# Some Features of Teaching Natural Knowledge Based on Competence Approach in General Education Schools

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#### ABSTRACT

In this article, some features of teaching natural knowledge based on the competence approach are outlined. It is noted that the use of pedagogical technologies in the educational process - respecting the individuality of the student, listening to opinions, creating an opportunity to draw correct conclusions - in the process of working in groups and small groups - to form the base and subject-related competencies in the learner. will be a factor.

## INTRODUCTION.

Improving the quality of general secondary educational institutions depends on the introduction of state educational standards and curricula based on a competency approach, effective introduction of pedagogical innovations and optimal teaching methods into the educational process. Effective formation and development of students' competencies, continuous improvement of teachers' professional competence in the application of pedagogical innovations, effective teaching methods, providing them with high-quality methodical services based on their methodological needs, based on a systematic approach is directly related to management.

The educational process involves the acquisition of knowledge by students and the formation of the required behavior and thinking in them. A place of study is one of the social institutions of society, which determines the development of society in the future, not today. Its purpose is education and upbringing. Pedagogical and mental processes of a person are formed and developed during educational activities, new activities are created on the basis of it, and competence increases. The educational process is directly aimed at mastering certain information, actions, forms of behavior. The concepts of learning and teaching are related to educational activities, they serve to acquire and teach knowledge, skills and abilities.

It is known that one of the components of education - the process of personal development is closely related to education. A person develops not only under the influence of a genetic factor or the surrounding social environment, but not only under the mechanical effects of these or those aspects, but in an environment that provides solutions to internal conflicts from the bottom (simple) to the top (complex).

The process of introducing the competency approach in general secondary schools is gradual, longterm and complex, and implies organizational and methodical management in accordance with modern requirements and innovations.

**ANALYSIS OF LITERATURE ON THE SUBJECT.** Sh.Kurbanov, E. Seytkhalilov, A.N. Leontev emphasized the need to look at knowledge from the point of view of teaching based on the competency approach. According to this approach, educational activity is considered as a process based on the continuous interaction of management functions, aimed at the educational goals of the educational institution and in general. Activity consists of actions. An action is a process aimed at achieving a certain goal. Different authors offer different lists of functions. These include: planning; organization; make it happen; control [1].

O.Musurmanova and others analyzed the mechanisms of organizing innovative activities of future teachers by optimizing the requirements of professional competence based on the requirements of the social order [2]. Reflexive technologies for the development of professional competence of future teachers have improved the facilitating actions of pedagogues on the basis of mutual transformation in pedagogical practice.

In his research, N.A. Muslimov developed an improved methodology for the development of professional competence of future teachers of specialized subjects based on integrative-differential approaches [3]

D.T.Polatova proposed the factors for the organization of needs-based education and the improvement of professional pedagogical diagnostic methods used in it [4]. The researcher uses variable programs based on needs, the criteria for a step-by-step systematic diagnosis of professional pedagogical needs, the effective use of individual-oriented education in the educational process of future primary education teachers, based on a variable-integrative approach. offers to organize experimental Mini classes.

The criteria of professional competence of future teachers were proposed in the research conducted by S. Saidmurotova and others [5]. In the criteria of professional competence, active methods of education, game technologies, individualized educational technologies were analyzed in educational technologies, and the effectiveness of these technologies was positively evaluated.

B.Kh.Khodzhaev recommends the use of interactive methods in the organization of education as the main factor for the development of professional-methodical competence in his work [6].

In his research, M.Vahobov found that the competencies formed in general secondary education students are a set of theoretical knowledge, practical skills, skills, and personal qualities that allow students to perform various behaviors aimed at educational goals, - and revealed the general rules, development and implementation bases, components of state education standards in the conceptual model of state education standards based on the competence approach in general education subjects of general secondary education[7].

B.Umarov, in her research aimed at managing the methodological system of introducing the competency approach in general secondary schools, paid special attention to clarifying the priorities of introducing the competency approach in general secondary education, improving the prospective model and management technology[8].

In our opinion, the introduction of the competence approach means special emphasis on the

formation of practical skills in the educational process, comprehensive consideration of the interests and educational needs of learners, and integration into the content of educational programs and educational resources.

**ANALYSIS AND RESULTS**. In today's era of globalization and rapid development of digital technologies, professionals systematically develop independent self-personal and professional skills, along with the development of skills related to the acquisition and processing of information and their application in professional activities. the formation of development competence is important. From this point of view, the concept of lifelong learning is being studied as one of the main trends in education.

The teaching of natural sciences involves the formation of natural-scientific, technical, ecological and economic literacy in students, as well as the mutual integration of sciences in the development of critical and creative thinking. creates the ground for the coming. Also, through this science, students can understand the possibilities and problems of modern science and technology development through interdisciplinary integration, understand the nature of environmental problems through the goals of sustainable development education, ways of rational use of nature, principles of healthy lifestyle and aimed at forming the skills of using acquired knowledge in everyday life.

The period of primary education is the most important stage of the student's understanding of the world, the expansion of his imagination and the construction of the foundation of knowledge. During this period, the child creates a "student personality", develops interest in school and education, expresses his thoughts and feelings freely and clearly, solves unfamiliar problems creatively, and prepares for the future. begins to gather internal motivation for plans. This requires teaching teachers based on an innovative approach and modern pedagogy.

Natural sciences teach the student the reasons for the occurrence of events and processes occurring in animate and inanimate nature and their interrelationships, the stages of development in nature, including the evolution of the development of living organisms, the natural scientific foundations of modern techniques and technology, the nature and society. helps to know about the interrelationship and impact, the scientific basis of the economical use of natural resources, the importance of a healthy lifestyle. The student's internal motivation, through his interest in mastering natural sciences, plays an important role in his understanding of the state of the natural and social environment, in his understanding of environmental and human problems, and in his ability to make decisions to find their solutions.

The natural-scientific basis of human outlook is the knowledge of nature. When young students understand the initial knowledge about the environment, they feel the volume of knowledge that is not yet sufficiently systematized. Integrated natural sciences make it possible to solve this problem. As a result of the implementation of an integrated approach in teaching, it helps students to form their natural-scientific literacy in studying the environment and to apply it in their social life.

Within the framework of the competence approach, all exercises performed in the "Natural Sciences" classes can be directly related to the natural environment. In these lessons, in addition to subject-related competences, assignments, educational situations, texts, illustrations, didactic games, and visual aids selected on the basis of the principle of integration are important in order to create basic competencies in students. Implementation of the competence approach in the "natural sciences" classes is also important for teaching the young generation to protect the ecology of the environment, to guide them to work in certain types of agriculture and industry. Because the rational use of land, underground resources, water, flora and fauna and other natural resources [9], preservation of property, material and cultural resources, allows to increase natural resources, preserve nature [10], treat it with value, create experience of creative activities aimed at increasing its resources in the future and careful preservation. In addition, nature: earth, water, plant and animal world is a source of inspiration and creativity for students. Enjoying the beauty of nature and being aware of its secrets

are important in forming their creative thinking. In this sense, it is appropriate to expand the scope of creative work with students in "Natural Sciences" classes. For this, frequent exercises such as drawing pictures, taking care of flowers and trees, worshiping birds, making various things from plants, and creating living corners with them will allow you to achieve the expected efficiency.

Students' practical experiences are directly related to the knowledge, skills and abilities they have learned. The basis of practical experience is the educational content and life experiences mastered by students. It is known that the educational content consists of 4 important components:

educational materials that develop students' cognitive activity - knowledge;

activity methods that allow to implement activity methods - exercises;

tasks that help to implement the experience of creative activity;

results of creative activity that allow expression of feelings and values.

These components of the educational content serve to realize the ability to "know", "implement", "aspire", and "create" in students. Mastering the above-mentioned components of social experience allows students to demonstrate educational and cultural competencies. Foundational and science-related competencies expand the practical experience of primary school students. These experiences are improved as a result of mastering the knowledge of "Natural Sciences" and applying it in practical activities.

Implementation of the competence approach in "natural sciences" classes ensures the successful development of students. In this process, in addition to acquiring theoretical knowledge and competencies related to science, students acquire the ability to use them in life situations. Science-related competencies facilitate the application of knowledge, skills and abilities acquired in "Natural Sciences" classes in familiar and unfamiliar situations. In the framework of the competence approach, students not only acquire specific knowledge, skills and abilities in the "Natural Sciences" classes, but also gradually gain practical activity experiences related to the relationship between nature and man.

**CONCLUSION.** Based on the above analysis, it can be concluded that the creation of educational content and teaching-methodological support, taking into account the adoption of modern trends in education, competent and person-oriented approaches to education, natural teaching knowledge based on the competence approach allows to improve the organizational and management mechanisms of the innovative educational environment in general education schools.

## LIST OF REFERENCES USED:

- 1. R.Ishmuxamedov, M.Yuldashev. Ta'lim va tarbiyada innovatsion pedagogik texnologiyalar (ta'lim tizimi xodimlari, metodistlar, oʻqituvchilar, tarbiyachi va murabbiylar uchun oʻquv qoʻllanma). –T., 2013. 280 b.
- 2. Umumiy pedagogika/ A.Musurmanova, N.J.Isaqulova, M.T.Jumaniyozova, A. Sh. Jumayev/darslik/. Toshkent.
- Муслимов Н.А., ва бошкалар. Касб таълими ўкитувчиларининг касбий компетентлигини шакллантириш технологияси/ Монография. – Т.: "Фан ва технология" нашриёти, 2013. -128 б.
- 4. Poʻlatova D.T. Boshlangʻich ta'lim boʻlajak oʻqituvchilarining ehtiyojlarga asoslangan malaka oshirish tizimini takomillashtirish. p.f.f.d.(PhD) diss. Namangan–2019. 191 b.
- 5. Saidmurotova S. va b. Malaka oshirishdagi boʻlajak oʻqituvchilar kasbiy kompetentligini tarbiyalash jarayonlarining samaradorligini aniqlash. Jamiyat va innovatsiyalar-2021. 308-314 b.

- 6. Ходжаев Б.Х. Умумтаълим мактаби ўкувчиларида тарихий тафаккурни модернизациялашган дидактик таъминот воситасида ривож-лантириш: Педагогика фанлари доктори. дисс. Тошкент. 2016. 314 б.
- 7. Vaxobov M. M. Kompetensiyaviy yondashuvga asoslangan davlat ta'lim standartlarini joriy etish zamonaviy ta'lim paradigmasi sifatida // Zamonaviy ta'lim (Uzbekistan). 2016. №10.
- 8. Umarov B, The Cramming Method Is An Important Tool For Forming Learner Communicative Competence. Historical Experience, International Journal of Academic Management Science Research (IJAMSR), 2021/2, p. 91-94
- Малыхин А.А. Теоретические основы компетентностного подхода к методической подготовке будущего учителя технологии. / А. А. Малыхин // Формирование профессиональной компетентности будущего учителя технологии. Коллективная монография//Под общ. ред. А.А.Малыхина. – Бердянск, изд–во БГПУ, 2022. – 240 с.
- 10. Abdullayeva Sh.A. va boshqalar. Zamonaviy oʻqituvchining kompetensiyasi. T.: "Komron Press", 2015. 92 B.