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**COMMUNICATION SPACE OF MODERN SOCIETY AND
MEDIA-CULTURE OF THE SUBJECT OF EDUCATION**

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Abstract

The expansion of the computer science requires the expansion of its knowledge, and the application of methods and means of computer science in all spheres of human life requires a qualitative change of the content of teaching computer science. Education is becoming global, the information and educational spaces are being formed. In this perspective, the article deals with the structure and content of the modern social communication space, as well as its various components and manifestations - cyberspace, media environment, etc. Media education is considered in the aspect of developing the media competence and media culture of the subject, as well as increasing the level of general education.

The authors focus on the understanding of the structure and content of the modern communication space of society, its various components and concepts – cyberspace. Such concept as media literacy is closely connected with media education. The authors emphasize that in the modern conditions of the information society, when in the information and educational spaces we are in contact with Smart-tools and media and technologies of their representation almost always and everywhere, it is necessary to form and develop media culture and media literacy, applying different pedagogical technologies in the learning process. At the same time, it is necessary that the acquired knowledge, skills and ICT competencies contribute to the formation of a special form of culture in the educational subject-media culture and communication culture in the cultural and educational space.

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1. Introduction

Communication is perceived in the broadest sense. In the information age, communication suggests the transmission and reception of information in a variety of relationships between subjects and the environment. In this respect, the sphere of education has a representation in the communication space, since all the processes of education, instruction and personal development are expressed in the transmission and reception of information, knowledge, cultural elements.

Modern information environment, computer science, informatization consider communication as the implementation of various processes and relations in the field of information and computer technologies - ICT. It is with this interpretation of communication that the concept of the communication space of society is connected (Abdurazakov, Korotnikov, Mukhidinov 2016; Zerkina, Lomakina, 2017). Technologically, this space has a reflection in the electronic communication virtual world (ECVW) and representation in cyberspace.

Cyberspace is a product and a means of the information society, informatization, IT industry, providing effective and rational interaction with the electronic virtual world and inside the virtual world, i. e. "... cyberspace, as a representation of images of real resources and their connections, is virtual and fully abstract" (Abdurazakov, Korotnikov, Mukhidinov 2016; Korotnikov, 2012). It is an abstract representation of the electronic virtual world, ECVW, with a variable but always orderly set of dimensions, which allows for modeling and algorithmization of the path in any possible direction.

Cyberspace is a relational model of an ECVW, the characteristics of which are considered as dimensions with open (expanding) sets of values. Since each attribute of this relational model can be represented as an orderly sequence of other attributes (sub-signs), then cyberspace is hierarchical, and each of its dimensions can be expanded into a cyberspace, (Abdurazakov, Korotnikov, Mukhidinov, 2016; Korotnikov, 2012).

So cyberspace allows the study of "language as a symbolic system transmitting information through time and space "real" and "virtual" methods; allows you to identify and define features of texts in virtual space, which become an integral part of the industry of production of information; to reveal features of creation of texts of virtual space and the juxtaposition of the texts of the mass of information on the nature of the relationship between the Creator and recipient allows them to allocate a special kind" (Zerkina, 2017, p. 16).

Since all processes and relations in cyberspace are performed by a person in the process of purposeful information activity, information interaction, it is considered in the "man-cyberspace" paradigm. Namely, the elements and relations of this paradigm form the communication space of modern society. In this respect, cyberspace is a technological projection of the communication space of society.

The modern society is referred to as the information society, the knowledge society. Its characteristic properties are: (DuFour, DuFour, Eaker, Many, 2010; Colin, 2015; Korotnikov, 2012; Korotnikov, 2016; Smith, 2017):

- informatization in the aspect of global informatization of the world community, information industry;
- highly developed industrialization, providing the release of large numbers of workers in the material and production environment for professional work in the information field;

- its inherent social and legal superstructure;
- substantial change in the content and form of expression of industrial relations;
- increasing role of knowledge, knowledge about knowledge, meta-knowledge;
- a high level of information culture;
- the corresponding level of education, information education.

Hence, all these properties of the information society are projected onto the communication space of society. That is, it fully conforms to the term "information and communication space of society", which at the same expresses its content, and is its qualitative characteristic. However, the virtual space did not give rise to its "virtual" language, but aggressively borrows national languages for its existence mixing them with English. The very process of communication, which primarily refers to oral communication, in the virtual space is mostly written implementation" (Zerkina, 2017, p. 360).

In the communication space, communication is not only the transmission of information by technical means, but also the receiving of the transmitted information by a person, transforming it into an available for perception form, its reproduction in the optimal form. That is to say, this is a technological solution to the problems of productivity and optimality of human interaction with cyberspace. Therefore, the social communication space, in addition to technological aspects, has many other: scientific cognitive, sociocultural, psychological, moral, ethical, legal aspects, aspects of informational security.

2. Problem Statement

Educational cyberspace is a specific part of the common cyberspace of society, which has an educational purpose and characterized by targeted educational relations with it (Abdurazakov et al, 2016; Borisenko, Volodina, 2015; Korotnikov, 2014). That is, it should be considered in the aspect of the following paradigm:

The subject of education - Educational cyberspace

Elements and relations of this paradigm generate the communication space of education, or the information and communication space of education. The specific properties of this space, reflecting both the content, goals, and quality of education, are: knowledge, meta-knowledge, information culture; orientation on their development and representation in the personal systems of subjects of education, on the formation and development of personal knowledge, meta-knowledge, personal information culture, knowledge and self-knowledge. These properties are the focus of attention in the field of our research.

3. Research Questions

What are the technical and technological basis for the implementation of communication educational space and features of the organization of information activities and information exchange in the paradigm of "man-cyberspace" in the aspect of the formation of personal information culture of the subject of education?

4. Purpose of the Study

Specific for the communication space of education are the following aspects: competence, developmental, age, motivational, personal, expressing the direction of the formation of subject

competence, personal development of the subjects of education, taking into account their individual characteristics and age.

Since the space implies streamlining and organization, the communication space of education must be manageable, not only as a directive, but also in a methodical (pedagogical way) on the basis of social norms, informational law, the culture of informational interaction, under the direct influence of the personal informational culture of teachers.

These issues should be the focus of the scientific and pedagogical community and in our work the author's vision of the structure and content of the modern communication space of society, its various components and concepts-cyberspace.

5. Research Methods

The research methods are the sociological, psychological, pedagogical research on the problem of systematization, generalization, description; methods of comparative analysis of national and international experience in the introduction and use of media, Smart, Internet technologies in education in the aspect of the formation of personal information, media and Smart culture and the basics of communication culture.

6. Findings

In the communication space of education, communication also includes the reception by the subject of learning of the transmitted information, its transformation into an available for perception form, its reproduction in the optimal form. The technological solution of the problems of productivity and optimality of the student's interaction with this cyberspace is supplemented by the processes of subject learning (accompanied by or accompanying them).

That is to say, the paradigm

"Student - education cyberspace"

is represented in the paradigm:

"Student - teacher - education cyberspace".

The cyberspace, which forms the technological basis of the communication space of education, has a large number of various physical devices that provide communication of educational information.

The first level is represented by the means of processing, transformation, representation, telecommunications of information, producing universal electronic resources. They are stationary computers, notebooks, laptops.

The second level is constituted by the means, which provide the productivity of the interactions between the electronic educational information and "consumer", the subject of learning, the student: the information reproduction in a visual, accessible for perception, external for the computer form. These are means of media, media technologies, media systems. Media information is viewed as the information intended for reproduction on a media means and, therefore, presented in the form necessary for it.

The terms "media", "media environment" are united into a single informational cognitive system media objects, media information storage means, means of its communication and reproduction. The intellectual media means in media interaction is, in fact, only a computer with its operating environment

and appropriate technologies. Other media devices (audio, video, players, etc.) perform "mechanical" functions: store, transmit, display, reproduce. Therefore, the media resource is a complex electronic system that has the characteristics of a standard, unified information product and contains many educational functions. This resource is available for modification, but only by the manufacturer. In regard to the user (consumer), it only has the necessary adaptation options in accordance with individual needs and tasks. That is, in respect to the training session, media means is a static means of teaching. Implementation of various media only changes forms of perception, but the role forms of education subjects' participation in the process do not change.

The third level of information communication tools is made up of Smart-tools, Smart-technologies, Smart-systems, which have a great educational potential; they "receive priority, they can determine the stage of society development following the information one" (Abdurazakov & et al, 2016, p.45).

The fast advance in information and computer technologies, facilitates the replacement of ICT by smart technologies, allowing the user to adapt to changing environment during its implementation, therefore, as many experts note (Korotnikov, 2012; Korotnikov, 2016; Dong Uk Im, Jong, Oh Lee, 2013; Rogers et al., 2012; Yunfeng, Le-Wu, 2008) smart technologies are becoming a priority, which can determine the development of society after the information stage.

In terms technical application, these "smart" media devices are implemented with built-in intelligence, which allows the subject not only to read information from them, but to conduct an interactive dialog, to build constructive interaction with them in real time. These are smartphones, tablets, interactive smart boards, etc., which operate independently or autonomously under the control of their own operating systems. These Smart-systems, uniting Smart-devices and corresponding Smart-technologies, providing their functioning, create not only a new image of media information, but also a new state of society - the Smart society represented by Smart-subjects, Smart-objects and Smart-relationships, (Korotnikov, 2014).

That is, a Smart-system is a computer with limited capabilities and a media system with inverse connection related to the computer: it can create and correct media products, and transfer it to a stationary computer. That is, a Smart system is a media system that has the means (network, physical) of inverse connection with computers.

Smart-systems make the learning process dynamic. Interaction with media is becoming more structural and meaningful. Therefore, Smart-environment is (currently) the highest level of media environment. Therefore, the formation and development of Smart-education requires media education.

Media education is a form of education that has a binary orientation:

towards adaptation in the media environment, the formation of skills in the productive use of its resources, media competence;

towards the educational process in order to increase its effectiveness through the use of media environment resources.

That is, in a narrow sense, media education is part of education with its own goals. In a broad sense, this is a form of modern education, which includes media education in the narrow sense and is based on it and its results.

Media competence is the result of acquiring the individual's knowledge and skills of working with media objects (objects of media environment): searching, transferring and productive use in the aspect of "appropriating" their content and obtaining derivative information; it is also the ability to adapt to the conditions of the media environment, that is, the interaction of the subject (the user) with the expanding (physically and logically) cyberspace requires the formation of media competence of subjects of education, the competency of the subject of SMART education, developing their personal potential and creating new opportunities for enhancing subject learning, (Dneprovskaya, Yankovskaya, Shevtsova, 2016; Korotenko, 2016; Tikhomirov, Dnieper, 2015; Borisenko, Volodina, 2015; Ji-Seong Jeong, Mihye, Kim, Kwan-Hee, Yoo, 2013).

The higher the level of media competence of the subject of education, the more opportunities and potential he has for increasing the level of education (media education), including self-education.

At the same time, media competence is not the only goal of media education (in the narrow sense). Adaptation in the media implies not only the ability to work with media systems, but also the possession of a relationships culture in the media environment, media culture of the subjects. And, as the media competence of the subject serves as a means to increase its level of general education, personal media culture is also a means to enhance the general culture of the subject, its information culture, forming its part.

The personal media culture of the subject includes the culture of his activity in the media environment and the culture of perception of media information. It expresses the level of personal development, its ability to perceive, analyze, evaluate media objects, to meditate, to acquire knowledge of the environment and to form personal knowledge through the media environment.

7. Conclusion

Hence, the media competence of the subject is, on the one hand, the technological realization of his personal media culture, and on the other hand, the personal potential that provides its formation and development.

The media education in any form and in any sense aims at developing the information culture of students. Media education implies not only the development of intellectual capabilities (thinking, knowledge, skills), but also the development of the spiritual and intellectual culture of the subject of education, the respective qualitative characteristics of the personality, that in aggregate provide its adaptation to the variable conditions of the social and information environment.

Personal media culture is formed in all fields of education, in each academic subject, especially in all humanities. Studying information in the unity of form and content, computer science also develops personal media culture. The main role of teaching it is to define the patterns and principles of personal media culture development as an integral part of personal information culture (Black, Borisenko, 2016).

Perception of media education as a form of modern education means the following. The teacher of the modern school should have a high level of media competence and media culture, be able to work with media technologies and media means, including SMART-technologies and SMART-resources, be able to manage and optimize the information-cognitive interaction of his students with the educational

cyberspace in terms of its constructiveness, productivity and security (for cyberspace, students and their personal information).

Cyberspace of society is a structurally-ordered (relational) representation of its media environment. Cyberspace education is structurally-ordered (relational) representation of its educational media environment. Therefore, the media culture of the subject is also its culture of interaction with and inside the cyberspace. Consequently, the personal culture of communication is a personal media culture that is developed (expanded, expressed, manifested) in all the above aspects of the paradigms:

- "man - cyberspace";
- "subject of education - educational cyberspace";
- "student-teacher-educational cyberspace".

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