

## Conference Paper

# Information System As a Factor Determining the Development Vector of Modern Education

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### Abstract

The information system is considered one of the paradigmatic coordinates of modern education. It is noted that education is one of the most important factors contributing to the successful solution of problems related to globalization, allowing us forming a citizen's stable personal potential and self-defense skills of the latter as a carrier of certain cultural values in the information flow. The aim of the research is to study the information role in modern culture and in modern education. It should be noted that culture as a process of accumulation and translation of social experience determines the society progress and its intellectual and spiritual sphere. Education is the main socio-cultural mechanism that society uses to purposefully influence the course of its development. Education provides information and historical continuity of generations and security of continuity of this process. The research has revealed the importance of the information system in culture as a factor that is decisive in the modern education entire set of components formation. The information society is a civilization in the basis of the development and existence of which is a special non-material substance, conventionally referred to as "information". This substance interacts with a person's spiritual and material worlds. The latter is especially important for understanding the essence of the new social order. On the one hand, information forms the material side of a person's life, as it acts as innovative technologies, computer programs, etc., on the other hand, it is one of the main means of interpersonal relationships and spiritual representations, which can be dynamically transformed and interpreted. Information begins to determine both the material existence and the socio-cultural reality of a person at the same time. The study has fixed that in the conditions of the information society, the most important task is to prepare a person for the perception and processing of large amounts of information, for mastering modern means, methods and technology of working with information.

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## 1. Introduction

L. Kogan repeatedly noted "the cultural significance of communication and specific social institutions intended for the production, preservation, distribution and consumption of spiritual culture values" [4]. In this regard, it seems relevant to single out the methodological foundations of the study of education as an element of socio-cultural

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reproduction. This dictates the need to identify the main paradigm coordinates of modern education. Nowadays, one of these coordinates is the information system.

Culture as a process of accumulation and translation of social experience determines the society progress and its intellectual and spiritual sphere. Education provides information and historical continuity of generations and security for the continuity of this progress. Education is the main socio-cultural mechanism that society uses to purposefully influence the course of its development. It has traditionally been the most important information channel providing communication between generations, social inheritance, selection and transfer of knowledge and skills within the framework of specific social communities and groups.

The concept of the “information society” has been developed in the 50–70s of the XX century, with the entry of mankind into the era the rapid development of technology, primarily computer technology. Writers, and philosophers are interested the problem of human existence in the information society, that led to the “information” society concept. The concept of the information society is often replaced by a “post-industrial” one. However, the prefix “post-” psychologically causes a certain rejection, because in the history of human culture, it gives the epochs certain flair of ‘apocalypticism’. Later, the concept of the “global society” has been developed, which became possible, first of all, due to global information networks. But this concept is too vague. It is difficult to define it scientifically. As a result, the concept of the information society proposed by A. Toffler was strengthened [7], although the thinker himself did not give a clear definition of this phenomenon either.

## 2. Methodology and Methods

The concept of the “information society” developed by A. Toffler and by A. Touraine [8], cannot be limited only to the economic approach, or, like the same concept developed by J. Ellul [2], only to the social approach. Changes in the information society have covered (and we have the opportunity to observe this) absolutely all spheres of the human community. Moreover, since all cultures, having different “cultural ages”, are not at the same stage of the information society at the same time, it leads to complex inter-civilization conflicts.

According to Encyclopedia.com, many advanced countries of the world can be characterized as information societies because “increased reliance on activities directly associated with the production, distribution, and utilization of information” is typical for them [3].

Based on the definition from the “Russian–English glossary of the information society” [6], we define the information society as a civilization, the basis of the development and existence of which is a special non-material substance, conventionally called “information”. This substance interacts with a person’s spiritual and material worlds. The latter is especially important for understanding the essence of the new social order. On the one hand, information forms the material side of a person’s life, as it acts as innovative technologies, computer programs, etc., on the other hand, it is one of the main means of interpersonal relationships and spiritual representations, which can be dynamically transformed and interpreted. Information begins to determine both the material existence and the socio–cultural reality of a person at the same time

One way or another, history is divided into three main global stages: “agricultural” (K. Marx structured it in a more complex way, but that does not cancel its presence), “industrial” and “post–industrial”. The distinction between the stages is made on the basis of production relations or human interaction with nature (through tools, through the machine, through information). The transition from the previous stage to the next is carried out through a revolution of a scientific and technical nature, during which the environment changes, which, in turn, leads to the transformation of human consciousness. The last historical stage drawn by modern social cognition is the information society.

Therefore, the consideration of the information system as a factor that determines the formation of the entire set of components of modern education is complex. It involves not only the content of education, but also its forms, types, and, most importantly, the motivation for choosing an educational trajectory.

### 3. Results and Discussion

The analysis of the mentioned concepts of the information society, when considering it as a determining factor of modern education, allows us fixing several important theses. Firstly, today economically developed countries create high standards of life quality based on the widespread dissemination and massive use of information technologies, computer equipment, and telecommunications. Secondly, adequate socio-economic, political, and socio-cultural structures and institutions must correspond to this technological order. Thirdly, such adequacy can only be ensured by a high level of all social institutions consolidation in the state. The implementation of these three theses stated above is impossible without taking into account the interests of each individual and with a high degree of their integration into society. In other words, a particular person,

in all the variety of their needs and ways of meeting them, becomes the goal of the development of the socio-cultural system, and the criterion for the effectiveness of achieving this goal is the reduction of time between the emergence of a need and its satisfaction.

However, a different picture is observed today. At the beginning of the third millennium, the transition from socio-national cultures to multiculturalism is actually being completed. Familiarization with the so-called “universal values” is widely developed. Mass culture contributes to the translation of standardized social experience, standardized value orientations, patterns and standards of consciousness and behavior, actively influencing the spiritual life of society.

It is impossible to overestimate the role of mass media in the ‘mind equipping’ of a modern person. They create such a rich information environment that it cannot but affect the individual. In fact, the information environment forms a kind of a spontaneous component of a person’s education. Due to mass media globalization, computer networks, and the availability of various types of virtual entertainment, there is a global fashion for certain music, clothing styles, manners of behavior, etc. The same applies to education.

A person becomes addictive to being constantly in the information field. The insatiable thirst for information is explained by the ‘clip’ consciousness. Such a consciousness has no structure, internal logic, or core. It cannot be completed, built up, and, therefore, knowledge does not bring a sense of intellectual clarification [9].

Spiritual culture is a set of spiritual values, as well as the process of their creation, distribution, and consumption. Spiritual values are designed to meet the spiritual needs of a person, i.e., what contributes to the development of their spiritual world. Forming their hierarchy of value orientations, a young person accelerates the transition to adulthood, forms a mature attitude towards others and oneself. The inclusion of value orientations in the personality structure helps young people achieve a certain social harmony and adapt to the system of social requirements.

Primitive manipulation of society, low level of culture, spirituality, and morality stimulate aggressive relationships between individuals and entire nations. Therefore, in a globalised world, competition and rivalry degenerate into mutual aggression. Integration forms a mega-society, which is in a state of struggle of all against all. A unified global culture binds national elites with common interests, alienating them from national cultures.

In the conditions of post-industrial development, the openness of forms and technical capabilities of social communications, the “intrusion” into the mental structures of

consciousness can be carried out deliberately. Therefore, the most important task of modern education is to form stable worldview structures in a person that differ in relative invariance and act as normative and cultural–value criteria for the selection and assimilation of information.

Culture in the modern world is changing radically. Globalization processes lead to the interaction of previously isolated local cultures. The modern world has become what it is, largely due to the development and intensification of communication tools and information technologies. The computer and the Internet try to combine all types of information flows, not only replacing them, but also acting as a kind of universal translator. Digitised information can be processed, transmitted, and reproduced by a single device. As a result, the computer gradually replaces all means of communication.

Modern education cannot keep up with the growth rate of technological equipment of information flows. Meanwhile, education cannot exist without algorithmisation. Algorithmisation is generated by the process of expanding the mass character of education, its universality and accessibility.

However, the current tendency to associate education with narrow professional self–realisation of a person sets a new framework of requirements for the structures, content and methods of educational systems. At the same time, the development of these requirements is impossible without establishing the entire set of complex connections of the mosaic, multicultural space. Since, in a mosaic culture, knowledge is not the result of purposeful systematic efforts, but the product of the consciousness processing the influx of a wide variety of information from the external environment, this fact must be taken into account when considering the development of education in the XXI century.

Mosaic culture emerged due to the processes of globalisation, massovisation and virtualisation of the information space. In it, the system of values is formed on the basis of mass communications. Education in such conditions becomes only a part of communications. Education today is an agent of mass culture. It has to adapt to the external environment. However, this does not mean that education should convey the same values that popular culture promotes.

In fact, the modern student's amount of knowledge is very large. But the problem is that they do not know how to operate with this knowledge, they are lost in the cultural sphere and cannot act independently. The reason is that the modern education system is too affected by the processes of globalization and unification. It does not have a clear philosophical foundation, it is built on the maximum possible abstraction that meets the requirements of civilisation, but does not take into account the living content of a particular culture.

Meanwhile, the socio–philosophical understanding of the problems of modern educational policy in Russia, taking into account retrospective knowledge, gives a comprehensive picture of the present, and also helps analyse the prospects for the future development of the educational system. Researchers note that without the inclusion of a socio–philosophical analysis of the development of Russian education in the general doctrine of the long–term reforms of Russia, effective educational support for ongoing social transformations is impossible [5].

The school, as well as the institution of education in general, serves the function of transmitting general knowledge that will be needed in the future profession. The formation of the student as an integral person as an educational goal is not laid in the basis of education, since the cultural and spiritual content is maximally reduced, and there is a lack of specific content in education [1]. The interests of accumulating capital to expand consumption and increase the material base dictate the game rules for education. It is more profitable to educate economic functionaries who will be specialists in a particular field, without being full-fledged, harmonious individuals. It is also beneficial to maintain information chaos. This is confirmed by modern educational standards [1].

## 4. Conclusions

During the transition to the information society, the most important task is to prepare a person for the perception and processing of large amounts of information, mastering modern means, methods, and technology of working with it. A person must have a certain level of information acquisition culture. In the nearest future, the fate of everyone will depend on how effectively he \ she is able to find, receive, adequately perceive and use information. The process of an individual's information culture formation must be continuous. Its result should be the person's ability to purposefully create and improve his \ her own information environment and use it for self–realization.

In the society with extensive information, the school and the teacher lose their information and knowledge monopoly. If we consider the criterion of education to be a person's awareness of the circumstances that they may face in life, then it is not the school that trains the person and gives them the strength to respond to rapidly changing conditions. In modern information and communication networks, a person is surrounded by a mass of data available to them. They quickly, bypassing the process of traditional education, learn new media technologies that allow them to receive information in an interactive mode, implementing their creative ideas in the virtual world. Information

that is actively distributed around the world in various types and forms gains a great influence.

Thus, civilization processes, influencing social reality, form the modern paradigm of the educational system. The research has shown that the lack of spiritual and national cultural values in the basis of the education system leads to the fact that the education system is transformed into abstractions based on uncertain features and characteristics. Education is unified, globalised, and created on economic objectives to the detriment of specific national cultural interests. The lack the education system spiritual foundation in the modern information environment leads to the formation of an inhumane society, which should be qualified as humanitarian destruction that undermines a particular country security. Today, this is typical situation for the entire community of countries that try to come to the notorious common market for educational services in order to create a common labor market.

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