ADVANTAGES OF CREDIT-MODULAR STUDENT LEARNING

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https://doi.org/10.5281/zenodo.7697711

Annotation. As a result of the transition of the educational process of higher educational institutions to a "credit-modular" system of education and the use of modular training programs by teachers, it contributes to the development of skills for independent work with textbooks, popular science, additional literature and, as a result, helps to develop the creative and independent potential of students, as well as about the benefits of this process.

Key words: credit-modular system, independent work skills, modular training, combination, traditional lesson, scoring, principle of dynamism, operational knowledge, cognitive, individual, motivation.

INTRODUCTION.

Reforms in the higher education system are of great importance today, when fundamental changes are taking place in all aspects of the life of our country. The transition of education to the "credit-module" system is one of the most urgent issues of the present time. Modular teaching is widely used by many educational institutions. In the last 20-25 years, his ideas have been actively used in the education of the USA, England and other developed countries.

METHODOLOGY.

It is possible to use modular educational technologies in order to develop the skills of independent work with textbooks, scientific popular and additional literature, creative and independent thinking in students. A unique feature of modular education technology is that the teacher creates a module program that allows students to work independently and creatively on the subject being studied. Students work independently and creatively with the help of the module program and achieve the educational, educational and developmental goal of the lesson. The teacher directs, motivates and supervises the students. The advantage of this method is that even students who are not ready for the lesson will gain some knowledge by moving during the lesson and using the book.

Today, in the modern education system, we can see the concept of "credit-module" in the works of the following scientists, including: S. Yu. Ashurova [1], N. V. Borodina [2], K. T. Olimov and others [3].

According to Academician Yu.K.Babansky, "Modular teaching is not only to convey scientific information to students, but also to master the main elements of new educational material. It is envisaged that the student will acquire not only the usual general educational skills, but also inventive skills" [4].

The main goal of modular teaching is to achieve thorough knowledge of students. T. N. Kori-Niyazi said that it is infinitely better to develop the student's ability to reason logically than to provide information. In the process of modular education, students do not receive ready-made knowledge, but learn to acquire this knowledge independently and to objectively evaluate themselves, to think independently. Students help each other by completing the tasks themselves. With this, the teacher encourages them to work together.

During the lesson, the teacher can assess the students many times. This situation is taken for granted even by students who have received two grades. And to correct it, the student can independently work on this topic again and achieve much higher results. Homework is also given depending on the work done during the lesson. If students answer all the questions, they will not be given homework.

If the questions were answered prematurely by them, the schemes were not filled in, they have been doing these things at home. But preparing for such lessons requires a lot of work and time from the teacher.

So, modular education is a method of organizing the educational process based on the modular presentation of educational information. The essence of modular teaching is that the teaching content is divided into autonomous organizational-methodical modules, the content and volume of which may differ depending on didactic goals, students' profiles and levels. The combination of modules should provide the necessary degree of flexibility and freedom in the selection and completion of the specific educational material necessary for teaching a certain category of students (and independent study) and for the implementation of special didactic and professional goals.

Modular construction of courses involves the development of modular curricula that are significantly different from traditional lecture-based curricula. A modular curriculum developed for a subject should be clearly divided into teaching materials for audience workload and independent work.

The modular program is developed according to a certain scheme and includes:

- a complete list of educational goals and objectives;
- requirements for students' preparation (competencies) before and after graduation;
- description of each module of the subject (list of module sections, their summary, lecture abstracts, plans of seminars and laboratory-practical trainings, topics of supervised independent work, creative assignments, assignment completion and submission schedule);
- brief organizational and methodological characteristics (main forms and methods of teaching, forms and methods of monitoring results in the educational process, teaching policy);
- system of evaluation of educational results (including the summary table of evaluations).

Before the beginning of the lesson (in special cases - in the first lesson), the teacher should give students the opportunity to familiarize themselves with the content of the module program.

In the modular education system, a rating assessment of knowledge, skills and abilities is used, in which all types of educational activities of students (in and out of class) are taken into account and evaluated with certain points.

Rating is an individual aggregate indicator of a student formed on the basis of educational results. The rating is constantly changing depending on the results of the student's daily activities. The student's individual academic rating is made based on the results of mastering all the subjects he studied.

When evaluating knowledge based on rating, the following are taken into account:

- encourage the student to work regularly and systematically on mastering the subject;
- introducing an element of competitiveness into the educational process by replacing the average categories (excellent, good, satisfactory) with a more differentiated evaluation and the possibility of continuous accumulation;
- to interest students in successfully mastering each element of the curriculum, because they all contribute to the formation of the overall rating of students;
- creating an objective criterion for identifying the best students (various scholarships, awards), as well as recommendations for postgraduate studies, etc.

What do we mean by the credit-module system of the educational process? Today, the "credit-module" system of organizing the educational process is adopted in foreign universities, including: Europe, Russia and the USA. European higher education system (European Credit Transfer and Accumulation System — ESTS).

The "credit-module" system is a model of the educational process organization based on the unit of ESTS credits of modular educational technologies, which is the quality of the measurement units of the student load necessary for mastering the content modules.

Resolution No. 824 of the Cabinet of Ministers dated December 31, 2020 "On measures to improve the system of educational process organization in higher education institutions" was adopted. According to the decision, starting from the 2020/2021 academic year, the educational process in higher education institutions will be gradually transferred to the credit-module system, and the regulation on the introduction of the "credit-module" system into the educational process of HEIs was approved.

The regulation ensures that the following requirements are met:

- modular structure of the educational program, i.e. all educational materials for a certain specialty are divided into separate blocks — modules, the student studies a certain subject/module within his specialty in a mandatory mode — lectures and practical exercises on this subject are held daily until passing the exam or test;
- increasing the flexibility of educational programs, i.e. depending on the level of preparation, the student receives one or another number of hours in the subject — minimum or high level;
- participation of the student in the formation of an individual study plan, i.e. each student has their own individual plan with their own set of courses, the student chooses which course to study first and which to study later. The science teacher makes recommendations about which subjects a student can choose from a particular course;
- to increase the share of self-education in the educational process, that is, a number of topics are given for independent education, students prepare creative works, abstracts, presentations, work with additional literature recommended by the teacher, study the field of their interests;
- use of loans to assess labor intensity;
- use of scoring systems to assess knowledge.

The theory of modular education is based on specific principles closely related to general didactics.

The general direction of modular education, its goals, content and methodology are determined by the following principles:

- modularity;
- separation of individual elements from the teaching content;
- dynamism;
- efficiency of knowledge and their systems;
- flexibility;
- conscious perspective;
- versatility of methodical advice;
- equality.

The principle of modularity determines the approach to education reflected in the content, organizational forms and methods. In accordance with this principle, training is based on individual functional parts — modules — designed to achieve specific functional goals.

To implement this principle, the following pedagogical rules must be observed:

- educational material should be developed in such a way as to fully ensure the achievement of the didactic goals set for each student;
- it should be represented by such a complete block that it should allow to design a single content of education corresponding to a complex didactic goal from individual modules;
- in accordance with the educational material, it should combine different types and forms of education subject to the achievement of the goal.

The principle of separation of individual elements from the teaching content requires consideration of the learning material within the module as a single entity aimed at solving a single didactic goal, that is, the module must have a clear structure.

This principle is similar to the principle (principle) of dividing the educational material into parts (stages) in programmed education, but there is also a significant difference. In programmed learning, the material must be divided into small, closely related parts that must gradually increase in complexity. In modular teaching, a certain subject of a certain course or a subject fragment that meets a certain didactic goal and is called a module element is considered to be the smallest unit of educational content [5,10,11].

Based on the principle of separating individual elements from the teaching content, the following pedagogical rules should be observed:

- it is necessary to separate the structure of individual goals for an integrated didactic purpose;
- achieving each of them should be fully provided with educational materials of each element;
- there should be a separate set of specific goals, one integral didactic goal, one module.

The principle of dynamism ensures a free change in the composition of modules, taking into account the social order. The high rate of scientific progress causes a rapid aging of social, general technical knowledge and even forces to reconsider the importance of general

scientific knowledge from time to time. The inertia inherent in all aspects of education is one of the reasons for the gap between education and social conditions.

Learning materials will need to be constantly revised and updated, almost every year. One of the ways out of this difficult situation is to ensure such a construction of the teaching material that the sections of the changing part can be sufficiently independent from each other and allow to quickly change, supplement and develop the teaching material of each section.

By implementing the principle of dynamism, it is possible to resolve the conflict between the stable and changing content of the educational material. We formulate its pedagogical rules:

- the composition of each element and therefore each module can be easily changed or supplemented;
- new modules can be created by building elements of different modules;
- the module should be presented in such a way that its elements can be easily replaced.

The principle of effectiveness and efficiency of knowledge and their system.

In educational communication, the problem of effective knowledge formation among students appeared, which had a negative effect on the level of professional training of specialists. The way out of this situation is to teach not only types of activities, but also methods of movement. An active approach to modular education is important, but its limitation is that it does not require the development of a creative attitude to the learning process [6].

Operational knowledge is acquired more successfully if students demonstrate initiative, ingenuity in the process of independent problem solving, and the ability to apply existing knowledge in situations other than those in which they were acquired or obtained. It is possible to talk about an effective and operational knowledge system only with their inseparable unity with skills. It means a system of general scientific, general technical and special knowledge and skills that a student can freely and independently use in practical activities.

Pedagogical rules that should guide the implementation of the principle of effectiveness and efficiency of knowledge and their system are as follows:

- goals in modular education should be formulated in terms of activity methods (mental or practical) and action methods;
- disciplinary and interdisciplinary construction of the content of the modules in accordance with intellectual or practical activity to achieve the set goals;
- learning should be organized on the basis of a problem-based approach to acquiring knowledge, so that a creative attitude to learning is ensured;
- it is necessary to clearly indicate the possibilities of transferring knowledge from one type of activity to another.

The principle of flexibility requires a modular program and the creation of modules accordingly, so that it is easy to adapt the learning content and methods of its acquisition to the individual needs of students.

The implementation of the principle of flexibility requires compliance with the following pedagogical rules:

- initial diagnosis of knowledge is necessary in the individualization of educational content;
- it should be organized in such a way that according to its results, an adapted structure of a certain module can be easily built;
- it is necessary to analyze the needs of the student in order to individualize the educational content;
- for the same purpose, you can use a comprehensive criterion to build it, including basic training and individual educational goals;
- it is important to observe the individual assimilation rate;
- the methodological part of the module should be built in such a way as to ensure the individualization of teaching technology;
- Individual control and self-management is required after achieving a specific learning goal.

The principle of conscious perspective requires a deep understanding by students of the immediate, intermediate and distant learning stimuli. It is necessary to find an acceptable measure of the relationship between teacher-directed communication and students' independence (self-management). Too strict control of activity deprives students of initiative, reduces the role of independent learning [7].

If you are going to use student self-direction, you need to provide them with clear instruction and an understanding of the goals (intermediate and ultimate). In modular teaching, they should act as important results of the activity, so they should be recognized by students as perspectives of cognitive and practical activity.

When implementing the principle of conscious perspective in the process of modular education, the following pedagogical rules should be observed:

- each student must first submit a whole module program developed for a long study phase (course, year or whole term);
- it should be understood by the teacher personally as a meaningful and expected result;
- the complex didactic goal should be clearly indicated;
- it includes a program of learning activities to achieve its goal and the student is provided with a guide to achieve near, medium and long perspectives;
- at the beginning of each module, the overall goals of the training should be clearly described as activity results;
- at the beginning of each element, the specific objectives of the training should be clearly indicated as the results of the activity;
- the multifaceted principle of methodological advice requires ensuring professionalism in the student's knowledge and pedagogical activities.

Many factors affect the effectiveness of education, first of all, the relevance of the educational content to the capabilities of students. However, following this condition, many difficulties arise in the educational process, in particular, due to the fact that students cannot choose the optimal methods of mastering the material, and their independent knowledge skills are not developed. There are problems in the work of teachers, for example, lack of skills, inability to use all teaching methods and choose the most suitable for these conditions or their combination.

The methods of solving these problems reveal the implementation of pedagogical rules, the multifaceted principle of methodological advice:

- educational materials should be presented in modules using personal explanatory methods that facilitate the acquisition of information;
- the student should be offered various methods and methods of mastering the educational content, which he can choose freely, or create his own learning method based on them or personal experience;
- Methodological advice should be given to the teacher on the organization of the educational process. Alternative solutions can be different teaching methods and organizational schemes, which, according to expert teachers, are the most suitable for mastering the proportions of a certain content;
- the teacher can freely choose the proposed teaching methods and organizational goals or work according to his own methods and organizational schemes;
- In cases where the teacher himself has built the module, this is appropriate.

It is important to observe the principle of equality.

In recent years, special attention has been paid to activating students in the pedagogical process, developing management and turning it into self-management. Attention should be paid to creating the basic conditions for interaction in the educational process. It can be the level of preparation of the students. The nature of management relations primarily depends on it.

But what kind of real relationship can we talk about when, as in traditional education, the main purpose of teacher-student meetings is to provide the former with information for the latter? In other words, during training, the teacher often forgets the need to use other functions and carries out "information injection". The pedagogical process will be effective if the student himself is as active as possible and the teacher approaches each student individually and uses the function of consultation and coordination.

The principle of equality in modular education requires compliance with the following pedagogical rules:

- modular program allows students to acquire knowledge independently to a certain level;
- it is designed to free the teacher from performing a purely informative function and to create conditions for a more vivid manifestation of the consulting-coordinating function;
- modules should create conditions for the teacher and the student to choose the optimal educational method together;
- in the process of modular training, the teacher transfers some management functions to the modular program, where they become self-management [8].

Using this information tool, the student should independently organize the acquisition of new material and come prepared to each pedagogical meeting, solve problematic issues, participate in research activities, etc.

CONCLUSION.

The above principles of modular teaching are closely related to each other. They (in addition to the principle of equality) reflect the features of increasing the educational content, and the principle of equality describes the interaction of the teacher and the student in the new conditions that develop during the implementation of the modular approach to the

educational process. All these principles are based on general didactic principles(principles) and interrelated with them.

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