Abstract

Being one of the most rapidly developing phenomena of modern civilization, informatization and digitalization become the realities of the modern school, through the active penetration of information technologies into the everyday education practice. We can view school changes as a natural phenomenon associated with the formation of new cultural instruments, as a process of changing the content, methods and organizational forms of educational work. Digitalization could not but touch upon one of the main means of learning - a textbook. Increasingly, students are switching to electronic versions of textbooks. Training programs are accompanied by interactive support. This is only the beginning of the process, since digitalization requires new concepts, new learning models and new textbooks. Informatization of education is closely related not only to changes in the educational environment. Almost all links of the modern pedagogical process are being transformed. This process also affects school upbringing. Nowadays the organization of upbringing process is largely determined by the upbringing program of each educational organization. Therefore, it is important to consider the risks that arise from immersion in this environment. The purpose of the article is to determine the risks of the modern socio-digital environment that hinder the process of implementing upbringing programs in educational institutions.

Such theoretical research methods as analysis, generalization, comparison, interpretation, systematization were used to achieve the research goal. The results of the study will allow teachers to organize the upbringing process effectively, taking into account the presented risks and protect them from the negative effects of digital environment.

Keywords: informatization, digitalization, digital environment risks, upbringing program.
Introduction

A digital environment is an environment of active social interaction. The educational environment becomes a part of such a digital environment, which creates a set of new contradictions, which are recognized as problems, risks and opportunities in the development of promising lines in education, in the identification of new approaches and methods in the upbringing of children, adolescents and youth of school age and student age.

Over the past 20 years, there have been significant changes in information technology, expressed in the emergence of new products that allow you to change the interaction of a person with information and with other people (Verbiczij, 2019; Hilbert, 2020; Soldatova, 2018; Toropov, 2018; Tixonova, 2018; et al). As a result of the possibility of instant access of the consumer, in our case a student, to electronic educational products, the role of the student changes from the “faceless, mass consume” of educational products to an individual personalized customer and consumer of these services. In this case, the rivalry between traditional forms of education and electronic educational products intensifies.

There are often cases when teachers do not often use textbooks and switch to electronic resources. Currently, educational platforms appear, using which the learning process is much more effective: there is an opportunity for a more visual study of the material; a variety of didactic techniques are used for better assimilation of information; horizons for independent search are expanding, etc. But the informatization and digitalization of the educational process inevitably result in a number of risks, and this applies both to the learning process and upbringing.

The analysis of the risks arising with the appearing of information technologies in the process of upbringing (Verbiczij, 2019; Hilbert, 2020; Korovin, 2010) made it possible to single out the nature of the problems that cover various aspects of pedagogical activity. A teacher should be ready to solve psychological and pedagogical, informational and organizational-methodological problems (Kruglov & Volkova, 2020).

Purpose and objectives of the study
The purpose of the article is to determine the risks of the modern socio-digital environment that hinder the process of implementing upbringing programs in educational institutions. The authors of the article want to pay attention, that ignoring of the influence of the social network environment on children can lead to losses in the upbringing of the younger generation.

**Literature review**

In 2013, an all-Russian study on the digital competence of children and adolescents was carried out under the guidance of G.V. Soldatova (Soldatova et al., 2013). The works of M.V. Voropaev (Voropaev, 2010), G.Yu. Belyaev (Belyaev, 2020), V.V. Kruglov (Kruglov & Volkova, 2020), N.L. Selivanova (Selivanova, 2020), P.V. Stepanov (Stepanov, 2020) are devoted to the upbringing aspect of the digital environment (Ettinger & Cohen, 2020).

At the same time, special attention is paid to the studying of the process of the child's existence in the virtual space, threats and risks of his staying there.

Network community issues in their research were touched by G.Yu. Belyaev (Belyaev, 2020), M. B. Voropaev (Voropaev, 2010), A.V. Mudrik (Mudrik, 2019) and other famous scientists. A number of researchers (mainly from the Higher School of Economics) focused their attention on the analyses of the potentials of upbringing aspect of digitalization (Bochaver et al., 2019).

In foreign studies in the second half of the 2000s, the topic of the influence of the informatization of society (and certain aspects of this problem) on the person formation was considered, in particular, by D. Twenge (Twenge, 2019), D. Espelage (Espelage, 2019).

Despite the study of many issues close to the subject of our research interest, it should be noted that the problem of risks of the digital environment, considered in the context of the theory and practice of students’ upbringing, has not been the subject of a special study yet.

**Methodology**

The study of the problem of the influence of the digital environment on the process of personal upbringing due to relevance is an important problem. However, there are not so many studies devoted to the direct influence of the digital environment on upbringing in domestic and foreign science.
The first works on Internet addiction and its prevention belong to I. Goldberg (Internet addiction disorder, n.d.), K. Young (Young, 1998) and D. Greenfield (Greenfield, 1999). In Russia, a similar phenomenon has been studied since the 2000s (Vojskunskij, 2000; Fortova & Matyuxina, 2018).

Results

As a result of the theoretical analysis of risks arising in the socio-digital environment, based on the study of pedagogical experience in overcoming these risks, a set of problems covering various aspects of pedagogical activity should be ready to solve by the teacher:

- psychological and pedagogical problems. They are connected with unbalanced increase of influence on students of some sources of personally significant information (The Internet and television broadcast patterns of behavior appropriated by consciousness, defining value orientations, behavior) and decrease in influence of others (teachers, parents, significant adults); with the influence on the self-regulation mechanisms of student (creators of digital products constantly improve technologies of impact on the consumer using colors, fonts, sound signals, enhancing the immersion in their product); with ease way of obtaining various information which force out independent generation of new knowledge; with preference of indirect forms of contacts if it is necessary, to message negative information and with transfer of skills of interaction with computer (smartphone, tablet, laptop) on traditional communication; with increase in cognitive load of students on the perception of a flow of information in network; with the absence of motivation among students to use information technology tools for teaching and upbringing; with the formation of the teenager's position of “follower” in a situation of choice, etc.;

- information problems connected:

with the manipulative and often destructive nature of information data flows that are significant in the context of upbringing; with the lack of reliable, orderly, publicly accessible and relevant upbringing-related information; with a wide quantity of electronic sources of information affecting the upbringing process; with the uneven provision of students with home computer equipment and Internet access, division of students into those who have mastered and who have not mastered information technologies (unfortunately, the concept of “digital inequality” persists in the territory of our state); with the need for constant monitoring of publicly available information resources that influence the upbringing process in order to improve the use of information technologies in classes, etc.;

- organizational and methodical problems associated:
with increasing the independent cognitive workload on students; with the inclusion of students in network communication, with the involvement of parents to accompany and support the process of teenagers' upbringing using information technology tools; with contact with other teachers dealing with the problems of upbringing in classes using information technologies; with the organization of professional support of technical and software tools of information technologies, etc.

Based on the analysis of the above-mentioned problems that arise in the process of using information technologies in the process of students' upbringing, we can highlight three directions in the development and use of information technologies in upbringing of students:

- the first direction - the development of educational electronic publications and resources - electronic reference books, encyclopedias, training programs, virtual environments, means of automated control of students' readiness to choose, computer textbooks and simulators;

- the second direction is the development of methodical support for the process of upbringing, which makes it possible to combine the traditional, established methods of upbringing work and the means that provide them with new, informational tools influencing the upbringing process;

- the third direction - training and retraining of teachers for the use of information technologies in upbringing, implemented in the framework of general education.

Open education, opportunity to take courses in different fields of knowledge from the best teachers and professors from the best university teachers and professors at universities, colleges and schools in different parts of the world, to get access to the best textbooks, to participate in various seminars, conferences calculated on different age, different audience, association in network communities on cognitive interests leads to the fact that an increasing number of students get education not only in schools, colleges and universities.

Let us turn to the definition of a “socio-digital network educational environment”. The socio-digital network educational environment is an interdependent set of socialization factors generated by the information and material medium of mass communication, deployed and diversified by the network structures and social units on the basis of a complete and final replacement of the analog signal carrier with digital one. It is social as it is its qualitative characteristic, it forms the basis for the creation, development
and interaction of all kinds of network communities of various ages, social status, meaning and purpose (Belyaev, 2020).

Currently, the situation has developed in such a way when the educational environment has become part of the socio-digital environment. This leads to the fact that, directly or indirectly, the factors of socialization of the network environment become factors of socialization of the educational environment. This, of course, has both positive and negative consequences. The educational environment receives additional potential for the process of socialization of its members, but at the same time assumes all the risks of socialization in the digital environment.

Today, there are not many people manage to be not included in the social network. The social network is increasingly becoming an attribute of a person's daily life. It is in the network that he manages to solve urgent daily tasks, sometimes easier and faster than in a real environment, which makes the network even more attractive. In the network, as already mentioned, the education of a student, an adult can become more individual, richer in knowledge (Bates, 2019).

The virtual space produced by the global computer network serves as the basis for multi-vector communication and polylogue for both individuals and different social groups due to the expansion of interpersonal contacts by eliminating geographic and temporal barriers. Studies of virtual communication make it possible to state the presence of specific features of language, social hierarchy, indicators of social status and social norms. In the modern era, contacts between people become more virtually mediated (Pal’chinskaya, 2015).

Naturally, the possibilities of using a social network, the productivity of such use is impossible without various kinds of gadgets and their software. The social network is certainly a product of high technology.

Socially digital networked educational environment can be called educational in the very original sense of the word. Currently, it provides an individual with a huge number of opportunities for a variety of types of education: independent training, distance learning, etc. This environment is also relevant for learners with disabilities;

Social-digital network educational environment is very diverse and it is constantly becoming more complex, enriched with various structures, forms, types and content.

Social-digital network educational environment gravitates towards “horizontal connections” and hardly fits into hierarchical structures of power verticals of management. This environment dictates a new format of
relations in society, enriching the picture of society with variety of new social phenomena that compete for the opportunity to influence children and adolescents, trying to involve them more and more in social interaction according to rules and on their own platforms. Many concepts that were previously the subject of only a professional IT sphere at the moment have entered the sphere of mass use, changing their format of interaction with the environment.

This environment, obviously, changes the way the individual interacts with the surrounding reality, changing the work of the neocortex, redistributing brain activity, creating new connections and new forms of thought. These phenomena are noted by representatives of neurobiology and neurophysiology. In the world, more and more people are talking about the generation of children who, from a very young age (almost from birth), actively use electronic communication devices (Kostiainen, 2016). This fact certainly affects their perception of the world. Brain science continues to study the influence of modern information technologies on the development of thinking, imagination, creativity, cognition, etc. (Tihonova, 2018). At the same time, it is quite possible that the data of new studies will confirm the hypotheses about further evolution, while a network educational environment may become one of its impulses.

The modern digital network educational environment no longer distinguishes between the concepts of “original” and “copy”. We remember that in the “analog space” each next copy was worse than the previous one, the sound was worse, the image was worse. It is like typing under a copy on a typewriter in the last century – all but the first copies became only worse. In a modern digital environment, the production of copies is equivalent in quality to the original - it is impossible to distinguish one copy from another. You can make thousands of copies, but all of them will be indistinguishable from the original. It is difficult to overestimate the consequences of this supersonic leap for the educational space. There is no need for cinema installations, there is no need to ask for help from specialists – the home movies and photoshop programs make the same capabilities of each user of the network. High resolution allows you to accurately imagine the quality of the original, as if a person directly observes the phenomenon of nature, a work of culture, as if he himself visits museums and sees all the charm of the surrounding nature and culture with his own eyes.

All educational resources, all libraries of the planet, a significant number of various textbooks that appeared in online versions, all films and audio programs recorded since the mid-90s of the nineteenth century have become available to millions of people thanks to the modern digital network social educational environment. Open network access provides hundreds of millions of terabytes of information here and now, sometimes this information is just unique. This affects the quality of the teacher's work,
increases the potential of the environment for effective work with its resources, since the adult significantly expands the range of choices of means and methods for both educational and upbringing work with students.

The digital network educational environment contributes to the formation of the cultural worldview of children. However, not only masterpieces of world culture are presented here. The Internet is replete with sites that carry unnecessary information. Some of them propagandize aggression and violence. Internet content cannot be controlled. The worst thing about this situation is that children face such sites daily. Many of them are not able to distinguish truth from lies, spam from high-quality information. They are not ready to filter out network information.

Today, thanks to the social digital network educational environment, even a new profession has arisen – a blogger organizer of event diaries on social networks. We are talking about networks such as Odnoklassniki.ru, Twitter, Facebook, Youtube, Instagram etc. About messengers like WeChat (for gamers), Discord, Snapchat, Viber, WhatsApp, Telegram etc.. We have listed the most popular and well-known information services in Russia. There are much more than a hundred of them in the world. Similar services are today the basis of an extensive cellular structure of network communities around the world;

Modern social digital educational environment could make “visible” and “discussed” all areas, all participants and all events of political, economic, cultural life and leisure of people. Besides, the network environment allows for anonymous communication: any person can “put on” the mask – nickname, can support communication, proceeding from the level of individual preferences and imaginations. Networks allow the person under his own or a fictitious name to enter into a conversation, discuss, express an opinion about any program, about any film or interview, about a lecture or show, about videos about animals or culinary delights, about scandalous news or sports events.

On the Internet, everyone has an opportunity to treat any given message, for example, by putting “like” or “dislike”. When communicating online, a person can never be sure whom he is communicating with. Not only teenagers use nicknames. Politicians, journalists, doctors and representatives of many other professions use this type of communication. Many users leave comment about posts, videos or articles. It's good when these comments are positive, written in good Russian. However, the reviews are often negative, accusing, mocking. Such users are very fond of arguing, bringing the interlocutors to a dialogue, while they do not choose expressions, humiliate and insult the participants of discussion. Such dialogues can lead to trolling and cyberbullying (Espelage, 2019). The consequences of such online bullying can be dire.
Therefore, both parents and educators should warn children against such a danger of the virtual world (Tomoniko, 2019).

These characteristics of the socio-digital environment give rise to a whole range of risks that create an unfavorable environment for organizing the process of upbringing of younger generation. Among them: the actual impossibility of the existence of a modern child outside the socio-digital educational environment; anonymity of existence in the network, which allows to promote asocial values; content of various sites, chat rooms which can be destructive for the normal cultural outlook of children, adolescents and youth; increasing of self-esteem due to an artificial increase in approval from members of online communities; replacement of real identity with virtual; high technologies of organizing the upbringing environment are combined with the resuscitation of archaic, asocial-wild forms of social behavior; Internet dependence of a large number of students; mastering the patterns of behavior and rules of social navigation, mastering the norms, values and attitudes of a particular virtual network community, which is not always pro-social.

These and other risks often create difficult obstacles for teachers, parents in upbringing of students, in the implementation of certain upbringing programs.

**Discussions**

Problems related to the impact of informatization and digitalization on the education and upbringing of students have become especially acute in connection with their transfer to distance learning during the pandemic (Bao, 2020; Stepanov, 2020).

If the solution of various aspects of these problems was postponed, then the pandemic forced to solve problems quickly. There are especially many issues related to the need and possibility of upbringing in connection with distance learning of students. It was during this period that few works appeared, which examined the narrowing of opportunities for the child to gain important experience in sharing common tasks with others (Rethinking education in the digital age, 2020; Zilka, 2020); minimizing his direct, lively communication with friends, other peers, significant adults, which is necessary for his full social development (Soldatova G.U. (2018)); difficulties of the class leader's activity (Selivanova, N.L. (2020)); potential and risks of digital environment for upbringing (Pettersson, 2020), peculiarities of interaction with the family (Tomoniko, 2019). The emergence of mixed education will pose new problems in the field of upbringing.
Conclusion

If we are talking about the learning process, then undoubtedly, informatization and digitalization bring positive results. Textbooks, additional materials, plans – all of them appear in online versions. Interactive boards have become a great help in the work of teachers, which, in addition to their direct purpose, make it possible to watch various additional material. Most schools already have access to Internet content.

Serious work remains to be done. For example, to fill the content of textbooks. Now it is often very weakly connected with real life. School needs new textbooks, which are based not just on information for assimilation, but on new didactic technologies, opportunities for independent search.

Teachers have to rebuild quickly, increase the level of competence in the field of informatization and digitalization of education.

However, as the pandemic has shown, among others, there is one significant drawback - the lack of real communication.

Informatization, digitalization of education is closely related not only to changes in the educational environment. These processes also affect school upbringing. Since today the organization of the upbringing process is largely determined by the upbringing program of each educational organization, it is important to consider the risks that arise in connection with immersion in this environment. In turn, consideration of the influence of the social network environment on the construction of a schoolchild's upbringing should become the basis for adjusting any upbringing program, its content and forms of implementation.

The upbringing potential of the social network environment, as well as the analysis of environmental risks, has not yet become the subject of special and in-depth study, but even the results of a few studies devoted to this issue show that ignoring the new reality of the upbringing process can lead to losses in the upbringing of the younger generation.

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