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"METROLOGY AND STANDARDIZATION"

Abstract: the authors of the article considered various forms of organization of classroom work in the discipline "Metrology and standardization": frontal, individual, collective and combined. The article provides specific examples of the joint and phased use of the considered forms of

"Теория и практика современной науки"

education. It is concluded that individual collective and frontal work activates the learning process, and makes it not only interactive, but also improves learning.

Key words: collective form of work, frontal form of work, individual form of work, self-learning group, collective form of work, interactive learning.

In the Republic of Uzbekistan, a clear concept for the development of the higher education system has been developed, according to which a "phased transition from education, the curricula of which are aimed at obtaining theoretical knowledge, to an education system aimed at developing practical skills" is necessary [1].

Indeed, it is very difficult to overestimate the importance of practical work. Lichtenberg G.K., a German philosopher, wrote: "A person cannot be taught anything. He has to learn everything himself" [2].

Modern, innovative forms of organization of practical classes are collective work. The founder of the theory of "collective way of learning" V. K. Dyachenko, identified four main forms: individual, pair, group and collective, from which, like bricks, fundamentally different things can be built [3]. Let's consider the joint use of individual and frontal forms.

The frontal form of learning requires the teacher to be able to manage the learning process of the entire audience, when all students are working on the same task. The effectiveness of the frontal form of work directly depends on the competence of the teacher, his ability to keep the entire audience in his field of vision. The result of frontal work increases if the lecturer creates a favorable atmosphere of creativity. The frontal form of work can be used in any classroom lesson. But since the frontal work is focused on the average level of knowledge of students, practical work must necessarily be supplemented by group and individual work.

The main weapon of a teacher of a technical university in practical classes is problem solving. On the basis of the theoretical material covered, received at the lecture, the teacher selects the number of individual examples necessary for the group. When choosing tasks, it is preferable to use a differentiated approach, forming at least three levels of difficulty: high, medium and low. Differentiation of students is not a discrimination of their potential, rather, it is a deeper process of individualization of learning.

Most often, students use the "template" method of completing assignments, therefore, to activate the audience, the teacher should solve the first example himself, using the "problem" method [4], or the "question and answer method" [5], organizing the front view of the work. In carrying out his task, the student develops the skills of independent understanding and critical thinking, analysis and synthesis, reflection and responsibility for decision-making. But so, he can work outside the classroom, without the control of the teacher, coming only for consultations. The task of a professional is to organize "mutual learning", the so-called "self-learning", in Dyachenko's terminology, a group.

You can start small - place the task on a presentation slide so that everyone can see all the options at the same time - this saves classroom time and creates a trusting contact, as one of the components of interactivity.

The second step is to invite those who wish to solve the example on the board, but at the same time, call only those who can definitely cope. If there are no worthy students among those who wish, then, using manipulations [6], force them. The third step is to invite the entire audience to monitor the progress of the decision, with accompanying comments. The effect of collectivization can be accelerated by calling two or three participants at once to the board.

As teaching experience shows, when trying to find an error in the solution on the board, the whole group is included in a single, according to the definition of V.K. Dyachenko, the collective process of "mutual learning", when "everyone teaches everyone, and everyone teaches everyone."

Thus, individual work moves to the frontal and turns into a "collective" one, with the realization that "the more I teach others, the more and better I know

myself" [3]. The "self-educational" process, not only does not exclude the control of the teacher - it requires highly qualified pedagogical knowledge, skills and abilities.

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