PROBLEMS AND SOLUTIONS OF DIRECTION OF STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS FOR SCIENTIFIC RESEARCH

[1]Bahrom Kurbanov, [2]Abdukakhor Zaparov, [3]Gullola Kurbanova, [4]Ahmadbek Zafarov
Dotsent of Gulistan state university[1],Professor of Andijan state university[2],Senior teacher of Gulistan state university[3],Senior teacher of Andijan state university[4]

ABSTRACT

The article discusses the importance of directing students of higher education institutions to research work, the problems in this process, ways to solve them, and the tasks of professors and teachers of higher education in this process.

Keywords: research, research directions, methods, analysis, synthesis, generalization, problems, problem solving, research presentation, tasks of professors and teachers.

Paragraph 4.4 of the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 "On the Strategy for further development of the Republic of Uzbekistan" PF-4947 "Development of education and science" Further improvement of the system of continuing education Continuation of the policy of radical improvement of the quality of general secondary education in preschool education institutions deepening of science teaching Improving the quality and efficiency of higher education institutions Great attention will be paid to stimulating research and innovation activities.

Taking into account the above, an important task for professors and teachers is to bring the specialists trained in the higher education system to the level of world standards, to pay special attention to the training of scientific and pedagogical staff, to direct students to research work. As a result of the study of scientific works and articles in the field of orientation of students to research work, there are important problems facing students who want to engage in research work in higher education. These problems are:

1. Inability to choose the right research topic.
2. Lack of knowledge of scientific research methods and their use.
3. Inability to independently prepare the basis of scientific research.
4. Challenges in working with literary sources.
5. Lack of ability to make a presentation of the research work done.

Orientation of students to research work can be done in two ways:

• The first is the organization of problem-solving lessons in seminar-practical classes, directly in the classroom to motivate students to solve tasks, to create them in the field of specialization or any subject (lesson plan, technological map, electronic manual):

• Second. The logical continuation of the lesson is the implementation of extracurricular research activities: independent work, abstracts, term papers, scientific, research work, participation in Olympiads and exhibitions with their speeches and scientific articles at conferences.

Students begin to do research work, first of all, if they can independently perform the tasks given by the teacher in theoretical and practical classes, using the scientific literature in the library and present it in the form of independent work, abstracts, coursework, and secondly, systematic knowledge in individual research work (graduation work). can be observed by applying.

Higher education professors should teach students to solve existing problems in order to begin their research work.

1. To teach students to choose the right research topic. This is a very complex process, and the progress and positive outcome of the research work will depend on the choice of topic. The topic reflects the

specifics of the research work and is chosen in collaboration with the student and his / her supervisor. When choosing a research topic:

• Opportunity to discuss, express their personal views, conduct research on the pages of scientific research;

• The lack of a wide range of research topics, taking into account the scientific knowledge and skills of the researcher.

• Availability of materials for research, in some cases, the topic is interesting, but there are not enough materials to do it.

The range of topics that students should pursue during their higher education should be based on the study of scientific knowledge and the drawing of independent scientific conclusions based on them.

2. To teach research methods and their use.

Conducting research is the study of evidence Research methods are the ways to achieve a goal in scientific work. The science that studies methods is called Methodology.

We know that every scientific research work is a process of analysis and synthesis, comparison, classification, modeling, observation, experimentation and interviewing in the process of carrying out a certain scientific research work. it is necessary to teach how to use the methods. Without a good method, even a well-chosen method will not give good results. If methodology is a method of applying a method, methodology is the teaching of methods.

To use the research methods of the student conducting the research:

Philosophical methods:

Based on dialectical and metaphysical methods, it additionally includes philosophical methods: intuitive, analytical dogmatic, sophistic, and others.

It allows the study of general methods, the analysis of the process of thinking, as well as methods of acquiring any everyday human knowledge. This includes the following theoretical knowledge.

The method of analysis involves combining the studied parts of the subject and summarizing the results of the analysis. If the analysis method is performed at the beginning of the study, the synthesis method completes it.

The method of abstraction is the study of abstraction as a result of thinking.

The generalization method is to identify general points in the research. comparison, preliminary conclusions, visualization of the dynamics of the development of the event, generalization, the formalization of the results using conditional symbols.

The induction method is a method of drawing general conclusions based on known facts. The deductive method is to draw a special conclusion based on general opinion. It would also be useful to teach students the use of observation, tariffing, experimentation, comparison, formalization, and other methods.

3. To teach independent preparation of the regulations of scientific research.

Students are taught to choose the direction of the problem on the chosen topic, to demonstrate the relevance of the topic on the basis of adopted laws, decisions, to select the object, to define the subject, to form a sequence of tasks to clearly define the purpose of any research work. will need to be trained to prepare a charter.

4. To teach students to work with literary sources.

An analysis of the literature in the field of research allows the student to become familiar with the problem situation by showing that he or she is familiar with more than one source in the field of research. It will be

necessary to convey to the student that the validity of the hypothesis raised in the research work must be backed up by literary data and logical reasoning.

At the stage of putting the research topic - the teacher focuses on working on several types of topics, introduces the literature, Internet addresses. In collaboration with the supervisor and the researcher, the topic is identified, its relevance, scientific novelty is determined. In this, the teacher plays the role of a consultant, the role of the teacher is superior, not active, it is necessary to achieve that the researcher is superior.

At the stage of doing research work - the teacher is the consultant and the research student should be given a high level of independence. As a researcher, the student is required to work independently on the content of the topic, the teacher asks a variety of guiding questions that help to solve the problem. It is at this stage that the student has a personal opinion on the research work, makes independent decisions, learns to give conclusions and suggestions, completes the work.

At the defense stage - the scientific activity carried out is analyzed. At this time, the student and the supervisor, the teacher are equal partners. At the end of the defense, the activity is evaluated.

• Have a positive attitude towards the student, respect him as a person:

• Recognize the student's unique qualities, give him the right to choose, freedom:

• Assessment of the student's performance, taking into account the individual, psychological characteristics:

In short, with the development of science and technology, it is necessary to update, deepen and strengthen the acquired knowledge, to direct students to scientific research, to train them in scientific activities, to allow the next generation to engage in scientific activities, to identify problems in a timely manner. , focusing on overcoming them, engaging educational, confident in the student's own strength and power in achieving the goal, curiosity, scientific independence, satisfaction with their work, satisfying aesthetic needs and closely studying the beauty of science.

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