WEB OF SYNERGY:

International Interdisciplinary Research Journal

Volume 2 Issue 3, Year 2023 ISSN: 2835-3013

https://univerpubl.com/index.php/synergy

Modular Teaching Technologies in the Educational Process

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Article Information

Received: January 22, 2022

Accepted: February 23, 2023

Published: March 24, 2023

Keywords: *pedagogical technology, technology, at the technological level, aspect, scientific aspect, descriptive aspect, practical aspect, local (modular) technology, concept, module, scientific concept, modular teaching.*

ABSTRACT

Modular teaching is generalized to the main issues of science requires informative and instructive lectures. Lectures should focus on developing students' creative abilities. The practical and laboratory classes of the module are organized together with lectures; they supplement the content of the lectures with new material to be studied. Students will gain theoretical and practical skills. Theoretical and practical knowledge, skills and competencies acquired in educational institutions through science curricula and programs in the implementation of modular teaching technologies in the classroom are strengthened through participation in productive forms and processes organized in various forms. Improving the system of vocational guidance of young people in the country is a necessary condition for the effective functioning of the system of continuing education in terms of resources, personnel, organizational, information and legal. Experience has shown that expanding students ’knowledge of work and raising their awareness of ways to successfully organize their goals will make them more prepared to make the right career choices.

In the history of the formation and development of the concept of pedagogical technology, there have been different views: it is interpreted as a doctrine of technical means, and as a consistent and systematic organization of the teaching process by design. There are several definitions of pedagogical technology.

The concept of technology came into being in the 1960s in connection with the reform of education in America and Western Europe. B. Blum, J. Koroll, P.YA. Galperin, V.I. Davidov, N.A. Menchinskaya, Z.I. Kalmokova, L.I. Zankov technologies are popular. Technological approaches to the organization of training V.P. Bespalko, N.F. Talizina, L.M. Friedman, YU.N. Kulyutkina, G.S. Suhobskoy, T.V. Kudryavtsev, A.M. Matyushkin belongs to most psychologists and didactics, such as M.I. Mahmutov. The analysis of technological approaches shows that most teaching technologies are lagging behind. Theoretical foundations have been strengthened in a number of technologies, the practical side of which has not been clarified.

T.A. Ballo highlights one aspect of technology, the task-oriented approach to teaching. Others have either computer-programmed learning or a problem-based learning structure.

L.V. Zankov, T.Ya. Galperin, V.I. Davidov's research focuses on integrated learning technologies.

1. There are many unresolved issues in pedagogical technology. The study of this problem is associated with the definition of the concept and methodological essence of teaching technology.

Pedagogical technology is defined as a field of theoretical and practical (within the education system) research related to all organizational aspects of the pedagogical system in order to achieve specific and potentially created pedagogical results.

To illustrate the essence of pedagogical technology, we consider it appropriate to dwell on the definitions given by educators.

“Pedagogical technology is a set of psychological and pedagogical lessons, a special set of forms, methods, techniques, ways of teaching, educational tools. At the same time, it is an organizational and methodological factor of the pedagogical process ”(B. Likhachev).

"Pedagogical technology - a meaningful technique for the implementation of the educational process" (V.P. Bespalko).

"Pedagogical technology - a description of the process of achieving the planned learning outcomes" (I.P. Volkov).

"Technology - a set of processing, the art of transformation, skills, abilities and methods" (V.M. Shepel).

"Pedagogical technology is a well-thought-out model of pedagogical activity of students and teachers in the design, organization and conduct of the educational process by creating the necessary conditions for them." (V.M. Manaxov).

The basis of person-centered technology is the intellectual and emotional-motivational development of students, the formation of knowledge and professional skills, ensuring a value-based approach to the educational process, increasing activity, self-awareness and independence.

Analyzing these studies, the following definition can be made:

pedagogical technology is a project of a system of continuous development of pedagogical activity aimed at achieving educational goals and personal development.

Technological progress is one of the most important components capable of tracking social processes today. Improving the technology of pedagogical education is a prerequisite for shaping the cultural level of a society and its economic power.

Teaching technology ensures the functioning of education, ensures the application of knowledge in the labor process, shapes the consciousness of the teacher, affects its speed and way of life. Vocational training technology creates an individual's interest in discipline, will and specialization. Educational technologies aimed at meeting the comprehensive demand for specialists focus on the implementation of psychological and pedagogical conditions that are rapidly adapted to the cooperation of teacher and student.

The technological principle of professional training is the goals, content functions, teaching methods for the future profession. Based on this, pedagogical technologies will be developed.

Different approaches to the definition of pedagogical technologies show that, in fact, teaching technologies take place between science and production, as well as the educational process. It is an independent field of knowledge in the system of professional didactic training, which is closely linked with the theory and practice of didactics of teaching. It includes the functions of designing and constructing the process of managing educational activities.

Modular learning is one of the most promising systems of learning because it is best adapted to the learning system of the human brain. Modular learning is based on the modular structure of human brain tissue.

Modular training provides opportunities to comprehensively address the following modern issues of vocational education:

- Module - optimization and systematization of activity-based learning content to ensure the flexibility and adaptability of programs;
- IndividualIndividualization of teaching;

- Monitoring the effectiveness of training at the level of practical training and assessment of observable actions;
- Activation of the teaching process on the basis of professional motivation, independence and full realization of educational opportunities.

In modern theory and practice of modular teaching, two different approaches can be distinguished: the science activity approach and the systematic activity approach.

Within these approaches, a number of conceptual training concepts based on the module have been developed. At the heart of all concepts is an activity approach, and in this context, the teaching process as a whole or within a particular subject is focused on the student's sequential mastery of elements of professional activity in accordance with the content of the modular curriculum.

Modular teaching technology is developed and implemented in accordance with the accepted principles of teaching.

At the same time, the basis of the study material should be scientific and fundamental. The principle of system quantization is achieved by constructing the appropriate structure of educational information in a module.

In general, the module can consist of the following elements:

- historical - is a brief description of the history of the problem, theorem, problem, concept to give;
- problematic - this is the formation of the problem;
- systematic - is a systematic representation of the structure of the module;
- activation - is the identification of key phrases and methods of action necessary for the acquisition of new learning material;
- theoretical - this is the main educational material, which - didactic goals, problem statement, substantiation of hypotheses, ways to solve the problem;
- experience - is the description of experimental material (study experience, work, etc.);
- generalization - is a summary of the description of the solution of the problem and the content of the module;
- application - the development of new methods of action and a system of issues for the practical application of the studied material;
- errors - to reveal a type of errors observed in the study of the content of the module of the student, to determine their causes and show ways to fix it;
- connection - the previous module with other modules, including related disciplines show connection;
- deepening is a highly complex learning process for gifted students presentation of material;
- testing - mastering the content of the module by students monitoring and evaluation of the level using tests.

At the same time, visual information is more important and effective than verbal information. The ability of the visual cortex to receive information is much higher than that of the auditory cortex. This, in turn, allows the visual system to transmit about 90 percent of the information a person receives. In addition, visual information is provided at the same time. Therefore, it takes less time to receive and remember information than verbal information. When visual information is used, the formation of imagination is on average 5-6 times faster than verbal. Human exposure

to visual information is much higher than to verbal information will be In most cases, he misses the last one. Demonstration information is easier and more accurate to repeat. People's trust in visual information is higher than in verbal information. That is why it is said, "It is better to see once than to hear a hundred times."

However, in visual information, the yield of perception and memory does not depend on the length of time between its presentation, and the absorption of verbal information depends on it. One more important detail should be noted: the reception of symbolic-visual information increases the effectiveness of teaching. Therefore, it is necessary to create conditions for the reproduction of information obtained from educational and scientific literature and computer technology. This highlights the need to individualize teaching.

The principle of technology allows learning to become a repetitive process. In a modular learning system, the number of teaching sticks is equal to the number of teaching modules.

In order to achieve the learning objectives, it is necessary to create the basic conditions to ensure the continuity of the educational normative documents.

It is recommended to use the principle of membership for these purposes.

11. The principle of membership. This principle implies a systematic approach to curriculum and program development to ensure that learning objectives can be achieved. This will ensure that the hours in the curriculum are consistent with the objectives of the subjects.

Principles of modular learning - the theory of modular learning technologies are the basics.

The modular learning system is based on modules. There are two approaches to this education system:

1. Transformation of the educational system of the educational institution into modules: each course in the curriculum of the higher education institution is accepted as a module and students study in 1 module for a specified period.

2. Transfer of courses from the curriculum to the modular system: in the transfer of courses from the curriculum to the modular system, each subject is a separate module, each chapter of the curriculum is based on the module.

Modular technologies remain one of the most effective approaches to the formation of knowledge and skills in students on the basis of independent activity, planning, self-management and control, ensuring effective results in mastering. The module is a goal-oriented link that reflects the content being studied and the technology involved.

To do this, the organization of education should take into account the abilities, needs and characteristics of the student. When these elements are taken into account, a system of education based on the concept of "subject-subject" emerges, which is self-differentiating, developing, strengthening the motivation to learn.

One of the modern researchers, P.A. Justyavichene, analyzes the module as a unit based on a certain degree of independent information and aimed at achieving the intended results on the basis of targeted methodological management.

N.V.Borisova, V.M. K.Ya.Vazina, Gareev, E.M.Durko, V.V. Karpov, M.N. Katkhanov, S.I. As a result of studying the views of Kulikov, P. Justyavichene and other scientists, the following types of modules can be distinguished:

- ✓ independent conceptual subunit;
- ✓ the module as an independent unit includes one training course and several blocks;
- ✓ the module can be an interdisciplinary unit, which includes a number of disciplines related to

a particular specialty;

- ✓ vocational training module aimed at acquiring a specific specialty.

There are also a number of features related to the concept of "module":

- ✓ The goal;
- ✓ Integration of different types of educational activities;
- ✓ Methodological support;
- ✓ Independent development;
- ✓ Independence of the student in the educational process;
- ✓ Ability to analyze and structure educational information;
- ✓ Control and self-control;
- ✓ Student's personal learning trajectory.

Principles of modular approach:

- ✓ Modularity
- ✓ Content structuring
- ✓ Provide dynamic movement (from simple to complex)
- ✓ Activity
- ✓ Flexibility
- ✓ Preliminary determination of results
- ✓ Provide a variety of tips.

Module types:

- ➢ Practical modules (modules aimed at developing practical skills and competencies).
- ➢ Technological or mixed modules (modules aimed at developing theoretical knowledge, practical skills and competencies).

The general didactic goals of the chosen specialty are reflected in the approved standard. The development of the module program is based on the requirements of this standard.

Modular learning technology - in its content and structure, synthesizes the creative processes of educators and learners in real situations. The features of pedagogical activity in modular teaching technology are the process of clarifying the content of educational information and goals through a specific situation. Creative learning activities are guided by the basic rule of modular learning - to give a certain degree of freedom of movement and to regulate these movements in the system of the whole structure of the learning process. Only through the use of modular teaching it is possible to develop in students a scientific research approach to solving educational problems and professional tasks, the formation of independent learning skills and methods.

The use of modular education helps to form the understanding of knowledge, forms the professional readiness to develop creative skills.

The introduction of such technology in the learning process arouses the interest of learners in science, develops the mind, requires guidance to overcome cognitive resistance, directs it to logical research and makes it a step-by-step process. teaches, teaches theoretical methods of thinking.

REFERENCES:

1. Azimova N. E. Et al. Youth Is Moving Force of Civil Society //Eastern European Scientific Journal. – 2019. – №. 1.
2. Азимова Н. Э. Роль профессионального педагога в подготовке гармонично развитой личности //Международный журнал гуманитарных и естественных наук. – 2018. – №. 5-1. – С. 30-32.
3. Азимова Н. Э. Технология духовно-нравственного воспитания преподавателя профессионального образования в процессе обучения //Молодой ученый. – 2011. – №. 5-2. – С. 117-118.
4. Азимова Н. Э., Насимова З. И. К. Важные особенности человеческого образования в семье //Academy. – 2020. – №. 5 (56). – С. 27-29.
5. Azimova N. E. Methods of Teaching Theoretical and Methodological Bases of Pedagogical Science in Medical Institutions //European journal of business startups and open society. – 2022. – Т. 2. – №. 1. – С. 16-20.
6. Azimova N. E. Information Technology in Teaching Archives-Project Topics, Technical Achievements that form the Basis of Information Technology //European Journal of Life Safety and Stability (2660-9630). – 2022. – Т. 13. – С. 8-11.
7. Azimova N. E. Problems of development of new pedagogical technologies of training of teachers of professional education and their introduction into the educational and educational process //Academicia Globe: Inderscience Research. – 2022. – Т. 3. – №. 01. – С. 1-3.
8. Azimova N. E. New Pedagogy in Teaching Economic Sciences the Role of Technology //Journal of Marketing and Emerging Economics. – 2022. – Т. 1. – №. 8. – С. 1-4.
9. Azimova N. O ‘qituvchi nazokatida dilkashlik va pedagogik takt //центр научных публикаций (buxdu. Uz). – 2020. – Т. 2. – №. 2.
10. Азимова Н. Kasbiy ta’lim oqituvchilarini tayyorlashning yangi pedagogik texnologiyalarini ishlab chiqish va ularni oquv-tarbiyaviy jarayonga tatbiq etish //центр научных публикаций (buxdu. Uz). – 2020. – Т. 2. – №. 2.
11. Азимова Н. Э., Насимова З. И. К. Важные особенности человеческого образования в семье //Academy. – 2020. – №. 5 (56). – С. 27-29.