## SCIENTIFIC RESEARCH METHODOLOGY OF VOCATIONAL EDUCATION

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## Resume

In this article, the main tasks of education today, directions of professional education, the laws of the Republic of Uzbekistan "On Education" and "On the National Program of Personnel Training", the President of his "Great Future" "Legal guarantee", the directions and specialties of vocational schools and colleges, the basis of the personnel training system in continuous education, the teacher's identification of problems based on the study of literature and practical work are discussed.

**Keywords:** professional education, the main tasks of education, interest in their professions, direction and specialization of colleges, modern techniques and technology, continuous education.

One of the main tasks of education today is to provide the education system with modern pedagogical technologies. The purpose of the teaching process is to ensure the unity of education, upbringing and development. However, the problem of developing the abilities, consciousness and skills of the students, and deepening their scientific and practical knowledge in the training of pedagogic personnel in the fields of professional education is even more important. These features help to develop the abilities of future learners, to increase their interest and responsibility in their professions. The problem of improving students' creative abilities in the process of teaching is complex and multifaceted. That is why it is important to develop the interest and ability of students in improving their scientific-theoretical and practical knowledge.

Laws of the Republic of Uzbekistan "On Education" and "On the National Program of Personnel Training" and the Cabinet of Ministers "Measure to organize secondary special vocational education in the Republic of Uzbekistan - on the activities" of May 13, 1998 No. 204, in order to ensure the implementation of the content, to organize a new system of secondary special, professional education in accordance with the state educational standards based on the requirements of the time, the Ministers Court decisions have been developed. In accordance with it, the curriculum developed by the Center for Secondary Special Vocational Education of the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan and pilot-tested in 1998/1999 and 1999/2000 academic years The state

educational standard of secondary special and vocational education has been developed.

In his brochure entitled "Legal guarantee of our great future", the President states: "In order for an educator to become a teacher, to cultivate the intelligence of others, to enjoy the benefits of enlightenment, to grow into a true patriot, a true citizen, first of all, the educators themselves must meet such requirements. should have such qualities." This thesis, in turn, requires teachers-educators to have high professional and personal qualities. Therefore, the tasks assigned to the teacher are very complex, responsible and at the same time honorable. Our Republic, which has set itself the goal of becoming one of the developed countries, is trying to introduce advanced technologies in the field of education, as well as in all sectors of the national economy, and thereby bring the content of education to the level of world standards.

Based on the direction and specialization characteristics of vocational schools and colleges, the educational system should be integrally connected with production processes. For this purpose, vocational education teachers are required to improve the teaching methodology of special subjects, professional-pedagogical skills and practical skills. Currently, based on the need to adapt to world standards, it is very important that the main part of professional education teachers - personnel should be able to deeply understand and analyze modern techniques and technologies, to have the level of creating modernity. In the educational process, it is desirable to use modern pedagogical technologies and active learning factors, to implement modern technical tools, to encourage students to work more independently, and to widely use various ways of teaching lessons from best practices. Another important aspect is the effective organization of training of special subjects in order to develop professional inclinations, abilities, knowledge and skills of students studying in vocational schools and colleges, to acquire one or more modern professions according to their chosen directions, this process is supported by modern textbooks, educational it is necessary to provide with manuals.

Nowadays, it can be said that vocational education is steadily and consistently moving to a new state of quality. The reason is that many important events in the life of higher education in recent years are connected with the development and implementation of the third generation educational standards. Through the modernization of higher education, new tasks are set before us, and educational classes are being organized based on new approaches and new innovative methods of teaching. Today, it can be said that it is a world demand to inform the educational process, to direct students to the profession regardless of their

level of knowledge, to improve their intellectual potential, to increase their interests, and to move them to a higher level of knowledge development. The ability of people to live in a multicultural and rapidly changing world depends on education in many ways, and the professional qualifications and skills of a teacher are determined by the quality of his pedagogical activity. The teacher becomes a figure of society, directly and indirectly participates in changes in society. That is why recently there is a lot of talk about the role and influence of the teacher in society, and the demand for educated teachers is increasing day by day. The peak of active protest of the teaching profession in the society has passed. This is also confirmed by surveys conducted among students.

At the present time, when science is becoming an endless ocean, the teacher of vocational colleges is required to clearly justify the theoretical and practical direction of organizing and conducting the educational process. To do this, it is impossible to imagine a teacher without a deep study of the methodology of science, the practice of the theory of his subject. Thus, in our household traditions, education has long been understood as a two-sided process - education and training. It is known that knowledge without a moral foundation is a sword in the hands of a madman. Therefore, I believe that it is necessary to pay serious attention to the formation of the readiness of future teachers to solve educational problems, as well as the training of personnel in institutions. Now we know how important the spiritual and moral environment in society is. Education (schools, vocational colleges and universities) or, in other words, people's learning is the main factor in the development of a morally healthy society. We should not forget that the school is one of the few social institutions where all citizens of our country are taught life lessons. A truly invaluable teacher who is skilled in many fields of science and technology, pedagogy and psychology, who can combine humanity and demandingness, who has an inquisitive research mind, high culture and, of course, love and skill for his subject. is necessary. The combination of these qualities helps to fulfill the main task of a teacher. In our opinion, it is necessary to have higher education institutions that implement the principles of fundamental education, have strong scientific schools, post-graduate studies and doctoral studies, and are actively engaged in innovative activities.

Continuing education is the basis of the personnel training system and a priority area that ensures the socio-economic development of the Republic of Uzbekistan and meets the economic, social, scientific-technical and cultural needs of the individual, society and the state. Continuous education creates the necessary conditions for the formation of a creative, socially active, spiritually rich person and

the training of highly qualified competitive personnel. The work of transferring educational institutions to the regional direction and changing their structural structure will be carried out. Monitoring of development of continuous education system and evaluation of its effectiveness is carried out. Training and retraining of pedagogues for the continuing education system is a priority. Continuity of education means that a person has the opportunity to receive education from birth to the end of his life. Such a system is reflected in the "Law on Education" of the Republic of Uzbekistan. Vocational education - in-depth development of students' professional inclinations, abilities, knowledge and skills allows them to acquire one or more modern professions in their chosen directions.

The purpose of conducting scientific research on the problems of vocational education is to develop and implement effective methods of teaching and learning, to find a solution to the problem of using technical tools. In order to conduct scientific research, a teacher needs to have a deep knowledge of the content of the subject. Many future pedagogues are engaged in pedagogical research during their student days. They prepare methodological instructions, models, and materials for independent work. They improve their pedagogical skills by participating in scientific conferences and seminars with their lectures. The process of scientific pedagogical research can be conditionally divided into the following stages:

- 1. The teacher's determination of problems based on the study of literature and practical work, the teacher must determine the following during the study of literature:
  - opinion of the author of the literature about the studied problem;
- his suggestions about the problem being played, different from the methods;
  - which main issues are not covered in the literature;
  - research to solve the problem.

The following are the problems that arise during the training process:

- difficulties faced by the teacher during training;
- causes of deficiency and difficulties.
- 2. Step-by-step organization of training.

By comparing the evidence, a recommendation is made.

3 Formalization of research results and application in the educational process.

General and special methods of scientific research are used in the teaching methodology of special subjects.

Cross-sectional methods include theoretical research, observation, interview, and research.

Theoretical method - research conducted on the basis of reading and analysis of literature and pedagogical experiences. Books and journals, articles and patents, scientific works, collections and catalogs, information obtained from the Internet system are used in working on literature.

Observation is used to take into account changes in students' learning of subjects, their behavior and behavior, and to determine ways to provide appropriate educational influence through natural observation. This method is the researcher's perception of a certain aspect and phenomena of pedagogical experience with a goal in mind. It takes into account the speed and number of observations, object of observation, time, description of pedagogical situations for observation, etc. Observations depend on species depending on the recording method. The method of direct and indirect recording allows the researcher to record the behavior of the observer in the real pedagogical process. The direct recording method allows you to obtain evidence about the consequences of an event through other people or by using some kind of instrument. In the age of scientific and technical progress, visual methods of observation are increasingly used by using various technical means (film, video, television).

The interview method, being a type of questioning, requires serious preparation by the researcher. Because it is done in the form of an oral conversation, without writing down the interlocutor's answers, during direct contact with the person being examined. It is used in the interview method - when working individually and in groups with teachers and students, parents and the general public. In contrast to the interview method, the interview method involves the consistent presentation of predetermined questions. In this case, the answers are recorded on magnetic tape or cassettes. Today there are many methods of interviewing in the theory and practice of public inquiry

there is. These are:

- in the form of groups;
- fast;
- testing, etc.

When studying students' creativity, factors related to their specific individual activities are analyzed and conclusions are made.

Pedagogical inquiry method - the process of the researcher obtaining information from other people about some aspects or events of the pedagogical experience forms the basis of this method. The questioning method implies a

logically thought-out system of questions, their precise expression, relatively few (3-5) questions. It can also require a definite answer ("yes", "no").

Tests, questionnaires - a survey, that is, a questionnaire method, are conducted in order to determine the novelty of a scientific hypothesis, to find out the thoughts, views, opinions of students individually or in groups, what kind of profession they are interested in, their future dreams, and to draw appropriate conclusions and make recommendations.

The purpose of the test questions is to evaluate the knowledge of the students in a short time.

One of the ways to determine the knowledge and worldview of a specialist is a test with the help of a test.

With the help of the test, the test allows you to immediately determine or evaluate the knowledge, science, spirituality, as well as the direction and specialization of the young person, and the talent of the student or specialist. The advantages and disadvantages of the educational evaluation using the test are presented and it is noted that the evaluation process can be automated using EHM. The reason for the accuracy of the test questions and problems is its shortness and conciseness, the presence of the correct answer among the common answers and their guidance to the students, its similarity to a puzzle game, and the memory, internal feelings and ingenuity are at hand. Printing test questions will further activate students' independent work.

The method of conducting tests is the method of mass collection of written answers. Developing test questions (questionnaires) is a simple scientific process. Ultimately, the reliability of research results depends on the content of questionnaires, the form of questions, and the number of completed questionnaires. Usually, the test questions are designed to allow working with data using mathematical statistics methods.

Experimental method - this experiment is conducted in order to verify and determine the practical processes of a scientific hypothesis or practical work related to the educational process.

The method of statistical data analysis is the continuous increase of the allocated funds in the field of education, textbooks and training manuals, visual aids, teacher training, construction of educational institutions, economic contracts. and the funds coming from them are determined by the statistical method.

Methods of mathematics and information technology - theory of teaching, translation from one language to another language using computers in practice, programmatic education and its control by machines, strengthening of teaching,

increasing the effectiveness of education through assessment, differentiated and individualized teaching It consists of processes such as education.

Social research method - in which questions are included in the questionnaire. The goal is to determine students' interest in professions, friendships between students, learning conditions, achievements and shortcomings, interest in religion, especially in Sufism, students' spiritual qualities, enthusiasm for learning, the level of provision of literature, educational distribution, the level of teaching by teachers, the level of the quality of training manuals, studying the types of training on the computer, training in improving professional skills type of education, financial support of parents, their education, workplace, public places frequented by students, place of residence, decisive factors in becoming a specialist, level of awareness of students, being a perfect person questions about the level of spiritual qualities and mastery necessary for All questions and answers are edited on the computer and conclusions are made.

Vocational education for a long time was aimed at educating a well-rounded person, but this event was carried out at the expense of a decrease in the level of formation of professional skills of graduates. This situation did not serve to increase the need to improve professional skills and abilities, improve one's knowledge and self-educate throughout one's life. For this reason, people who lack professional skills, who are far from creative research, who are not good at education and professional work, also got involved in this field. Such mistakes and shortcomings in the higher education system have had negative consequences in our social life. As a result of the reforms implemented in the education system in our republic, special attention is being paid to the issue of special training for professional education for working professions and the formation of professional skills and abilities in the learner.

It is known that professional skills mean that a graduate has acquired high-level professional skills and qualifications, which is reflected in the level of competitiveness of a person in his profession in the labor market. Professional skills are determined by such qualities as the high flexibility of the workforce and the quick assimilation of innovations, the ability to quickly adapt to new production conditions, and the ability to independently choose the field of activity.

At the current stage of education development in our republic, the main task of the science of "Vocational pedagogy" is to prepare specialists who can adapt to the modern production conditions at the level of world requirements, to raise our economy to the level of a great country, and to form a creative approach, not the amount of information provided as the main factor in this process. , it is necessary

to pay attention to training the qualities of independent thinking and application. The increasing attention to professional education can be explained by the following:

- 1. Formation and development of gymnasiums, lyceums, colleges and other types of new educational institutions as a result of educational reforms;
- 2. Organization of vocational education in higher educational institutions, organization of separate departments and faculties;
- 3. It is envisaged that professional pedagogy will become more closely connected with other disciplines, it will be implemented in the future, and new concepts and theories will emerge at the junction of knowledge fields;
- 4. Increasing the types of educational services provided by vocational educational institutions to the population, establishing the production of finished products and providing services to them at their base, introducing advanced forms of labor organization, and others.

Vocational pedagogy studies the laws of education, training, study and development of students, develops criteria for the use of educational, pedagogical and information technologies, establishes the types of vocational education institutions and their management system. This science aims to prepare a person for professional activity, educate the growing young generation, adapt the skilled labor force to the level of new requirements.

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