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THE PROCESS OF PREPARATION FOR RESEARCH ACTIVITIES OF FUTURE TEACHERS OF VOCATIONAL TRAINING

Annotation. The article is devoted to the problem of preparation for research activities of future teachers of vocational training. The article substantiates the demand for vocational education teachers to develop and improve research activities. And the essence of the research activities of the teacher of vocational training is considered. The ideas that fulfill the system-forming functions of the process of preparation for research activities are identified. The goals of preparing a future professional education teacher for research activities are given. A stating experiment aimed at revealing the attitude of students-future teachers of vocational training to research activities and the level of readiness for it are presented here.

Key words: professional education, research activity, innovative educational environment, experiment.

At the present stage, the education system is undergoing serious structural changes, it is undergoing intensive reform, new projects are being developed and implemented, and innovative processes are expanding. One of the most important tasks of vocational education is the achievement of such a level of education of future specialists that would be sufficient for independent creative solutions to theoretical and applied philosophical and research problems.

A.V. Among the main directions of updating the educational process, Khutorskaya names the following: the personal orientation of education, which involves the development of individual abilities of students; mastering the system of research methods used in basic sciences; strengthening in the content of the activity component and practical orientation, which are the main ones - types and methods of research activities, and so on. [1].

At the same time, mastery of the methods of scientific research refers to the essential characteristics of the high level of education of future graduates. In the research of V.I. Andreeva, V.V. Davydova, L.V. Zankova, G.V. Kozlova, D.B. Elkonin and others emphasize that the originality of thinking, the creativity of students, is most fully manifested and successfully developed in a variety of educational activities that have a research focus.

The development and improvement of the research activities of students as an indispensable component of the system of training specialists are one of the important problems of pedagogy and psychology of the higher education. This form of organization of study at the university is inextricably linked with the problem of enhancing the cognitive activity of students, with the formation of their creative thinking, research skills. The scientific development of these problems is devoted to the works of many scientists - representatives of pedagogy and psychology of the higher education: G.N. Alexandrova, A.N. Aleksyuk,

G.S. Altshuller, B.G. Ananyeva, V.I. Andreeva, V.P. Bepalko, P.Ya. Halperin, N.K. Goncharova, V.V. Davydova, V.I. Zagvyazinsky, M.M. Levina and others.

The analysis of pedagogical works on this problem (B.S. Gershunsky, N.V. Borodovskaya, G.M. Dobrov, V.I. Zagvyazinsky etc.) revealed two aspects of the component composition of research activity: methodological and procedural. Describing the composition of the methodological component of research activities, in its composition we single out the goals, objectives, research hypothesis.

Consideration of the essence of the research activities of the teacher of vocational training allowed to scientifically substantiate the process of preparation for the research activities of future teachers of vocational training at the university. The main leading ideas of preparation for research activities are the following: the idea of organizing the unity of educational and research activities; the idea of scientific support for research activities; the idea of the continuous development of students' research activities through various forms of organization of educational activities.

The named leading ideas fulfill the backbone functions of the process of preparation for research activities of future teachers of vocational training and its individual subsystems, goals, content, stages.

They are expressed by: the creation of three subsystems for preparing students for research activities: preparation for research activities in the process of learning activities, extracurricular activities and the inclusion of students in research, production, research and innovation; continuity and continuity of goals and content, methods and means of preparation for research activities of future teachers of vocational training; the development of scientific and methodological support for preparation for the research activities of students [2].

A study of the innovative development of professional and pedagogical education at the present stage allows us to conclude that there is a need to rethink the substantive and procedural characteristics of the research activities of the future teacher of vocational training and prepare for it in the context of humanization, technologicalization, informatization, integration and other development trends of professional and pedagogical education.

The fundamental point in describing the training process for vocational education teachers is the formulation of training objectives that determine the direction and content of the process under study. The objectives reflect the intended results of the preparatory process for the future research of a teacher of vocational training.

Analysis of the structure and content of the research activities of the future teacher of vocational training in modern conditions, as well as the directions of development of innovative processes in vocational education, economics, management, society allowed to identify the goals of preparing the future teacher of vocational training for research activities.

The objectives of preparing the future teacher of vocational training for research activities are: the formation of special knowledge, research skills; the formation and development of a scientific worldview and the need for the constant development of personal and professional qualities, improvement of future professional and pedagogical activities; development of the methodological culture of the future specialist; improving the quality of vocational education. Describing, in accordance with the stated goals, the process of preparing future vocational training teachers for research activities, we proceed from the following prerequisites: the training process should be characterized by conceptuality, that is, rely on theoretical approaches and principles that determine the fundamental ideas for preparing future vocational training teachers for scientific and research activities; the preparation process should be characterized by universality, that is, not depend on the content of innovative processes in specific socio-economic, political, pedagogical conditions and at a certain level of development of scientific and technological progress and form a generalized idea of the structure and sequence of actions for preparing future vocational education teachers for scientific research activities; the preparation process should be characterized by manufacturability, which determines the possibility of its effective implementation in the context of specific educational practice and implies that the description of this process contains an indication of the technology, means, forms of preparation, as well as requirements for the organization of preparation for research activities; the training process should be based on the relationship of the psychological pedagogical, engineering, industrial and technological components through the inclusion of the research component in the process of vocational training, thereby improving the

quality of preparation of future vocational teachers for research activities [3].

Scientific and methodological support of experimental work on the preparation for research activities of future teachers of vocational training

An experimental verification of the developed model of preparation for the research activities of future teachers of vocational training in the conditions of an engineering pedagogical university was carried out in 2019 on the basis of the Jizzakh Polytechnic Institute.

The following conditions were identified as the main conditions for the organization of the experimental research: organization of the process of preparation for research activities of future teachers of vocational training on the basis of the developed stages of training in the conditions of the innovative educational environment of an engineering and pedagogical university; selection of the content of training in accordance with the selected structure and content of the research activities of future teachers of vocational training [4];

use of the developed author's course "Scientific research: methodology, theory, practice of organizing and conducting".

At the first stage — the stage of the ascertaining experiment — the questionnaire was used to determine the correctness of the tasks set, and in particular, the advisability of preparing future vocational education teachers for research activities in a modern engineering and pedagogical university.

The ascertaining experiment was aimed at revealing the attitude of students-future teachers of vocational training to research activities and the level of readiness for it [5].

The purpose of the questionnaire was to identify the level of understanding of the essential characteristics and properties of research activities by future teachers of vocational training, as well as interest and motivation in research professional and educational activities.

Students of the experimental group evaluated and expressed their attitude to scientific research as a multidimensional complex phenomenon, defining it as: a way of personal and professional development; type of cognitive activity; a form of realization of a person's creative potential; a way to improve the quality of educational activities; a way of transforming pedagogical reality; a way of developing new pedagogical knowledge. The results of a stating experiment showed that the largest number of students (47%) identify with research activities only the form of realization of a person's creative potential. Fewer students see in research activities a way of personal and professional development and a way to improve the quality of educational activity - 25% and 23%, respectively. Only a small number of students are aware of the need for new knowledge, scientific research (10%) and see a type of cognitive activity in research activities.



Picture 1. Student survey results

The results of the ascertaining experiment indicate that student teachers of vocational training understand that it is possible and necessary to use various scientific approaches, principles, methods, technologies, tools, forms in future professional pedagogical activities, but they do not realize the need for a focused, systematic study of pedagogical reality and development new knowledge. This is due to the ignorance of the areas of research activity in which the teacher of vocational training can participate and the forms of its implementation.

In addition, when conducting a stating experiment, students' interest in various forms of research activity and the possibilities for improving the professional-pedagogical, industrial, and managerial activities of a future teacher of vocational training through it were revealed.

Thus, the results of the ascertaining experiment indicate that students understand the significance and the role of research activities in modern conditions, are interested in the possibilities of this type of activity, imagine what properties it should possess, but they are not fully aware of all aspects and forms of manifestation of scientific - research activities of future

teachers of vocational training, identifying it only with the possibilities of personal development. This indicates the need for special training of future teachers of vocational training for research activities.

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