

# Methods and tools of module teaching

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*Abstract* – The paper considers the methods and tools of modular training, which is one of the modern training technologies. The task of the teacher or trainer is to develop, compile and apply the appropriate training methods for each module or sequential module. For that, students should first learn to approach the training in accordance with their individual characteristics and styles of training, and students should apply the most appropriate methods and tools of training.

Keywords - modular training, structure, main point, method, program

## I. INTRODUCTION

The aim and task of a modern university is to satisfy the educational needs of each student from the in respect to his tendencies, interests and opportunities. For that, it is necessary seriously to change the attitude of the student and the teacher in the educational process [3].

The new paradigm is that the student learns independently, and the teacher exercises motivational control over learning, that is, uses such tools as motivation, organization, counseling and control. To solve this problem, pedagogical technologies are required, providing students with self-reliance, teamwork and the ability independently manage educational and cognitive activities. This kind technology is modular training [4].

Differences of modular learning from other learning systems:

• The content of the training is presented completely independently: each student receives advice from the teacher in order to present himself more independently, purposefully, to find the necessary educational material.

• Intends to change forms of communication between teachers and students [5].

Hence, each student can determine their level of knowledge, see gaps in their knowledge and skills, as well as correct them in case of need.

The modular learning allows the teacher to individualize the work with students, consulting with each of them and helping them individually. Modular training requires a single modular system based on modular programs. Modular system is a training program consisting of modules. Sections of modules are hierarchical or ranked on the basis of a certain regularity. Each module provides knowledge and skills focused on one competency [3].

Why a modular system?

- It is economically beneficial.
- Covers a wide audience with a social point of view.
- Corresponds to individual requirements.
- Reacts to regional differences.
- Can be applied to local committee and all other organizations.

The main features of the modular system as a training system are:

- The time of training and development of students is clearly defined.

- Actions related to learning affect the continuity of learning.
- Rules, standards, evaluation, guidance, documentation are in the structure of each module and in the whole system.

The module consists of educational activity, based on individual training, with the beginning and the end, forming integrity within itself, regulated in a systematic framework.

Each module, the purpose of which is to ensure that students have achieved a specific goal, consists of defined interrelated parts. The module allows the student to move forward at their own pace and immediately receive a notification of their success. In the traditional approach the content is grouped by topics, topics, paragraphs and lessons, at the same time as in the modular approach the content is organized in the module.



Modular system:

- Can be used in different systems, different training profiles and training routes.
- Can adapt to differences between students.
- Differential modules can be used together in the system. Before implementing a modular program, it is important to ask a few questions regarding students:
- Can these students work independently?
- What if they can't work?
- Will they value and prefer to work independently?
- If not, what should they do?
- Do these students have enough reading skills to follow text instructions?
- Do you have enough time to learn this way?
- If not, how can this be overcome?
- Do students know what is expected of them?
- Is there a set of recommendations in combination with practice prior to the start of such a study?
- How does this teaching method affect the entire workload of students?

These questions should lead to questions that will be useful

in further evaluation, but should also be considered at the

planning stage before the implementation of the modules. It is known that a teacher or trainer is part of the learning environment. The teacher or trainer needs to know how to evaluate different learning environments. The location of the teacher or trainer should also be interviewed during the training period.

The task of the teacher or trainer is to develop, compile and apply appropriate teaching methods for each module or sequence of modules. To do this, students must first learn how to approach learning in accordance with their individual characteristics and learning styles, and the most appropriate teaching methods and tools should be applied to students.

## II. TRAİNİNG STYLES AND APPROACHES

Everyone can learn, but not so. We need to find the path that everyone will know best, open this path and make sure that it moves forward along this path. Because determining the individual's learning style and making the necessary adjustments will increase the person's success level.

Each person uses different and unique ways to prepare, study and memorize new and complex knowledge.

Modern learning approaches can be given under the following headings:

- full training
- Active learning
- problematic training
- Cooperative learning
- Learning through discoveries
- Behavioral education
- cognitive learning
- Structural training
- Training on the theory of "multiple intelligence"
- Open training
- Other approaches to training

Knowledge of student learning styles will help them understand that many students simply cannot learn or report themselves undesirable because their learning style is unknown. Thus, the environment of training, methods of training and methods suitable for students can be determined by the definition of the style of training in accordance with the characteristics of personality. The result may be more effective, productive and uninterrupted training.

Training styles called learning types are divided into 4 groups:

- Those who study in practice
- Those who study by observing
- Thinking students
- Those who learn by touch (touching)

Modular learning offers a flexible learning approach that provides learning opportunities that can be adapted to individual learning styles.

The student is in the center of modular education. The student is a center of classroom, workshop and laboratory work. The student must understand and accept life, work, family and social relations, some basic concepts and principles aimed at national and personal needs. When a student acquires knowledge within the framework of a sound concept and laws, he or she acquires this knowledge and begins learning throughout life.

The real purpose of student-centered learning should be to enable him to learn his own profile and type of training and thus teach him how to learn. To increase learning activity, you need to start by exploring yourself and other concepts based on teaching, curriculum, or teaching methods.

When implementing student-centered learning, it is recommended that you adhere to the following strategies:

- Corresponding terms and conditions must be provided for training
- The concept of "school-oriented student" must be mastered
- The concept of "school-oriented student" should be implemented at the end of the planned process
- The system of measurements and evaluations should be developed with the help of programs, textbooks, instructions, modules and other teaching materials, as well as teaching aids and methods.
- Students' life skills should be supported by extracurricular activities.
- The "Educational-Oriented Training" application model and application guidelines should be improved.
  - Student Based Approach Methods

1. Simulation method. This method creates real-life examples for students. (For example, turning a classroom into an office). In this environment, students are given a task or assignment. During work, students use their knowledge and skills with the support of the teacher.

2. Demonstration method. This is a clear demonstration of the current process or stages of any operation. It consists of verbal explanation and demonstration. After the explanation, the teachers give the students practical work individually or in groups. It is used to teach how to use an instrument or instrument, how to perform an operation.

3. Roll method. This method gives different situations in real life. In these cases, there is a task that needs to be done, or a problem that needs to be solved. The selected task (task) should be from real life. The duration or time to solve the problem depends on the students 'own knowledge and skills. Group work is more suitable for this method.

4. Computer training. This method of training is focused on the individual training of students. Moreover, the teacher set a goal, so the program must be developed. Ready-made plans, developed or sold by the school, are aimed at achieving this goal. The teacher should study these programs and have knowledge about their operating systems. Thus, students can work individually.

Teacher-student interactive methods:

1. Brainstorming. The first thing that comes to mind about the problem, topic or question, is to say. Here it is important that everyone can express their opinion openly and as comfortably as possible. It doesn't matter the quality of the idea, but the quantity. Not good or bad ideas. Any opinion can be accepted.

2. Questioning method. In this method, students ask the expert about the subject of the letter they wrote. Whenever possible, professionals are invited to the training site. These people give examples from real events. Students are informed about this activity and ask questions.

3. The controversial method. As a rule, it is applied after the introduction of a new topic or concept. The presentation is explained personally by the teacher. Or it can be done right after reading the text. The questions are designed to enable students to think and express their opinions. Group work is suitable for this method. The opinions and opinions of the group can be discussed in the learning environment.

4. Group work. Used for classroom and workshop, or for

extracurricular activities. Groups must consist of at least 3 and a maximum of 6 people. Group work is more productive in research and design work. This method gives students the habit of working in a team.

Measurement and Evaluation in Modular Learning

Measurement and evaluation are related to student performance characteristics and have significant implications for the student.

The purpose of measurement and evaluation.

Measurements and evaluations in schools are more focused on two goals. This is an assessment of whether the curriculum has achieved its goal by measuring and evaluating student performance.

Examinations used for measure the success of students have different titles for different purposes.

Readness for exams. These exams are designed to determine the level of knowledge and skills of a student for the planned unit of study. Examinations, which determine the level of preparation, determine which deficiencies are in students, before moving on to the teaching part, and these shortcomings are identified. Some sources also call such tests diagnostic assessments.

Formative follow-up exams. Such exams are designed to identify learning gaps and difficulties associated with the subject or unit of study. These exams cover all the goals associated with the topic and determine what goals the student has not achieved. These types of exams are non-assessment oriented exams and are designed to identify gaps in the student's knowledge and skills.

Summative level (or final level) exams. These exams held at certain periods of the educational process or at the end of the educational process in order to measure and evaluate the success and status of the student. Certain tests can be used to assess student performance at the beginning of the learning process and at the end of the learning process.

It is important to meet certain conditions in order to be able to decide whether the new forms of behavior that should be taught in the learning process have been studied at the expected level. First, these behaviors must be measured using highly reliable measuring instruments. If the maturity and determination that a person acquired in certain types of behavior are not objectively determined, it cannot be decided that this person has not reached the expected level of appropriate behavior. The first thing to do is to objectively determine whether students have learned the behavior they are taught and the degree of determination they have acquired in that behavior. Only in these conditions can a decision be made as to whether they possess this behavior and whether there is a difference between the level of training that occurs in connection with this behavior and the levels of training that are expected to take place. It follows that the level of training achieved for the goals that should be achieved by students must first be measured, and then this level of training must be compared with the expected level of education.

# Measurement and Evaluation in Modular Learning.

Students in educational institutions where modular education is applied:

- At the end of the modules, the acquired competencies should be measured.

- At the end of the lesson, all competencies obtained using the modules should be measured.

- All educational activities carried out at school and should be freely assessed.

For that purpose, students can use the knowledge and skills acquired as part of the tasks in the module using the measurement tools included in this section:

- Measure knowledge-based profit with measurement questions

- Practice tests also measure skills indicated for training purposes

- As a result of the measurement, students determine earnings at the end of the exercise.

- As a result of the assessment, students move on to the next exercise or module.

- Teachers can develop and apply new measurement and evaluation tools, if necessary.

- Teacher:

- Self-assessment of students, comparing their answers with the answers on the reverse side of the module.

- Helps students to evaluate themselves in terms of incorrect or correct answers

- Guarantees that students will fill in the gaps

- Gives an instruction to students to go to the next exercise or module in case of success.

Training environment in modular training.

Concept of educational environment, place of work, educational workshop, etc. The purposes of training can be the most different. In order to achieve the desired results in the educational process it is necessary to have a training medium. The learning environment is an instrument of the learning process, which creates the necessary conditions for the proper and active continuation of the learning process. The concept of the learning environment is linked to the purpose of training or teaching. The learning environment varies depending on the different objectives of the training and teaching. In fact, any educational environment can be adapted to training.

To support the process of learning space / environment must meet the following requirements:

- The environment must have all the functions necessary for the performance of educational activities, provided as a goal.
- To stimulate the necessary mental and educational activity.
- The environment must be as real as possible.
- There must be models in space, and these models must support training.
- The environment should allow the student to direct the learning process
- The environment should allow the student to learn about the process.

These requirements can be translated into relevant questions, which need to be answered before and after the application of the module.

Educational environment.

- Textbooks, modules, television programs, experiments, training with the help of a computer, equipment, tools and resources, such as workshops, schools, classrooms, workshops, laboratories, as well as each of the activities used for this purpose educational environment.

The learning environment is very diverse:

- The environment of training, supported by the teacher:

teacher, appointee and supervisor. The student depends on the information provided by the teacher. The teacher is at the same time and specialist, and the source of knowledge, and leadership.

- Joint environment of training: the word "cooperation" is the key word in the category of training. It is based on the cooperation between the teacher and the students, as well as between the students and the equal participation of the teacher in the activity.
- The environment of self-education: the key is motivation. In principle, the teacher is in a managerial position, but not in the service. A teacher is a leader who helps a student. Students acquire and apply knowledge and skills independently, using a variety of educational materials and communication technologies.
- Students strive to learn and have the potential to learn. Teachers who use student-centered teaching methods believe that students can learn and create a learning environment in which all students can learn.

Requirements for school environment:

- The environment of training should be saturated and complete. The learning environment should include all the components that come to mind in order to complete the whole learning process. The environment of training should reflect the changing educational experience, determine individual needs, opportunities and styles of training and take into account the diversity of training strategies.
- The environment of training should be focused on activities: the environment of training should stimulate the necessary mental activities. The educational process takes place when the student works with the materials.
- The environment of training must be real or have a relationship to real life. The student should always check with experience what he can do and how he will use the knowledge and skills that he acquired in the educational environment.
  - It is necessary to be models in educational environments: it is necessary to develop different models in this environment in order to focus the student's intellectual and practical activity, connected with the educational process, to support and support it.
  - The environment of training should gradually trust the definition of the direction of the student: the student must learn to learn. He should do more to regulate his training from the point of view of forms, content and direction. At the same time, he will be less dependent on the structure of the educational environment and will be able to "find direction" in the educational environment. Strong educational environment should be built in such a way that the responsibility for training gradually passed from the environment to the student.
  - The environment of training should systematically improve the understanding of students with their abilities. The academic environment should provide students with the opportunity to determine their own progress. "Start something" (increase your competence at the expense of hard work) - this is a positive thing for the student.

A student is a person who will shape the educational process in terms of form and content. The regulated environment in the learning process has a supportive effect on the student.

Depending on the social environment and conditions, the training environment is organized in such a way as to ensure

space and the possibility of interaction. Students need social interaction and usually work together. They can learn a lot from each other, and they can learn a lot from each other.

In this regard, the learning and working environment should be suitable for individual use and group work.

## **III. CONCLUSION**

The paper considers the methods and means of modular training, which is one of the modern training technologies. The task of the teacher or trainer is to develop, compile and apply the appropriate training methods for each module or sequential module. For this, students should first identify approaches to learning that correspond to their individual characteristics and styles of learning, and apply to students the most appropriate methods and means of learning.

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