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Formation Of A Digital Culture Of A Teacher In Higher Educational Institutions

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Abstract: The full-fledged self-realization of a teacher in modern society is possible only if he reaches a certain level of digital culture. The digital culture of a teacher is a certain level of skills and competencies that contributes to an increase in the effectiveness of the educational process in higher educational institutions.

Keywords: information culture, digital culture, higher educational institution, self-realization, self-education and self-development, information educational environment.

Introduction

What is “digital literacy of the teacher”? What digital competencies are being developed by educators in Uzbekistan? What skills will be most in demand in connection with mass digitalization?

The global informatization of the world community, the differentiation of social processes is that the primary activity in various areas of social labor is the search, collection, accumulation and processing of scientific information.

Quite recently, each teacher of a higher educational institution carried out work on the Internet and the development of modern programs to the best of his ability and ability, but the situation with the coronavirus showed that digital skills are becoming obligatory and necessary from desirable ones. Traditional teaching methods are increasingly losing their relevance in modern education, which is reflected in a tangible decrease in the quality of education in vocational education. Accordingly, classical face-to-face education has become practically impossible. The educational community must be prepared for repeated dramatic changes in professional activity. Thus, for the entire public, there is a need for constant immersion in new flows of information, the renovation of knowledge, and the acquisition of new professional skills. The main task of teachers today is not just to acquire a certain set of competencies and skills to use the information environment, but also to realize the importance and effectiveness of the overall process of informatization of education. These skills cannot be achieved without self-education and self-development of teachers. In recent years, the formation of an information culture of the individual has become a priority in Uzbekistan. Solving the urgent tasks of adapting the educational process to the conditions of updating the content of higher education in the country, it can be stated that it is difficult for the subjects of the educational process to demonstrate such skills as: autonomous thinking, independent acquisition of knowledge and work with useful information obtained from various Internet sources. This determines the readiness of students for further self-education, the ability to effectively apply competencies and skills in professional activities, improving and developing them in the future.

The Main Findings and Results

Thanks to the rapid development of computer technology, people have access to a wide variety of information anywhere in the world, exchange information, and communicate in real time. For free orientation in information flows, a modern specialist of any profile must be able to receive, process and use information using computers,

telecommunications and other means of communication. But for this it is necessary to know the rules for navigating through a huge amount of available information and to have a certain information culture.

Information culture is a new type of communication, which makes it possible for a person to freely enter the information being; freedom of exit and access to information being at all levels from global to local, since the intra-national, intra-state type of information being is as untenable as national science; a new type of thinking, formed as a result of the liberation of a person from routine information and intellectual work, among the features that define it, the orientation of the latter towards self-development and self-learning is already clearly manifested today.

An important condition for improving the activities of a teacher in the modern information society is to increase his abilities associated with the continuous independent receipt, transmission and use of information, where universal spiritual values are a priority. At the same time, such abilities of the teacher, with minor changes in the wording, are understood as the information culture of the teacher. Its development implies the acquisition of competencies that allow the teacher to freely navigate in the information space, participate in its formation and promote information interaction with students. Information culture is of decisive importance for the development of the professional competence of a teacher at any level of education, especially higher education.

The Internet has an impact on changing interactions in culture, including political. The influence of the World Wide Web on political culture is expressed in the formation of a new image of politics, new forms of political culture, in the need for other political leaders. Significant transformations under the influence of digitalization are taking place in the artistic life of modern society. On the one hand, digital art reflects the integration of various types of art (photography, cinema, video, music, painting, literary genres) forming various configurations of new techno-artistic hybrids through their computer processing.

Digital culture is a system of values, attitudes, norms and rules of behavior that is accepted, supported and broadcast by the digital transformation team. Digital competence of civil servants. Customer focus of public digital services/products/services.

The obsolescence and lack of demand for many forms of daily operational activities, the optimization of routine processes due to the digitalization of procedures, services and the emergence of new value motives in the activities of a civil servant lead to the need to find new methods and means of optimal organization of work in the emerging digital environment. Conceptual changes in professional activity are an inevitable and time-consuming process that is recognized and re-evaluated by constantly searching for a compromise between the interests and priorities of the state, the state administration on the one hand, and employees on the other.

One of the means of developing the information culture of a university teacher is the use of Internet resources. The use of the Internet in the process of teaching students expands the traditional list of teaching methods by the type of interaction between the teacher and the student. In addition to the methods of self-learning, individual and group learning, the teacher can use the method of communicative learning. The implementation of this method involves the provision of various types of communications between participants in the educational process. The means of communication are:

- e-mail with a variety of functionality and programs-managers of information mailing lists;
- an electronic bulletin board and messages, which allows all participants in the learning process, both teachers and students, to organize asynchronous discussions, ask questions and make announcements, write off and put up presentations and files;
- students' access to various on-line thematic groups for discussion of course sections, problems, projects;

- text dialogue between participants in the learning process;
- computer video conferences with the possibility of organizing communication between students and teachers of different universities, remote at a distance;
- exchange of educational information - automatic synchronous and asynchronous exchange of data and files;
- group work of students on a single network document;
- group use of a single network application or development of the same document in real time.

The development of the information culture of a university teacher in terms of the use of Internet resources in the learning process can be at one of three levels. The first level is associated with the accumulation of pedagogical experience, the development of information and communication technologies. The teacher gets acquainted with specialized software products in his subject area, including on the websites of the creators of these software products. The teacher creates a list of Internet resources of a subject orientation, training files and documents, tasks for independent work of students in electronic form, etc. A sign of mastering the first level is the use of the Internet as a source of additional information in the educational process by both teachers and students, the accumulation of certain experience in creating their own educational information resources.

The digitalization of education has enough real problems. For example, two digital divides become an obstacle for any projects in this area.

The first is that a significant part of the population does not have computers or other gadgets necessary for online learning and a high-quality Internet connection.

The second is that it is difficult for people without sufficient experience in using the Internet and digital resources to study online. Someone does not know about the useful possibilities of digitalization and uses a smartphone only for entertainment, while someone, even knowing about various useful features, cannot learn how to work with applications and programs without outside help.

Therefore, it is not enough to provide, for example, all teachers and school students with gadgets, it is also necessary to acquaint them with the real possibilities of digital.

Another notable problem is that pedagogical rules and teaching methods in the digital environment are just being formed. The same digital didactics is a new phenomenon, and it is just beginning to develop. The effectiveness of online classes and individual digital tools, various aspect of the impact of digital on student success are being investigated right now, but for now, digital learning can be called an experiment.

In addition, quite often traditional approaches are being digitized under the guise of digital transformation. That is, neither the available variety of educational content nor the possibility of individualization according to the interests and abilities of the student is used. For example, if a teacher just gives a lecture via video link, not even understanding how many students are actually listening to him, and not doing their own thing at that time, this can hardly be called full-fledged digitalization. If the equipment is purchased for the school, but not used, this is all the more not digitalization.

In the concept of "information culture" the leading word is "culture", it is it that contains the greatest semantic load. The studies of the most prominent domestic culturologists make it possible to define culture as a complex concept, meaning a result, process, method, attitude, norm, system of activity, the only subject and primary object of which is a person.

A person who is capable of self-realization is a person who has the ability of self-education and self-development. A full-fledged realization by a person of himself as a person is impossible without self-education and self-development, which implies conscious practical activity. Many great figures and personalities determine their motivation in achieving their success, first of all, in the fact that self-criticism and self-criticism in moderation, as a quality, to one’s life, to the results of any activity we carry out, most

qualitatively stimulate a person and personality to constant self-realization through self-improvement. It is very important to understand that digital competencies are associated with the fact that the teacher is forced to work in a fundamentally new, digital environment and interact with other participants in the educational process: directly with schoolchildren, with other teachers, with the administration and with parents, as well as with third parties, who are somehow involved in the educational process. All this must be done in a digital environment. Its main difference from what we are used to seeing is completely different principles on which interaction is built.

The second level is characterized by the presence of the process of planning and coordinating the use of educational resources on the Internet. The features of this level are the systematic use of remote access to intensify the learning process, the organization of remote conferences, the exchange of educational information, the use of e-mail to organize individual student learning.

At the third level of development of information culture, the activities of a teacher are associated with the widespread use of Internet resources in all forms of education, with the organization of distance learning, with the creation and use in the educational process of full-text electronic educational and methodological complexes in the disciplines of education, with the organization of broad interaction with other universities at the level joint educational programs.

In the course of our study, seven basic digital competencies were compiled that every modern university teacher in Uzbekistan should master.

1. Search and work with information

Currently, most teachers have already formed the skills of searching and analyzing information on the Internet. However, some teachers still have problems creating digital content.

2. Internet security

Educators must learn to keep themselves and their information safe online. Unfortunately, many university teachers still do not understand the importance of cybersecurity and urgently need to learn its basics.

3. Information and data management

Information must be securely stored and properly managed. As our study has shown, many teachers do not know how to use cloud storage systems, and also do not realize when they violate the law regarding personal data of third parties.

4. Organization of learning in the digital environment

Prior to the coronavirus situation, more than half of the teachers were already using digital resources to varying degrees. Nevertheless, the situation has shown that online education is a completely new format of work that needs to be learned.

5. Cooperation in the digital environment

Teamwork in the digital environment is one of the keys to effective learning. The main condition for cooperation in the digital environment is the development of digital tools for collaboration with students, parents and colleagues.

6. Communication in the digital environment

Communication is equally important for online learning. As it turned out during the study, many university teachers cannot cope with the parallel use of several functions within the same communication service; it is also difficult for them to interact with several services and applications at the same time.

7. Self-development in conditions of uncertainty

Constant self-development, training, advanced training, mastering new skills and competencies are the current requirements for any modern specialist.

The standard of information culture of a modern teacher assumes the versatility and versatility of its structure. Its standard includes many components. For our study are more interesting: cognitive; instrumental; applied.

The cognitive component implies that the teacher has certain views and ideas about the information environment and types of information interaction, experience in analyzing

and evaluating the processes and phenomena occurring in it, understanding the final results.

We understand the instrumental component as the teacher's ability to use various information technologies in their activities to achieve the goals of the educational process. It is closely related to the teacher's knowledge of the methodology of teaching the discipline with the help of information technology; the ability to organize their own information and research activities, search and interpretation of the information received; presentation and self-presentation skills; skills of business communication and creative cooperation in the information and educational environment; knowledge of the principles of productive interaction in the triad "teacher - computer - student". In our opinion, an important component of the component is the possession of maneuverability, flexibility and a high degree of adaptation to the constantly changing conditions of the information and educational environment.

The applied component determines the activity of the teacher in solving educational problems in the information and educational environment of the university and is directly dependent on the understanding of the need for informatization by teachers; mastering the skills to effectively use information technology in their activities; skills in designing training sessions on an information basis; approbation and subsequent correction of their implementation in their own pedagogical activity. The reflexive component of this component implies the possession of diagnostic tools and methods of peer review, the ability to combine information technology tools with traditional and innovative educational technologies. The consistency of the above components determines the level of development of the teacher's information culture.

Work on self-education and self-development comes from the analysis and awareness of one's pluses and minuses, one's successes and failures, constantly comparing one's results with others, giving one's achievements the most objective assessment. Thus, the basis of successful self-development and self-education is formed reflexive skill, which consists in the ability to objectively and qualitatively self-analyze states, actions, deeds and all one’s activity in general, including professional one. This whole process is called self-reflection. Self-reflection is an analysis of one's motivational capabilities and activities. Self-reflection allows you not only to improve yourself, but also to decide whether you are really motivated for your activities. For example, the simplest, most typical pedagogical activity of self-reflection to determine one's motivation includes five stages.

1. Professional past and future. At this stage, the teacher himself raises questions about the motives and motivations for choosing his profession, further professional career.

2. Current situation. At this stage of the lesson, the teacher is determined with his feeling from the activities carried out by him. So in these questions problems and difficulties in the implementation of activities, their alleged causes and actions to overcome the consequences of these difficulties are determined.

3. Planning classes. The stage of questions related to lesson planning is designed, first of all, to determine whether the teacher follows all the methodological rules and recommendations that he has, or neglects them. How does he relate to the construction of the educational process, and what goals does he pursue from his activities.

4. Your behavior during the educational process. The essence of this stage is the definition by the teacher in the analysis of his own position and role during the lesson. This raises questions about self-confidence during classes, the role of the teacher in the educational process.

5. Motivation to teach others. This stage is probably the most difficult for understanding and objectivity. But in case of its success, the teacher is able, as a rule, to identify and define the most typical problems that exist in practice. So at this stage, questions are raised about passion for one's subject, love and respect for the audience, etc.

The next step in self-education and self-development is the setting and definition of clear and specific goals for their activities - goal setting. That is, the goal, which, as a rule, comes from the motivation of the teacher, is the goal-perspective. Such a goal often does not have any specifics and is, so to speak, extremely abstract. The achievement of such an abstract goal is carried out by achieving certain so-called "working" goals, achieved over a certain period of time and contained at certain stages to achieve global goals. So the “goal-prospect” will be the achievement of maximum productivity of their educational process.

Of course, it is possible to correctly set both “prospective goals” and “working” goals only when self-analysis of one’s motivation, one’s existing skills, abilities and results is carried out. Thus, we can conclude that self-realization includes self-development, self-analysis, which are built on self-reflection and goal-setting. Any teacher who wants to achieve success needs to be able to critically perceive not only their activities and their results, but also the motivation for this activity. Having successfully completed the first stage, the teacher will be able to move on to the second, namely the construction of a “real” global goal and the definition of specific tasks to achieve it. Having analyzed in detail what self-realization is, how it is expressed for the teacher specifically, let's try to determine what self-realization of a teacher is in a digital educational environment? A modern teacher can be considered self-fulfilled only if he reaches a certain level of digital culture. Digital culture is a complex systemic quality of a person, which is expressed in the presence of an information worldview focused on the values of information interaction in the digital environment. That is, digital culture is a situation where a teacher has a certain set of knowledge and skills, as well as practical experience in information activities. This is manifested in the teacher's ability to: - organize subject-based learning using the means of the information environment; - to organize methodical influence by means of the information environment; - influence the formation and development of students all with the help of the same information environment. It is important to note that all these skills should be autonomous, that is, without the involvement of specialists in the field of information technology. The teacher must have such a level of knowledge and a set of skills that the informatization of the educational process is carried out by him as clearly and simply as conducting ordinary classes. Having determined the above, we are faced with the question, what should a teacher do in order to develop skills and gain skills to achieve the required level of information culture?

Digital culture can be formed only as a result of the process of cultural and personal development of a teacher. This process takes place under the influence of internal and external factors determined by the digital information environment, the activity and initiative of the teacher himself.

The standard of information culture of a modern teacher assumes the versatility and versatility of its structure. Its standard includes many components. For our study are more interesting: cognitive; instrumental; applied.

The cognitive component implies that the teacher has certain views and ideas about the information environment and types of information interaction, experience in analyzing and evaluating the processes and phenomena occurring in it, understanding the final results.

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of adaptation to the constantly changing conditions of the information and educational environment.

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There are three main stages in the formation of digital culture:

1. The stage of identification in a professional pedagogical environment. The purpose of this stage is to obtain a certain list of knowledge in the field of understanding the information environment and technologies, as well as the development of the teacher's performance capabilities through his self-determination.

2. The stage of differentiation and individualization in professional activity. This stage is expressed in the development and manifestation by the teacher of an individual approach in information activity, which is characterized by creativity, criticality, reflectivity.

3. The stage of personalization in the digital professional pedagogical information environment. The formation of self-awareness, an adequate assessment of one's activities in the digital educational environment is the end result of this stage.

According to certain stages, there are the following means of forming a digital culture of a teacher, carried out both by him and by changing existing approaches to the professional training of teachers. So among the methods carried out by the teacher himself, the following can be distinguished:

Self-reflection and creation of the most comfortable conditions of the working environment by determining one's motivation, tasks and goals, as well as solving local problems related to the working environment and working with the audience.

As part of achieving a certain progress in self-reflection, set phased tasks to achieve a certain level of information culture through self-education and self-development.

In the process of self-development and self-education, the teacher should have a clear understanding of what he wants to achieve, and how much the efficiency and laboriousness of his work will increase, which will certainly increase his interest.

Development of technical skills through the direct use of social networks and information and reference systems by teachers, the creation of chat rooms for teachers in social networks for mutual assistance and discussion of issues.

Among the methods associated with changing the approach to teaching and introducing the work of a teacher on the part of the employer, one can single out the following:

1. **Determining the target component.**

This method consists in fixing the connection, goals, results and means of evaluating the teacher and his level of information culture. They should be simple, clear and transparent.

2. Designing in the learning structure of models aimed at the formation of this digital culture.

3. Development of an ideology for the use of innovative technologies in the framework of obtaining higher professional education by future teachers.

Thus, the teacher's digital culture model includes the following elements:

1. Informational. These are its structure, the content of digital skills and algorithms for

integrating the model into the educational program.

2. Human resources. Model developers are responsible for the formation, updating and development of its information component. Personnel that implement the accounting and formation of digital skills in the design of the learning process and the formation of skills embedded in the model directly in educational and / or professional activities.

3. Methodical. These are recommendations for implementing the model, taking into account digital skills in the development of programs of disciplines, practices, advanced training, and ready-made solutions.

4. Software and hardware. The implementation of the model in the educational process will require possible additional costs: the purchase or modernization of the park of technical equipment and the acquisition of various types of software. The model does not put forward requirements for the type and configuration of the software. The decision remains with the organization implementing the implementation of the model.

A university teacher masters various tools for teaching using digital educational technologies. These are the tools for:

- collaboration with documents, presentations and spreadsheets,
- videoconferencing,
- storage and distribution of materials,
- conducting online surveys, testing.

A separate task is the question of how to effectively organize online lectures and seminars and develop assignments for independent work of students in a remote format.

To help master these competencies, special digital certification programs are being developed for teachers of higher education and secondary vocational education. At such courses, students analyze the issues of the technical organization of distance learning, effective interaction with students, and quality control of educational results.

Not all teachers have the opportunity to undergo such training, while the digital environment requires the development of new competencies, including those not directly related to teaching.

For example, to create a video lecture, the teacher plans the filming process, chooses a suitable filming location, thinks over the script, prepares the recording. This is a fairly wide range of tasks. Can one specialist perform all these functions? Especially considering that all other work tasks have been preserved.

Currently, the teacher needs to plan, organize and direct learning process in line with changing ideas about the student's readiness to perform professional functions and social roles, provide conditions for training to life in changing socio-economic conditions, demonstrating the diversity of the application of information environments and the resulting basic knowledge. Learning new information environments makes it possible for a future specialist to identify the advantages and disadvantages of these programs an thereby determining the degree of their effective use in practice.

Conclusion

As a result of the study, we came to the conclusion that it is necessary to have a laboratory in the university, where not only computers should be, but also tablet computers, modern smartphones to teach students of the humanities cycle digital technologies in the classroom, so as the level of their knowledge of various programs on digital media is insufficient for creative use in practical pedagogical activity. As a conclusion, I would like to note that the importance of forming a digital culture of a teacher of a university in Uzbekistan undoubtedly contributes to an increase in the labor intensity and efficiency of the educational process he conducts. Modern realities show that traditional teaching methods and teacher skills are not able to fully meet the demands of society for education. Teachers need to be aware of the need to form a certain level of digital culture in them through self-education, self-development,

which will subsequently lead to their full self-realization in a digital educational environment.

References

1. Davronova S. F. THE ROLE AND IMPORTANCE OF ELECTRONIC EDUCATIONAL RESOURCES IN THE ACTIVITIES OF THE TEACHER //Scientific Bulletin of Namangan State University. – 2020. – Т. 2. – №. 3. – С. 457-465.
2. Gnatyshina E.V. Pedagogical tools for the formation of the culture of the future teacher // Bulletin of the Chelyabinsk State Pedagogical University. 2018. No. 1. P. 46–50.
3. Davronova S. F. ISSUES OF ENSURING THE QUALITY OF EDUCATION IN HIGHER EDUCATION INSTITUTIONS ON THE BASIS OF ELECTRONIC RESOURCES //Scientific Bulletin of Namangan State University. – 2020. – Т. 2. – №. 10. – С. 403-409.
4. Farmonovna D. S. APPLICATION OF ELECTRONIC EDUCATIONAL RESOURCES IN THE PROCESS OF TEACHING PROGRAMMING TO FUTURE COMPUTER SCIENCE TEACHERS //EDITOR COORDINATOR. – 2020. – С. 50.
5. Choriyeva M. A. HISTORY OF CREATION" SHAH-NAME" FIRDOUSI //CURRENT RESEARCH JOURNAL OF PHILOLOGICAL SCIENCES (2767-3758). – 2021. – Т. 2. – №. 12. – С. 45-48.
6. Choriyeva M. A. EPICS OF THE SHOHNOMA. DESCRIPTION AND ANALYSIS OF FIRDAVSI'S POEM "SHOHNOMA" //Oriental Journal of Philology. – 2021. – Т. 1. – №. 2. – С. 1-8.
7. Gnatyshina E.V. Sociocultural approach as a general scientific basis for the formation of the digital culture of the future teacher // Bulletin of the Chelyabinsk State Pedagogical University. 2018. No. 1. P. 50–58.
8. Eleskina A.N. Comment No. 315 // All-Russian seminar "New competencies of a teacher in a digital economy 12.12.2018".
9. Podlasy I.P. Pedagogy. Book 2: Theory and Technology of Education. M.: Vlados, 2014. 608 p.
10. Prokudin D.E. "Digital culture", "Analog culture" // Bulletin of St. Petersburg State University. 2013. no. 4. P. 83–91.
11. Намазова Н. Д. МЕСТО СОВРЕМЕННОГО ВУЗА В РАЗВИТИИ РЕГИОНАЛЬНОЙ ИННОВАЦИОННОЙ СИСТЕМЫ //Gospodarka i Innowacje. – 2022. – Т. 24. – С. 916-925.
12. Namazova N. THE ROLE OF THE MODERN UNIVERSITY IN THE KNOWLEDGE TRANSFER РОЛЬ СОВРЕМЕННОГО ВУЗА В ТРАНСФЕРЕ ЗНАНИЙ.