FORMATION OF THE INFORMATION CULTURE OF TEACHERS IN THE CONDITIONS OF MILITARY INSTITUTIONS OF HIGHER EDUCATION

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This article presents the methodological principles of forming the information culture of teachers in the conditions of military institutions of higher education. The practical result of the scientific research of the article was the system of recommendations to the management of the military institution of higher education regarding the formation of the information culture of teachers in the conditions of military institutions of higher education. The article systematizes the key problems of improving the information behavior of teachers in military institutions of higher education. The article considers the internal and external factors of formation of the information culture of teachers of military institutions of higher education. The article emphasizes that the information culture of the teacher, as a systematized set of knowledge, skills and abilities that ensure the optimal implementation of individual information activities, aimed at meeting both professional and non-professional needs, is a multilevel system that develops over time. The essence of information needs of teachers in the conditions of military institutions of higher education is considered in the work. Particular attention in this study is focused on the fact that today in Ukraine there is no state concept of information culture. The components of the model of the information culture of a teacher in the conditions of military institutions of higher education are analyzed and considered in detail in the work. The article presents the essence of the concept of pedagogical conditions, which are necessary for designing the learning process in the conditions of military institutions of higher education and which contribute to the development of the information culture of teachers. The basic factors which are necessary for revealing of pedagogical conditions of development of the information culture in the conditions of military establishments of higher education are offered. The main didactic requirements for information technologies of teaching for the formation of the information culture of teachers are considered. The list of criteria for an estimation of a level of formation of the information culture of the teacher in the conditions of military establishments of higher education is offered. The list of organizational and pedagogical conditions in the military institution of higher education, which are necessary for the formation of the information culture of the teacher, is presented. The article presents the key stages of technologies for the formation of the information culture of the teacher. The specifics of the project-reflective approach to the formation of the information culture of teachers and cadets in military institutions of higher education are considered. The scientific result of the research was the proposed methodological principles of forming the information culture of teachers in the conditions of military institutions of higher education

Keywords: *information culture, teacher, factors, criteria, psychological aspects, cadets, military institutions of higher education, project-reflexive approach*

1. Introduction

A significant increase in the volume of information resources, an increase in the flow of educational literature, the appearance of audio, video, and electronic media, updating the content and methods of education through the humanization of education and the integration of knowledge presuppose the availability of teachers of military institutions of higher education with special, additional knowledge and skills necessary for independent search, analysis and processing of information, use and transfer of key competencies to cadets.

Today, a teacher who responds to new social expectations, is mobile, is capable of creative growth and professional self-improvement, perceives and creates innovations, and thereby updates his/her knowledge, enriches pedagogical theory and practice, and has a high level of information culture, is an effective teacher.

That is why the topic of formation of the information culture of teachers in the conditions of military institutions of higher education is gaining relevance.

2. Literary review

Works [1, 2] provide information on ensuring the quality and effectiveness of electronic learning systems for improving the information culture of the teacher. The main aspects of the study of the culture of the organization of web-based distance education systems are given in scientific works [3, 4]. The issue of designing an intellectual user interface of educational systems from the standpoint of the teacher's information culture requirements is considered in scientific articles [5–7]. An analysis of the use of multimedia components in modern mobile learning technologies is presented in [8]. A scientific article [9] is devoted to the study of information culture in the Internet environment. An analysis of ways to improve the quality of the educational process to ensure the appropriate level of information culture of teachers is given in studies [10]. The scientific article [11] contains systematic information about taking into account the requirements of the Internet environment to improve the information culture of teachers.

But today, specialized literary sources do not provide sufficient information regarding the formation of the information culture of teachers in the conditions of military institutions of higher education.

3. Research aim and tasks

The aim of the article is to develop methodological principles for the formation of the information culture of teachers in the conditions of military institutions of higher education.

To achieve the goal, the following tasks were set:
1. Analysis of the information needs of teachers in the conditions of military institutions of higher education;
2. Study of the teacher's information culture model in the conditions of military institutions of higher education;
3. Identification of pedagogical conditions that contribute to the development of the information culture of teachers in the conditions of military institutions of higher education.

4. Materials and methods

The object of research is the information culture of teachers.

The subject of the study is the processes of formation of the teacher's information culture in the conditions of military institutions of higher education.

An applied problem, identified in this topic, is the complexity of the information behavior of teachers and cadets in the environment of military institutions of higher education.

The scientific problem lies in the lack of methodological principles regarding the formation of the information culture of teachers in the conditions of military institutions of higher education.

The following research methods were chosen:
– generalization – for the analysis of information needs of teachers in the conditions of military institutions of higher education;
– classification – in order to highlight and substantiate the main components of the teacher's information culture model in the conditions of military institutions of higher education;

– deduction – for the parameterization of the components of the teacher's information culture model in the conditions of military institutions of higher education;
– analysis and synthesis – in order to identify pedagogical conditions that contribute to the development of the information culture of teachers in the conditions of military institutions of higher education.

5. Research results

The informational behavior of the teacher in military institutions of higher education determines the desire to satisfy certain informational needs, which reflect the need to receive information corresponding to the nature of the performed actions or work.

The formation of information culture is determined by both external factors (social and professional requirements for pedagogical culture) and internal factors (the level of development of individuality as a teacher's mental world, personal properties and qualities that determine the teacher's readiness to overcome barriers in the informatization of his/her pedagogical activity and others). Information culture as a subjective phenomenon is characterized by dynamism, changeability, associated with the transformations that occur in the teacher's experience, in his/her psyche and personality. On the other hand, information culture as an objective phenomenon is also constantly enriched, specified, improved in connection with the development of the information environment.

The information needs of teachers in the conditions of military institutions of higher education are as follows:

1. The teacher is not only a user, but also a generator of information, his/her activity allows not only to transfer a certain amount of knowledge, but also to organize the cognitive activity of cadets in the information environment.

2. The constant increase in the volume of information requires the teacher to be able to accumulate the necessary knowledge in the field of related disciplines in order to teach integrated courses and create new educational programs.

3. Search, creation and use of comprehensive information that complements official educational publications.

4. Mastering the innovative experience of colleagues, implementing the main provisions of the pedagogy of cooperation with cadets require active interaction with the information environment of higher military education.

5. Increasing the significance of the teacher's professional communication, including direct and telecommunication interpersonal communication.

Despite the fact that the educational standard considers information culture as one of the criteria for the quality of education, the state concept of its formation, including regarding the teacher, does not yet exist. In general, research in this field allows us to consider information culture as an element of the general culture of humanity, the basis of which is knowledge of the information environment, the laws of its functioning, and the ability to navigate information flows.

The teacher's information culture, as a systematized set of knowledge, abilities and skills that ensure the optimal implementation of individual information activities, aimed at satisfying both professional and non-professional needs, is a multi-level system that develops over time. The model of the teacher's information culture in the conditions of military institutions of higher education assumes the multifunctionality of its structure and includes several interrelated components:

– cognitive-operational (general ideas about modern basic knowledge in the field of information technologies and experience of practical implementation of this knowledge in application to individual types of human activity at the level of initial orientation, mastery of a system-informational approach in a specific subject area of a teacher);

– instrumental and operational (competence in the field of methodology, organization of various types of information activities);

– communicative (the teacher's competence in flexible and constructive conduct of dialogue "human-human", "human-computer", "human-computer-human"), ideas about ethics, tact and tolerance in computer communication;

– worldview (the development of the teacher's own position, a valuable attitude towards the objects and phenomena of the rapidly changing information environment, the formation of a worldview about the global information space, information interactions in it, the possibilities and problems of its cognition and transformation by a person, as well as ways of forming this component of information culture in cadets).

According to the logic of the research, for the design of the learning process, it is necessary to identify the pedagogical conditions that contribute to the development of the information culture of teachers in the conditions of military institutions of higher education. By pedagogical conditions we mean the pedagogical environment, in which the learning process develops and functions, which corresponds to the goals of the development of information culture in the conditions of military institutions of higher education and implements the didactic principles of selecting the content of learning in unity with the function of expanding and professional orientation of the field of activity of cadets, which determine the development of this quality as a component of the specialist's professional competence.

Therefore, in order to identify the pedagogical conditions for the development of information culture in the conditions of military institutions of higher education, it is necessary to: determine the system of adequate goals of the learning process; justify the didactic principles of the selection of their subject content, structure the content of the educational material; identify the factors of functioning of this process (methods, means, organizational forms); to develop a program for the formation of information culture as the main means of achieving the set goal, to test the developed program in an experiment.

The main didactic requirements for information technologies of education are: motivation in the use of various didactic materials; clear definition of the role, place, purpose and time of using educational programs; the leading role of the teacher in conducting classes;

close relationship of a specific class of educational programs with other types of teaching aids; introducing into the technology only such components that guarantee the quality of education; compliance of the computer training methodology with the general strategy of conducting the training session; ensuring a high degree of individualization of education.

The level of formation of the teacher's information culture in the conditions of military institutions of higher education is determined by knowledge about information, information processes, models and technologies, skills and abilities to use means and methods of information processing and analysis in various types of activities, the ability to use modern information technologies in professional activities, vision of the environment of the world as an open information system, the ability to teach students to use the educational space of the Internet, its services and information resources as part of the education system. An innovative teacher cannot be detached from the realities of today's life, he/she is constantly in search of new forms and methods of teaching, informational and pedagogical support of the educational process. The material that the teacher places on his/her website should help the cadets to find information that they cannot find in the educational institution.

The formation of the teacher's information culture will be effective if the following organizational and pedagogical conditions are met in a military institution of higher education: the existence of a scientifically based and implemented model for the formation of the teacher's information culture, the creation of an intellectual and informational environment of a military institution of higher education that will allow teachers to organize professional activities using computers, local and global networks; systematic monitoring of his/her competence in the field of information culture.

The process of informatization of education and the related use of the possibilities of information technologies in the learning process leads to changes and the emergence of new learning methods, reconstruction of programs of educational subjects, integration of topics, educational disciplines themselves, the introduction of innovative approaches to assessing the level of knowledge of cadets, diagnostic methods of control appear. Teachers face the difficult task of constantly improving didactic methods that contribute to the professional development of a specialist.

Features of technologies for the formation of the teacher's information culture are determined by the main stages: formation of computer literacy – mastering of information technologies – improvement of design and constructive elements of pedagogical activity based on information technologies – improvement of gnostic, organizational and communicative elements of pedagogical activity – implementation of project activities in unity with the educational project of information technologies – implementation of psychological regularities in the development of cadets' information activity in the process of the teacher's project-reflective activity.

The formation of the holistic information culture of a teacher in the system of military institutions of higher education is determined by the implementation of a project-reflective approach, which involves

the integration of information, project and reflective activities, aimed at the teacher and the cadet. The project-reflective approach has the property of strengthening the pedagogical and psychological basis of the process of professional training, which contributes to the development of not only knowledge and skills in the field of information activities, but also the development of abilities necessary for an effective teacher.

6. Discussion of the results of the development of methodological principles for the formation of the information culture of teachers in the conditions of military institutions of higher education

As part of this study, methodological principles were developed for the formation of the information culture of teachers in the conditions of military institutions of higher education. Possible areas of practical application of the proposed methodological principles are:

– conflict management in the conditions of military institutions of higher education;

– information provision of the educational process of military institutions of higher education.

The advantages of the proposed methodological principles of the formation of the information culture of teachers are:

– taking into account the key problems of improving the information behavior of teachers in military institutions of higher education;

– laying the basis of the created methodological foundations of internal and external factors of the formation of the information culture of teachers of military institutions of higher education;

– the presence of didactic requirements for information technologies of education for the formation of the information culture of teachers.

Among the shortcomings of the created methodological foundations of the formation of the information culture of teachers in the conditions of military institutions of higher education should be attributed the fact that they do not take into account situations of risk and uncertainty that may arise in the educational process.

In the process of using the proposed results, the following limitations of a subjective nature may be imposed:

– in the process of development of the IT environment, new information needs of teachers may arise in the conditions of military institutions of higher education;

– the list of organizational and pedagogical conditions in a military institution of higher education may change depending on the specifics of different specialties.

Further areas of research may be:

– assessment of the effectiveness of social interaction of teachers in the information environment of military institutions of higher education;

– assessment of the quality of taking into account the psychological aspects of cadets and teachers in the process of forming information culture in the conditions of military institutions of higher education.

7. Conclusions

1. The analysis of the information needs of teachers in the conditions of military institutions of higher education was carried out, which made it possible to reveal the specifics of the teacher's behavior in the modern information environment.

2. The study of the teacher's information culture model in the conditions of military institutions of higher education was carried out, which made it possible to systematize its interrelated components.

3. Pedagogical conditions that contribute to the development of the information culture of teachers in the conditions of military institutions of higher education were identified, on the basis of which it turned out to be possible to implement didactic requirements for information technologies of education.

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