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International Scientific Conference**DIGITALIZATION OF EDUCATION IN THE CONTEXT OF
MODERNIZATION OF RUSSIA**I. M. Melikov (a)*, O. B. Skorodumova (b)
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**Abstract**

The aim of the study is to actualize the contradiction between the form and content of digital technologies in science and education, which is becoming the problem of modernizing Russia. The main research methods are hermeneutic and axiological, as well as a systems approach. The main results of the study are that when digital technologies are introduced, content elements of the Western world is often introduced into Russian society, which do not correspond to the existing cultural and historical traditions of Russian society. As a result, the proper level of modernization is not ensured and society is in fact, thrown back. The conclusion that the authors come to is that for modernization to be carried out productively, it is necessary, when introducing digital technologies, to fill the forms of the global world as content with a culture that was formed in the course of historical development and rooted in the reality of Russian society. Content of modernization, which is carried out on the basis of digital technologies, should come from an authentic, not a global culture, which is unique in its essence. Culture is the personification of the content of social life, therefore it is she who must fill all social forms. The novelty of the work lies in substantiating the idea that digital technologies should not contradict the socio-cultural characteristics of Russian society, but correspond to them and even take care of their safety

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1. Introduction

All digital technologies exist and are being implemented in virtual reality. Virtual reality has always existed in the social world and will continue to exist as long as humanity exists. Virtual reality is the reality of morality, laws, documents, written monuments, scientific theories, ideas, etc. This is the world of social consciousness that indeed controls the social world. Humanity is guided by it in its actions and deeds. More significant is not the objective social world, the virtual world. It is a metasocial world, a world based on metanarratives - concepts, myths, different world views, etc. The modern social world is rationalized and even, in a certain sense, intellectualized in the sense that its center of gravity is transferred from the embodied material level to the virtual one. This is, in fact, a feature of the information society.

1.1. Digital technologies in the modern world

If virtual reality emerges along with social life, then in recent decades the Internet has spawned - a phenomenon that made it possible to make this virtual reality tangible. Only individual people endowed with the corresponding intellectual potential understood the power and significance of virtual reality before the advent of the Internet. The Internet made virtual reality accessible to everyone.

The human social world itself is, in principle, and remains fragmented. In the past, only people who were involved in power and theoretical activity could overcome this disunity. Today, the Internet has virtually effortlessly united all of humanity. Almost all people living on earth are involved in it. Almost every person today has a mobile phone with the Internet, with the help of which he is in potential contact with the whole world.

1.2. Networked society is a feature of the modern world

Virtual networks (Tapscott & Tapscott, 2016), called social networks, play a special role in human globalization, and they involve more and more people in this process every day. And where the level of globalization is greater and deeper - in the economy or in social networks - is still a big question. If earlier an individual was “cut off” from the world due to lack of information, now the availability of information thanks to the Internet makes him automatically a “citizen of the world”. The information field unites people from all over the world, a person can communicate with anyone, wherever he is. If a single social space is still being formed, then a single information space has already been created. And it is more significant than the social world.

Possession of information, according to cybernetics, allows control. And being in the global information space creates an opportunity not only to be involved in social processes, but also to participate in their management. In this regard, the information space of the Internet can seriously squeeze social power. Today's world is an information society, and its formation is facilitated by the Internet, which unites the world into one “global network”, the “world wide web.”

2. Problem Statement

The modern information society has made a restructuring of the entire structure of higher education inevitable (Bowen, 2018). The sphere of educational services is becoming an institution of the information space. This presupposes the transformation of the entire education system and the educational services market. We can say that education is becoming the country's national wealth. Therefore, the modernization of education becomes a necessary condition for the development and provision of social progress in line with the development of the entire modern civilization. In the new historical conditions, science and education become capital, which can extremely strongly affect the level of development of the entire society and the way of its functioning (Kuzmenko, 2018).

2.1. The sphere of education in a digital civilization

In these conditions, the problem of increasing the level of globalization and informatization of regions arises. And here the main role is to be played by higher educational institutions, which become centers of innovation and modernization in the regions and, accordingly, centers of an information civilization.

At present, innovations are coming to the fore in social life as forms of creative activity that generate not just something new, but a phenomenon that leads to a qualitative, radical change in society. First of all, we are talking about applied science and technology, economics, politics, since innovation is indirectly related to practical activities (Castells, 2009).

Modern search engines allow you to find, rank, and correlate information related to solving a particular problem (Botto, 2017). The activity of a specialist becomes impossible without being included in the network (Gloor, 2017). The ranking of participants within the network is carried out by the system itself, taking into account their contribution to this network community. Status growth does not depend on external regalia, but on the activity in the network, the success of solving certain problems.

2.2. The importance of innovation for the development of modern society

As a result, the specialist is required not only to master a certain knowledge, but, first of all, to master the methodology of searching for something new. In addition, success in the market directly depends on the mastery of the methodology for adapting knowledge to professional needs. It is becoming generally accepted that in the electronic economy based on knowledge, information, image and connections, constant self-education plays a dominant role and one of the main tasks of education is the formation of the ability to innovate in this area (Brockman, 2017). Time requires a combination of personal and professional qualities. Educational services, in addition to professional training of an individual at the stage of growth, gradually take the place of a process that inseparably accompanies a person throughout his life, shaping his labor and social status. Therefore, education is gradually moving from the formation of skills, abilities and knowledge in the field of advanced technologies to the formation of personal competence and the creation of new knowledge in innovative areas of science and technology.

Based on this, digitalization can be considered as an integral part of the modernization of society, because modernization is directly related to the introduction of digital technologies. The modernization of public life in general, in turn, begins with the modernization of the education system. However, with this rather specific goal, the problem of ideological attitudes and methodological principles of modernization arises. In other words, the question of how to modernize education is becoming topical, what should be the innovative approaches used in digital technologies in the field of science and education.

3. Research Questions

The form is of a civilizational nature, and this is especially important in the modern conditions of globalization. Therefore, the very modern historical situation presupposes the universalization of all social forms. Forms in society should be similar to the form of society itself. But if a society is globalizing, then this means that its form is equally becoming global. The global form of society requires the globalization of all forms.

3.1. The contradictory nature of digital adoption

The process of introducing innovative methods of digital technologies in science and education is controversial, since the problem of conformity of form and content arises. The introduction of digital technologies presupposes the modernization of Russian society, associated with the establishment of the values of the globalizing world. However, at the same time, substantial elements of the Western world are introduced into Russian society quite often, which do not correspond to the established cultural and historical traditions of Russian society. As a result, the proper level of modernization is not ensured and society is in fact thrown back.

3.2. The need to take into account culture when introducing digital technologies

For modernization to be carried out productively, it is necessary, when introducing digital technologies, to fill the forms of the global world as content with a culture that has formed in the course of historical development and rooted in the reality of Russian society.

4. Purpose of the Study

The aim of the study is to actualize the contradiction between the form and content of digital technologies in science and education, which is becoming the problem of modernizing Russia.

4.1. Relevance of the problem

The global world marks an information civilization, the concept of which was first used by Toffler. Of course, the information civilization exists on the basis of the information society. But if at the same time in most spheres of public life there is an information component and there is the necessary consistency and integration between them, then it is customary to talk about an information civilization.

In a modern society focused on the values of capitalism, it is not only efficient technologies that provide high returns for production activities, but also the sphere of educational services and science that serve to form human capital are important. The sphere of science and education acquires particular importance in the context of an information society and an information civilization (Castells, 2016).

4.2. Justification of the goal

Under the new conditions, the role of information services in public life is increasing. A high level of development of the information society presupposes an increase in the volume and qualitative diversity of the market for the consumption of intangible goods. An industrial society, the basis of which is the consumption of appropriate resources, is gradually becoming a thing of the past. The time has already come for a post-industrial, information society.

5. Research Methods

The methodological basis of the research was made up of fundamental and applied research on the problems of digitalization, information society, modernization, globalization, as well as the current state of education and science, materials of scientific and practical conferences.

5.1. Methodology

Projects based on strategies for using social networking technologies were used as research materials.

5.2. Methods

To consider innovative approaches to the use of digital technologies in education and science, a systematic approach, hermeneutic methodology and an axiological method were used.

6. Findings

Digital technologies should not contradict the socio-cultural characteristics of Russian society, but correspond to them and, moreover, take care of their safety. Only then will the ultimate goals of digitalization and modernization be achieved.

When it comes to modernization, it is supposed to reach the appropriate level of Western countries, and this implies borrowing Western ideology and technological models. And this often leads to undesirable consequences and destructive phenomena.

Of course, it is necessary to have the experience of leading countries as a guide. The mechanical reproduction of their experience cannot be productive. It is necessary to take into account other people's experience, but copying, as a rule, does not give the desired result. Therefore, it is necessary to follow our own path, taking into account the prevailing domestic peculiarities. The lesson that history teaches is invaluable. After all, the problem of modernization faced Russia more than once in the past.

In particular, this is clearly demonstrated by the reign of Peter the Great. Successful modernization took place only when it was carried out on the basis of a synthesis of Western models and national culture, when the introduced Western innovations were carried out taking into account historical traditions. In this case, modernization acquired a systemic character and led to the transformation of the entire society. Russian culture itself can be considered as a model. At the beginning of its formation, literature, theater, painting, music in Russia were based on European models, but at the same time they acquired a distinctive character.

Obviously, success accompanies when Western forms are filled with original content. The problem of Russian society, both in the broad and in the narrow sense, is not the lack of a level of development, but the fact that this development is not carried out in forms that are understandable and accessible to the global world. Therefore, the primary task here is to ensure the conformity of form and content. The form must be universal and accessible, but the content must be unique. Moreover, the more unique and distinctive the content (with a universal form), the more it is appreciated.

The universality, on the basis of which globalization is built, presupposes a universal connection of everything with everything. The process of globalization is aimed at making connections linear and one-dimensional, while human existence is not one-dimensional, but multidimensional. One-dimensionality can cover only one side. Globalization really implies universality and is built on one dimension. She is interested in the social world of a person in one dimension. It is based on reduction, simplification, the desire to reduce the complex to the simple, accessible.

Globalization is a simulacrum of sociality. Just as a simulacrum is a copy, so globalization creates its own society, to some extent a copy, a reproduction of natural society. Sociality in itself is a complex, and most importantly, a multidimensional phenomenon. Sociality has an external and an internal side. The outside is built on universality and unification. In addition to the external, there is also an internal side, which is expressed in culture. Why does culture reflect the inner side of social life? Because it dwells primarily in the inner world of a person. The culture of a society is the aggregate inner world of people who form a society. Sociality has form and content (Kuzmenko, 2019). On the surface, society is, of course, primarily a form. But there is content behind the form. Globalization presupposes only form, only the outer side. Globalization provides only a framework, a skeleton of sociality, but the richness of human relations in public life remains outside its field of vision. Sociality necessarily provides for culture, globalization excludes it. Globalization is civilizational. Just as civilization and culture are opposites in the concept of cultural-historical types by Danilevsky (2018) and Spengler (1993), so in fact, globalization and culture are opposed.

Historically, sociality develops on the basis of culture, becoming the form in which it is clothed. In other words, sociality grows out of culture. Culture is primary, sociality is secondary. In the case of globalization, the opposite is true. In fact, there is only a process of globalization; culture is simply ignored. They often talk about the phenomenon of cultural globalization. However, it is quite rightly noted that globalization embraces economics most of all, politics less, and culture least of all. Culture cannot be globalized, because it is built not on universality, but on uniqueness and originality. Globalization is characterized by universality, which culture cannot be inherent in.

Universality cannot penetrate the depths of culture, but this does not mean that globalization can completely isolate itself from the phenomenon of culture. No matter how isolated globalization from culture, without culture in general it cannot exist. However, traditional culture is not acceptable to her. The global world at best can be tolerant of it, tolerate it, but not interact. Globalization is not complementary to culture, and culture itself cannot be globalized. Then globalization creates its own global culture. Global culture is a rather unique phenomenon. There is no longer natural culture that is naturally created and presupposes uniqueness. This is a culture whose principle of existence is universality. The inner world, moral convictions, life outlook, religious principles, the level of spiritual development of people in such a culture do not have value and significance (Melikov & Skorodumova, 2020).

This is a global form of modernization. You may or may not like it. It doesn't matter, because we are talking about necessity, inevitability. Another thing is the content of modernization, which is carried out on the basis of digital technologies. It should come from an authentic, not a global culture, which is unique in its essence. Culture is the personification of the content of social life, therefore it is she who must fill all social forms (Melikov, 2020).

7. Conclusion

Successful modernization of the society entirely depends on the quantity and quality of training of the relevant personnel. In this issue, as in almost all others related to ensuring the appropriate social progress, the cadres decide everything and, accordingly, act as a decisive factor.

7.1. Education as a means of modernization

The system of science and higher education today is not just a structure that provides appropriate educational services, but a center for the modernization and transformation of public life. Proceeding from this, the education system, especially higher education, gains high importance among public and state interests. The path of modernization of Russian society as a prerequisite involves the modernization of the market for educational services of higher education.

7.2. Reliance on cultural identity is a condition for successful modernization

The development of science and education determines the country's ability to reach the necessary frontiers of the modern stage of social progress. Science and education are the key to modernizing society and the country as a whole. And this implies, when introducing innovative approaches to digital technologies, taking into account not only the principles of modernization that provide the necessary forms, but the unique and distinctive features of the culture that should fill these forms.

References

- Botto, R. (2017). *Crowdsourcing for Filmmakers (American Film Market Presents)*. Routledge.
- Bowen, U. G. (2018). *Vysshee obrazovanie v cifrovuju jepohu [Higher Education in the Digital Age]*. Publishing House of the Higher School of Economics. [in Russ.].

- Brockman, J. (2017). *Eta kniga sdelayet vas umneye. Novyye nauchnyye kontseptsii dlya uluchsheniya vashogo myshleniya* [This book will make you smart. New scientific concepts to improve your thinking]. AST. [in Russ.].
- Castells, M. (2016). *Vlast' kommunikacii* [Power of communication]. Publishing House of the Higher School of Economics. [in Russ.].
- Castells, M. (2009). *The Rise of the Network Society, The Information Age: Economy, Society and Culture Vol. I*. Blackwell.
- Danilevsky, N. Ya. (2018). *Rossija i Evropa* [Russia and Europe]. Algorithm. [in Russ.].
- Gloor, P. (2017). *Swarm Leadership and the Collective Mind: Using Collaborative Innovation Networks to Build a Better Business*. Emerald Publishing Limited.
- Kuzmenko, G. N. (2018). Influence of postindustrial society technologies on modern education. *Journal of Social Sciences Research*, 3, 168-172. <https://doi.org/10.32861/jssr.spi3.168.172>
- Kuzmenko, G. N. (2019). Filosofskoe sodержanie ponjatija «chelovek» v sovremennom social'no-gumanitarnom znanii [The philosophical content of the concept of man in modern social and humanitarian knowledge]. *Perspektivy Nauki i Obrazovania*, 42(6), 10-19. [in Russ.].
- Melikov, I. M. (2020). Pedagogical aspect of humanities. *Perspektivy nauki i obrazovania*, 44(2), 30-46. <https://doi.org/10.32744/pse.2020.2.3>
- Melikov, I., & Skorodumova, O. (2020). Philosophy as a Methodology of Understanding in the Educational Process. In Z. Anikina (Ed.), *Integrating Engineering Education and Humanities for Global Intercultural Perspectives. IEEHGIP 2020. Lecture Notes in Networks and Systems*, 131, (pp. 1015-1023). Springer. https://doi.org/10.1007/978-3-030-47415-7_109
- Spengler, O. (1993). *Zakat Evropy* [Decline of Europe]. Publishing house «Mysl». [in Russ.].
- Tapscott, D., & Tapscott, A. (2016). *Technology behind Bitcoin is Changing Money, Business, and the World*. Portfolio.