

Information and Communication Technologies in Modern Digital Educational Environment

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Abstract. The main purpose of our study was to consider the impact of the process of digitalization of modern society on students, leading to serious changes in their consciousness and psyche, due primarily to scientific and technological progress in society, as well as the process of irreversible globalization of the information space. The modern digital educational environment has a serious impact on the transformation of the entire system of information and communication technologies, causing, at the same time, often not quite adequate change in the Outlook of potential consumers of services using these technologies, which necessitated a close study and study of the problem. Modern digital resources and technologies have a serious impact on the value system and the entire way of life of people. The development of Informatization, which became the Foundation for digitalization of modern society, has made significant changes in the processes of education and training of students. Despite all the obvious advantages and prospects of the digital space, it is necessary to realize and clearly understand that the phenomenon of digitalization has not only advantages that contribute to the development of technological progress in General, but also carries a rather powerful potential threat to the full spiritual life of citizens, their health, constitutional rights and freedoms.

Keywords: education, training, students, information and communication technologies, digital educational environment, informatization, digitalization, transformation, value system, digital resources and technologies.

1 Introduction

Modern digital resources, digital content and digital technologies have a significant impact on the mechanisms of functioning of various authorities, public institutions, and thinking, value orientations, attitudes, constructs, the whole way of life of people, in General, changing, including the structure of relations, becoming, at the same time, an effective criterion for the development of society and personality.

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With all the obvious advantages and prospects of digital space, you need awareness and a clear understanding of the fact that the phenomenon of digitalization has not only the benefit, contributing to the development of technological progress in General, but carries quite a powerful potential threat of a full-fledged spiritual life of citizens, their health, constitutional rights and freedoms, providing, thus, a very impressive impact on the mental components of personality and, first of all, modern children and youth, leading to serious and irreversible changes.

2 Findings

The changes taking place in Russian society in recent decades have undoubtedly contributed to the development of democratization, openness and transparency. At the same time, freedom of speech, conditioned by the removal of certain prohibitions and censorship, has caused an unprecedented scale of decline in moral standards in society, explicitly or indirectly promoting and pushing people to assert, as a priority, material values to the detriment of universal values. Humanity and humanity, care and compassion, as well as such concepts as «spirituality», «sense of duty», «conscience», «morality», «patriotism», etc. in every possible way were vulgarized and reduced to remnants of the past. Words of one of the greatest domestic teachers V.A. Sukhomlinsky that «in the person whom we bring up, moral purity, spiritual wealth, physical perfection have to be combined» [12] were actually leveled and disavowed within our today's reality.

Many Russian scientists in their research consider the issues caused by the use of information and communication technologies in the modern educational environment [1-6; 10; 11; 14; 15], characterized primarily by the rapid development of digitalization [7].

Moreover, the process of educating the younger generation today is actually reduced to zero. The emasculation of one of its most important components – education – from the education system did not happen suddenly, at the wave of a certain «magic wand». The educational process – one of the most delicate and complex in all educational practice – gradually, step by step (or, as it has become fashionable to say today «step by step»), but, at the same time, very punctually and consistently «dissolved» in a series of increasing bureaucratic «paperwork», which falls on the shoulders of those who, in accordance with their official duties, had to directly deal with and be responsible for the education of students.

What kind of setup can be the modern child in a situation where parents once, and educational organizations and institutions with its formation actually doing (they do not pay money for it – the process of education is not included in the figures for which are awarded and paid remuneration, various kinds of bonuses and who is now voluntarily going to engage in what do not pay, and, moreover, would not ask – well, if only a true fan of pedagogy, real selflessly altruistic. However, as convincingly shows practice, even thus, now already surprisingly rare, and, in modern conditions, truly «collectible copies» of very quickly discourage any hunt «engage not those, than need to» - read «not those, than prescribed engage from above»).

In fact, this means exactly that in the current conditions in which the domestic education system is located, in practice, no one is responsible for this outrage (to call a spade a spade), despite the fact that article 2 of the Federal law «On education in the Russian Federation» of December 29, 2012 No. 273-FZ defines education as «a single

purposeful process of education and training...» [13]. I would like to draw attention to the fact that in the first place in the fundamental educational law of our country education is indicated, and in the second place – training.

To our great regret, we have to state that this is the most important part of the educational process today was in the «shadow» and looks the least significant and in demand in terms of assessing the level of professionalism and professional competence of the modern specialist, which does not contribute to the implementation of tasks aimed at the formation of the personality of a person and a citizen.

What happened that led to that situation (read-catastrophe), in all, practically without exception, educational organizations of the Russian state when for real «education» at teachers and Tutors simply did not remain neither forces, nor, respectively, time? A truly fantastic increase in the number of reports and documents (and, in modern conditions, in connection with digitalization-digital document circulation) invented and changed with extraordinary speed by various «officials from education», putting, apparently, only one real goal: to justify their existence and purpose (and, accordingly, those salaries that they are very satisfied, in contrast to the salaries of teachers – those who work «on the ground», embodying all this bureaucratic nonsense in life), generates in practice the very situation when the «stranglehold of reporting, stationery and bureaucracy» knocks out from under the feet of real workers «educational shop» the last soil for independent, creative, lively, real (not reporting for the sake of) educational work with students. Educate was simply once, and summarizing all of the above, still and there is no need.

«Absorbed with mother's milk» is not only not relevant, but also useless, not in demand, and, in truth, those who are truly lucky-who was granted from birth the opportunity to taste the taste of their mother's milk on their lips, today is becoming less and less – which, of course, also manifests one of the negative aspects of the «achievements» of scientific and technological progress. With rare, rare exceptions, today's «tiny son» is no longer interested in parents' vision of the world, their understanding and attitude to the balance of forces of good and evil, does not listen or simply ignores their years and decades of developing a system of assessments regarding what is good in this world and what is bad...

The totality of achievements due to scientific and technological progress in society, as well as the process of irreversible globalization of the information space, largely contributed to the transformation of the media into one of the most powerful factors in the formation of the «picture of the world» as an individual and various subjects.

Many Russian educational organizations in recent years have turned into «enterprises» for the formation of students of certain skills, consisting in the ability to guess the correct answer from the proposed options and more-nothing. Today, the ability to think and reason independently, analyze and compare, identify patterns, etc. is not in the price. All this is the «last century», not digital at all. And perhaps this is due to the fact that more than 50% of Russian schoolchildren are characterized by anxiety, irritability and emotional tension, and not as a manifestation of situational reaction to what is happening, but at the level of stable and regular personal manifestations; every fifth student is characterized by constant manifestations of fear and aggression. The fact that a more or less healthy child comes to school today, and as a rule, a chronically ill one finishes it-no one is surprised any more. Schools have become a «conveyor belt for the production of neurotics».

The quality of today's information, which is actually the «habitat» of a modern child belonging to the «digital generation», largely depends not only on his mental but

also physical health and development. The steady growth of distrust, critical perception, and, often, open manifestations of aggression towards modern media in society is a clear demonstration of the quite obvious fact that the traumatization of the population by the mass media is increasing and for this reason the desire of citizens to self-defense, expressed, among others, attempts to determine the criteria of information security of the digital environment.

From our point of view, a very important circumstance is the fact that Man took his place in the hierarchy of living beings exclusively (!) due to the presence of speech and language (not as an organ with which, thanks to special receptors, it is possible, for example, to distinguish a particular taste, but as an effective and reliable tool and means of interaction). The absence or decrease in the skill of using and developing speech and language-can lead to severe and irreversible consequences, one of which, of course, will be the displacement of a person from the «pedestal» of the biological chain of development.

The achievements of digitalization eloquently demonstrate that this danger is very real. The modern «digital generation» has almost unlimited access to various kinds of information, confidently uses the achievements and novelties of the digital environment, operates more freely with various kinds of gadgets, etc. But ... with all this, this «digital generation» with catastrophic speed loses elementary human communication skills, often has difficulties in clearly and clearly expressing their thoughts, not to mention emotions, do not know how to conduct a dialogue, operate with a sufficient stock of words (studies show a depressing picture of the decline in both actively used and General vocabulary). But in order to understand each other elementary, it is necessary, at least, to read the same books...

Changes taking place today in the consciousness, the psyche, the mindset of people, primarily in adolescence and youth, changing fundamental policies and life constructs, substitution of ideals and values alien to the national unity, the centuries-old culture and lifestyle of Western models of pseudo-sexual freedom, promiscuity and permissiveness does not bring the mentality of Russian citizens positive transformations. The absence of a well-thought-out system of psychological support for the subjects of educational relations in the modern communicative space only aggravates the above problem [8].

Education as one of the most important social institutions, performing such important functions as the transfer to new generations of knowledge and skills, accumulated social experience, teaching cultural norms and values, socialization of the individual, etc., has a huge impact on the development of society. At the present stage of human development, education is the main condition determining the availability of adequate responses to the challenges of the era.

In modern society, education, largely due to the introduction of more modern and advanced information and communication technologies in the digital educational environment, gradually turns into a continuous process that takes place throughout the life of a person, providing an opportunity to update and replenish knowledge, skills and abilities corresponding to personal and social needs. Education is one of the key channels of social mobility, which not only trains future specialists in various fields of activity, but also contributes to their further advancement on the career ladder, acquiring a higher status.

The value bases of education and education of people are in accordance, balance to each other. Often, certain specific social circumstances can strengthen or, conversely, weaken the importance, weight of each of these processes in the formation of personality. One of the most important «acquisitions» of the subjects of the educational

process, which had the most significant impact on the change of their psychology, in General, in recent years were:

- informatization;
- globalization;
- increasing social mobility;
- loss of prospects for sustainable positive development [9].

The transformation of the model of the educational process in the education system, allowing to move to the study with the help of information and communication technologies from the study of information and communication technologies, and then-to Smart education, carried out in the process of solving two interrelated tasks-socialization and education of citizens in social networks-is extremely relevant today. In this regard, it is very important to create a modern telecommunications infrastructure for knowledge management and implemented processes in educational institutions in order to ensure the transition outlined above.

Specializing in the development and promotion of the latest information technologies, individual companies offer technical solutions for the application of information and communication technologies in the modern education system in a digital educational environment. Most of them are very original technical solutions that have the most significant competence, mainly on individual problems. It should be emphasized that the development of decision support tools and analytical subsystems is constrained by the lack of quality of initial information, the lack of integration platforms that allow combining applications and initial data: technical solutions, as a rule, are not interfaced with each other, being local in nature. Users for the solution of tasks of educational, production, financial and administrative activity need to have on 2-3 ArmA on workplaces, and for the solution of each problem actual for the distributed educational institution creation of separate data sets updated independently is required. The information of the same name and the same type in the system is not always synchronized in time in different functional data sets and, in addition, is repeatedly duplicated.

In practice, this situation leads to cost overruns to ensure information exchange between several information systems of the complex. The need to organize an effective search, storage and access to relevant information and reduce the reaction time of the system, increase its survivability and performance in a rapidly changing environment when reconfiguring the information system or changing control algorithms may require the provision of coupling of the systems being built and the selection of the necessary equipment. All this, as a rule, requires for each pair of interacting systems the development of new exchange regulations. Often this leads to software and information incompatibility of a certain part of the developments used in the system and their duplication in the absence of a unified policy of Informatization in a distributed educational institution. The effectiveness of integrated systems, ultimately, decreases, their productivity does not increase, and the cost of creating information systems increases.

The key element of global competition, which requires rapid adaptation to the needs and requirements of a dynamically changing world, accelerated development of innovations, constant updating of technologies – has become the competition of different education systems. At the same time, the decisive factor of social justice and political stability, one of the most important life values of citizens – is still the opportunity to receive quality education.

Improving the efficiency of the educational organization, as well as the dynamics of its development, through the introduction in all areas of modern information and communication technologies, primarily in the organization of scientific research using the model of quality control and management of research and educational activities, in the training of highly qualified specialists in their places of permanent residence and / or work-is considered by us as a global strategic priority.

The processes of Informatization and globalization, especially intensively occurring since the beginning of the XXI century around the world, also affected all spheres of life of modern Russian society. At the same time, it is necessary to focus attention on the fact that the development of new information and communication technologies and their widespread use in the digital educational environment often poses a threat not only to the health but also to the safe development of minors. Children and adolescents, being as open as possible to the powerful flow of information, have become the most vulnerable victims of modern media. Today, the problem of mass media as a tool that forms the spiritual and value orientations of the younger generation is particularly relevant.

Everyone has the right to expect a decent standard of living. Achieving this goal is one of the main tasks of any democratic state, which is largely determined by the possibility of education, the availability of quality preventive medicine, as well as an effective system of information security of students both in the educational space and outside it.

Today, society is making new demands on education. The democratization of society has created opportunities for the renewal of education as a source of new potentials for social renewal. Innovative processes of social policy revealed the need for educational education of the individual. One of the key approaches to learning is to focus on the development of the student's personality, on the continuous process of education, self-improvement and self-development.

3 Conclusion

Summing up the above, it should be noted that the development of Informatization served as the basis for a new wave of the industrial revolution around the world, called «digitalization», under the powerful influence of various information and communication technologies, which received a new impetus through the introduction of various types of digital resources and technologies in the modern digital educational environment. Today, there is a serious and irreversible transformation of the decades-old system of values and attitudes that have a significant impact on the consciousness of Russians and, above all, students, in the process of their education and training, as the most popular potential consumers of modern information and digital services, in the conditions of social changes taking place in society.

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