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Methodology of Applying Modular Teaching Technology in the Science of Life Safety

Rahimov Oktyabr Dustkabilovich
Professor of "Ecology and labor safety" department Karshi Engineering Economics institute, Academician of the Turan Academy of Sciences of the Republic of Uzbekistan, Russian Academy of Natural Sciences

Ashurova Laylo
Assistant teacher of "Ecology and labor safety" department Karshi Engineering Economics institute

Abstract: *The article depicts the basic content of the quality of education and its criteria, self education and distance learning, its teaching methods, integrated approach to teaching, technology of creating modular teaching materials, the essence of modular teaching, modularity, the structure of the module, the composition of elements.*

Keywords: *quality of education, efficiency, quality of life, innovation, modular teaching*

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INTRODUCTION.

At present day, the quality of education is a very significant and problematic issue. This is because all other social issues, political problems and economic indicators develop on the basis of the level of quality of education. Besides, the quality of education determines the development of the country and society, the fate of all mankind as well. Therefore, it would not be wrong to interpret the quality of education as a quality of life.

The quality of education and the effectiveness of education is one of the key factors in determining the quality of life in a society. The more the state and society spend on general and vocational education and the result meets the highest international standards, the higher the quality of life will be. Determining the effectiveness of education requires achieving high quality education at the expense of optimal costs [1].

One of the main directions in improving the quality of education is the widespread use of digital technologies and innovative pedagogical technologies in the educational process [2]. One of such innovative pedagogical technologies is modular teaching technology [3].

As a result of the spread of the COVID-19 pandemic around the world and the application of strict quarantine measures, the establishment of distance "online" training in all countries, including the higher education system of Uzbekistan, has led to further improvement and widespread use of modular training systems [4].

ACTUALITY OF THE RESEARCH.

The modern education system requires the organization of the educational process on the basis of the principles of self-development and self-assessment of students. In such an educational environment, the focus is on independent learning. The organization of independent education at the level of requirements depends, first of all, on the level of providing students with educational-methodical and scientific-informational manuals. There are several ways to create scientific information and teaching aids for students, of which the technology of creating modules is of particular importance. Modular learning technology gives good results in the quality organization of the independent learning process of students and the establishment of a system of distance learning [5].

RESEARCH METHODS.

The research work includes the study, analysis and generalization of pedagogical, psychological and methodological literature, curricula, textbooks, coursebooks, observation and analysis of the process of creating and teaching modular teaching materials in universities, interviews, questionnaires, observation, test questions, experiments and mathematical and statistical methods were used to conduct experiments and obtain results.

RESEARCH RESULTS AND DISCUSSIONS

Modular teaching technology emerged in the late 1960s as an alternative to traditional teaching technology in the United States and Western Europe. Modular learning technology is a technology that combines all the theoretical and practical progressive technologies of traditional teaching technology. The basics of modular training were developed and fully described by P.Ya.Tsyavichene.

The concept of expressing the components that make up modular pedagogical technology. Modules can be represented as large modules, medium modules, and small modules. For example, a separate chapter of science or chapters of several contents close to each other can form a large module, separate topics in it a medium module, and topic plans a small module.

The importance of modular teaching is that the student achieves the learning goal independently (or through a certain level of support) through the process of working with modules. The educator develops a program based on a certain sequence, which complicates the didactic tasks and consists of a set of modules. The program allows the student to self-manage the learning process in collaboration with the teacher through access and intermediate control [6].

Modular teaching technology represents a complex approach. A set is a set of parts that are in a functional relationship and form a whole. Complex theory and integrated approach do not represent the concept of "complex" [7].

Modularity in the organization of educational materials in distance learning requires:

- modular structure of the distance learning course and its elements;;
- Development of a clear structure of each module;
- **compile a clear list of learning elements included in the module;**
- **reference materials;**
- additional materials on sciences close to the content or related to the development of science;
- glossary;

The structure of the module should consist of:

- purpose of the module;
- module access test;
- module study information resource;;
- module content
- Recommendations on the sequence of learning elements;
- Module completion test.

The structure of the training elements included in the module:

- purpose of the learning element; information of scientific study
- resources;
- Texts, exercises and problems of educational-visual material;
- Assignments (tests) to check the acquired knowledge;
- Tutor checklist with standard answers.

Content materials:

1. historical information;
2. interesting information;
3. internet information

In the design of learning materials for distance learning, the widespread use of effective methods of information coverage, including graphical diagrams and tables, is recommended [8,9].

The following methods can be used to illuminate information based on graphical schemes: clusters, mental maps, fish skeleton schemes, denotation graphs, and so on. For example, mental maps were developed by Tony Bzen, a well-known writer, speaker, and consultant on teaching psychology and thinking. It is derived from the word Mind maps and is also known as "Intellect card" or "Mind card". In addition, training materials include fish skeleton, open saw, FSMU, boomerang, scarab, cascade, Veer, pinboard, "T-scheme-technique", dolphin, blitz-questionnaire, "Why?" technologies, BBXB (Bilaman, Bilishni xoxlayman, Bildim.) (I know, I want to know, I learned), conceptual table, insert table-based lighting allows distance learning students to better absorb and absorb information [10,11].

CONCLUSIONS AND RECOMMENDATIONS.

The technology of modular teaching of academic subjects is an integral part of modern pedagogical technology and plays an important role in improving the quality of education. Based on the results of analytical and theoretical research, we can draw the following conclusions:

1. Modular teaching technology in higher education does not negate the traditional teaching system and is applied in an alternative form.
2. The use of modular learning technology in a tiered learning system gives good results.
3. Modular teaching gives good results when applied to students with high knowledge, mastery and skills.
4. It is recommended to use some elements of block-modular learning technology in teaching low-learning requirements.

5. It is effective to combine modular learning technology with student self-development and self-assessment technology. Because the independent learning process of more students plays an important role in modular teaching.
6. Modular creation of basic teaching materials, division of science content into large, medium and small modules, re-creation of textbooks and coursebooks on science play an important role in modular teaching.

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