THE ESSENCE OF THE CONCEPT OF INFORMATION COMPETENCE OF FUTURE PRIMARY SCHOOL TEACHERS IN PEDAGOGICAL RESEARCH

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Summary

The article examines the study of the concept of "information competence", within the scope of the study we consider it appropriate to consider the definitions of "competence" and "competence", as well as the essence of the original concept of "information". In view of this, first of all, it is necessary to analyze the concepts of "competence", "competence", from which this term originates, as well as distinguish the definitions that are most often used by modern researchers, namely: "information competence", "information literacy", "information culture", etc., and then taking into account the newly emerging requirements for the professional training of educators in this field. The National Educational Glossary states that "the concept of competence / competences should be distinguished from competence / competences as the acquired realization abilities of a person" (Lunyachek, 2018: 50). The analysis of the concepts "competence" and "competence" indicates all their complexity and multifacetedness, therefore we consider it appropriate to conduct an analysis of both concepts.

Key words: information, information competence, competence, competence, information literacy, future primary school teacher.

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1. Introduction

Particular attention should be paid to the definition of competence specified in the Draft of the new Basic Law of Ukraine "On Education", Article 1, according to which "Competence is a dynamic combination of knowledge, ways of thinking, views, values, skills, abilities, and other personal qualities that determine the ability of a person successfully conduct professional and/or further educational activities" *(Pro osvitu, 2018)*. A similar interpretation is given in the Concept of the New Ukrainian School.

2. Literature review

Scientific searches in English-language sources provide additional reasons to testify that both terms "competence" and "competence" in English are denoted by the common term "competence" and "competent", so quite often, when incorrectly translated by fellow scientists, both terms are equated and the essence of the concept is lost. The study of various aspects of the concepts of "competent", "competence" of a specialist attracts the attention of modern foreign scientists (R. White, E. Stringfellow, J. Raven, D. McClelland, L. Holmes). All of them offer their own interpretations. Some researchers define "competence" in education and psychology as the subject's ability to make logical decisions under ideal conditions,

that is, competence in making judgments is derived from a hidden state with the help of external factors (R. White, E. Stringfellow, J. Raven, L. Holmes); and some – as individual and organizational characteristics, which, in turn, are closely related to effective behavior or work (D. McClelland).

Agree with J. Raven, who gives a detailed definition of competence and understands it as "a complex of knowledge, abilities and skills that are revealed in personally significant activity for the subject" *(Raven, 2005: 25)*. We consider the interpretation of the concept of "competence" by V. Lunyachek to be apt, who defines it as the ability to effectively conduct activities, perform tasks or work in a qualified manner. The researcher emphasizes that the formation of competence is carried out by the method of acquiring in the process of learning the sum of competences, which are a combination of characteristics and allow to ensure the performance of professional duties at a high level *(Lunyachek, 2016: 33)*.

3. Research results and discussion

On the basis of the analyzed approaches to the definition of these concepts, it can be stated that the essence of the definition of competence is revealed by many researchers to a greater extent through the concepts of "knowledge", "skill", and the concept of competence is usually equated with the concepts of "level of professional skill", "level of training" and is used in a broader sense. The analysis of the definitions of "competence" and "competence" showed that in the context of the study it is more appropriate to use the term "competence".

It is quite clear that the term "information" is the basis for the term "information competence", information and communication technologies (from the Latin word *informatio*, translated as "summarization, clarification, familiarization"). The origins of this concept can be found in the writings of ancient philosophers, and gradually it began to be thoroughly studied in the sciences of cybernetics and computer science. Today, this concept is common both for technical and humanitarian sciences.

In view of the above, it becomes clear that the combination of the definitions of "information" and "competence" in science did not happen by chance, but in the process of a thorough problem-based search by many domestic and foreign scientists, precisely as a result of which the new concept of "information competence" was formed.

In order to gain a deeper understanding of the essence of the process of formation of information competence, it is necessary, in our opinion, to consider and, if necessary, distinguish the definitions that are most often used by modern researchers, namely: "information literacy", "information culture".

The informational culture of the individual is one of the components of the general human culture. This is a system of knowledge and skills that allow satisfying individual information needs through the use of both traditional and new information technologies. It is understood as an important factor of a person's professional activity, as well as the social security of an individual in the information society.

The term "information literacy" is defined as a set of competencies necessary for obtaining, understanding, evaluating, adapting, generating, storing and presenting information used for the purpose of analyzing problems and making decisions *(Petuhova & Baloha, 2016: 60)*.

According to T. Pankova, the main difference between literacy and competence is that a literate person has knowledge, and a competent person can (willingly) use this knowledge in solving practical tasks *(Pankova, 2013: 200)*.

Drawing a distinction between literacy and competence in behavioral characteristics, it can be argued that a literate person knows and understands, for example, how to behave in a certain situation, while a competent person can really and effectively use knowledge to solve certain problems.

For the first time, the concept of "information literacy" was introduced in 1977 in the USA and was used in the national program of higher education reform. According to American educational standards, an information literate student is able to find relevant information, determine its accuracy, distinguish between facts and opinions, and discard irrelevant information.

Scientist A. Goryachev significantly expands the framework of "information literacy" and proposes to include the following skills in this concept, bringing it closer to "information competence": to determine possible sources of information, the strategy of its search and acquisition; analyze the received information, using various schemes, tables, etc. to record the results. Evaluate information from the point of view of its reliability, accuracy, sufficiency for solving the problem (task); feel the need for additional information, receive it if possible; to build up one's own bank of knowledge at the expense of personally significant information necessary for one's activities in various areas; use modern technologies when working with information; work with information individually and in a group *(Goryachev, 2018: 67).*

All this gives reason to assert that the concept of information competence arose in connection with the rapid development of ICT and its "end-to-end" penetration into all aspects of society.

The results of one of the first studies of information competence are presented in the report of the Department of Information Literacy of the California State University "Information Competence at a California State University" for 2001.

According to the results of this study, information competence is defined as the ability to determine information requirements for a research question for formulating an information search strategy; the ability to determine the forms of presentation of the necessary information; the ability to organize information in the most favorable way for analysis, synthesis and understanding; to be aware of ethical, legal and political problems of using information resources.

American Association of Libraries of Educational and Scientific Institutions (The Association of College and Research Libraries) defines information competence as "a complex of abilities needed by an individual to determine the need for information, the ability to find, evaluate and effectively use the necessary information". In turn, according to scientists from Palomar College, information competence includes: understanding the need to obtain information, knowing how to find the necessary information, the ability to select quality sources and the selection of relevant information, the ability to analyze and synthesize information, the ability to use and transmit information.

Ya. Karlinska, researching the problems of professional pedagogical education, analyzes and agrees with Kathleen Dune's opinion that information competence is a set of competences related to the search and analysis of information in traditional printed form, the level of computer competence, competence of critical perception and analysis, communicative competence, media competence (as the ability to work with various forms of information presentation) *(Karlinska, 2011: 310).*

It is quite clear that in the context of the raised problem regarding the study of various aspects of the information competence of future specialists, including primary education, it should be noted that the number of publications on this issue increases significantly every

year, which indicates a growing tendency to accumulate information, and also about the inexhaustibility and relevance of the studied concept.

The concept of "information competence" is quite broad and is ambiguously defined at the current stage of the development of pedagogy. In the process of scientific research, two main approaches to the definition of information competence have been identified. The first of them is based only on the use of technological computer tools in the process of working with information. The second, in turn, interprets information competence as an integrative quality of the individual, which is the result of reflecting the processes of selection, assimilation, processing, transformation and generation of information into a special type of subject-specific knowledge, which allows to produce, make, forecast and implement optimal decisions in various spheres of activity with the possible use of technological means.

The analysis of the structure of IR gives grounds for asserting that scientists have different approaches to determining its components (or in some studies – components).

Based on the analysis of scientific publications and conducted research, it can be concluded that a modern specialist should not only be knowledgeable about modern ICT, but also be able to use it effectively in professional and pedagogical activities. Training and retraining of specialists in the field of ICT should contribute to the achievement of this goal. Therefore, pedagogical institutions of higher education should not be limited to the formation of only information literacy, but also consider the education of students in the plane of their integration - the formation of information competence.

The generalization of theoretical provisions made it possible to reveal the essence of the concept of **"information competence of the future primary school teacher"** as a systemic quality of the individual, which reflects his theoretical and practical ability to use ICT in the process of implementing training methods for students of the first level of comprehensive general secondary education, self-educational activities.

According to our belief, it is the informational competence of the future primary school teacher that determines his further professional skill.

Therefore, the information competence of a primary school teacher is one of the most important indicators of the success of his activity and at the same time is a necessary condition for further increasing the level of his professional competence; manifests itself in the teacher's methodical activity as one of the types of professional pedagogical activity; expresses the unity of theoretical and practical readiness of a specialist for further professional activity in the conditions of informatization of education; is based on a combination of psychological and pedagogical, methodical and subject knowledge, abilities, skills, experience, motivation and personal qualities of the student, necessary in further professional activity.

It follows from the above that the concept of information competence implies the ability to select, analyze, process and transmit information, as well as the ability to use computer technologies for the processes of working with information. In this aspect, the opinion of T. Pryshchepa is important that IC consists of two groups of information skills. These are the basic skills of working with information and the skills of using information technologies when working with information. According to the researcher, the basic skills of working with information include its collection, analysis and processing for further use:

– the ability to realize the need for information;

– the ability to identify lost information and restore it (to understand that there are various sources of information; to be able to choose from a large number of resources only those that allow solving a specific problem; to know how to access the necessary information);

– the ability to develop information search strategies (clearly formulate a request for the necessary information; develop systematic search methods; understand the principles of creating knowledge bases and working with them);

– the ability to select information (use various search techniques; use communication and information technologies; work with bibliographic services, archives, databases; be aware of the latest technologies and be able to apply them);

– the ability to compare and evaluate information (understand that information can be subjective; review scientific publications; assess the reliability of information; be able to work with several sources at the same time);

– the ability to systematize, process, and reproduce information (choose the appropriate way of working with information in a specific situation; compile your own knowledge system for the convenience of further work; use already available information to solve tasks; reproduce information using various means; be aware of the existence of copyright issues);

– the ability to synthesize existing information, creating new knowledge based on it.

– In turn, skills related to the use of information technologies include:

– carrying out an information search on the Internet (ability to use search engines, correctly compose a search request; know Internet portals related to professional activity; be able to find the necessary information with the help of Internet directories);

– establishing communication using the following Internet technologies: e-mail; chat; forums;

– use of standard software that allows: processing text, tabular, graphic documents; create presentations; use the Internet; view and listen to video/audio recordings;

– use of technical devices, such as: computer, office equipment, digital/cassette recorder, video camera, projector *(Snigur, 2007: 21).*

It can be argued that the formation of basic skills of working with information in unity with the skills of using information technologies while working with information will allow future primary school teachers in their further professional activities to qualitatively create new information products-information models: plans, analytical reports summarizing work experience, projects, developments, etc., both in electronic and non-electronic form.

4. Conclusions

Thus, in the course of the research, it was found that the modern informatized and high-tech society needs a competitive specialist, who is not only a well-rounded person, but also a competent specialist, able to quickly adapt to educational innovations, able to effectively solve professional tasks with the help of means of information technology, as well as capable of independent retraining and improvement of their own training *(Drokina, 2016: 74).*

Therefore, in the modern conditions of education development, considerable attention should be paid to the theoretical and experimental substantiation of the organization of professional and pedagogical training of the future primary school teacher in a pedagogical institution of higher education, without fail taking into account the specifics of the transformation of the teacher's professional activity in the conditions of educational renewal.

The conducted analysis of the works of scientists on the research problem gives grounds for asserting that a significant role in the composition of professional competence is played by informational competence, which determines the practical activity of a specialist and affects the effectiveness of the educational process.

Revealing the definition of the concept of "information competence of the future primary school teacher", substantiating its essence provides an opportunity to determine the main methodological approaches to the formation of information competence of future primary school teachers, to determine the structural components of the information competence of future primary school teachers, and, on this basis, to substantiate the structural and functional the model of its formation in the process of professional training.

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