



## SCIENTIFIC METHODOLOGICAL FUNDAMENTALS OF DEVELOPMENT OF COMPETENCIES FOR STUDENTS IN TEACHING NATURAL SCIENCES IN PRIMARY SCHOOLS (NATURAL SCIENCES)

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### Annotation

This article emphasizes the basic competencies in bowling classes, the specific features and tasks of their formation.

**Keywords:** elementary school, natural science, student, competence, development, lesson.

### Introduction

According to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On approval of state educational standards of general secondary and secondary special, vocational education" educational standard and curriculum (primary education: mother tongue, reading, mathematics, nature (grades 1-4) "was implemented on April 6, 2017 by Resolution No. 187. The goals and objectives of the state education standard are as follows[11]:

The purpose of the state education standard is the general secondary education system socio-economic reforms in the country, developed foreign organization based on the best practices of countries and science and modern information and communication technologies, spiritual is to cultivate a harmoniously and intellectually developed person.

Apparently, it is the basis for achieving these goals and objectives we need to form competencies[24].

What is competence? What is a competency approach?

do we understand It is worthwhile to answer these questions first.

Competence (lat. Compete - I achieve, I deserve, I deserve) -

- 1) the scope of powers, rights and duties of a particular state body (local self-government body) or official, established by law, charter or other document;
- 2) knowledge, experience in this or that field[12].



According to Zoroaster's teaching, "the duty of the teacher-priests is to teach children knowledge in a good way, to bring them up in a way that distinguishes between good and evil, and to guide them to the right path." His "youth" praises the leader of the teachers, who wisely fights against evil, instills in the minds of children the truth, pure faith and honest intentions[13].

In addition, the Avesto's laziness, indifference, irresponsibility, ignorance, illiteracy, lack of knowledge and skills in the Yashts, which impede the minds of children and their independent thinking, "Bad teachers" who weaken their attitude to life and work, weaken their faith and impoverish them spiritually[6].

Zoroaster's dialogue with Ahuramazda, the supreme deity, also says of good and bad teachers:

Ibn Sina said that it is the teacher's responsibility to educate students, and expressed the following views on what a teacher's personality should be:

- Be calm and serious in dealing with children;
- Pay attention to how students master the knowledge imparted;
- Use of different methods and forms in education[25];
- Knowledge of the student's memory, ability to acquire knowledge, personal characteristics;
- Be interested in science;
- Distinguish the most important knowledge;
- To impart knowledge in accordance with the age and mental level of students;
- Every word should be at the level that evokes children's emotions.

During the reign of Muhammad Taragay Mirzo Ulugbek, science, literature and art, enlightenment developed rapidly[14]. Ideas such as classroom teaching systems, age-appropriate teaching of children, and the timing of educational activities have also been put forward and implemented to some extent. At the same time, Ulugbek attached great importance to the knowledge and skills of teachers and educators on human qualities. Their material needs were met by the state, and the most skilled teachers were honored. At the same time, he demanded that teachers participate in scientific research in addition to teaching.

## Analysis and Results

Similar views have been expressed by Western educators. For example, Disterverg said, "A good teacher will never back down from his or her discipline. A teacher must always work independently, a bad teacher can tell the truth, and a good teacher can teach children to find the truth. "



The urgent task today is to organize the education system in Uzbekistan on the basis of national ideas and requirements of the younger generation, to ensure that it meets the prospects of social development and world standards[15].

The common task of the education system is to radically reform the education system, cleanse it of the remnants of the past and raise it to the level of developed democracies, to train highly qualified personnel who meet the highest moral and ethical requirements for the development of society[26].

Theoretical and methodological armament of the education system aimed at the full development of the individual is the main goal of pedagogy today.

Successful fulfillment of the high but honorable tasks described above requires high professionalism, knowledge and broad outlook from each pedagogical staff.

Pedagogical skills are the highest example of a teacher's creativity, which is formed over the years. His mastery is a complex process and one of the most pressing problems in pedagogy[16].

Along with the many qualities that characterize the teaching profession, it is important that he or she acquires pedagogical skills. Only a teacher with high pedagogical skills can be competent and talented in his profession.

To be successful, every teacher must have high pedagogical skills and a broad outlook. Only then, with a little effort and great results, creativity will always be his partner. Only a talented person with pedagogical skills can have pedagogical skills. In order for pedagogical activity to be effective, the teacher must have a deep knowledge of the subject, an understanding of related disciplines, be able to explain the material in a way that is understandable to students, encourage students to think actively and independently[27]. He must be able to take into account the knowledge, level of maturity and mentality of the students, to imagine what they know and what they do not know yet[7]. A gifted, experienced teacher is able to put himself in the shoes of a student, based on the fact that what is clear and understandable to adults can also be something that is difficult for students to understand and abstract. Therefore, he carefully thinks and plans the character and form of the narrative.

The teacher should conduct psychological observations related to the student's ability to access his or her inner world and to better understand the student's personality and his or her temporal mental state. Such a teacher is also quick to notice changes in the student's psyche[17].

In a teacher, speech is the ability to express one's thoughts and feelings clearly and vividly. This is very important for the teaching profession.

The teacher's speech should be clear, vivid, figurative, bright in pronunciation, expressive, emotional, without stylistic, grammatical and phonetic defects.



Teacher prestige is the ability to directly influence students emotionally and voluntarily and gain prestige on that basis[28]. Reputation is gained not only on this basis, but also on the basis of the teacher's knowledge of the subject, kindness, gentleness, and so on. This ability includes a whole set of personal qualities of a teacher, including his volitional qualities. depending on[18].

The qualities of a teacher's profession, that is, high pedagogical skills, do not form in him all at once. It develops through hard work, research and skills.

The acquisition of high professional skills by teachers is carried out directly through the system of continuing education. Skills development, which plays a key role in the system of continuing education, allows students to analyze their performance and provide them with future directions.

Today's world requires a teacher to have a correct understanding of the requirements of advanced pedagogical technology of teaching, to be proactive, to be aware of innovations in their subject and to be able to introduce them into their lessons[19].

The level of cooperation between teachers and students in the educational process, the successful solution of the problem of creating a friendly environment, the level of knowledge, skills and personal qualities of science teachers and school management will depend.

The teacher first:

- Gentle, open-faced, sweet-spoken, loves children as they are;
- Understand that love is the power to motivate students, to create a friendly atmosphere in the classroom, and to motivate students to learn;
- A deep sense of responsibility for the fate, happiness and future of students, respect for their dignity and dignity;
- In any pedagogical situation, students should refrain from rudeness, insults and shouting, threats and intimidation[29];
- To be able to understand students, to appreciate their feelings, to help them overcome their worries and anxieties, to know their peculiarities, interests and needs in youth and psychological development[8].

The fair and democratization of the education system in our country reveals a special demand for the educational process and a unique pedagogical approach. The essence of this process is radically different from the previous one[20].

This requires that students, teachers, families, and communities work together toward a common goal in the field of education, that is, mastering the requirements of the SST and achieving results above its norms.

One of the main factors in meeting the requirements of the SST is the introduction of new pedagogical technologies in the educational process with effective results.





The use of advanced pedagogical technologies in the educational process, increasing the effectiveness of education, the implementation of scientific achievements in practice, the task of educating creative, socially active high-spirited youth who can think independently is important[21].

In order to impart modern knowledge to young people, a teacher must first be equipped with such knowledge. After all, the basis of success in the system is determined by the quality of the teaching process organized in schools. Improving students' life skills and competencies during school hours depends on the teacher's professionalism[30].

The result of the educational content is that the student is able to express their independent opinion, choose their direction and prove the views on which it is based, to develop the skills of preparation of young people for independent living, if taught to defend when appropriate clearly visible[22].

### **Conclusion/Recommendations**

The demands on the teacher's personality in education reform are increasing day by day. One of the problems facing the science of pedagogy is the problem of working conditions of teachers and educators. At the heart of the teacher's multifaceted and complex work is the task of educating the younger generation in an educated and moral manner.

In this regard, today the following requirements are set for the teacher:

- In-depth knowledge of the subject and adequate mastery of its methods;
- Have a broad scientific outlook and deep faith;
- Deep understanding of social needs and moral necessity;
- Deep understanding of social and civic duty;
- Be socially and politically active;
- Love of their profession and children;
- Spiritual pedagogical alertness and aspiration for innovation;
- In-depth study and promotion of the history, national values and traditions of their people;
- Have the qualities of pedagogical observation, organization, assertiveness, perseverance, composure, honesty, self-control;
- Must be fully qualified for the profession and have pedagogical tact (etiquette)[9].

In the modern education system, the development of a free personality through the formation of competent knowledge, the formation of children's independent thinking, the acquisition and application of knowledge, quick and careful decision-making and clear planning of actions, effective cooperation in different groups, openness to new



relationships. attention is being paid[23]. This requires the widespread introduction of alternative forms and methods of competency acquisition, along with learning activities. In this case, the widespread use of methods of developing children's abilities, the use of new pedagogical tools in the classroom, such as interactive methods, multimedia, gives effective results[10].

In short, it is important for every educator in the education system to focus all their knowledge and experience on improving the education system.

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