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FORMATION OF PROFESSIONAL PEDAGOGICAL INFORMATION COMPETENCE BACHELOR OF SPECIALTY 015 «PROFESSIONAL EDUCATION. ENERGY»

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Currently, the basis of the content of professional education is the competency approach. Two groups of competencies are distinguished: general (universal) and professional (subject-specialized). Professional competence assumes that a specialist has knowledge and experience in the field of his professional activity.

With regard to pedagogical activity and taking into account the informatization of education, which is currently taking place, in their works [1–5] they revealed the concept of professional competence, highlighted the information sphere in its structure.

In our work [4], we identified 3 stages in the process of forming the information competence of the future teacher:

1. The basic level of information competence is formed at the first stage of teacher training in higher education institutions. Within the framework of general professional disciplines and disciplines of subject training, knowledge, abilities and skills are acquired, which are formed in the process of learning and self-learning of informatics and information technologies.

2. At the second stage, the development of information competence takes place, where the ability to perform pedagogical activities with the help of information technologies is formed. In this regard, such courses are introduced into the curriculum of pedagogical higher education institutions, which orient students to the use of information technologies in their subject area. Each course should have a practical orientation and be subject-oriented and interdisciplinary in nature.

3. The final stage is the formation of informational competence of future teachers, which occurs later in professional activity during the use of information technologies.

For future teachers of professional training, whose training is aimed at a bachelor's degree in the specialty 015 «Professional training. Energy», these stages require clarification. Let's consider in detail how each of the named stages corresponds to the current state of the education system.

The first stage includes the formation of general views on the role of information and information processes in society, as well as the development of ICT application skills to solve a wide variety of tasks that a person has to face in life. This is what the «Informatics and ICT» course is dedicated to, provided in secondary (full) general education, the graduates of which are entrants to the system of higher professional education. Their knowledge, abilities and skills are basic for the formation of the basic level of informational competence of the future teacher of vocational training. The analysis of the standard of secondary (full) general education for the basic level (as the

minimum possible level of mastering informatics and ICT) shows that the information training received by the applicant at school is quite fundamental and consists of:

– from the relevant system of basic knowledge,

– the ability to apply, analyze and transform information models of real objects and processes using ICT,

– experience of using information technologies in individual and collective educational and cognitive activities.

Also, analyzing the mandatory minimum content of the main educational programs, defined in the standard of secondary (full) general education in informatics and ICT, it can be seen that the mastering of a large list of general purpose software systems (operating systems, file managers, archivers, graphic packages, text and table processors, etc.), more than ten types in total. As a result, first-year students already have knowledge, abilities and skills that can be considered as one of the components of the basic level of information competence of the future bachelor of professional education. The higher education system of training should not repeat the school system, it should complement it due to the knowledge, skills and abilities that are instilled in the specialized disciplines of the basic undergraduate educational program and demonstration of examples of practical use of ICT in the process of their study. Therefore, it is possible to propose the following formulation of the 1st stage of the process of formation of information competence of a bachelor of professional education: formation of the foundations of information competence of a bachelor of professional education. The stage is based on the knowledge, abilities and skills of a graduate of secondary (full) general education. The basic educational program of the bachelor's degree in the specified profile ensures the fulfillment of this stage due to the acquisition of practical experience in the application of ICT in humanitarian, social, economic, natural and professional (informational) disciplines.

However, in practice, one has to face the fact that the level of preparation of 1st-year students is significantly different. Therefore, in the bachelor's training system, it is necessary to provide for special courses or elective courses dedicated to the development of ICT, which are included in the content of the school computer science course. These are the following software tools: table and text processors, a graphics package for processing raster graphics, a database management system, tools for creating Web resources.

The second stage is the prerogative of the bachelor's higher education system, although students get some ideas about the pedagogical use of ICT even at school, observing the ways in which ICT is used in lessons and in extracurricular activities. These ideas are not systematized, fragmentary, and largely different for different students. To a large extent, they depend on the level of informatization of the educational process of the educational institution where the student previously studied. Today, this level is very different, since informatization of educational institutions of general education started relatively recently.

The content and essence of the second stage will differ depending on the profile of the university training of the Bachelor of Professional Studies. For specialty 015

«Professional education. Energy» we can propose the following formulation of this stage: the formation of the pedagogical component of the informational competence of a bachelor of vocational training. It forms the skills of carrying out pedagogical activities with the help of ICT and is provided by the informational disciplines of the main undergraduate educational program, for example «Information and communication technologies in education», «Pedagogical software tools», «Methodology of teaching information technologies», «Hydropneumatic devices of mechatronic systems» and their educational modules. At the same time, future bachelors acquire skills in the use of various ICT tools in the process of industrial training and teaching computer science.

The third stage (final) for a modern teacher of professional training begins as part of training in higher education and extends to further professional activity. Its essence is in specialty 015 «Professional education. Energy» can be expressed as follows: the formation of professional information competence of a teacher of vocational training. This stage begins with pedagogical practice, then it can continue within the framework of master's training and ends during professional pedagogical activity. To a large extent, his success depends on the level of ICT use in the educational institution where the graduate comes to work. The execution of this stage is ensured by:

− accumulation of educational computer materials and methodical methods of their use in the educational process (the so-called «methodical piggy bank»);

– improvement of pedagogical skills due to active participation in the professional community (including online) with the aim of sharing experience with colleagues.

This is exactly the approach to the process of formation of professional pedagogical information competence of the bachelor of specialty 015 «Professional education. Energy», in our opinion, most corresponds to the current state of the practical work of a teacher of vocational education.

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