

METHODOLOGICAL WORKS ON THE SCIENCE OF TECHNOLOGY

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Abstract:	Keywords:
In this article, the current tasks and educational processes of technology science in general secondary education schools, the organization and implementation of methodical service in technology science in the general secondary education system, methods and forms of methodical work organization, information about the content and methodical work management system is covered.	methodical work in the science of technology, tasks of scientific-methodical work, forms of methodical work, methods of methodical work, content of methodical work, methodical board, management system of methodical work.

Currently, in our republic, it is necessary to raise the quality of school education to a new level, to form a healthy, strong and effective motivation to study in students, to teach them to independently plan their professional growth, to acquire modern professions in the conditions of the digital economy. great attention is being paid to the education of the ability. "In order to effectively organize the educational process in educational institutions, the development of practical scientific researches aimed at studying new, including alternative approaches and scientific justification, without changing the study periods, by students Expanding the use of modern educational technologies that ensure the expansion of mastering competence" are defined as the priorities of improving teaching methods and gradually applying the principles of individualization to the educational process.

In order to organize scientific and methodical work in general education schools based on the requirements of the times and lead it, the head of the school should be both a good pedagogue and a specialist who knows the secrets of the profession well at the same time. He should learn independently and study the content of scientific and methodical works and issues related to their organization through training courses. Among the tasks of scientific and methodical work organized in general education schools are the following:

- to improve the scientific-ideal level and pedagogical skills of pedagogues and technical staff of the general education school;
- improving the content, form, methods and means of educating students in the spirit of national independence;
- unity of education, upbringing and development goals, ensuring coherence of general scientific, general professional and special training;
- consists of learning, summarizing and introducing advanced pedagogical and production experiences, scientific and technical achievements into the educational process. Participation in scientific-methodical work is mandatory for all leaders, teachers, engineer-pedagogues in secondary schools and is an integral part of their pedagogical activities. The content, direction, and structure of methodical work in general education schools are

determined by the regulation on methodical work. In accordance with this regulation, collective and individual methodical work is carried out.

The following are among the forms of collective methodical work:

- pedagogical council;
- methodological commissions;
- school of advanced practice, problem seminars, scientific-methodical conferences, pedagogical studies and various methodological councils. Individual methodological work is carried out in the following forms;
- independent methodical work of general education school leaders, teachers, and other technical staff on improving their ideological and political level, pedagogical skills and professional skills;
- individual methodical work with the head of the school (principal), his subordinates, teachers, pedagogues and other technical staff.

High efficiency can be achieved only if methodical work is coordinated in terms of form and content, as well as in terms of coverage of different groups of pedagogic employees. The experience of organizing methodical work on the basis of a common theme in a general education school is one of the methods of such coordination. The essence of such organization of methodological work is that the school of general education studies a general topic for a certain time. As a result, it makes a certain contribution to solving the current problems of improving the educational process, taking into account the level of training of various categories of pedagogical staff, it allows to successfully implement the tasks of improving their pedagogical skills.

Methodical work should be planned as an independent department in the perspective and current work plans of the general education school. The issues of organization and effectiveness of independent work are reflected in the internal control plans of secondary schools.

When planning methodical works, it is appropriate to be based on the following requirements:

- foreseeing future development (by deadlines and tasks);
- development of plans based on comprehensive study and analysis of the situation and results of educational and methodical work;
- creating the necessary opportunity to demonstrate the creative character of the plans, that is, the initiative and creativity of the employees participating in their implementation;
- harmoniously combining collective and individual forms of methodical work;
- the possibility of quick verification (indication of the executors of the accuracy of records and execution periods).

Taking into account the variety of forms and goals of methodical work, its attraction to pedagogues of different groups and categories, coordination of the content and duration of events, elimination of repetition of one work, and improvement of its effectiveness have long been used in the pedagogical practice of "Methodical work" general plan" will be drawn up. This work paid off in pedagogical experience. In such a plan, all methodical works in the general education school are coordinated according to the system, calendar

periods and important events. The main goal of the teacher of technology is to improve their skills. This is an important tool for improving educational work. This work greatly helps teachers in their work with students, increases their spiritual and educational level, pedagogical and production skills. It should be noted that the methodical work of teachers is based on their independent work in this field.

This work should be aimed at a specific goal, be carried out regularly and be reflected in educational work. Methodological work of teachers should be carried out under the direct supervision and guidance of school leaders. In general education schools, independent methodical work is carried out together with collective work.

A technology teacher should always work on improving his pedagogical skills and improving his qualifications.

Teacher training institutes will help him a lot in this regard. Short-term courses are organized in these institutes, where teachers get acquainted with achievements in the field of science and technology, advanced pedagogical experiences. Of course, these courses cannot cover all teachers. Therefore, together with the course preparation, methodical work is carried out on a regular basis.

Usually, they do some methodical work. This imposes additional responsibility, forces them to work diligently on independent education and be an example for their colleagues.

The technology teacher plays a leading role in teaching students the methods, forms, and content of methodical works. The state of the educational process, the level of preparation of students depends on the teacher's professional qualifications, pedagogical skills, and the level of culture. Individual methodological work is carried out according to the plan drawn up for the whole academic year. It provides that a teacher, that is, an engineer-pedagogue, performs individual methodological tasks in order to deepen his pedagogical skills and knowledge. They include; preparing lectures on pedagogical topics; creating methodical instructions on the most difficult subjects of the curriculum; problematic research that requires a lot of work. These assignments are a mandatory minimum for every pedagogue.

A teacher's work plan should consist of four sections:

1. Raising the ideological and political level.
2. Improving methodological and pedagogical skills.
3. Expansion and deepening of scientific and technical knowledge in the field of the type of work being taught.
4. Improvement of knowledge and skills in the field of organization of pedagogue's work on a scientific basis.

This plan will be reviewed and approved at the methodical board meeting. Teachers' reports on the implementation of this plan will be heard. When developing materials for raising the ideological and political level, it is necessary to consider the life and production of the present time. It is necessary to study the published works, documents of the President's decisions on general secondary education, participate in political seminars and theoretical conferences, get acquainted with current politics through the press, radio, and television, and stay in practical work. In the lectures, instructions, and recommendations prepared in the process of improving methodological and pedagogical skills, it is intended to improve

the form of educational work with students. During the independent work of the teacher of technology education, he should regularly familiarize himself with scientific journals and works related to labor education, and improve the quality of training in his methodical skills, preparing new methodical instructions, students' to solve the problem of activation of cognitive activities, and to help spread advanced pedagogical practices among other teachers. The teacher who entered the theory classes to check that the lessons have a calendar theme and a plan for each lesson, as well as lesson plans; compliance with the lesson plan and program; that educational tools are effectively used; assessment of the implementation of educational work in the lesson and its implementation, the appropriateness of the type of lesson chosen to solve the set goal; he should pay attention to the correct selection of the structure of the lesson, the distribution of time, and the preparation of the teacher and students for the lesson. To expand and deepen the scientific and technical knowledge in the field of the studied field of work, regularly study advanced technology and rational work methods, technical innovations, participate in scientific and technical seminars, listen to lectures on technical topics, go to exhibitions is achieved by visiting, participating in excursions to advanced enterprises, etc. Practical skills and qualifications are improved by mastering advanced work methods under the guidance of qualified methodologists and with the participation of production leaders. Improving knowledge and skills in the field of organization of pedagogue's work on a scientific basis; developing scientifically based documents to be used in labor education classes; it is achieved by determining the regular supply of educational workshops with the necessary materials and equipment, organizing the workplace on a scientific basis, and using the most effective instructional and technical means of education.

Preparation of didactic materials. Preparation of tools used as a source for theoretical and practical training is also part of methodical work.

Preparation of educational and didactic materials means their selection by the teacher and adaptation to the purpose of theoretical or practical training. If there are no ready-made tools, then the teacher has to prepare them himself. When preparing educational and didactic materials, the teacher of labor education should pay attention to the following, taking into account the limited time and technical capabilities:

- worksheets, handouts (copies of printed texts), slides, sketches for the blackboard;
- questionnaires for written assignments, written and oral tests;
- assessment sheet, control sheet; - work plans, organizational documents.

Materials for the teacher include not only information related to the field, but also information on organizational work, methods and evaluation of results. And the materials for students, as a rule, contain only aspects related to the field.

Didactic materials may differ from Teaching materials if they are intended for students. For example; worksheets, quizzes, guiding method questions and specific handouts.

One of the newest methods of preparing handouts is color separation of texts;

- white papers: texts on content aspects (for teachers and students);
- green papers: tasks for students;
- red papers: methodical documents of the teacher and answer sheets of assignments.

Color coding also makes documents easier to use. Also, today there are wide opportunities for preparing various educational and didactic materials using computer technologies.

Management of the educational process as a methodical work management system is carried out by organizing the activities of the pedagogical team. Therefore, the pedagogical team is the main object of methodical work management in the educational institution. The pedagogical council of the school determines the specific forms of methodical work in the general education school. The head of the school (principal) is in general management of methodical work. He approves the plan of methodical work, directs the work of the pedagogical council, conducts instructional-methodical meetings, analyzes the trainings conducted by teachers, supervises the methodical work of individual teachers, presents to the higher authorities in the school he leads. reports on the state of methodical works. The deputy director for educational affairs is the organizer of methodical work in the school as a whole, as well as methodical work conducted in science associations. The methodical work conducted with class leaders is supervised by the deputy director for educational affairs, and the methodical work conducted with teachers of general education is supervised by the head of the scientific department. In the comprehensive school, teachers' methodical work is carried out together with collective work. The most important of the collective methodical works are the methodical meetings organized by subjects. Issues considered in method associations may include the following;

- 1) studying new curriculum, textbooks, manuals and methodological works;
- 2) studying methodical guidelines and orders, developing measures for their implementation;
- 3) discussion of educational and production work, educational and technical documents, time standards for various works, organization and equipment of students' work;
- 4) development of methods of study of subjects of the curriculum, organization of verification work and determination of qualifications;
- 5) holding open classes and discussing the results.
- 6) methodology of teachers' educational work in classes, extracurricular activities;
- 7) the teacher's information on issues such as learning about scientific and technical achievements, advanced labor experiences with students.

In conclusion, the pedagogical council is the collective leader of the educational process in the general education school. This council provides the director with guidance on educational and organizational work. The council conducts its work under the leadership of the director. The pedagogical council deals with the following issues;

- 1) discusses the results of the school's semi-annual academic work and qualification exams;
- 2) determines teacher training and retraining, listens to teachers' lectures on their work experience;
- 3) takes care of issues related to mastering of lessons, participation in lessons, educational work of masters and teachers with students in educational groups;
- 4) implementation of curriculum programs, etc.

Collective forms of technical and pedagogical qualifications of teachers can be seminar training, pedagogical training and other forms.

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