REQUIREMENTS FOR PROSPECTIVE TEACHERS IN PREPARING FOR SCIENTIFIC ACTIVITY

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Abstract. The requirements for the preparation of future pedagogues for scientific research activities are very important from this point of view. In this article, the requirements for the preparation of future pedagogues for scientific research activities in higher educational institutions that train pedagogues will be highlighted.

Keywords: research concept, theoretical knowledge, practical skills, innovative ideas

Introduction

Since the years of independence, the development of the education system has been recognized as one of the priority directions of state policy. Today, fundamentally changing the content of education and upbringing and raising it to a modern level is one of the most important issues. This is because the modernization of society, the development and prospects of life, the results of reforms, and the formation of socio-economic policy in accordance with the conditions of republican independence and a market economy are all closely related to the problem of training highly qualified personnel.

To date, much work has been done to develop and support scientific research activities. In this regard, the state has implemented measures such as the adoption of laws and decrees, the establishment of new scientific research institutions, and the improvement of the system for training and encouraging scientific personnel.

Metodology

In the era of globalization, engaging in scientific research is of paramount importance. The training of highly qualified personnel, the creation of innovative ideas and technologies, and their implementation are crucial for the development and stability of our country. Modern knowledge, innovative technologies, and newly created products resulting from scientific research play a significant role in ensuring economic growth, strengthening national security, and improving the quality of life for the population. Furthermore, the development of scientific research activities, in turn, contributes to the improvement of the system for training scientific and pedagogical personnel, enhancing their qualifications, equipping them with modern scientific and educational methods, and providing incentives. Developing scientific and scientific-technical potential also creates the necessary conditions for the country's development.

Therefore, scientific research is a systematic process of investigation conducted to expand scientific knowledge, identify new knowledge, and apply it in practice. Its main goal is to develop new scientific knowledge, ideas, theories, recommendations, and conclusions, as well as to deepen and develop existing knowledge [1].

Scientific research can be carried out in various forms: research work, experiments, observations, mathematical modeling, creative projects, international cooperation, and others.

Discussion

The scientific research process consists of the following main stages: identifying the problem and research topic, analyzing existing knowledge, developing a research concept, selecting research methods, processing and analyzing the obtained results, drawing conclusions, and preparing scientific reports, articles, and research projects.

The essence of the requirements for students in preparing for scientific research activities includes:

1. Theoretical knowledge:

• Formation of systematic and in-depth scientific knowledge: Students should possess broad and deep knowledge in fundamental, general professional, and specialized subjects.

• Knowledge of scientific research methodology: Students should have a thorough understanding of scientific research methods, including formulating hypotheses, analyzing results, and drawing conclusions.

• Knowledge of foreign languages: Students should have a good command of at least one foreign language, enabling them to access and utilize scientific literature and research from foreign scholars.

2. Practical skills:

• Conducting scientific research: Students should have developed skills in conducting scientific research, performing experiments, processing results, generalizing, and drawing conclusions.

• Information analysis and generalization: Students should have developed the ability to use scientific sources and empirical data, analyze them, generalize them, and generate new knowledge.

• Independent reasoning and conclusion-drawing: Students should possess the skills of independent reasoning and drawing conclusions.

3. Personal attributes:

• Developed independent thinking and creative approach: Students should demonstrate a developed ability to generate original ideas and find innovative solutions.

• Striving for innovation and inquisitiveness: Students should exhibit a desire to learn about and research new knowledge, discoveries, advanced technologies, and approaches.

• Sense of responsibility for improving the quality of higher education: This implies that students have developed a sense of responsibility for their work.

• Interest and passion for scientific-pedagogical activity: Students demonstrate interest in both scientific research and pedagogical work.

4. Enabling environment:

• Provision of modern laboratory, library, and material-technical resources.

• Development of collaborative links with foreign scholars.

• Opportunities to participate in scientific conferences.

• Financial and material-technical support for research.

Conclusion

In conclusion, the requirements outlined above explain the necessary attributes for prospective teachers to effectively prepare for scientific research activities. By understanding research methodologies, developing critical thinking and analytical skills, and fostering

effective communication and collaboration, teachers can engage in meaningful research that contributes to the advancement of knowledge in the field of education. We believe that by equipping future teachers with these essential skills, we can ensure their thorough preparation for the demands of the modern educational landscape and their positive impact on the field of education.

References:

1.G.A. Asilova. Ilmiy tadqiqot faoliyati asoslari. Uslubiy qo‘llanma. – T., 2020. – 128 b.
2.Nizamova M.N. Talabalar kasbiy mobilligini rivojlantirishning pedagogik mohiyati va funksiyalari. O‘zbekiston Milliy universiteti xabarlari. – Toshkent, 2022. – 1/9-son. 141-144-b.
3.Z. Davronov “Ilmiy ijod metodologiyasi”. –T.: “IQTISOD-MOLIYA”- 2007, 216 b
4.E.T.Farmonov, Z.SH.SHaripov. “Ilmiy izlanish asoslari”. O‘quv qo‘llanma. -Toshkent: 2022. -217 b
5.Рахматов А.Д., Юнусов Р.Ф. Илмий тадқиқот асослари.- Т.: ТИМИ, 2008.- 210 б.
6.Abdullayeva O.O. Bo‘lajak pedagoglarda tadqiqotchilik ko‘nikmasini shakllantirishning nazariy asoslari // Kasb-hunar ta’limi №6, 2024. 97-100-betlar
7.Jo‘rayev, S., & Abdurasulov, J. (2023). SUBJECT, TASKS AND CONTENT OF STUDYING THE BASICS OF MILITARY-PATRIOTIC EDUCATION. Академические исследования в современной науке, 3(7), 149-153.
8.Abdurasulov J. (2024). HARBIY PEDAGOGIKANING BOSHQA FANLAR BILAN ALOQASI. Молодые ученые, 2(6), 48–52. извлечено от https://inacademy.uz/index.php/yo/article/view/28164