



 Research Article

ANALYSIS OF FOREIGN AND DOMESTIC EXPERIENCE METHODS OF DEVELOPING MEDIA SKILLS OF WORKING WITH INFORMATION TECHNOLOGIES FOR FUTURE SCIENCE TEACHERS

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ABSTRACT

The views on the analysis of the experience of future teachers of Natural Sciences on the development of Information Technology mediacognition by a large number of foreign and local mediapedagog scientists and their discovery of the essence of mediacompetence in their scientific research work, their pedagogical potential and the conditions for the use of various information and communication technologies in the educational process.

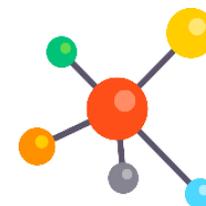
KEYWORDS

Media, skills, mediaculture, mediacompetence, mediacompetence, methodology, methodology, pedagogy, education, training, Information, Communication, Technology, social networks, internet, media, distance learning.

INTRODUCTION

The development of the state and the development of society is largely determined by its intellectual potential. Because a country with a highly developed scientific potential is always advanced in all areas. Therefore, radical reform of the education system in

our country is approached as a priority task of state importance, and great attention is paid to it. There are specific requirements for the organization and management of the educational process to achieve the training of highly qualified personnel. First, to ensure



that the level of professional knowledge of students meets the requirements of state educational standards. Second, to achieve full coverage of the independent creative activity of students in the range of knowledge, skills and abilities set by the state educational standards. The rapid development of society in this way, the need for highly qualified personnel requires the teacher to meet the social needs, demonstrating their intellectual abilities [1].

In accordance with the Decree of the President of the Republic of Uzbekistan PF-6079 dated October 5, 2020 on the approval of the Strategy "Digital Uzbekistan-2030" and measures for its effective implementation, the active development of the digital economy in our country, in all sectors and industries, , comprehensive measures are being taken to widely introduce modern communication technologies in public administration, education, healthcare and agriculture.

State on the accelerated development of the digital industry, increasing the competitiveness of the national economy, as well as the implementation of the Action Strategy for the five priority areas of development of the Republic of Uzbekistan in 2017-2021 in the "Year of Science, Enlightenment and Digital Economy" In order to ensure the implementation of the tasks set out in the program:

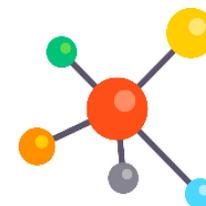
The Ministry of Information Technologies and Communications, together with the Ministry of Preschool Education, the Ministry of Public Education and the Ministry of Health, envisages the creation of IT infrastructure and computer equipment in 13 model districts (Appendices 2a-14a) by the end of 2020. to take measures to complete the digitization of preschool and secondary schools and health care facilities, as well as to introduce information systems and organize the training of responsible staff [2].

RELEVANCE OF THE TOPIC

In order to improve the methodological training of future science teachers in the teaching of their specialties, it is necessary to better organize the educational process, to better understand the goals and objectives of this process, to master innovative education, information and communication technologies and digital technologies. Media education in the modern information society, the use of media in the educational process, the formation of the modern teacher's ability to work with the media, the essence of education through the media, disclosure, increase pedagogical capacity and use of various media understanding of the conditions, the educational process (information technology, Internet, social networks, screen art, television, advertising, interactive games, computer animation, etc.), pedagogical models and as a means of shaping their readiness to use. Therefore, the development of media competence of future science teachers through the development of information technology skills is one of the most pressing issues facing science. At the same time, in accordance with the requirements of modern scientific and technological development, it is important to improve the methodology of developing media competence of future teachers of natural sciences by improving their knowledge of the media in pedagogical research.

BRIEF ANALYSIS OF SCIENTIFIC RESEARCH ON THE TOPIC

In order to improve the methodological training of future teachers in teaching their specialties, it is necessary to better organize the educational process, to better understand the goals and objectives of this process, to master innovative education, information and communication technologies and digital technologies. Media education in the modern



information society, the use of media in the educational process, the formation of the modern teacher's ability to work with the media, the essence of education through the media, disclosure, increase pedagogical capacity and use of various media understanding of the conditions of the educational process (information technology, Internet, social networks, screen art, television, advertising, interactive games, computer animation, etc.), pedagogical models and as a means of shaping their readiness to use [3].

Among the scientists of the Commonwealth of Independent States Sharikov AV, Myasnikova T. I, Fedorov AV, Milyutina AA, Nikitina E. Yu, Onkovich GB, Imanova OA, Shablin MS, Iskakov BA, Zmanovskaya NV, Mezentseva D. A and others have done extensive research on the organization of media education.

At a time when modern education is developing rapidly and rapidly, students depend not only on the level of knowledge, but also on the level of media skills and competencies. Therefore, a number of scientific studies have been conducted on the development of media competence of students of pedagogical higher education institutions. In particular, the problems of media education in the Republic of Uzbekistan S. Beknazarova, Ya. Mamatova and S. Sulaymanova have been studied by several other scientists and scientific and methodological bases have been developed. Babadjanov SS, The technology of developing students' media competence in the teaching of "computer science and information technology" in pedagogical higher education institutions has been studied as a pedagogical problem.

The problem of professional training and competence of teachers has been studied by Isyanov RG, Muslimov NA, Mahmudov AX and many others.

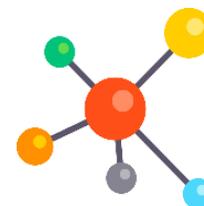
Problems of using modern information and communication technologies in education have been studied by Taylakov NI, Yuldashev U. Yu, Mamarajabov ME and Tursunov SK and many other scientists.

However, in the process of teaching the subject "Education and Information Technology" in pedagogical higher education institutions, there is a need to develop a methodology for developing future science teachers' skills in working with information technology.

There are a number of pedagogical studies on improving the system of teaching the subject "Information Technology in Education" in higher education institutions of the country. However, there is a need for systematic research in the field of "Information Technology in Education", which will fully cover the main components of the development of teaching aids for the development of media skills of future science teachers working with information technology. In this sense, the Republic requires the improvement of the content of the creation of teaching methods for pedagogical higher education institutions and the revision of existing teaching methods and technologies.

SCIENTIFIC NOVELTY OF THE ARTICLE

Research by many foreign and local media pedagogues to improve the methods of developing the skills of future teachers to work with information technology and to reveal the essence of media education in their research work, pedagogical potential and The conditions of use of various information and communication technologies in the educational process have been studied as a means of shaping the readiness of future teachers to use them, but the "Methodology for developing media skills of future science teachers" has not been sufficiently studied.



The purpose of the study: Improving the methods of developing the skills of future science teachers to work with information technology.

Object of research: The process of developing the skills of future teachers of natural sciences to work with information technology.

Subject of research: Forms, methods and tools of methods of developing the skills of future science teachers to work with information technology.

Systematic, comparative-logical analysis was used in the study.

Research methods: Study and analysis of relevant scientific sources, didactic materials, DTS, curricula, educational and normative documents, textbooks and teaching materials; interview, observation, questionnaire, test, pedagogical experimental methods were used.

The main part of the radical reforms in the education system requires everyone to have knowledge, high culture, high skills, creativity, a sense of responsibility to society.

The main sections of the media education program ("media agencies", "media categories", "media technologies", "media language", "media representation" and "media audience") related to learning).

Today, there are a number of unresolved issues directly related to improving the effectiveness of education. These problems are related to the informatization of education, the training of teachers in the field of modern information technology, the lack of skills of teachers in the use of modern information and communication technologies. One of the important aspects of these problems is the attitude of educators

towards the informatization of their education. It should be noted that the role of the educator in the informatization environment will increase.

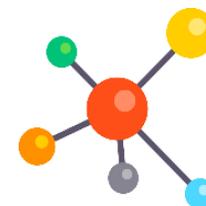
At present, educational institutions are equipped with modern computer and telecommunications technologies. This, in turn, requires educators to take a new approach to their work. The introduction of new technologies in the teaching process, rather than squeezing the teacher by technical means, changes his tasks and roles, leading to the complication of teaching activities.

The main stages in the development of media competence in the world are:

These began the necessary training integration practice with media education. Media education was included in the arts, geography, and social sciences.

Sharikov AV, Defining the concept of "media education" teaches theoretical and practical skills for mastering modern media, which is considered in the theory and practice of education "media education" as part of a specific and autonomous field of knowledge rgatish "describes; emphasizes the need to differentiate the use of teaching aids in teaching mathematics, physics, geography and other similar fields.

Conceptual framework: socio-cultural theory, elements of "critical thinking" development theory, semiotic, cultural, ethical and environmental media education theories. The cultural component (the need for media formation as a result of media development) and the social component (the importance of the social role of awareness of media pedagogy), according to the concept of AV Sharikov, the basic principles of socio-cultural theory of media education:



- The development of media naturally leads to the need for special vocational training associated with the emergence of a part of the management system of a new organization in each new field;
- Given the popularity of the media, specialists, first of all, teachers of special media (discipline-modules) should teach the language of the media to the general public;
- This trend emphasizes the growing role of the media in society and, consequently, the confidence of media educators in the further development of the media-educational process.

The purpose and objectives of the introduction of media education in education are:

- The role of the media in the socio-cultural development of the individual;
- To acquaint the audience with the basic concepts and laws of communication theory;
- Development of perception and understanding of the media audience;
- Development of media analysis, interpretation, evaluation, critical thinking skills of the audience;
- Development of media and communication skills of students.

Organizational forms: Media-educational base, taking into account the specific characteristics of the educational institution (for example, in schools specializing in natural sciences), the interdependence of different stages in the system of continuing education (for example, the professional training of students) (Profile) and extended courses.

Media education methods can be classified according to the sources of knowledge obtained:

- Oral (speech, story, conversation, explanation, discussion);

- Exhibition (images and presentation of media texts);
- Practical (performing various practical tasks in media materials).

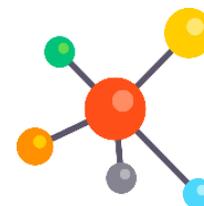
According to the level of cognitive activity:

- Explanation (accurate information about the media by the teacher, the acceptance and assimilation of this information by the audience);
- Reproductive (development and application by the teacher of various exercises and tasks in media materials, methods of solving them for students' learning);
- Problematic (problem-based analysis of specific situations or media to develop critical thinking);
- Partial search or heuristic, research (organization of research and creative activities). However, theoretical and practical sessions involving a variety of creative tasks are preferred.

Myasnikova TN in her research work "Development of media competence of university students" noted that media competence is the result of personal-subjective mastery of the student in the process of formal and informal education, which characterizes the individual's individual readiness to communicate with the media. .

He explained the indicators of the development of media competence of university students as follows:

- Knowledge of the media, including classical information about the media and innovative components;
- Media consumption, which is reflected in the receptive use of the media;
- Media criticism, including analytical, reflexive skills, evaluative argumentation;



- Media competition, the student's ability to take into account the variability and novelty of the modern media environment;
- Creative skills in designing media texts in educational and professional contexts.

AV Fedorov, one of the leading experts in the field of mass media, described a person's media abilities "his motives, knowledge, intelligence, abilities (indicators: motivational, communication, media, emotions, interpretive assessment, practical-operational and creative activity)." , selection, use, critical analysis, evaluation, creation and transfer of media in various forms, forms and genres, analysis of complex processes of media activity in society ".

Media pedagogue of the Commonwealth of Independent States Fedorov AV In the monograph "Development of media competence and critical thinking of students of pedagogical higher education institutions", the issues of media competence and development of critical thinking of students of pedagogical higher education institutions (specialty "Media Education", state registration number doirasida 03.13.30) It is studied in the context of general problems of science and media literacy [6].

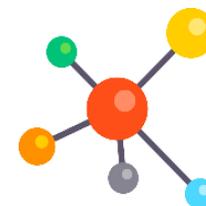
In her research, Mezentseva D. A emphasizes the need to create a common workspace for wiki website users to create a group of web pages, store, edit, discuss information through modern media.

Wiki-sites add all the necessary documents to the general workspace, organize it with a system of folders, pages and links, edit (with changes to any document displayed in the workplace), leave comments and access to discussions in the forum on projects designed to collaborate, can send messages to each other via wiki mail. Thus, by creating a workspace on the wiki site and joining it and its

students, the teacher places all the necessary learning materials in this space and checks, corrects and evaluates the homework done by the students on the wiki site pages the possibility of seizing the opportunity [7].

Mamatova Ya., Sulaymanova S. created a textbook "Uzbekistan on the way to the development of media education." This textbook has been proposed as a project to be improved through discussion among pedagogical journalists. It was noted that the manual should be considered as the first attempt to create professional adaptation of students-journalists by teaching them the basics of media and information literacy in the context of new mass communications. Only then will the future specialist be able to understand the harmony of different media products, their instructions, facts and events, and to bring certain values and worldviews of the nation, people into the global information space through the media content he creates. `studied. In other words, it is written that the voice, pride and consciousness of the peoples of Uzbekistan can be easily promoted in the global media and information space [8].

Babadjonov Saloxiddin Sobitdjonovich, in his dissertation on the technology of media literacy development of students of pedagogical higher education institutions, showed that the development of technology for the development of media competence of students of pedagogical higher education institutions is based on the characteristics of the information society. It includes not only relevant media knowledge and skills to work with it, but also an advanced information worldview, information orientation, and media creativity rather than individual media knowledge and media analysis skills. This has led to the improvement of the content of teachers' media competence in connection with professional



pedagogical activities, the implementation of media policy, the introduction of media concepts in curricula, the use of media technology in education, the development of modern information and communication technologies [9].

the skills of future science teachers to work with information technology" pedagogical experiment was conducted at the Kokand State Pedagogical Institute, Navoi State Pedagogical Institute, Tashkent region Chirchik State Pedagogical Institute.

Results of empirical research. In order to determine the level of media competence "Methods for developing

Kokand State Pedagogical Institute			Navoi State Pedagogical Institute			Tashkent Region Chirchik State Pedagogical Institute		
Total number of students	Number of participating students		Total number of students	Number of participating students		Total number of students	Number of participating students	
322	291		322	271		250	192	
Indicator of assessment of the development of information technology skills of future science teachers in (%)								
60-69,9%	70-89,9%	90-100%	60-69,9%	70-89,9%	90-100%	60-69,9%	70-89,9%	90-100%
203 -69%	52 -19%	34 - 12%	182 -65%	57 -21%	32 -12%	115-60%	48 - 25%	29 15%

CONCLUSION

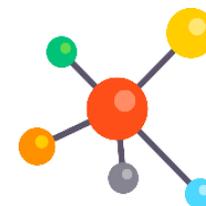
According to the results, it is possible to define innovative organizational and didactic forms of the research problem as theoretical and methodological substantiation, practical development, experimentation and improvement and implementation of methods of developing media skills of students working with information technology. will give.

In short, to further develop the media competence of future science teachers, using the experience of developed countries, the inclusion of subjects in the curriculum that cover the concepts of media competence and the creation of methodological manuals and delivery to listeners, students, media

culture, media literacy and media The development of science is a requirement of the times.

As a result of the development of media skills of future science teachers working with information technology, we can make the following suggestions for the organization of educational work at a high level:

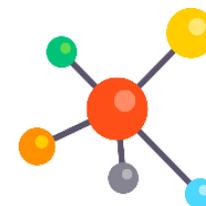
- Organize and conduct classes in accordance with state educational standards;
- Organize lessons on the basis of modern pedagogical methods and visuals (images and representations of media texts);
- Carry out education in an integrated manner with education, in the formation of spiritual and enlightenment consciousness of students, use it



wisely (perform various practical tasks in media materials), methods of media education.

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