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MEDIA EDUCATION: PEDAGOGICAL ASPECTS OF INFORMATION AND MEDIA CULTURE

Lyudmila Aleksandrovna Parshutina (a), Georgy Vasil`evich Tokmazov (b), Magomed Musaevich Abdurazakov (c)*, Maria Ivanovna Kushchazli (d)
*Corresponding author

(a) Institute of Education Development Strategy, 19, Zhukovsky St., Moscow, 105062, Russia, parshutinala@mail.ru
(b) Admiral Ushakov State Maritime University (Novorossiysk), 93, Lenin Ave., Novorossiysk, 353918, Krasnodar Territory, Russia, tokmazov@mail.ru
(c) Russian Academy of Education, 14-3-8, Salaryevskaya, Moscow, 108811, Russia, abdurazakov@inbox.ru
(d) Peoples' Friendship University of Russia named after Patrice Lumumba (RUDN University), 6 Miklukho-Maklaya St., Moscow 117198, Russia, kushchazli-ai@rudn.ru

Abstract

Media education is becoming a characteristic phenomenon in the modern information and educational sphere. One of its goals is the mastery by its subjects of the mediating functions of communication systems, their means and technologies, the formation of subjects' skills for conscious and responsible perception of information of the social and information environment, including media information. In this aspect, the article considers the status of media education, its essence and characteristic features. Such concept as "media literacy", the ability to perceive and critically analyze the content of the media environment and express oneself in this environment, media creativity through the technologies of media environment implementation is closely related to media education. That is, a new specific direction of the subject's information activity in the context of his/her information interaction with the socio-information environment is formulated in order to form information culture and subculture as an invariant property of personality. Modern society is based on the use of information and knowledge. Today, it is impossible to ignore the ubiquity of media, various forms of ICT, or their impact on private and public life, economy and production, education and culture. In this context, for the successful adaptation of the individual in society and active participation in the life of digital society, new types of IT-competencies are required, contributing to the formation and development of personal culture of knowledge and cognition.

Keywords: Education, information, educational media environment, media information, media, media communication

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1. Introduction

As a result of the rapid and continuous development of IT technology and the significant progress of informatization and communication of society, information and communication technologies (ICT) in one form or another become an integral part of every person and every profession. They are reflected in the nature of relations, communication and interaction in society, in social norms and law.

The development of the methodological system of training specialists in the modern scientific, technological and social contexts is a natural and necessary condition for the modernization of the education system. In connection with the change of content, as well as with the changing conditions of functioning, development of science, technology and knowledge-intensive technologies, the methodological system of training requires continuous improvement of training content and the use of achievements of information and digital technologies in the teaching and learning process (Giza, 2024; Mambetova et al., 2024; Mascareno & Chavez, 2024).

As is known, the information component is today an integral part of any professional activity, and information has become a determining factor in the development and cognition of society and man. An electronic and digital representation of educational information and knowledge gets expression in the content and subject learning, as well as personal reflection. The digital representation of educational information as an electronic educational resource (EER) has an advantage over an ordinary information educational resource (IER) due to the availability of significant opportunities in terms of the quality of impact on the subject of learning. The most developed EER with a built-in artificial intelligence function and with a "friendly interface" is "cyber-EER", functioning under the control of digital technologies for displaying information. EER possessing such quality is media information, which opens other qualitative forms for not only visualization, perception and assimilation of cognitive media information, but also the possibility of self-reproduction and self-learning. Media technologies include technical-technological and software tools that support all formats of media information presentation and include a wide range of communication channels. The development and trinity of media information, technology and communication give rise to a "media system" that has become an integral attribute of cyberspace. In this context, a separate specialized sphere – the media environment of education – should be distinguished as an area generated by media resources oriented towards the realization of educational goals and created in the process of digitalization of education (Collet-Sabé, 2023; Manakbayeva, 2023; Sheveleva, 2024).

Media education is both a goal and a form of modern education, and its realization is ensured by the following components:

i. highly developed information and digital technologies for presenting information and providing access to information sources for any consumer;
ii. specialized and adapted technologies for organizing the learning and cognitive process in any educational institution;
iii. qualitatively new ways of assessment, means of control and diagnostics of educational results.

Therefore, media education is identified as an educational field through the realization of media education environment, which is generated by its conditions, means and resources, i.e. media information, media tools, and educational communication. At the same time, the technologies of media education

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realization are electronic educational resources, educational institution's IOS, various components of the mediasphere (media), media technologies that ensure the efficiency and quality of digital infrastructure functioning.

Media education in a higher education institution is carried out in active interaction of students with the realization of a set of direct and feedback links, which provides purposeful information and cognitive interaction of subjects of education with the components of the media environment. The media environment of learning in the conditions of a modern university should provide students with conditions for socialization and their personal development, expansion of the academic knowledge base, formation of personal information culture and cognition, expansion of opportunities for the disclosure of professional skills and competence of students. Since the spatial representation of the IOS has a systematized logical and informational model with identified and interrelated components, the educational media environment is based on specialized, documented and adapted media resources (Mele, 2022; Nikulin, 2023; Rawel, 2022).

Consequently, the triad of "media information, media tools and media communication" on a parity basis forms a media environment, which has an educational purpose and is characterized by purposeful relations with it by the subjects of education. The systemic triunity of the three components generates a media system, which is the main conceptual feature of media education and its representation in cyberspace.

Naturally, "information" is the main component in the triad, and media and communication provide the subject's interaction with the IOS and its components. The information and educational space representing the educational media environment is called educational cyberspace, aimed at achieving the goals of education and personal development of educational subjects. That is, education is transitioning into a new form of media education, the purpose of which is to form "media literacy, media competence and media culture", as well as the culture of information security.

We believe that the identification of competencies related to information security should be categorized as general cultural competencies and should become mandatory for study throughout the entire normative period of education. Accordingly, the problem of ensuring information and media security is also extremely important, which can be solved only through a comprehensive approach, taking into account both informational, technological and ideological aspects of mastering the information and media environment.

Consequently, the subject's information literacy is supplemented with media literacy, information competence with media competence, information culture with media culture, and information security with personal culture of information security and the critical thinking of educational subjects.

Information-educational environment, educational media environment and their representation in cyberspace are a consequence of the requirements of modern education, trends of its development as information education, a necessary condition for meeting the increasing information-cognitive and sociocultural needs of all subjects of education. Constructive informative-cognitive and sociocultural interaction of a student with an educational cyberspace develops his knowledge and culture, while his culture and knowledge optimize this interaction. However, in the conditions of e-learning (form of distance learning), on the one hand, the requirements to the subjects of e-learning, to the general and

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personal culture, media culture increase. On the other hand, the media format of information presentation in education gives new ways and means of its formation and reproduction in the development and self-development of the subject. This requires its own methodological description of "aspects of media education and the problem of formation of "digital, information and media" culture of the subject of education".

2. Problem Statement

The purpose of the study is:

i. the conceptual systematization and identification of conceptual aspects of media education in the context of the study of the problem of formation of "digital, information and media" culture of the subject of education, designed to counteract the process of "digitization" of personality;
ii. the deeper understanding of modern trends in the development of media education and media competence and the definition of the conceptual outline of the process of forming the media culture of educational subjects;
iii. the representation of the qualitative impact of the information and educational environment on the personality of the learner through media technology and media resources designed for education and created within the framework of digitalization of education.

3. Research Questions

Despite the significant number of studies on the problem of students' interaction with the information and educational environment, there remains a fairly wide field of problems that require additional study and analysis of the degree of influence of media technology on the subject's personality and the formation of his or her personal culture. For our study, the twofold intersubjective orientation of media education is of special importance, namely in the aspect of:

i. adaptation of the subject of education in the media environment as part of cyberspace, formation of skills to understand and critically evaluate various aspects of media as a technology and media content regardless of content;
ii. realization of the educational process in the context of information and communication interaction in order to ensure the quality of education and achievement of learning outcomes, i.e. in the aspect of qualitative and quantitative impact of media education on individuals.

The phenomenon of media culture is relatively new for the analysis of cultural aspects of the digitalization of society and in recent years this topic has become one of the most debated ones. This fact has both methodological and methodological grounds, since the integration of media technologies in education implies a number of internal and external factors. They provide a deeper understanding of modern trends in the development of media education and media competence, in determining the conceptual outline of the process of forming media literacy and media culture of the subject of education.

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4. Purpose of the Study

Based on the research problem, the paper broadly addresses the following issues:

i. role and place of media technologies in education and media education;
ii. content of the concepts of "media environment", "media culture" and "personal media environment" of the subject of education;
iii. understanding of the need to form media literacy, media competence and media culture of educational subjects;
iv. formation of skills of the subject of education to identify elements of information literacy and media culture;
v. perception and critical analysis of media information and media content;
vi. information, media and communication culture of education subjects in cyberspace.

5. Research Methods

The main scientific and methodological approaches used in this paper are as follows.

A content approach is aimed both at adequate expression of the content of education in electronic digital forms and representation of the electronic digital forms themselves in the content of education and subject teaching systems, in the methodological system of subject teaching.

A system-activist approach is a requirement of the Federal State Educational Standard, and the most perfect form of the method of cognition of the surrounding world, phenomena, reality.

A sociocultural approach is aimed at the development of socioculture and the culture of interaction in this area, ensuring the formation of the subject of education readiness for comfortable life activity in a constantly changing sociocultural environment.

The following research methods were used in the study: formalization, systematization, modeling, logical representation and expression of sociocultural phenomena, general scientific methods of cognition (analysis, synthesis, comparison and contrast, generalization, systematization, etc.).

6. Findings

6.1. Pedagogical aspects of interaction of the subject of education with cyberspace

With the development of informatization, globalization and telecommunication, the educational space, by virtue of its derivative globality, is ordered, systematized and transformed into a multidimensional electronic-virtual space, which is called an educational cyberspace. The content of the educational cyberspace consists of specialized educational portals and open educational resources adapted for the purposes of subject teaching Web-, media-ER (electronic educational resource). Appropriate technical and technological support ensures fast and quality access to the virtual world. It is natural that almost all resources of the educational cyberspace have the potential of positive impact on the subject, because "the subject of education occupies, "appropriates" a part of cyberspace, temporarily or permanently "prescribing" itself in it" (M. M. Abdurazakov et al., 2016).

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Based on navigation and queries with the help of a search engine, the subject of education satisfies his/her information needs, and thus creates derived information: knowledge based on information exchange with cyberspace.

But human logic is diverse and each interaction with the content of the IOS or cyberspace is conditioned by subjective pragmatics of expanding the knowledge base, creative potential or outlook, as well as by psychological, socio-cultural and other prerequisites. In this aspect, the identification of the results of interaction of the subject of cognition with the IOS and information and cognitive activity in the cyberspace should be provided with appropriate educational resources. Such interaction has a number of peculiarities.

i. The problem of goal-setting is of crucial importance. To identify the results of the learner's interaction with the media environment requires active search work, developed thinking and the need for IERs and EERs. It is also assumed that the subject is information and digital literate.
ii. Motivation, cognitive interests of subjects, as an important way to improve the effectiveness of learning quality, is assumed. Otherwise, the realization of the learning goal loses its meaning. Interaction with open access EERs in education (formal education) is regulated in accordance with the Federal State Educational Standards (FSES). These educational resources are concentrated on electronic media or network educational portals and are available to the subjects of education.
iii. Interaction with EERs for self-study or self-education is the realization of an individual educational trajectory, i.e. in the conditions of non-formal, informal learning, in the preparation of educational and research projects. In professional education, interaction develops their field of research activity. For example, in interdisciplinary cognitive systems, if necessary or required, the field of their activity is related.
iv. In the conditions of media education, EERs are physically and logically realized as objects of the media environment in terms of form and content. Since the subjects of education have an educational and cognitive goal and motivation, the logical model of search when interacting with the media environment filters information and resources, thus determining whether the subject is interested in the result or not. For example, in the case of filtering and sampling cognitive or other information, where a broader "masked search" is required, followed by filtering based on certain attributes and criteria. This interaction requires a certain amount of time and, above all, the learner's determination, but this interaction is not optimal, but it is acceptable. Due to the fact that the objects of interaction are not resources themselves, a logical assessment of the information environment and a critical approach to information are simply necessary. Naturally, the requirements of personal culture of information security and information safety must be ensured.

To this end, the subject of education requires not only knowledge and skills, but also the culture of knowledge and cognition, culture of communication and safe interaction with the virtual world. Such quality of personality should form and develop at all levels of the educational system in the digital era.

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6.2. The essence of the concept of "media education" as a component of the educational space

Media education is becoming a characteristic phenomenon in the modern information and educational sphere. One of the goals for its subjects is to master the mediating functions of communication systems, their means and technologies, to form the subjects' skills for conscious and responsible perception of information in the social and information environment, including media information, and to increase the efficiency and productivity of its use.

The UNESCO materials define media education as a priority for the 21st century pedagogy as follows.

> Media education (media edication) should be understood as the teaching of theory and practical skills for mastering modern mass communication media considered as part of a specific, autonomous field of knowledge in pedagogical theory and practice. It should be distinguished from the use of media as aids in teaching other fields of knowledge, such as, for example, mathematics, physics or geography. (Zaghloul, 1984, p. 4)

More recent UNESCO recommendations note the following: Media education ... ensures that individuals know how to analyze, critically reflect on and create media texts; identify the sources of media texts, their political, social, commercial and/or cultural interests, their context. They know how to interpret media texts and the values disseminated by media; select appropriate media to create and disseminate their own media texts and gain an interested audience; and be able to access media freely for both perception and production.

According to the Moscow Declaration on Media and Information Literacy (2012), in order to survive in the new media and information environment, to function successfully in it, to find effective solutions to problems in all spheres of life, individual citizens, their communities and entire nations must possess a number of important competencies. They enable them to seek information, critically evaluate it, create new information and new knowledge using available tools and formats, and to disseminate information and knowledge in a variety of ways (Gura, 2007).

It is important to note that in the era of globalization and the creation of information and educational space, education should be based on the study of all types of media (Feilitzen, 1999; Fedorov, 2015; Kryukova, 2013; Kirillova, 2024; Klushina, 2016; McLuhan, 2023). With the emergence of media technologies, it became possible to talk about the expansion of the channel of the communicative process familiar to the IT-technology user (Kirillova, 2005).

Media education (media education) (Smelser & Baltes, 2001, p. 94) and the study of media technologies (media studies) "...are aimed at forming media literacy" (Gutiérrez-Martín & Tyner, 2012, p. 31) of students, since media education is closely related to such concepts as "media literacy", "media competence", and "media culture", which also have different definitions. For example, "media literacy" (media literacy) is "the ability to critically and consciously evaluate media texts, maintain a critical distance from "pop culture" and resist manipulation", "... as the ability to master, interpret, analyze and create media texts" (Worsnop, 1999, p. 64). That is, one must be able to evaluate media texts critically

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and consciously, to maintain a critical distance from "pop culture" and to resist manipulation (Worsnop, 1999, p. 65), to be able to work with information of multiformat presentation.

According to I. V. Zhilavskaya, "Media includes the widest range of means and channels of communication, serving the transfer of various kinds of information. It is an integral, self-organizing substance, which like blood vessels permeates the entire social organism, all spheres of our life" (Zhilavskaya, 2016, p. 21).

According to Zhurin (2005), in media education is defined as "an educational field, the content of which is knowledge about the role of media in culture and perception of the world and skills to work effectively with media information" (p. 22).

However, in today's information and education sphere, such understanding of media education seems incomplete and one-sided, since it is reduced to the acquisition of quite certain knowledge and skills by the subject and becomes self-sufficient. Rather, it is media education. Then, as education is multistage and diverse, the acquired knowledge and skills immediately become a personal resource, a means for acquiring new skills and knowledge with the formation of many direct and associative links. This is especially true for media education at a higher education institution, where students already possess a certain media competence formed at a general education school and are ready to apply it to other knowledge, subject, professional, etc. Therefore, media education in higher education, and not only in higher education, is understood:

i. as an educational field, which aims to develop knowledge, skills, and competence of educational subjects necessary for working with media information and media tools.
ii. as an education that includes the productive use of media information and media tools on the basis of knowledge, skills, and competence to work with it.

These two points mutually express and develop each other: media competence is a support for the acquisition of subject and other competences and is developed in the process. In other words, media education in the aspect of media studies is mediated through the practice of working with media information in basic education, which is also reflected in the personal development and socialization of students.

Therefore, media education at the university is carried out in the active interaction of students with the media environment with the realization of a set of direct and feedback links, the results of which are the following:

i. students' professional competence is formed and their media competence is developed by mastering new forms and means of receiving, displaying and perceiving educational and cognitive information;
ii. direct and indirect impact of media information is reflected in the personal development and socialization of students;
iii. level of professional competence and media competence increases, and students' personal media culture develops. Moreover, the level of information competence and information culture of students develops.

It should be added that the notion of "media" is far removed from the notion of traditional media products, and is associated with all mass-consumption networked information coming to the consumer by

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means of communication, displayed and stored on material carriers inherent to it, and reproduced by specialized means. All these means are also included in the sphere generated by this information and called "media".

According to Zhilavskaya (2016), media are defined as follows. "Media includes the widest range of means and channels of communication, serving the transmission of various kinds of information. It is an integral, self-organizing substance that, like blood vessels, permeates the entire social organism, all spheres of our life" (para. 6). That is, in accordance with this definition, media means, media channels of communication, or media communications, and information or media information transmitted by them form a single integrated whole. These three components of the integrated whole are connected by their mutual requirements and their properties, without which they are no longer "media". At the same time, since media components are designed to meet needs and achieve certain goals, they must also meet the requirements of consumers and the corresponding social systems, in this case, the education system.

6.3. Media environment as a component of educational space

One of the goals of media education is to master the mediating functions of communication systems, their means and technologies, and to form the subjects' abilities to consciously and responsibly perceive the information of the socio-informational environment. In this context, we agree with the opinion of T. N. Murovan that "media education should solve the problem of realizing one's own information needs, forming skills of working with information sources... One should be able to critically assess the reliability and trustworthiness of media messages" (Murovana, 2017, p. 12).

However, as practice and personal experience of the authors shows, the conditions of electronic and digital learning presuppose a qualitative expansion of the concept and content of media education in two aspects, which is de facto happening. It includes:

i. media training aimed at developing the knowledge, skills and *media competence of* education subjects necessary for working with media information and media tools;
ii. media education as a field of productive use of media information and media tools based on the knowledge, skills and competence to work with it.

In other words, "media education in the aspect of media training is mediated, and in the practice of working with media information, is reflected in the personal development of students. "The direct and mediated impact of media information is reflected in the personal development and socialization of the subjects of training" (M. Abdurazakov et al., 2019, p. 2). Moreover, the level of their information competence and information culture develops.

Media environment of education is a socio-cultural information and educational environment in which the objects of media information for educational purposes are invariant and have cognitive value. The main objects of media information and educational interaction are:

i. electronic educational resources of a predominantly multimedia presentation format: hypertext, text, sound, video image, graphic image, animation (cartoons), audio, video information;
ii. Media communication tools, media technologies: media playback and display devices that ensure the perception of media information;

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iii. various forms of social media environments: press, television, movies, radio, players and other devices used for educational purposes.

The mediascape can be of an experimental or subjective nature, for example, the personal mediascape of the subject of education, oriented to the implementation of an individual learning trajectory or media activity. However, each object of the media environment of education should be associatively connected with the components of the IOS for quality control and achievement of planned learning outcomes. In this aspect, "Management of activity and personal mediascapes can only be mediated, including through the mediation of the educational institution IOS" (Johnson, 1995, p. 64).

This is especially characteristic of higher education institutions. Multifunctional media resources and media EERs are also in demand here. However, both the theory and practice of subject-based learning in higher education are more focused on specialized media resources that meet the specific requirements and needs of general, group, and individual curricula. Therefore, it is necessary to expand associative ties with the general media environment of society, to immerse all subjects of education at the university, students and teachers, and to expand their personal media environments accordingly. Therefore, the media environment of the HEI and, accordingly, of all higher education is virtual as a conditional association of personal media environments and similarly virtual other local media environments. Since personal sociocultural and cognitive interests can, in principle, extend to all available elements of the media environment, the virtual media environment of higher education actually interlocks with the media environment of society, or has it as a limit of its development. Hence, the educational media environment is an open developing socio-information system that actively interacts with the IOS and the general socio-information environment (Korotenkov, 2012a). The personal media environment of the subject of study at the university is virtual; it is variable and has no documented representation. It manifests itself in the subject's informal interaction with the media environment of society and local media environments, and serves as a means and a result of this interaction (Korotenkov, 2012b).

6.4. Aspects of Development of Person-Centered Educational Media Environment

From the point of view of information and media support of the educational process, the main problems of media education are related to the very concept of "media environment" as a convenient "tool" for learning about the world and the culture of perception of reality, working with information and its sources, forming critical thinking, self-awareness and key competencies of the subject in the field of media technology.

Another aspect of media education as a pedagogical training system based on the integration of information and pedagogical technologies is the development and practical implementation of an educational and methodological complex of formation and development of information culture to make more intensive the process of mastering new knowledge. In this regard, media education becomes the optimal way (technology) to achieve the goal: the formation of knowledge, skills and competencies. Moreover, the goal of media environment realization is the formation of "information and digital literacy – media literacy – media culture – information culture".

Therefore, it is necessary to consider the interrelated consideration of the university's IOS and its media environment in their systemic unity and intersystemic interaction as a single integrated information

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and communication system of open nonlinear dialog with common principles of formation, implementation and management of their development.

The media environment of education, as a condition for the development of the natural informational aspect of the modern learning and cognitive and sociocultural environment, is self-governed but disordered, as the subject's dialog with the media environment is self-governed. The subject's educational and cognitive interaction with the content of the media environment is not automatic, but is presented as an open dialogue with direct and feedback. And a self-consistent temporal world of learning and self-learning is realized. Naturally, the aspect of organizing and regulating the interface dialogue in a non-linear situation is one of the most important factors of media education and the process of socialization of its subjects in order to ensure quality, efficiency, productivity and correctness.

The artificial aspect of the formation and development of an educational media environment or its systemic component, the media environment of a higher education institution or other EI, is the result of purposeful design and formation. That is, such local educational media environment is specialized, targeted, and therefore develops in an artificial aspect, in the processes of human thinking and purposeful intellectual activity.

The relative naturalness of society's media environment is that it is an objective reality, a product of society's natural development, and its resources are ready and available for consumption. The natural media environment is co-managed and meets the requirements of the functioning of the social and information environment. There is a developed system of its regulation, social, moral and ethical norms, and information law. It is only necessary to know, respect and fulfill them in one's informational and cognitive interaction with it. All this should be both the subject and the result of media education of students in higher education and, therefore, should be reflected in the content of information education and media education, especially in the content of "ICT Informatics".

Consequently, the media environment is formed and developed in an artificial, active aspect. Hence, the educational media environment of a higher education institution is an open developing information and educational system that actively interacts with the university's IOS.

The HEI's educational media environment should be a person-centered environment in which:

i. content and information provision of high quality with accurate and reliable information available to students, taking into account their age categories and psychological characteristics;
ii. personal characteristics of interaction between subjects of training and components of the university IOS are taken into account;
iii. psychological support of the process of personal development and self-development of students in interaction with the resources of sociocultural is provided.

As in the IOS, the formation and development of a personally-oriented educational media environment of a higher education institution is based on its pedagogical system and its subject methodological implementation. At the same time, it is an integrated association of personal media environments of its subjects, students and teachers. They are formed and developed on the basis of their individual educational routes and personal educational trajectories, provide for the presence of a program of individual development through self-discovery, self-determination of the student's personality and an individual program of activity implementation of this development.

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Like the university's IOS, its media environment is heterogeneous and hierarchical: there are sub-environments of faculties, departments, and other divisions of the university with their specific topics reflected in resources and media resources. At the same time, each resource of the university's structured media environment can be demanded and used in any part of it, so all direct and associative links should be defined.

The development and self-development of a university student presupposes intellectual, spiritual and moral formation of his/her personality. This is possible only with full immersion in the educational media environment, with a corresponding expansion of his/her personal IOS, its electronically expressed part. It should be self-governed at the level of awareness of personal duties and responsibilities, as well as controlled by the pedagogical system at the level of control and necessary correction. The student's personal educational trajectory is one of the mediated forms of this management (Nimatulaev et al., 2018).

6.5. Pedagogical aspects of building media competence and media culture

From the point of view of didactics, media education technologies become logical components of the information and educational environment, while the subject's personal media environment develops under the influence of subject-educational systems. Therefore, it needs a general scientific and methodological description and methodological support of the corresponding methodological system of subject education.

The subject's personal media environment is heterogeneous, as it is an integral result of a systematized combination of a part of society's media environment and the media environment of an educational institution. Therefore, personal media environment is an electronic and media projection of personal information environment, which has logical boundaries and interrelations with the IOS. We believe that such approach to the definition of personal media environment to express the internal logic of the subject's personal interrelations with the environment is necessary for his professional and personal development, and sufficient for his self-development in self-education and self-study. That is, it is formed on the principles of materiality, necessity and sufficiency in relation to the following:

i. interrelation, mutual influence, mutual interaction of personality and personal media environment;
ii. influence and information-psychological impact of elements of this media environment on the student.

I. V. Zhilavskaya defines media competence as follows. "Firstly, it is a set of knowledge, skills, abilities and readiness to master the sociocultural, economic and political context of media functioning. And secondly, it is the result of media education, which is necessary for effective activity in any subject area" (Zhilavskaya & Zhilavskaya, 2021, p. 8). According to Korotenkov (2014), "Media competence and media culture of subjects act both as products and as intellectual means of education. They are necessary for self-education and self-development of an individual" (p. 4). Moreover, "Personal information culture can be formed only in conditions of full and independent immersion in the media environment" (M. M. Abdurazakov et al., 2016, p. 4).

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Consequently, it is necessary to develop media competence, media culture and media safety of the subject of study at the university in their integrated combination and complementarity; it is necessary for them to realize their personal media competence in the sphere of media technologies.

1. Personal media competence is understood as the area of "rights and opportunities, responsibilities and capabilities" of an individual to access and use the objects of the media environment, which is necessary for management by the pedagogical system. Personal media competence, as a standard of media competence, is a factor of the pedagogical system and it should be perceived as a component of his personal media environment, formed and developed within the media environment of the university.

2. Personal media competence is, first of all, the competence of a media resource user, which is necessary for the subject of education to increase the productivity of interaction with the media environment. The higher the level of media competence of the subject of education, the more stable the personality to the variable conditions of society, in particular, the higher the potential for improving the level of education (media education), including self-education.

3. The subject's personal media culture includes a subculture of activity in the media environment, a subculture of media information perception, and a culture of knowledge and cognition.

It also manifests itself in the culture and ethics of their personal media interactions.

Obviously, the subject's information competence includes his media competence, personal information culture, subculture or media subculture.

Shaikhitdinova (2013), considers media culture "as a phenomenon with multidirectional modality, which states ... media culture as the art of the possible in the field of human subjectivity in the media age" (p. 33).

We consider media competence and media culture of the subject of study at the university in the cognitive aspect in terms of productivity, legitimacy, safety of interaction with the media environment and in the aspect of achieving meta-subject and general educational result. And personal media culture can viewed in the aspects of socialization, personal development and self-development of the individual.

6.6. Information and computer security culture as a component of information and media culture

The formation of media competence and media culture of a student is a matter of the entire period of study at a higher education institution and each of its educational subjects. However, since these are systems of knowledge, skills, and personal qualities, they should be considered from the position of the system-information approach, from general universal positions. This is possible only at the level of informatics education in the context of socialization, information law, and information culture. Only at this socio-informational, socio-cultural level, it is possible to consider and reflect them in personal systems in the unity of content and forms, methods, forms and means of their realization.

Consequently, in modern higher education, in any specialized university, the subject of informatics becomes the main guide in the spaces of the general media environment and local media environments. As such, it provides systematic realization of their informational, technological, psychological, socio-cultural, legal, ethical and other aspects of the IOS in the diversity of subject teaching.

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The media environment stimulates the project activity of university students and to a great extent ensures its effectiveness.

Project work can be done in both humanities and science subjects. Here it is possible to propose topics of both subject and meta-subject nature about meta-description of a particular subject-scientific area, about issues of culture of activity in this subject area, inter-subject and inter-science relations, etc.

Any work on the preparation of projects, essays, reports requires immersion of the student in the media environment, in the Internet sphere, in the portals offered by the teacher, recommended by the training program, found independently. And, therefore, in addition to the development of his subject and meta-subject competences, it entails the development of his media competence and media culture.

The information environment, media environment of a society, IOS and media environment of education are complex structural substances with a great variety of interconnections and relationships determined during their formation and development or during the realization of subject-object interaction in and with them. Their ordering, modeling, systematization, and abstract representation as multidimensional structures can provide:

i. constructive dialog in information and cognitive interaction with them, when searching for necessary resources, IERs, EERs;
ii. productivity, rationality and safety of interaction with them;
iii. better performance by these environments of the functions assigned to them: organizational, informational, sociocultural, etc.

Information space is a systematized representation of the environment by a set of conceptual attributes, which serve as dimensions of this space. Each element of the space is uniquely defined by the values of conceptual attributes, i.e., it acts as a point of space with coordinates on all dimensions. That is, the IOS space is its systematized logical-informational model with identified components and implementation of the logic of interrelations (components and their elements).

The media environment has an electronic expression in the variety of e-Learning resources, electronic media technologies, media communication tools, and electronic infrastructure, while the electronic tools themselves increasingly correspond to the concept of "cyber devices". Therefore, in scientific literature, the information space representing the media environment is called cyberspace, and the educational media environment is called the educational cyberspace.

Freedom in the modern information environment is the possibility of free choice based on the system of rules of actions and behavior operating in it. Unfortunately, not everyone can or wants to act according to these rules. It must be learned and taught, which is what the scientific and educational subjects of socio-legal informatics are designed to provide.

The subject of education must learn to carry out his activity in accordance with the laws of society, environment in accordance with the laws of development of human civilization, with the laws of nature and the universe. There cannot and should not be antagonistic contradictions in its relationship with the environment.

Therefore, the information and educational environment, educational media environment and its representation in cyberspace are a consequence of the requirements of modern education, trends of its

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development as information education, a necessary condition for meeting the increasing information, cognitive and socio-cultural needs of all subjects of education.

At the same time, the IOS, media environment and cyberspace are effective means of developing information education, which under their influence turns into media education, means of developing students' information and cognitive and sociocultural needs, their socialization, personal development and self-development.

The university IOS, its media environment and educational space are specific projections of the general IOS, media environment and cyberspace, reflecting its specialization, educational focus, and their subject expression. It is a means of developing their professional and information competence, media culture, information culture along with the growth of their information and cognitive, socio-cultural needs and the corresponding educational interaction.

Subject socialization is necessary for a constructive and productive interaction in the educational sphere with the university IOS, media environment, oneself, which is a means of development and increasing the effectiveness of this interaction, an intellectual resource for the development, expanding and ordering the IOS and media environment.

7. Conclusion

The information and educational environment of a higher education institution is considered from the position of activity and development of a pedagogical system taking into account the internal needs in the development of the components of the IES, including the media environment of learning.

The formation and development of modern university IOS are an expression of a qualitatively new information worldview of education. They are carried out in accordance with the requirements of digital transformation of the educational system. The requirements for the IOS of an educational institution are its orderliness, structuredness, the presence of formalized systems of identification, addresses and links available to students in form and content.

The specifics of the modern social and information environment is that IERs and EERs are subjects of copyright and other information law, have social significance and as such are subject to protection and legal defense. They imply compliance with the rules and procedures for their use.

IOS, media environment and cyberspace are effective means of developing information education, which under their influence turns into media education, means of developing students' informational, cognitive and socio-cultural needs, their socialization, personal development and self-development.

The university IOS, its media environment and educational space are specific projections of the general IOS, media environment and cyberspace, reflecting its specialization, educational focus, and their subject expression. It is a means of developing their professional and information competence, media culture, information culture, and oneself, which develops along with the growth of their information, cognitive, socio-cultural needs and the corresponding educational interaction.

Consequently, the informational conditions of media education are the conditions of the electronic virtual world formed by the Internet and all its specialized and local information and educational environments (IEI). They are supplemented by methodological conditions determined by the pedagogical

system and its educational and methodological implementations at various levels of education and subject teaching.

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References

Abdurazakov, M. M., Korotenkov, Y. G., & Muhidinov, M. G. (2016). Educational space representation in cyberspace. *SHS Web of Conferences*, *29*, 01001. EDP Sciences. https://doi.org/10.1051/shsconf/20162901001

Abdurazakov, M., Volkova, S., Gadjiev, D., & Lyaginov, O. (2019). The concept of electronic learning with the application of digital technologies. In *Proceedings of the International Scientific Conference Innovative Approaches to the Application of Digital Technologies in Education and Research (SLET-2019). Stavropol-Dombay, Russia* (Vol. 2494, pp. 1613-0073).

Collet-Sabé, J. (2023). Pre-modern epistemes inspiring a new Global Sociology of Education Imagination. *British Journal of Sociology of Education, 44*(8), 1249-1266. https://doi.org/10.1080/01425692.2023.2195089

Fedorov, A. V. (2015). *Media education: history and theory*. International Public Organization.

Feilitzen, C. (1999). *Media Education*. Children and Media: UNESCO & NORDICOM.

Giza, A. (2024). Sociology and the Alienation of Knowledge. *Rethinking the Social*, 15-36. https://doi.org/10.1163/9789004708549_003

Gura, V. V. (2007). *Theoretical bases of pedagogical design of personality-oriented electronic educational resources and environments*. Publishing House of the Southern Federal University. https://refdb.ru/look/1499676.html

Gutiérrez-Martín, A., & Tyner, K. (2012). Media Education, Media Literacy and Digital Competence. *Comunicar, 19*(38), 31-39. https://doi.org/10.3916/c38-2011-02-03

Johnson, D. (1995). *Computer Ethics. Prentice-Hall Series Occupational Ethics*. Prentice-Hall, Inc. Engleword Clifs.

Kirillova, N. B. (2005). *Media culture: from modern to postmodern*. Acad. project.

Kirillova, N. B. (2024). *Media culture and the basics of media management.* Ural Publishing House.

Klushina, N. I. (2016). Media culture and its role in the development of the modern information society. *Actual problem of stylist, 2*, 50–54.

Korotenkov, Y. G. (2012a). Concept and problems of media education informatization. In: *Computer science and education*. Academy of Education.

Korotenkov, Y. G. (2012b). The concept and problems of media informatization of education. *Information and Education, 4*, 104–107.

Korotenkov, Y. G. (2014). Smart-society and Smart-education. In *Materials of the X international scientific and practical conference «Trends of modern science*.

Kryukova, N. A. (2013). Media culture and its role in the modern information society. *Omsk Sci. Bull., 5*(122), 226–228.

Mambetova, A., Burganova, R., Tabyldiyeva, O., & Tolepbergenova, A. (2024). The influence of the social well-being of the population on the sustainable development of the region. *E3S Web of Conferences, 537*, 02027. https://doi.org/10.1051/e3sconf/202453702027

Manakbayeva, A. B. (2023). Formation of Personal Moral Values in Complex Social Systems. *Lecture Notes in Networks and Systems*, 887-899. https://doi.org/10.1007/978-3-031-23856-7_76

Mascareno, A., & Chavez, J. M. (2024). *Quasi-Sovereignty: Hobbes, Luhmann, and World Society, 50*, 19–36.

McLuhan, M. (2023). *Understanding media: human external extensions.* Zhukovsky, Canon-press-C.

Mele, V. (2022). Metropolis and Modernity. *Marx, Engels, and Marxisms*, 33-59. https://doi.org/10.1007/978-3-031-18184-9_2

Moscow Declaration on Media and Information Literacy. (2012). Retrieved on 31st of January, 2023 from http://www.ifapcom.ru/files/News/Images/2012/mil/Moscow_Declaration_on_MIL_rus.pdf

Murovana, T. N. (2017). *Media Education: role and place in modern Russia*. http://www.unkniga.ru/vishee/7249-mediaobrazovanie-rol-i-mesto-v-sovremennoy-rossii.html

Nikulin, A. (2023). Globalization and the Principles of Tolerance. *Springer Geography*, 152-158. https://doi.org/10.1007/978-3-031-20620-7_14

Nimatulaev, M. M., Tsvetkova, O. N., Arutyunyan, V. V., Askerov, A. S., & Khomyakova, V. E. (2018). Internet Technologies In Education And Communication Culture In The Context Of Telecommunications. In S. K. Lo (Ed.), Education Environment for the Information Age. *European Proceedings of Social and Behavioural Sciences* (Vol. 46, pp. 517-525). Future Academy. https://doi.org/10.15405/epsbs.2018.09.02.60

Rawel, J. (2022). An allergy of society: on the question of how a societal "lockdown" becomes possible. *Kybernetes, 51*(5), 1814–1832.

Shaikhitdinova, S. K. (2013). Media culture: from media sociality to overcoming it. In *Cultural sciences in perspective digital humanites*. Materials of the International Conference-St. Petersburg: Asterion.

Sheveleva, D. A. (2024). Problems of intercultural dialogue in modern society: finding solutions. *Chelovek, 35*(2), 69-86. https://doi.org/10.31857/s0236200724020043

Smelser, N. J., & Baltes, P. B. (Eds.). (2001). *International encyclopedia of the social & behavioral sciences* (Vol. 11). Elsevier.

Worsnop, C. (1999). *Screening Images: Ideas for Media Educations*. Wright Communications, R. X.

Zaghloul, M. (Ed.). (1984). *Media Education*. UNESKO.

Zhilavskaya, I. V. (2016). Media Education as a factor contributing to the self-actualization of the individual in the information society. *Text of the report at the 24th meeting of the seminar Methodological problems of information sciences* (Moscow, INION RAS, January 28). http://inion.ru/files/File/MPNI_24_Zhilavskaya_I_V_Doklad.pdf

Zhilavskaya, I. V., & Zhilavskaya, V. (2021). *Systemic and institutional transformations of Russian media education* [Monograph]. MPGU.

Zhurin, A. A. (2005). Integration of media education with the chemistry course of secondary school. *Mediaobrazovanie Publ*, (1), 29-51.