of secondary vocational education and additional vocational education", "Development of modern mechanisms and technologies for preschool and general education", "Development of additional education for children, identification and support of persons with outstanding abilities", "Development of recreation and health improvement of children", "Support for youth initiatives and patriotic education", "Quality of education", "Support for innovations in the development and monitoring of the education system, ensuring the effectiveness of competitive mechanisms for the implementation of program activities in the field of education", "Scientific and methodological, methodological and staffing of RL teaching and teaching of languages of the peoples of the Russian Federation." Thus, we can observe an abundance of laws that can confuse the conceptual apparatus and complicate the process of implementing these programs. We have analyzed the most interesting informative laws. It should be noted that in accordance with the decrees of the Government of the Russian Federation "On approval of the Rules for the development of legal acts of federal executive" of August 13, 1997 N 1009 and "On anti-corruption expertise of legal acts and draft legal acts" of February 26, 2010 N 96, any legal act must be laconic, uniform and have the possibility of repeated application. At the same time, it should be noted that the Federal Law "On Education" does not specify the goals of education, there are no clear tasks, which makes it difficult to determine the need for education.

In the Federal Program of the Russian Federation "Development of Education", approved on December 26, 2017, No. 1642, with a period of implementation from 2018 to 2025, specific goals for the development of education were determined:

- ensuring the quality of the global competitiveness of Russian education and the entry of the Russian Federation into the top 10 countries by the quality of general education;
- availability of education, characterized by the availability of preschool education for children aged 2 months to 3 years;
- upbringing of a harmoniously developed and socially responsible personality based on the spiritual and moral values of the peoples of the Russian Federation, historical and national-cultural traditions.

However, the program has a limited period of implementation; it does not contain a long-term global goal of education, which confirms the lack of regulation of the goal of education at the federal level.

It is necessary to pay attention to the fact that educational relations in the field of digitalization require close attention and need a detailed regulation, since digitalization is not always possible in the educational process. In addition, attention should be paid to the psychological component of the educational process, since knowledge is assimilated both verbally and not verbally.

In addition, as the analysis of information sources shows, we do not find unambiguous answers to the questions posed in this study. Let us turn to the analysis of the "subject" of education. In the namely: a kindergarten; a school; a higher educational institution.

The subjects participating in the educational process are

- government;
- individuals (student, teacher, parents, legal representatives, etc.);
- society;
- organizations and enterprises (Kondakov, 2020).

The above subjects interact with each other. The education system cannot exist in a vacuum, its development is impossible without taking into account the socio-political and technological conditions. Consequently, the attribution of the goverment to the subjects of educational relations reflects the national policy that ensures national security. In turn, the processes of transformation, development, and improvement are directly reflected in the education system. The current education system cannot and should not lag behind the social processes. Consequently, the attribution of society to the subjects of educational relations is beyond doubt, since education refers to the basic social processes that society is obliged to support.

It should be noted that the legal acts on educational relations focus on the main subject of education that is an individual. The individual acts as a subject involved in the educational process. The first category includes students and teachers, and the second one – parents and legal representatives of students. The individual is the main subject, because education is designed to help him to determine his place in society.

Organizations and enterprises were attributed to the subjects of educational relations because production also refers to the basic social processes. Organizations and enterprises participate both in the educational processes and in implementing acquired knowledge, skills and abilities.

It is necessary to outline the modern goals of each subject:

1. The government has two goals:

- establishing a status of the country in education;
- providing the basis for human development.

2. The main goals of society are as follows:

- preservation and transfer of cultural heritage to the generation;
- motivation of the population to learn;
- social control.

3. The goal of individuals is to determine his mission in relation to himself and the world as a whole.

4. Organization and enterprises have the following goals:

- staffing with specialists with modern qualities, knowledge and skills;
- reduction of production costs using modern methods (Zekov, 2019).

The current situation has created new living conditions and the new method of reducing production costs – robotization – is developing. These conditions will reduce the number of jobs. In turn, the mass character in education will create the need to train three types of people:

- a class serving the existence of civilization;
- specialists in creative fields;
- people who have not found themselves in the modern world (Kondakov, 2020).

It is noteworthy that the first category, which includes teachers, doctors, etc., will be gradually replaced, and this will happen with the implementation of artificial intelligence.

It is necessary to define the goals of modern education and its role in the modern civilization.

We have tried to find out whether the citizens of the Russian Federation know the goals and objectives of the education system? Is digitalization necessary? Do people understand what "digitalization of the educational environment" means, and does globalization help to achieve the goals of education? More than 150 people took part in the survey; all respondents were representatives of the Russian education system. An analysis of the research results allowed us to draw the following conclusions:

- goals of education: self-realization (14 % of respondents answered), building up the national human resources (40 %), improvement of the education system (46 %);
- tasks of education: improvement of the education system (29 %), availability of education (12 %), digitalization (59 %);
- the understanding of the concept of "digitalization of the educational environment" among the respondents is generally sufficient (80 %), but provided that it is possible only within the framework of full-time education of students of all educational levels in accordance with the current legislation of the state (51 %);
- the role of globalization in the achievement of education goals: "does not contribute to" (53 %) due to the "impossibility to improve the education system"; "globalization is a long process of interstate integration"; "contribute to" (47 %) because of "exchange of experience, technologies, methods"; "faster adoption of digital technologies"; "bringing the education system to the international standards."

Thus, the opinions of the authors and the majority of the survey respondents coincide on the goals and objectives of the government in education and the role of digitalization. Digitalization can be a tool to achieve the goals. It is advisable to define the role of technology as methods that are aimed at achieving the tasks. The results of the study emphasize the importance of all issues. It is impossible to determine only the goals of education, the achievement of goals is determined by the tasks set. Since education and its development is a strategic direction of the government activities, the government sets goals and objectives for a certain period (Zekov, 2019). Progress brings its own innovations. Thus, digitalization of the education system is the progress that has occurred in this period. It involves the development of the education system. Our main task is to make sure that its implementation is occurring harmoniously. All this should take into account the tendencies towards globalization in all spheres.

Considering the issues of technology in education, we consider it possible to predict the most relevant areas of the future:

- robotics as a technology that is already widespread in the educational system;
- 3-D printing that can replace drawing as a discipline;
- big data analytics, artificial intelligence, virtual reality research will be the most popular areas in the future education system.

3. Research Questions

The subject was the theoretical, legal and organizational support of goal setting in education.

The ttheoretical and regulatory legal support involves the analysis of the Russian laws on education.

Legal acts were analyzed and the research was conducted.

4. Purpose of the Study

The purpose of the study is to draw attention to the need to regulate the goals of education at the federal level by studying the problem of goals of education in the Russian Federation and determining the legal relationship in this area.

5. Research Methods

The main research method is an analysis of regulatory legal acts, in terms of the norms regulating education. The sociological method made it possible to analyze the results of sociological surveys on the education system in Russia. In general, people see the goals of education as the main goals of learning: preservation and transmission of cultural heritage and personality development. The practice-oriented research is based on the following methods: conversation, questionnaires, statistical data processing - the method of averages.

6. Findings

The main goal of education is development of a personality in relation to himself and the world as a whole. Digitalization and the use of modern technologies in the education process are ways to achieve these goals, which is confirmed by the experimental data obtained. Strategic development directions are longitudinal projects, they take time, starting from setting goals and objectives, ending with the results obtained; while the project implemented, intermediate results are obtained and evaluated; if they are not proper, the tasks can be adjusted or changed. The digitalization of the educational environment is the task that is adjusted to the changes in the education system in the context of globalization. During the self-isolation caused by the pandemic, the educational process was digital. The definition of the main goals of the subjects involved in the education processes made it possible to focus on the existing discrepancies, but this should be the topic of another independent study. The development of the education system should involve purposeful, adequate, modern actions that can improve the efficiency of the system and be popular in society. Development and improvement should include forecasting methods that will determine the likelihood of developments in the area under study. The results obtained in this study indicate the importance of reforms aimed at improving the criminal legislation related to updating both the conceptual apparatus and the regulation of the digital space associated with the financial market, including cryptocurrencies and electronic money.

7. Conclusion

The approach presented is based on an analysis of the education system from various perspectives, which affect the education processes. The education system is a huge layer of activities of a large number

of people, a combination of many factors, all of which affect the system. Social, political, economic changes in the country and in the world contribute to changes in the system. A competent analysis of a large number of changing factors and characteristics can help create an up-to-date education system that occupies a leading position in the world.

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