

**PLANNING OF THEORETICAL AND PRACTICAL TRAINING IN ORGANIZING THE EDUCATION PROCESS OF FUTURE ENGINEERS**

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**Abstract**

This article discusses theoretical and practical training of future engineers in the organization of the educational process, their importance in planning and managing the educational process.

**Keywords:** Education, technology, consciousness, professional education, educational process, education, theoretical, practical training, planning, educational efficiency.

Modernization of the education system, like all areas of our life, remains one of the most urgent issues of today. Creating an innovative educational environment, ensuring its full compliance with international standards is an important factor in successfully socializing our youth to today's rapidly changing social life. The implementation of the "National Personnel Training Program" envisages the improvement of the structure and content of the continuing education system based on modern scientific achievements and social experience. For this, first of all, it is necessary to provide teaching processes in all educational institutions with advanced, scientifically-methodologically based modern methodology. It is one of the urgent problems facing the system of updating the purpose, tasks, and content of education for the young generation. We all have a deep understanding today. Only those young people who can compete with their peers who have received education and upbringing on a modern basis, who are physically and spiritually perfect, and who become mature experts in their profession, will be able to adequately continue the work we have started and raise it to a new level. In order to raise all-around mature and well-rounded young people, it is necessary to have qualified teachers who have mastered their specialty in depth. That's why teachers are faced with a lot of tasks these days. At the same time, students. In any social society, the education of the young generation is organized based on a certain goal. The purpose of education is determined based on the development of social society, its direction of development, and the content of social relations. Today, the main goal of education organized in the Republic of Uzbekistan is to bring up a perfect person.

Staff (specialist, engineer) trained on the basis of advanced science, technology and technology achievements in professional education is a model that fully reflects the image of a perfect person and a mature specialist.

The changes that are taking place in our country require updating the content of the educational system from the point of view of the era. Such updating is carried out on the basis of the Law of the Republic of Uzbekistan on Education and the National Personnel Training Program. In particular, the system of vocational colleges and lyceums was formed as a result of giving a



special place to vocational education in the continuous education system being formed on the basis of the national personnel training program. Vocational pedagogy is enriched with the most advanced methods and trends recognized worldwide. Today, new concepts and theories developed in connection with other fields of science are being developed, awaiting their wide application. Vocational education for a long time leads to the education of 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, to improve one's own knowledge and self-education throughout one's life. As a result of the reforms in the education system of our republic, special attention is being paid to the issue of special training for working professions and the formation of professional qualities in the learner. Planning theoretical lessons and practical training. A theoretical lesson in the field of pedagogy in professional education is an educational and educational process that is planned, directed to a specific goal and managed by the teacher. In this process, the teacher introduces ways to apply theoretical knowledge in practice. Theoretical lessons are mainly held in specially equipped classrooms. Various technical tools can be used in these classrooms. Practical training - basic words and phrases in a theoretical lesson necessary to perform a specific task aimed at a specific goal and guided by the teacher: theoretical lesson, practical training, didactic behavior, lesson planning, conditions, teaching and learning cycle, practical workshop refers to a planned didactic action carried out for the purpose of forming skills and competencies. [2]

Practical training is a component of vocational education and is held in training workshops, laboratories, training camps using real tools at the workplace. The system of vocational education is that theory and practice are separate from each other, that is, theoretical education is carried out in classrooms, and practice is carried out in workshops and laboratories. In the theoretical lesson, it is necessary to ensure that the necessary special knowledge is given earlier than in the practical lesson. In practical training, the teacher should only provide additional knowledge related to work assignments. If in practical training the teacher finds a deficiency in the previous knowledge of the students, he provides the necessary theoretical knowledge. Lesson planning - preparation for the educational process in order to achieve the expected educational results: selection of educational methods, preparation of handouts and educational didactic tools. Taking into account all possibilities, he should try to make sure that there are no changes in the plan once made. For an educator, planning means avoiding mistakes in managing the learning process. For the learner, planning means having a clear idea of the future learning process and what to expect from the learning. Planning of theoretical lessons and practical training can be done at the following levels:

- at the level of the entire educational period;
- at the level of one academic year;
- at the level of one semester;
- at the level of one month;
- at the level of one week;
- at the level of one day;
- at the level of one hour of theoretical class;



Often plans for different time levels are used at the same time. The planning of objectives and content is usually based on a specific plan and is created by the teacher himself. For this purpose, the chosen special field is divided into several topics or material fields. Then there are methods and plans. In this regard, we would like to draw your attention to the "Teacher's didactic behavior" model. The model of the teacher's didactic behavior described above can be used for the purpose of planning a special field. In order to properly plan theoretical lessons and practical training, the teacher should start from his own situation. That is, to answer the question "Can I teach the subject in accordance with the latest modern requirements of science or do I need to prepare separately for this?", "Is there a theoretical lesson plan or a plan for practical training?". After that, the teacher should determine the initial knowledge and skills of the learners. For this, the following basic questions should be asked: What is the level of initial knowledge of the students to conduct a theoretical lesson or practical training?

- What are the conditions for theoretical lessons and practical training?
- What educational content is planned to be taught?

Studying the above questions for planning is the basis for all other preparatory activities of the theoretical lesson and practical training. The relationship between these concepts and questions is clearly illustrated by the following factors. Objectives: Why? Each theoretical lesson and each practical training should follow predetermined goals. It is usually necessary to achieve a specific goal that we can set based on the curriculum. Objectives are included in the theoretical lesson plan in writing, and whether the objective has been achieved or not is checked and reinforced with the help of tests and assignments. Contents: What? The content of the field of knowledge (including skills and behaviors) is determined in accordance with the educational goals. These contents should take into account, on the one hand, the necessary preliminary knowledge (theoretical lesson content) and, on the other hand, the necessary special knowledge (the content of practical training) to complete the tasks.

When planning and conducting practical training, it is necessary to pay attention to the following:

Practical exercises, as a rule, are exercises on solving various practical problems, examples of which are given in lectures. As a result, each student must develop a professional approach to each problem and intuitive solution. In this regard, questions such as how many and what types of tasks are needed in the organization of personnel training at the university, how to organize them in time in the studied course, and what kind of homework to strengthen are far from idle. When choosing a system of exercises and tasks for a practical lesson, the teacher tries to ensure that he has a comprehensive idea of the subject and methods of the studied subject. The methodical function acts as a leader here.

In the educational system, the sequence of lectures and practical exercises is important. The lecture is the first stage of preparing students for practical training. The problems posed in it will have a clear expression and solution in the practical lesson. The lecture has no analogues among other types of lessons. Although each practical lesson is a traditional developmental, reinforcing lesson, etc., the lecture can actively perform the tasks of a preparatory lesson for active perception.



Thus, lectures and practical exercises should not only be strictly alternated in time, but also methodically connected with the problem situation. The lecture should prepare students for the practical lesson, and the practical lesson should be prepared for the lecture. Experience shows that the further the lecture information is from the material covered in the practical lesson, the more difficult it is for the teacher to involve students in creative research. Practical classes of any academic subject are group classes, and although individual work plays a large and important role in mastering the theory of questions, nevertheless, in teaching, they have group classes based on group thinking. (a person cannot learn if he does not think, and the ability to think is the basis for mastering any subject). If there is an atmosphere of goodwill and mutual trust during them, if students are in a state of emancipation, if they openly express their thoughts with the teacher and peers, they will have a significant positive effect.

Pedagogical experience shows that practical training cannot be limited to the development of practical skills and problem solving, drawing graphs, etc. Students should always see the guiding idea of the course and how it relates to practice. The purpose of the lesson should be clear not only to the teacher, but also to the students. This ensures the relevance of educational work, confirms the need to master the experience of professional activity and connects it with life practice. In such conditions, the task of the teacher is to show students the practical importance of leading scientific ideas and fundamental scientific concepts and rules.

Objectives of practical training:

- help students to systematize, strengthen and deepen theoretical knowledge;
- teaching students how to solve practical problems, contributing to the acquisition of calculation skills and competencies, graphic and other types of tasks;
- teaching how to work with books, service documents and diagrams; use of references and scientific literature;

In the system of professional education, students participate in practical training, which is the most time dedicated to self-study. They are an addition to the lecture course and serve as a basis for the qualification of a specialist of a certain profile. The content of these classes and the method of conducting them should ensure the development of a person's creative activity. They develop students' scientific thinking and speech, allow them to test their knowledge, in this regard, exercises, seminars, laboratory work are an important means of sufficiently rapid feedback. Therefore, practical training should not only perform cognitive and educational functions, but also contribute to the growth of students as creative workers. This serves to ensure the effectiveness of education.

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