

STUDENT DESIGN AND RESEARCH ACTIVITY AS A FACTOR OF FORMATION OF PROFESSIONAL COMPETENCIES AT STUDENTS

Khimmataliev Dustnazar Omonovich

Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Professor of "Pedagogy, Psychology and Teaching Methods", Doctor of Pedagogical Sciences

ABSTRACT

The article discusses the issues of formation and development of students' research competencies. The importance of scientific research skills in the learning process is emphasized.

Keywords: Design and research activity, student, ability, problem, motivation, interest.

Relevance of the topic: At present, a specialist who is capable of analyzing his own activities, of quickly and unconventionally resolving professional problems arising before him, striving for self-improvement, can be considered in demand. The key to good success is the involvement of students in research activities.

Objectives: to determine the importance of carrying out research work; identification of talented youth and improving the level of training of mid-level specialists.

Tasks:

- formation of research competencies,
- development of creative and analytical thinking,
- the formation of the need to obtain new knowledge and apply them in their professional activities,
- development of professionally important qualities and competencies.

Results and discussion. Technologies are replacing each other so rapidly that the so-called "narrow" specialist is simply not needed by the employer. Therefore, in the process of training a specialist, the development of students' abilities to master the methods that allow them to independently find, analyze and use knowledge in their professional activities is brought to the forefront. In this regard, there is a need for the transition of the educational paradigm from educational to scientific and educational, aimed at the intellectual development of future specialists, which also leads to a change in the methodological basis of educational institutions. As such a basis, the teaching-research principle is of interest, the essence of which is the active involvement of students in scientific research, that is, "reorienting the educational process to the development of the individual's creative potential, fostering a culture of thinking, and, ultimately, to training a specialist, able to find ways to solve problems arising in the professional-production and scientific field. " The educational process based on this principle, along with the introduction of students into research activities, allows them to form the necessary professional and general competencies. Research in the field of communicative, social and many other competencies was carried out by such scientists as D.A. Ivanov, O.V. Sokolova, A.V. Farmstead, but not enough attention was paid to the issues of research competencies.

It should be noted that the effectiveness of the implementation of research competence in the educational process is directly related to the organization of independent research and the formation of independent work skills.

Students' research activities are aimed at developing general and professional competencies, the formation of which allows them to become demanded and competent modern specialists in the future.

The world around us is very dynamic, it is constantly changing, forcing us to look for new non-standard options for solving problems, extract information from various sources and use it wisely, only in this case it is possible to remain a sought-after specialist. Mastering research skills, the ability to scientifically approach the solution of a problem is one of the key conditions guaranteeing the professional development of future specialists. What is a research activity? Leontovich A.V. thinks that research activity is the activity of students related to the solution of a creative, research problem with a previously unknown solution, this is the acquisition by students of a universal way of mastering reality, activating the students' personal position in the educational process based on the acquisition of new knowledge (i.e. Self-acquired knowledge, which is new and personally significant for a particular student).

Thus, by the research activities of students we understand the fulfillment of their creative research tasks through the main stages of the study: • statement of the problem, formulation of the topic; goal setting, hypothesis; familiarization with the relevant literature; selection of research methods; collection of material, its analysis; conclusions.

In our case, students performed research work on the topic: the use of geogrids in construction. The ability of students to research activities developed effectively in the process of their purposefully organized activities under the guidance of a teacher.

The teacher organizes and accompanies students' activities on the independent acquisition of knowledge, which is not always easy psychologically, especially to the "well-established", conservative teachers. In the process of scientific research work, tasks such as: a solid and deep assimilation of knowledge in various disciplines, the development of creative potential, the formation of professional and personal competencies are solved.

In connection with the tasks, we gave preference to material that can be implemented in the future professional activities of students. By participating in the activities of the topic we have chosen, the student himself asserts himself as a person, he develops and strengthens his position of cognitive interest, motivation to search for new knowledge.

Students involved in research activities, receiving and analyzing information from various sources, develop informational competence, delivering reports at conferences and seminars, presenting projects, they hone communication competence, and the competencies necessary in future professional activity aimed at demanding a specialist for him are formed creative development, to create the conditions for further professional and personal growth.

CONCLUSIONS

Thus, research activity, being the main factor in the formation of the competencies of a future specialist, appears to be an integral part of the modern education system aimed at training a mobile, highly qualified, proactive and creative specialist.

REFERENCES

1. Badashkeev, M.V. Student research activity as a factor in the professional formation of future teachers / M.V. Badashkeev, M. A. Badashkeeva // Secondary vocational education. - 2014. - No. 6. - S. 41–43.
2. Gladysheva, M. M. Assessment of the degree of formation of research competencies of students in the process of continuing professional education at the initial stage of experimental work / M. M. Gladysheva, V. D. Tutarova // Higher education today. - 2011. - No. 2. - S. 39–43.
3. Khimmataliev D.O. Integration of pedagogical and technical knowledge in the diagnosis of preparation for professional activity. Monograph. - Tashkent, Uzbekistan, 2018 - 168 p.