IMPROVEMENT OF METHODOLOGICAL TRAINING OF FUTURE PHYSICS TEACHERS IN HIGHER EDUCATIONAL INSTITUTIONS

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Abstract: The formation of preparation for the training consists of the formation of professional skills, creativity skills in future physics teachers, the development of communication culture, pedagogical technique and technology skills, the formation of the initial potential of teaching skills, teaches students and pupils the secrets of observation, creativity, independent mastering of advanced pedagogical practices, the distribution of attention in the process of reading and teaching, knowledge, skills and qualifications, provides control of mental states.

Keywords: Education, science, new education system, new approaches, pedagogical techniques, observation, creativity, advanced pedagogical experience.

Аннотация: Формирование подготовки к обучению включает в себя формирование профессиональных навыков, творческих способностей у будущих учителей физики, развитие культуры общения, навыков педагогической техники и технологии, формирование начального потенциала педагогического мастерства, обучение студентов и воспитанников секретам наблюдательности, креативности, самостоятельного освоения передовых педагогических практик, распределения внимания в процессе чтения и обучения, знаний, умений и навыков, обеспечение контроля психических состояний.

Ключевые слова: Образование, наука, новая система образования, новые подходы, педагогические технологии, наблюдательность, креативность, передовой педагогический опыт.

Annotatsiya: O‘qitishga tayyorgarlikni rivojlantirish bo‘lajak fizika o‘qituvchilarida kasbiy mahorat va ijodkorlikni rivojlantirish, muloqot madaniyatini, pedagogik texnika va texnologiya ko‘nikmalarini rivojlantirish, boshlang‘ich pedagogik salohiyatni rivojlantirish hamda o‘quvchilarga kuzatuvchanlik, ijodkorlik, ilg‘or pedagogik tajribalarni mustaqil o‘zlashtirish sirlarini o‘rgatish, o‘qish va o‘qish jarayonida diqqatni jamlash, bilim, ko‘nikma, shuningdek, aqliy nazorat qilish qobiliyatini rivojlantirishni o‘z ichiga oladi.

Kalit so‘zlar: Ta'lim, fan, yangi ta'lim tizimi, yangi yondashuvlar, pedagogik texnologiyalar, kuzatish, ijodkorlik, ilg'or o'qitish amaliyoti.

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Based on the meaning of the state policy for the development of education and science and its relevance, it can be explained as follows: firstly, The new education system, changes and new approaches to training a mature generation of personnel, the emergence of modern professional fields and their connection with the conditions of our country; secondly, as a result of socio-economic development, the concept of education has become a separate, independent sphere of human activity from a certain period, transferring the social experience of society to the next stage; thirdly, ***education*** is a set of actions aimed at forming the intellectual and spiritual aspects of a person, ensuring his active and successful participation in the production of society and social, political, cultural, educational life, and means enlightenment and imparting knowledge; fourthly, Science is one of the social institutions of society, a form of social consciousness that reflects the life of nature and society. It combines great scientific potential and creative power, serves to educate a spiritually mature person, and to create a powerful scientific potential in the country [1; p. 50-51].

The education sector, first of all, with primary education. However, the most advanced and experienced teachers should be involved in the primary grades, where the child's worldview, tastes, and potential are formed. Therefore, it is planned to radically reform school education, the secondary specialized education system, and also higher education. [2; p. 36].

Today, education in our Republic has changed radically, that is, different content, different approaches, different attitude, different behavior, high-level pedagogical processes, different pedagogical mentality are recommended:

- the content of education is being enriched with new improved skills and qualifications, actions on information, development of abilities, creative solving of scientific problems, and practices based on innovative technological equipment in educational programs;

- traditional methods of information - oral and written speech are giving way to computer means of teaching, to use a huge telecommunication network;

- An important organizer of the pedagogical process is the focus on the personal orientation of the teacher's contact with future teachers;

- special importance is attached to the spiritual upbringing of the person, the moral image of the person;

- the importance of science in creating innovative pedagogical and information technologies is increasing [3 ; 41-b].

It requires a methodological approach to the content of education in the formation of knowledge, qualifications and skills intended for the professional preparation of future physics teachers in higher educational institutions.

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Literature, dissertations, monographs on improving the teaching of natural sciences, general professional and specialized sciences, increasing its effectiveness, and using pedagogical and information-communication technologies were analyzed and the necessary conclusions were drawn.

In particular, in the course of our research, we were able to research the sources that serve as the methodological basis for improving the methodological training of future physics teachers as follows:

- legal and normative foundations for ensuring the effectiveness of education, holistic human development, and training of competitive, competent future teaching staff (legislation in the field of youth education and training, PERSONNEL TRAINING , Decrees and Resolutions of the President of the Republic of Uzbekistan, legal and normative documents of the Cabinet of Ministers, relevant ministries, departments, and international organizations on the status of teachers);

- among these are the international scientific ideas of mature methodologists, pedagogues, physicists, psychologists of our country and abroad on ensuring the quality of education and training competent future teachers.

- Based on these methodological ideas, the qualification requirements for the competence of a modern teacher are set out in a number of international and national legal and regulatory documents. In particular, they are set out IN THE RESOLUTION of the President of the Republic of Uzbekistan No. PP-3775 dated June 5, 2018 “ On additional measures to improve the quality of education in higher educational institutions and ensure their active participation in the large-scale reforms being implemented in the country, ” which also serves as the basis for determining the criteria for improving the scientific and methodological training of future physics teachers [4].

Among them:

- supreme education system of modernization dominant directions ;
- management of competence structure and content to know ;
- teaching innovative form , method and of the means the essence understanding and training in the process the application organization and control to do ;
- communicative , psychological , organizational , creative, informative , innovative competence concepts content ;
- advanced education technologies work exit and to practice implementation verb their ways to mark ;
- training projects work output , portfolios shaping and to practice implementation verb processes management ;
- e- learning modules creation and adjective control to do ;

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- graduation qualified works and master's degree dissertations practice with to tie organization verb ;
-pedagogical practice bases update and programs improvement control to do ;
- supreme education in institutions educational-methodical activity organization verb and development [4; 18-19 p].

Physics bullet physics in the process of shooting We explain the importance of professional orientation for teachers with the following :

- from physics theoretical the gap in knowledge and practical training is easily overcome;
- an opportunity is created to fully master the given knowledge, skills and abilities, which in turn helps to improve the teacher's pedagogical skills;
- in accordance with the pedagogical purpose, it allows to clearly introduce the goals and tasks of teaching subjects of physics in higher education;
- is intended to rationally organize educational content that can satisfy pedagogical needs;
- conditions are created for the formation of methodological skills and qualifications ;
- the path to self-awareness and self-awareness opens up as a true teacher;
- attention to independent education and self-discipline increases;
- in general, it has a positive effect on increasing motivation to study and work;
- is taught self-control and correction of shortcomings;
- they receive intellectual education through creative acquisition of knowledge, skills and abilities, etc. [5 ; 85-p].

Since our republic, as an independent state, has set itself the goal of building a democratic society and becoming one of the most developed countries in the world, this, of course, sets certain tasks for the education system [6 ; p. 11] .

A future physics teacher should know the theoretical science that forms the basis of physics, including fundamental theories, laws of nature, and scientific concepts (based on experimental evidence about the micro- and macrocosm of elementary particles and the electromagnetic field). Physical theories include the laws of conservation, special relativity and theories of gravity, classical and quantum mechanics, solid-state physics and the structure of matter, statistical physics and thermodynamics, nuclear and elementary particle physics, and others.

Pedagogical experiments are conducted in order to evaluate, develop and improve physics teaching. Pedagogical experiment is a specially planned and implemented physics teaching process, which allows observation and analysis of the pedagogical process. Pedagogical experiences and methods are tested and the results are studied. Effective methods are popularized [7; 57-p].

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The purpose of teaching the courses "General Physics", "Theoretical Physics" and "Methods of Teaching Physics and Astronomy" in higher education institutions is to educate, train and develop future physics teachers. Education is to give future physics teachers an idea of fundamental physical laws, phenomena, concepts, the physical picture of the world, and the tasks of physics teaching methods [8; p. 19].

In the modernization of the educational system, the introduction of innovative, pedagogical and information and communication technology tools into the educational process based on the requirements of the formation of a self-developing person in the higher education system is considered one of the main strategic directions today. [9; 14 -p].

Future physics in their teachers methodical preparation in improvement pedagogy from his achievements effective use to the goal appropriate . Last in years pedagogical of research to practice application about various approaches to the eye is being thrown . Some in cases of the research efficiency about negative thoughts also is reported . Ours in our opinion , actually research to practice implementation verb their ways to illuminate service doer scientific and methodological descriptive of materials work to go out separately need exists .

Conclusion : Thus, the issue of improving the methodological training of future physics teachers is an urgent scientific -methodical problem , comprehensive study of its methodological and scientific-theoretical foundations , comparative analysis, practical implementation of the theoretical ideas advanced on the basis of conclusions and recommendations is the guarantee of the training of teaching personnel in accordance with the requirements of the time .

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