

# Media Technologies In The Educational Space: The Formation Of Intellectual Independence

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## Summary

The article examines the process of professional training in educational institutions, media technologies and methods of media communication in the educational space of the institution, characterizes the place of media technologies in the educational space in the context of the term "educational space" itself, systematizes the methods of media communications in education.

The peculiarities of media education as a set of means and methods of teaching young people adequate media perception are pointed out.

## Key words:

*multimedia technologies, communication technologies, education system, educational process.*

## 1. Introduction

In the 20th century, the role of information began to grow steadily. It acquired great importance in the development of society, economy, science, technology and culture. However, the 21st century is no longer just called the era of information, but the century of the global information society, in which education, knowledge, information and communication form the basis of the development of the human personality and, accordingly, its formation of a professional.

A person is constantly under the influence of continuous streams of information. Mass media create around each of us a special information field, under the influence of which social, moral, artistic, intellectual values and interests are formed. This leads to the fact that a modern person can no longer imagine life without media technologies (press, television, radio, cinema, video, computer networks, etc.). Media information synthesizes several types of perception (hearing, sight) and is able to use all the ways of communication accumulated by mankind. Therefore, the formation of a modern specialist requires the skills of

perceiving a lot of this information, the ability to correctly interpret the meanings of audiovisual images, and competently navigate information flows.

All this is intended to provide media education, the resources of which have long been used in Europe and in the world. Education has only recently begun to talk about the need for the development and implementation of media in the educational process. At the level of secondary vocational education, it is important to form in the future specialist a culture of perception, analysis, interpretation and critical comprehension of media texts, as well as training in ways of self-expression using media technologies. Media literacy as the goal and result of media education is an integral concept that combines a wide range of different educational approaches, theories, methods, goals, and results. Representatives of different professions, age and social groups can be involved in the formation of media literacy, which confirms its potential in the structure of the educational space [1-3].

The progress of information technologies determines changes in the professional activity of a specialist, raises the problem of the readiness of a graduate of an open source institution to use new information technologies in further professional activity. This requires the inclusion of media education in the technology of the implementation of the pedagogical process.

## 2. Theoretical Consideration

At first glance, there is a concept "educational environment" that is synonymous with the educational space - they both act as an environment for the subjects of the educational process. At the same time, their difference lies in the fact that space does not imply the involvement of the student in it, but the environment presupposes immersion in it, interaction with the subject.

The conditional identity of these concepts allows us to talk about a similar structure of the educational space and the educational environment. There are a number of components of the educational environment that we can design for the educational space [5]:

- information component - the primary information necessary for assimilation, on the basis of which the content of education is built. Comprehension, increment of general and professional information through certain methods of activity creates personal experience, which is then transformed into knowledge;

- social component - it is based on a system of relationships with other subjects of the educational process (teachers, classmates, outstanding specialists, etc.);

- spatial and subject component - the location of the educational institution, the availability and equipment of classrooms, interior design.

- personal component - concepts, categories, images, methods of self-knowledge and interaction with the outside world created by the student;

- technological component - a system of methods and forms of teaching.

Media communication and media technologies, as you can see, play a leading role in any of the components of the educational space - the first in the social and personal component, the second in the subject and technological. From this, we can conclude that media communications are an important factor in interaction in the information educational space.

Media communications take up more and more space and time, form a new culture, a new environment. Education is being saturated with new forms, media and hypermedia images, which are no longer limited to tools for the implementation of content. The educational environment is self-forming based on new civilizational challenges.

The main task of modern education in the field of cognitive (cognitive) development is the formation of intellectual independence and the ability to select information and knowledge necessary to solve problems and achieve goals.

Among the multiple aspects of information environments and spaces, three main ones can be distinguished:

- information environment as an activity - a person is a participant in the communication process, the focus is on his ability to present personal knowledge in the form in which it can be transmitted, and, having perceived information

("someone else's" knowledge), again turn it into his personal knowledge;

- information environment as a system of historically established forms of communication;

- information environment as an information infrastructure created by society to carry out communication activities on a scale corresponding to the level of development of this society (publishing houses, libraries, information centers, data banks, mass media, etc.) [9]

The concepts of information environment and information space are interrelated - this is due to the fact that a person can move from one information environment to another (change of profession, transition to a new stage of training, etc.). Moreover, at the same time, an individual can be in several heterogeneous environments, they are a single whole (for example, the information environment of an educational institution, the information environment of virtual reality, etc.).

A characteristic feature of any information environment is the availability of information, but in itself it does not guarantee the effectiveness of a person's stay in this environment, since in this case the availability of skills for working with information, which must be developed in the learning process, is more important [6-8].

The educational space is not static, it develops, and as a result, the object can fall into a qualitatively new state, its composition or structure can change. The main features of the educational space are considered to be the qualitative nature of changes, their irreversibility and direction. These provisions allow us to consider the development of the educational media space as a process of irreversible, directional change in its components, determined both by the content-educational organization of the learning process through the use of appropriate professional and didactic support, and by the independence of any interaction between the subjects of the media space, including information and network.

Currently, there is no single theoretical concept of media education. Several theoretical media educational approaches are distinguished: "injection", "satisfaction of needs", "practical", "development of critical thinking", ideological, semiotic, cultural, aesthetic, ethical, sociocultural, etc.

Here are the main provisions of theoretical approaches to media education [6, 13].

1. "Injection". the theory is based on the position that media has a strong, mostly negative impact on the audience, which consists of a mass of passive consumers who do not understand the essence of the media text. Hence, the main goal of media education is to mitigate the negative effect of excessive media enthusiasm. In this case, the negative impact

of the media is opposed to the “eternal values” of the classical cultural heritage (the art of antiquity or the Renaissance).

2. The theory of “meeting the needs” of the audience is the opposite of the previous one and considers the positive effect of media. In this case, the influence of the media on the audience is limited, and students can independently select and evaluate the media text in accordance with their needs. The main goal of media education according to this theory is to help students get the most out of their needs.

3. "Practical" theory of media is directly related to technical creativity, the main goal of media education is to learn how to work with media equipment in all its aspects.

4. The theory of "development of critical thinking", which is based on the theory of "agenda", presents media as a means of disseminating patterns of behavior and social values among the population.

5. "Ideological" theory has become widespread in the domestic media pedagogy of the Soviet period. Its basis is the Marxist theory, according to which the media are capable of manipulating public opinion in the interests of any social class.

6. Semiotic theory of media education says that its main goal is to help students in the "correct reading" of media texts with the study of codes and "grammar". The semiotic theory of media education has something in common with the theory of "formation of critical thinking" by its approaches to the analysis of media texts, manipulative capabilities of media.

7. Cultural theory. In this theory, the media offers the interpretation of media texts: the audience does not just “read”, but puts various meanings into the perceived media information. Consequently, the main goal of media education according to this theory is to help students understand how media can enrich perception and knowledge.

8. Aesthetic (artistic) theory. It is also based on the cultural theory of media. The main goal of media education in this case is to help students understand the basic laws and language of the artistic aspect of media information, develop aesthetic perception and taste, and the ability to analyze artistic media texts.

9. Ethical theory, the main position of which is the formation of certain ethical principles of the audience through the media, brings to the fore the familiarization of the audience with a certain ethical model of behavior.

10. Sociocultural theory is based on the synthesis of cultural and sociological theories. The main priorities of this approach are: comprehension of the social role of media, the need to

teach the language of media to wide strata of society, professional training and expanding the possibilities of media pedagogical activity in various spheres of society.

11. Theological theory assumes that the media are capable of forming certain spiritual, moral, value principles. This implies the main goal of theological media education: to familiarize the audience with one or another model of behavior, with value orientations that correspond to one or another religious dogma.

12. The ecological theory of media education is based on the works of renowned environmental scientists and philosophers. Media educators - "ecologists" are convinced that it is necessary to develop the ecology of media perception as an integral part of a person's media literacy, which implies moderation in views, a critical analysis of media texts, and the preservation of a spiritual and aesthetic orientation within the framework of one's own viewer concept [12].

Each of the stages of the technology passes through the prism of communication. Along with this term, the concept of media communication is increasingly used in modern pedagogy.

The etymology of the term "media communication" goes back to the Latin prototypes: *communicatio* - message, transmission, *medium* - intermediate, mediating, mediator. From this, we can derive a working definition of the term media communication as "a process associated with the dissemination of specially prepared messages of social and personal significance by technical means between various groups and individuals" [7-9].

In the modern information society, there are a number of understandings of the term "media communication", most of them are characterized by an interdisciplinary approach. Historical and cultural understanding of media communication is associated with the "expansion" of a person from the period of oral communication and the handwritten / printing society - to the age of electronic technologies. Each stage of the historical development of communication methods has its own special style.

From the point of view of a sociocentric approach, media communications are considered in the context of social relations. This approach embeds media communications in various spheres of human activity and becomes an integral factor in the formation of a picture of the world.

Technocentric approaches consider media communications as one of the important conditions for the evolution of culture. It takes into account both technological capabilities and features of the content.

The semiotic approach involves interaction mediated by signs, languages, codes. Technical feasibility of implementation is also important here - information capacity, ease of perception, dominance of productive capabilities, mass character and accessibility.

The psychological approach reflects individual and group processes, media-communicative behavior, the influence of media on a person.

In media education, the following teaching methods are relevant and widely represented:

1. According to the sources of knowledge gained: verbal (lecture, story, conversation, explanation, discussion); visual (illustration and demonstration of media texts); practical.

2. By the level of cognitive activity: explanatory and illustrative (the teacher communicates certain information about the media, the perception and assimilation of this information by the audience); reproductive (the development and application of various exercises and tasks by the teacher on the basis of media in order for students to master the methods of solving them), problem (problem analysis of certain situations or media text in order to develop critical thinking); partial search or heuristic, research (organization of search and creative learning activities).

Among the methods of media text analysis actively used in media education of pupils and students [2, 11]:

- autobiographical (personal) analysis - a description of relationships, experiences, feelings, memories, associations caused by the media text: students / students compare personal life experiences (personal life experiences, manifestations of their character in various life situations are compared with the life experiences of characters in media texts), based on associative memory (the effect of "memory flashes");

- analysis of cultural mythology: identification and analysis of mythologization (including within the framework of the so-called folklore sources - fairy tales, "urban legends", etc.) plots, themes, character types, etc. in media texts;

- analysis of media stereotypes: identification and analysis of stereotyped images of people, ideas, events, etc. in media texts;

- character analysis - analysis of characters, motives of behavior, ideological orientations, and actions of characters in media texts;

- hermeneutic analysis of the cultural context - the study of the process of interpreting the media text, cultural, historical factors that affect the point of view of the agency / author of the media text and the point of view of the audience;

- identification analysis - recognition / identification of hidden messages in media texts, since media agencies often offer simplified solutions to complex problems (are the authors' conclusions logical? If not, what should they be?);

- ideological, philosophical analysis: analysis of the ideological and philosophical aspects of the media sphere;

- iconographic analysis - associative analysis of the image in the media text (for example, water, fire - symbols of purity and destruction) associated with semiotic analysis;

- content analysis - quantitative analysis of media texts (definition of the media text category, systematization of facts, conclusions about the types of narration, symbols, languages, forms, etc.; about how often certain factors manifest themselves, for example, stereotypes in the plot).

What methods of media communication are known? It is advisable to master media literacy in cycles of training sessions, within which various methods of working with meaningful material are distinguished.

Project activity in media education is represented by an integration system that at the level of synthesis or partial interconnection of the interactive interaction of various media content on the basis of a single technological device (or vice versa - the interaction of a number of technological devices in order to create and deliver unified content). Invariant approaches to the creation of educational project activities for the purpose of media education and the correlation of its tasks with the special tasks of the project being created; defining the content of teaching and teaching methods; selection of software based on the developed criteria; determination of organizational forms of training.

## Conclusions

In modern Ukraine, the media environment is a fairly complex organism, covering the economy, social institutions, public consciousness, spiritual and material culture.

The modern media environment is television (terrestrial, cable, satellite) and printed mass media, film video, e-mail and cellular communications, computer channels and the Internet as a space of free communication.

In this regard, media education is becoming especially relevant as a set of means and methods for teaching young people an adequate perception of the mass media.

This training involves the development of skills to work with information flows, perceive them, critically evaluate, interpret and create your own information product. For this, it is

necessary to use in the educational process the potential of media education - a complex humanitarian science, which relies on cultural studies, history and political science, sociology and informatics, pedagogy and management.

## References

- [1] Corral, S. (1998). Key skills for students in higher education. *SCONUL Newsletter*, 15, 25-29.
- [2] Frolov, D., Radziewicz, W., Saienko, V., Kuchuk, N., Mozhaiev, M., Gnusov, Y., & Onishchenko, Y. (2021). Theoretical And Technological Aspects Of Intelligent Systems: Problems Of Artificial Intelligence. *International Journal of Computer Science and Network Security*, 21(5), 35-38. DOI10.22937/IJCSNS.2021.21.5.6.
- [3] Meera N. S. Quality education for all? A case study of a New Delhi government school, *Policy futures in education*, 2015, № 13 (3), pp. 360–374.
- [4] Lazorko, O., Virna, Z., Brytova, H., Tolchieva, H., Shastko, I., & Saienko, V. (2021). Professional Safety of Personality: System Regularities of Functioning and Synergetic Effects of Self-Organization. *Postmodern Openings*, 12(2), 170-190. <https://doi.org/10.18662/po/12.2/302>.
- [5] Alfred P. Rovai, Linda D. Grooms The relationship of personalitybased learning style preferences and learning among online graduate students. *Journal of Computing in Higher Education*. - 2004. - №16, Issue 1. - pp 30- 47.
- [6] Andrea Santo-Sabato, Marta Vernaleone From the First Generation of Distance Learning to Personal Learning Environments: An Overall Look. *E-Learning, E-Education, and Online Training*. - 2014. - №138. - C. 155-158.
- [7] Shapiro, J., & Hughes, S. K. (1996). Information literacy as a liberal art: Enlightenment proposals for a new curriculum. *EDUCOM Review*, 31(2), 31-35.
- [8] McMillan R. Man Builds Twitter Bot That Humans Actually Like. *Wired*. URL: [wired.com/2012/06/twitter\\_arm/](http://wired.com/2012/06/twitter_arm/)
- [9] Mason, R. *Globalising Education: Trends and Applications*. London: Routledge, 1998. P. 37.
- [10] Biddiscombe, R. (1999). Developing the learning support role: Some of the challenges ahead. *SCONUL Newsletter*, 16, 30-34.
- [11] Iasechko, M., Shelukhin, O., Maranov, A. Evaluation of The Use of Inertial Navigation Systems to Improve The Accuracy of Object Navigation. *International Journal Of Computer Science And Network Security*, 21:3, 2021, p. 71-75.
- [12] Dordick H.S., Wang G. *The Information Society: A Retrospective View*. Newbury Park — L., — 1993.
- [13] Iasechko, M., Iasechko, S., Smyrnova, I. Aspectos pedagógicos do autodesenvolvimento de alunos de educação a distância na Ucrânia. *Laplage Em Revista*, 7(Extra-B), 2021, p.316-323.