DEVELOPMENT OF LOGICAL THINKING AND CREATIVE APPROACHES IN ORGANIZING INDEPENDENT ACTIVITY IN THE PROCESS OF CONTINUOUS EDUCATION

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Abstract. *This article discusses the methodological foundations for the formation of the content of educational programs of schools, vocational colleges, higher educational institutions according to the modular system, in the development of the psychological and pedagogical foundations of the modular system of teaching a particular subject.*

Keywords: *modular approach in education, educational system, methodology, educational programs, continuously education, unity, professional college.*

In order to develop the psychological-pedagogical basis of teaching on the basis of the modular system in the creation of modular education in the continuous education system, it is necessary to first form the content of the educational programs in the modular system. For this reason, in this place, the student is required to analyze and study educational and regulatory documents based on the materials he got acquainted with during the pre-graduation practice [1-17]. First, it determines the correlation between the curriculum and the subject programs. Then the studied subject determines which educational direction of the school or vocational college is intended to be taught in which course of the training course for junior specialists and in which semesters in how many hours in total. Analyzes how many hours are allocated to classroom training and how many hours are allocated to self-study out of the total number of hours assigned. In the course of the analysis, he dwells on the shortcomings encountered in these educational and regulatory documents and presents his recommended improved optimal options for modern vocational education based on the requirements of the state and society in the integration of modular technology into the content of science.

It then breaks down the subject content into major modules. The content of each identified major module is divided into separate sub-modules and the total number of hours determined for their teaching is determined. It is desirable that the content of small modules should be in the scope of a 2-hour training session. Then the teaching technology of each sub-module is developed. To do this, first of all, the learning goal of the module is determined, and then the result expected during the entire lesson is determined in advance.

All modules are viewed based on a specific structure. Including:

1) basic questions are prepared according to the module;
2) after the completion of the learning process of the module, the expected results that are formed in 3 different forms (through words such as ***"knows, understands, can do"***) are determined;
3) the symbols representing the core of the module content and the structure of tasks in the form of a drawing depicting its main ideas in a drawing form are researched;
4) a display of presentations on tasks is created;
5) informative and theoretical materials on questions and assignments for self-control are collected;

6) a methodological part is developed on the consistency of interactive methods used in the course of teaching the module;
7) test tasks are created for self-control;
8) a glossary of concepts and terms used in the module is given;
9) a list of used literature is provided.

In the process of teaching a subject, in the process of providing creative mastery using invariant test technology, the student researches the pedagogical problem of providing creative mastery of vocational education using invariant test technology. Reveals the importance of test technologies in the formation of creative mastery in vocational education and identifies the specific aspects of tests created within the framework of special subjects [2-205].

It sheds light on the content and ways of using invariant test technology in the process of teaching a given subject and develops a project of training sessions using invariant test technology that provides creative mastery in the process of teaching this subject [3-19].

Educational goals in vocational colleges determine the skills, personal qualities and behavior of the learner at the end of a certain educational process. For this reason, it is important to correctly define educational goals in the process of teaching the subject.

The quality and effectiveness of education is increased by ensuring creative mastery during the educational process. Analyzing one's own work leads to a fuller understanding of creative mastery. All types of self-relation are ultimately manifested in self-demanding [4-172].

If students of the vocational college develop an idea about their future, needs, and interests, creative mastery will be successfully formed and matured. Regular comparison of the present and future "I" of the student forms the ability to master the content and essence of the science program. Formation of creative mastery among students in vocational colleges is connected with two phenomena:

1) regular and interesting organization of the educational process;

2) to understand the need to know better in order to change their attitude towards pedagogues.

If a lesson is conducted using invariant test tasks during the educational process, the student's intellect is interconnected, and in this process, the effectiveness of approaching the objective contradictions of scientific knowledge and their solutions increases. The student learns to think independently and learn creatively.

The work program drawn up on the topic defines the module of topics that should serve the general development and growth of the student's professional skills. The organization of independent and creative work of students in the working program should have an educational, educational and developmental value.

In order to ensure creative mastery using invariant test technology during the teaching of a subject, first of all, it is necessary to study the content of educational and regulatory documents and their application to the educational process. For this reason, at this point, the student is required to analyze the educational and regulatory documents based on the materials he got acquainted with during the pre-graduation practice. In doing so, he first studies the content of the science program and determines the interrelationship of the topics in it. Then the studied subject determines which educational direction of the vocational college is intended to be taught in which course of the preparatory course for junior specialists and in which semesters, how many hours in total. Analyzes how many hours are allocated to classroom training and how many hours are allocated

to self-study out of the total number of hours assigned. In the course of the analysis, he dwells on the shortcomings encountered in these educational and regulatory documents and presents his recommended improved optimal options for modern vocational education based on the requirements of the state and society in ensuring creative mastery using invariant test technology in the process of teaching the subject.

In this 2-hour training session on the topic, the goal is to develop a technological map, a lecture text, a non-traditional form of lesson development, tests, the content and ways of using tests, pedagogical and psychological conditions, the process of using tests in the application of interactive methods, and the criteria for evaluating the knowledge of students who have mastered it based on the test. according to

Independent lesson preparation, regular and thorough mastering of the subjects taught, encouraging the student to approach the educational process creatively, will lead to the emergence and improvement of the student's talent indicators. The primary purpose of an educational test is to assess students' mastery of laws, concepts, and topics in a timely manner. It is observed that the use of educational tests in the course of the lesson has a positive effect.

Control tests are given to periodically check the knowledge and skills of students after passing the topics of a certain section (during the semester or at the end of each semester) or after covering the entire course and repeating the learning materials to check how much they have mastered (transfer from course to course or tests in lieu of final exams) may be given.

When forming an educational-methodical complex from a subject, the student must first collect theoretical information about the educational-methodical materials (educational-methodical complex). Also, it is necessary to determine the composition and content of the modern educational-methodical complex in vocational education, as well as the possibilities of active application of educational-methodical materials to the educational process in vocational education. These collected materials constitute the first chapter of the graduation work.

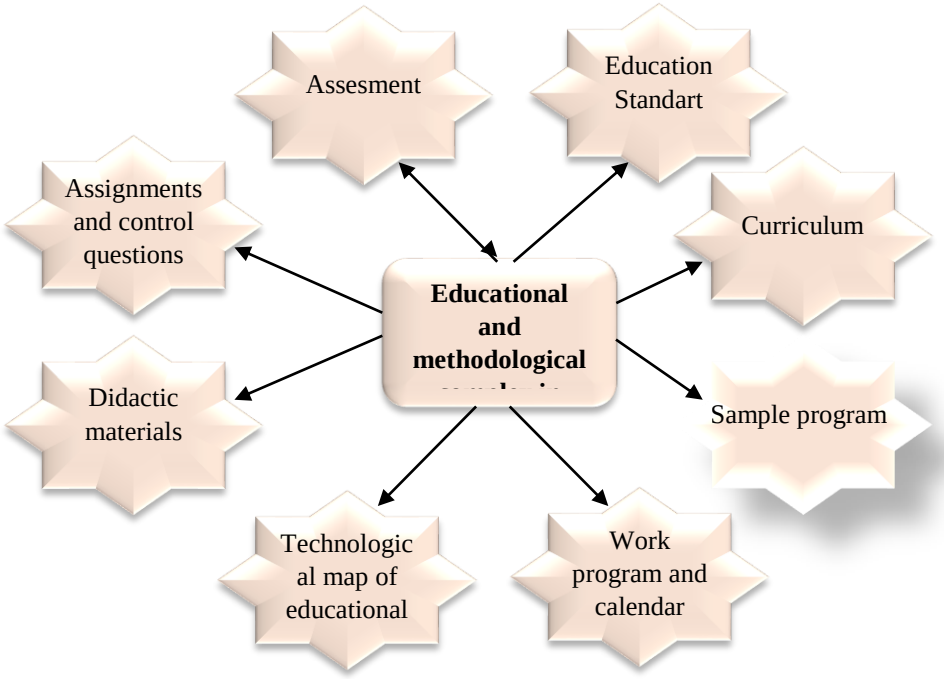

Figure 1. Educational and methodological complex in science

Then the student works on the materials that make up the second chapter of the graduation thesis. In doing so, he develops an educational-methodical complex project for the given subject.

For this, he should familiarize himself with the educational and regulatory documents based on the materials collected during the pre-graduation practice and analyze them. That is, it is discussed about the correlation between the curriculum and the science program, the content of the science program. He describes in detail the shortcomings identified during the study of these educational and regulatory documents, determines the ways of their improvement based on the requirements of the state and society today, and presents the optimal options for modern vocational education that he wants to recommend.

Also, ***when using the possibilities of interactive transmission of information in the teaching of a subject***, the student first collects theoretical information on the possibilities of interactive transmission of information in vocational colleges. In particular, it identifies the problems of using the possibilities of interactive information transfer in vocational education and reveals the possibilities of interactive information transfer in presenting the content of educational materials in vocational education. These data are presented as a pedagogical problem in the first chapter of the work. In the second chapter, he creates a teaching methodology using the possibilities of interactive transmission of information on the topic defined for him. That is, in the process of teaching the subject, he defines the content and ways of applying modern pedagogical technologies and develops a project of training sessions.

REFERENCES

1. Sh.Adinaev, A.Temirov // A model structure of giving students independent tasks in teaching the Java programming language // Physics, Mathematics and Informatics 2/2021, 16-23b
2. Temirov A.A., Habibulloev D.S., & G'ulomov G.J. (2021). General structure of management systems and services of distance education // Academic Research in Educational Sciences, 2(1), 203-212.
3. Адинаев, Ш. Ш., & Закирова, М. Р. (2010). Организация самостоятельной работы студентов в среде информационно-коммуникационных технологий. Казанский педагогический журнал, (4).
4. Абидова, Ф. Ш., Хамрокулова, Г. Т., & Темиров, А. А. (2019). Алгоритм быстрого строкового сопоставления сетевых систем обнаружения вторжений. Мировая наука, (4), 170-177.