SCIENCE AND INNOVATION

INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 8 UIF-2022: 8.2 | ISSN: 2181-3337

## ON THE USE OF DIFFERENT METHODS IN LESSONS BY ENGINEERING TEACHERS

## Nazarov Abdulla Abduvakhab ugli

Teacher of the Department of Technological Education at Termiz State University https://doi.org/10.5281/zenodo.7394506

**Abstract.** This article contains some information about the pedagogical skills of engineering teachers, the methods of conducting lessons, what methods they use in lessons, the essence of those methods, their advantages and disadvantages.

*Keywords: profession, four-step method, engineer-pedagogue, laboratory method, exercise method, graphic exercises, production - labor exercises.* 

## ОБ ИСПОЛЬЗОВАНИИ РАЗЛИЧНЫХ МЕТОДИК НА УРОКАХ УЧИТЕЛЯМИ ИНЖЕНЕРНОГО ДЕЛА

Аннотация. В данной статье содержится информация о педагогическом мастерстве учителей инженерии, методах проведения уроков, какие методы они используют на уроках, сущность этих методов, их преимущества и недостатки.

**Ключевые слова:** профессия, четырехэтапный метод, инженер-педагог, лабораторный метод, метод упражнений, графические упражнения, производственнотрудовые упражнения.

The renewal of production technologies, scientific discoveries and the direct transformation of technology into the production force require specialist personnel to independently and regularly deepen, update, complete and expand their knowledge. The training of qualified junior specialists in the system of vocational education largely depends on the professional knowledge, skills and qualifications of special subject teachers and pedagogical engineers. In the process of production education, a system of professional skills and qualifications is created, students will acquire the necessary production experience and professional skills. Therefore, every pedagogue should be a master of his field, a skilled educator, passionate and selfless. He should constantly research on himself, approach his work creatively, and be able to make students interested in science. In order to achieve this, special science teachers and engineer-pedagogues of vocational colleges should be able to use pedagogical technologies in the educational process, know information technologies and they should be able to use modern technical tools effectively in the course of the lesson.

In the educational process, it is desirable to use new pedagogical technologies and innovative methods, to implement newly produced 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 development of knowledge and skills of future general professional, special science teachers and engineer-pedagogues in higher education institutions, new textbooks, educational materials for their chosen profession secrets. It is necessary to provide with applications.

"Four-step method" method - acquisition of practical skills is a four-step method of the process.

This method helps learners to quickly and perfectly learn repetitive hand skills. When the "four-step" method is used, learners are introduced to as simple operations as possible, then

SCIENCE AND INNOVATION INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 8 UIF-2022: 8.2 | ISSN: 2181-3337

repeat and practice until they master it perfectly. This method is explained below; show what to do; return as indicated; consisting of steps such as exercise.

The stages of the "four-step" method are as follows:

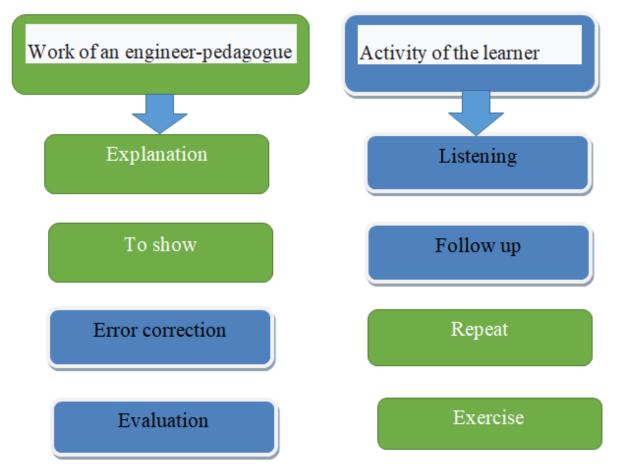
1. At the "Explanation" stage, engineer-pedagogists should first explains the simple operation step.

2. At the "Show what to do" stage, the engineer-pedagogue will show students how to perform the task in practice.

3. Work performed by the engineer-pedagogue at the third stage repeats actions. The engineer-pedagogue expresses his opinion on the activities of the students and corrects their mistakes.

4. At the "exercise" stage, the behavior of the learners is controlled by the engineerpedagogue. After the students have mastered the work, they can do it independently.

The main feature of the "four-step" method is that the students' actions are limited to the range of actions shown by the engineer-pedagogue.



The laboratory method is an educational method in which the student, under the guidance of the teacher, conducts experiments or performs practical tasks based on a predetermined plan, and in the process understands and understands new knowledge.

The main function of the laboratory method is to teach and develop new knowledge:

Using this method, the teacher provides students with the following opportunities:

- acquiring the skills and qualifications of using equipment;
- choosing new ways of independent research and the known ones check;

SCIENCE AND INNOVATION INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 8 UIF-2022: 8.2 | ISSN: 2181-3337

• acquiring practical skills: measuring and calculating, reproducing the results performance and comparison with previous ones.

The method of training is to carry out the planned actions many times in order to apply the learned materials in practice.

The main functions of this method are: educational and developmental. This

the advantage of the method is that it provides effective formation of skills and qualifications, its disadvantage is that it performs the motivational function poorly.

There are the following types of exercise: special; interpreted; written; oral; production - labor; laboratory - practical.

The explained exercises serve to activate the educational process, to perform educational tasks consciously. Their essence is that the teacher and students interpret the work being done, as a result of which they are mastered and understood. First, the best students are involved, and then the whole group participates in explaining the material. The described method of exercises ensures a high pace of training, helps all students to master the material consciously and firmly.

Oral exercises are related to the development of speech culture and logical thinking of learners, their cognitive abilities.

Written exercises - Their main task is to form, deepen and strengthen the necessary skills and qualifications. Therefore, they should be sufficient and different.

Graphical exercises are used in mathematics, physics, drawing, geography, drawing classes, and in the process of studying production.

Laboratory-practical exercises make it possible to acquire the skills of using labor tools, laboratory equipment (equipment, measuring devices), develop constructional and technical skills.

Production - labor exercises form a specially developed network of educational and production nature. They are simple and complex: the first one is the exercise of performing individual labor methods, the second one is production - the labor works as a whole or their main part (setting of machines, preparation of detail parts, etc.) are envisaged.

To sum up, the fact that engineering teachers organize lessons using different methods in classes is important for improving the quality of teaching subjects, for students to acquire knowledge even faster, and it is also very important to remember the given information more.

## REFERENCES

- 1. M.U. Dekhkanova "Methodology of Vocational Education" study guide. T-2013 148b
- 2. Shomirzayev M., Avazov J. Some aspects of the training of future engineers in the higher education system // tsentr nauchnyx publikatsiy (bukhdu.uz).-2021.-T.4.-№4.
- 3. Shomirzayev M.X., Yuldashov K. K. Student-Folk Craft for Young People Teaching History as a Factor of National Education //International Journal of Multicultural and Multireligious Understanding.-2021.-T.8. -№. 8. -C. 475-486.
- 4. ShomirzayevM.X. Pedagogical technologies-as a factor to increase student knowledge in school technology classes/current research journal of pedagogics.-2021.-T.2.-№.05.-c.84-96.
- 5. N.A. Muslimov. Professional formation of future vocational education teacher. Tashkent: Science, 2004. 128 p.
- 6. R. Ishmuhamedov, A. Abdugadirov, A. Pardaev. Innovative technologies in education. -Tashkent: Iste'dod, 2008. - 108 p.