



THE IMPORTANCE OF DEVELOPING THE PROFESSIONAL COMPETENCE OF FUTURE TEACHERS BASED ON AN INTEGRATIVE APPROACH

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Annotation: The problem of improving the quality of future teachers' communicative competence, their ability to think freely, actively, independently, model the educational process, as well as the ability to independently create new ideas and technologies of education and implement them, is especially urgent in the socio-political, economic and cultural conditions that exist today.

Keywords: Pedagogical process, social competence, special competence, psychological competence methodological competence, informational competence, creative competence, innovative competence, astronomy, interdisciplinary integration, solar system, planet physical parameters, integrative approach, astrophysics, celerations.

Pedagogical education system develops, offering new, scientifically based models and technologies of foreign language teaching to prepare students for activities in various professional fields, meeting the requirements of the time. The increasing status of foreign languages in modern conditions increases the demand for qualified specialists in this subject and determines the need to modernize their professional training in the integrated system of higher pedagogical education. The process of modernization of foreign language teaching in higher education is based on the general rules of modernization of the educational system of our country.

The socio-economic development of our independent republic and the prosperity of our country depend on the level of the introduction of innovative technologies and computer technologies into this process. The introduction of innovative educational technologies and computer technologies into the educational process of higher education institutions requires, first of all, the analysis of existing innovative educational technologies, the preparation of methodological recommendations for their application, taking into account the content of the taught subject. The developed methodical recommendations are used in the process of training, retraining and professional development of pedagogical personnel.

Pedagogical process - an activity organized and directed by people (teacher and learner) in order to form the necessary knowledge, practical skills and qualifications, moral-political, psychological and physical qualities of an individual and a group. The pedagogical process is associated with other social processes. Therefore, in order to make the learner aware of each social process, to inextricably link the pedagogical process with other processes, professional competence must demonstrate several qualities.

1. Social competence - the ability to be active in social relations, possess skills, and be able to communicate with subjects in professional activities.



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2. Special competence - preparation for organizing professional and pedagogical activities, rationally solving professional and pedagogical tasks, realistically assessing the results of activities, and consistently developing the BKM, and psychological, methodological, informational, creative, innovative and communicative competence are highlighted in this competence. They express the following content:

- a) psychological competence - the ability to create a healthy psychological environment in the pedagogical process, organize positive communication with students and other participants in the educational process, be able to timely understand and eliminate various negative psychological conflicts;
- b) methodological competence - the ability to methodically rationally organize the pedagogical process, correctly determine the forms of educational or educational activities, select methods and tools in accordance with the purpose, apply methods effectively, successfully use tools;
- c) informational competence - search for, collect, sort, process necessary, important, necessary, useful information in the information environment and use them purposefully, appropriately, effectively;
- d) creative competence - a critical and creative approach to pedagogical activity, the ability to demonstrate one's own creative skills;
- e) innovative competence - to put forward new ideas to improve the pedagogical process, improve the quality of education, increase the efficiency of the educational process, and successfully implement them in practice;
- f) communicative competence - to be in sincere communication with all participants in the process, including students, to be able to listen to them, to have a positive impact on them;
- g) personal competence - to consistently achieve professional growth, increase the level of qualifications, to demonstrate one's internal capabilities in professional activities;
- h) technological competence - to master advanced technologies that enrich professional and pedagogical knowledge, skills and qualifications, to be able to use modern tools, techniques and technologies;
- i) extreme competence - to make rational decisions and act correctly in emergency situations (natural disasters, technological process failures), in the event of pedagogical conflicts.

Analyzing the content of the professional activity of pedagogues and the modern requirements for it, in the conditions of today's modernization of education, we need to design the educational process based on the needs of learners, apply advanced foreign experiences to the educational process, information- communication technologies, wide implementation of pedagogical technologies, development of innovative approaches and methods aimed at developing cognitive activity of students, self-independent professional development form the basis of the content of the professional activity of pedagogues of higher education institutions.

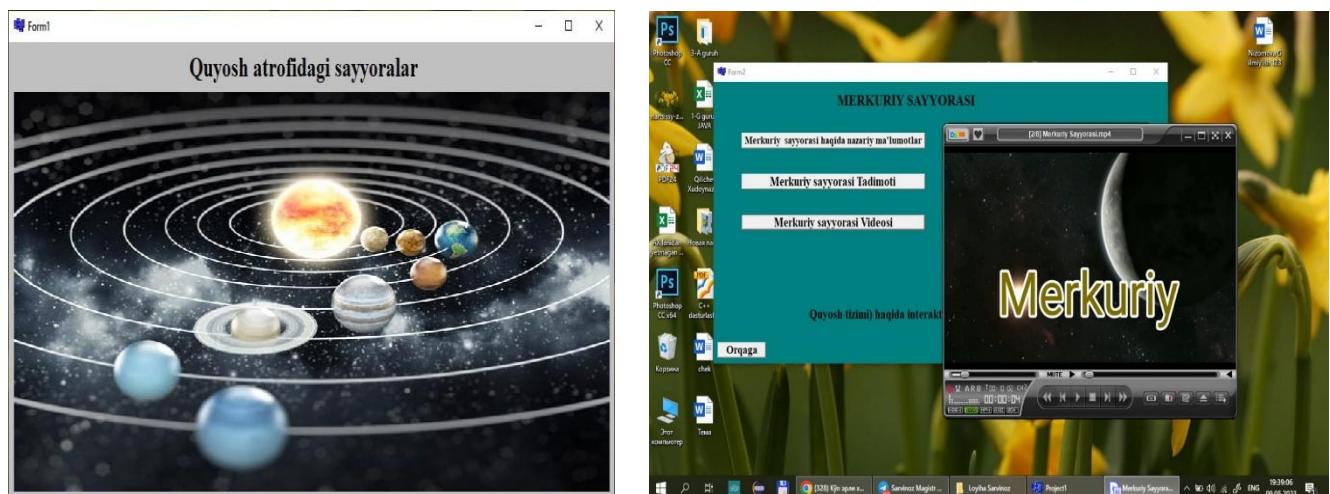
It is aimed at studying all the processes that take place in the planets of the solar system. Until now, it is given in the literature on the planets of the solar system, and today, in the development of science, it is used as the most important method in education. From these, it can be seen that the rapid application of innovative pedagogical and information technologies in the science of astronomy has become a pedagogical-methodical idea. The introduction of information technology into the educational system has led to the creation of new types of training (familiarization with physical models, computer experiments, solving experimental problems, conducting research, creative tasks) especially in the teaching of astronomy.

Astronomical component as a system-creating factor of training of natural sciences in higher educational institutions, astronomy as a science is divided into several departments.

The main divisions of astronomy are:

Astrometry is the study of the positions and movements of celestial bodies in his field of interest. Positional or spherical astronomy - studies the methods of determining the position of cosmic bodies from different observation points. It is often considered a part of astrometry. Celestial mechanics - the study of the laws of motion of celestial bodies of water under the influence of the force of gravity. One of the oldest branches of astronomy. Astrophysics - studies the physical and chemical properties of cosmic bodies. Its components are cosmochemistry and stellar astronomy. The first is related to the study of the chemical composition of celestial bodies and the determination of the laws of distribution of chemical elements in the universe. The latter studies the movement of stars and star systems and their distribution in space, taking into account physical laws. Cosmology - deals with the general laws, properties and evolution of the universe. Cosmogony - studies the origin, development and evolution of cosmic bodies.

In the teaching of astronomy as a subject, using modern pedagogical technologies serves as one of the goals of teaching and as an important factor in improving the quality of knowledge. In teaching the topics of planets in the solar system, the teaching of astronomy by calculating mathematical operations based on physical formulas and using pedagogical technologies will not only increase the speed of knowledge, but at the same time, it will also help to develop the spiritual strength and abilities of the students, instill in them a scientific outlook, a positive attitude. It also allows for the formation of qualities such as.



A single perfect plan for teaching astronomy in the educational system was created and based on this, it was possible to independently acquire astronomical knowledge using computer technologies and Internet media, two electronic complexes were created, and these students could work with textbooks and additional literature, share what they know. At the same time, it is important to be able to read and write physical formulas correctly, to be able to solve equations and problems related to quantity and quality, to be able to apply acquired knowledge, to create equations of law concepts, to find coefficients, to solve formulas. It is necessary to be



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able to write correctly, apply it to the creation of electronic and building formulas, write the formula of a known substance using the general formula of homologous series, create an equation for calculation, and develop the ability to solve problems, this is the need of the hour.

References:

1. S.T.Barakayeva Technology «mathematics together» when studying the topic «planet earth» in astronomy. International Scientific Journal Theoretical&Applied Science. 545-548.
2. S.T.Barakayeva [INTEGRATIVE APPROACH IN ASTRONOMY TEACHING AND ITS PRACTICAL ESSENCE](#) SCIENCE AND INNOVATION INTERNATIONAL SCIENTIFIC JOURNAL 390-393
3. Barakayeva S. *INTEGRATIVE APPROACH IN ASTRONOMY TEACHING AND ITS PRACTICAL ESSENCE* // Science and innovations. – 2024. – T. 3. – No. B1. - S. 390-392.
4. BARAKAYEVA S. *METHODOLOGY OF Interdisciplinary TEACHING OF THE SUBJECT OF THE PLANET "SATURN" FROM ASTRONOMY* //News of UzMU journal. - 2024. - T. 1. – no. 1.2. - S. 71-75.
5. Barakayeva Sarvinoz Tolqunovna. *"THE ROLE OF ASTRONOMICAL COMPONENTS IN THE INTERDISCIPLINARY TEACHING OF THE "SUN AND SOLAR SYSTEM" SECTION FROM ASTRONOMY."* Uzbek Scholar Journal 24 (2024): 109-113.
6. Akhmedov B.J. *Effect of general relativity in macroscopic electrodynamics: Autoref.* ... d-ra f.-m. science - I'm sorry. Ulugbeka, 2001
7. M. Mamadazimov, B.F. Izbosarov, I.R. Kamolov. *Astronomy*. Typography "Sano-standard". Tashkent. 2013. str.75.
8. Kamolov I.R., Kamalova D.I. , Sayfullayeva G.I., Barakayeva S.T., Hamroyeva S.N. O.Avezmuradov "Astronomy Teaching Methodology" textbook Khorezm-2023
9. D.Kamalova and others. *Research of electro physical and physicochemical properties of fillers for production of composite polymer materials*. Solid State Technology. November 27. 2020. Volume 63, Issue 6. pp 9771-9777. SCOPUS.
10. Kamolov, S.T. Barakayeva Intellectual property agency "Solar system and its planets" DGU 05797 patent for the electronic training manual program, Tashkent-2018