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PRINCIPLES OF MODULAR TECHNOLOGY AND THEIR INTEGRATION WITH THE PRINCIPLES OF MILITARY EDUCATION TRAINING

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Abstract: This article examines the issues of improving the quality of education through the integration of modular teaching technology and didactic principles of military education in teaching 70 112001 - Theory and Methodology of Teaching and Upbringing (pre-conscription military education). The issues of mutual integration of the principles of modular teaching technology and didactic principles of military education are methodologically successful in the content of the article. The article is also characteristic of the leadership of the military education faculty of the university, as well as the faculty.

Keywords: Essence of the decree, modular training, credit-modular system, adaptation, principle, integration, tactics, tactical line, quantum view of information, variability, flexibility, individualization of training, professional motivation, rules, harmonization.

Modular learning technology is derived from the general theory of functional systems, neurophysiology of thinking, pedagogy and psychology. According to research in these areas, the human brain, consisting of tissue modules, receives information best in quantum form (in other words, in the form of known contributions).

Modular training provides opportunities for a comprehensive solution to the following modern issues of professional education:

- module - optimization and systematization of training content based on a functional approach to ensure flexibility and adaptability of programs;
- individualization of learning;
- monitoring the effectiveness of training at the level of practical training and evaluating the observed actions;

Activation of the learning process based on professional motivation (interest), independence and full realization of learning opportunities.

In modern theory and practice of modular learning, two different approaches can be distinguished: an activity-based approach based on science and a pedagogical technology based on a systemic activity-based approach [5].

The modular training technology was developed and implemented in accordance with accepted training principles.

Information on the methods and technologies used in military education is also available in the textbook [6, p. 210]. The question is what military science and what subject the officer-teacher can choose and apply in his place. In this regard, the degree to which the facilitator has mastered the modern approach to teaching is also of great importance.

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70112001 - Theory and methods of training and education (pre-conscription military education) in the specialties of disciplines in the master's degree program "physical training in the system of command and military education" the principles of modular training are harmonized with each other in the test training process aimed at the gradual introduction of the curriculum into the credit-modular training system and as a result of compliance with the didactic principles of military education, there was an increase in the activity of master's students.

In our opinion, the principles of mutually compatible modular training and didactic principles of military education can be used and on this basis can be used to radically increase the effectiveness of military education. In particular, the subject "Physical Education in the System of Command and Military Education" is taught. The principles of modular technology of training and integration of principles of military training or didactic principles can be described as follows:

1. The principle of the activity approach. The scientific principle of military education.

The principle of the activity-based approach means that modules are formed in accordance with the content of the specialist's activity. This principle is the pedagogical rules that reflect the basic laws of the military-pedagogical process in military education and determine the teacher's activity in equipping students with knowledge, skills and abilities, and also reflect in these principles the laws of the educational process, its logic and contradictions, does not cancel the so-called principles.

In the process of military education, each principle includes specific aspects of the educational process, rules that illuminate their specific requirements, and their application determines the general attitude of the teacher to the educational process.

Scientific principle of military education. The educational process should be aimed at maintaining the Armed Forces in a state of constant combat readiness and further increasing their combat power. For the same purpose, teachers should equip their subordinates with precise knowledge in accordance with the latest achievements of science and technology and organize combat and socio-political training on a scientific basis in accordance with the requirements and guidelines of military psychology and pedagogy.

Science and technology are constantly evolving. New weapons and military equipment are being created, tactics, forms and methods of combat operations are being improved. This, in turn, requires the use of new methods and means of training. Therefore, the main requirement of the scientific principle of education is the constant increase in the combat potential of units and ensuring constant combat readiness based on the introduction of the latest achievements of science and technology in the educational process.

Based on the above, the basic requirements for the scientific principle of education can be formulated as follows:

- knowledge, reliability of facts;
- the relevance of the knowledge acquired by students for the achievements of modern science, technology, pedagogy, and psychology;
- compliance of forms and methods of teaching with modern scientific achievements [7, p . 24].

It can be seen that the mutual integration of the modular learning activity approach and the scientific principles of military education is successful.

2. Equality, the principle of equality. The principle of both team and individual approach in military education.

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The principle of equality, equality determines the subject-subject nature of the relationship between teacher and student.

This shows that modular learning technologies belong to the category of personality-oriented technologies. That is, modular learning technology will be adapted to the individual psychological characteristics of the individual.

The collective nature of military service is the unity of thought, will, actions and responsibility of the individual, an important condition for the successful fulfillment of tasks set before the military collective in peacetime and in combat conditions. At the same time, it is considered an important factor in the success of the educational process.

As a basis for developing a team spirit between individual content elements, it is important to organize teamwork during training sessions and drills, combat duty, internal and guard services. During team leadership training, the training requires the leader to know the psychology and mood of the team, general and individual thoughts, needs, general knowledge and practical activities of teachers.

The main pedagogical rules for implementing the principle of a team and individual approach in classes are:

- organization of team actions during training;
- creating conditions for creative work to find answers to questions, tasks, and solve problems in a team;
- teach each soldier to listen and understand the opinion of another soldier and the team;
- create conditions for team members to work together and at the same time show each of them their potential;
- knowledge by the educator of the mental, spiritual and physical capabilities of each soldier, the level of mental development.

Although the principle of equality, the equality of modular technologies and the principle of collective and individual approach in military education are not mutually compatible due to the rules, since all links of education are interconnected by a single, integrated process, the principles of education are interdependent and complement each other.

3. The principle of system quantization. The principle of preparing troops for necessary actions in battle.

The principle of system quantization is based on the requirements of a laconic approach to the presentation of information, the concept of engineering knowledge, and the theory of increasing didactic units.

Integration with the principle of system quantization and the principle of preparing troops for necessary actions in combat will help to increase the effectiveness of military training.

The principle of preparing troops for necessary actions in combat provides for the organization of the process of training soldiers on the basis of the Defense Doctrine and instructions of military science in accordance with the requirements of martial law.

The main requirements of the principle of preparing troops for necessary actions in combat are:

- knowledge of the peculiarities of modern warfare;
- ensuring a high level of technical, tactical, socio-political and psychological training of personnel;
- strengthening combat readiness;
- bringing training conditions closer to combat conditions;

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- train soldiers to move quickly and sharply, to aim at the target with the first shot, to win with the first attack;
- physical, mental and ideological training of soldiers.

The principle of systematic quantization is realized by creating an appropriate structure of educational information in the module.

historical - this is a brief description of the history of a problem, theorem, issue, concept;

the problem is the formation of the problem;

structural - this is a systematic presentation of the contents of the module;

activation is the identification of key phrases and methods of action necessary for the assimilation of new educational material;

theoretical - this is the main educational material, which contains didactic goals, problem statement, hypothesis justification, and ways to solve the problem;

experimental - this is a description of experimental material (educational experience, work, etc.);

generalization - generalization of the image and content of the problem solving module;

application - development of new methods of action and a system of questions for the practical application of the material being studied;

errors - identify the types of errors observed in the student's assimilation of the module content, identify their causes and show ways to correct them;

linkage - to demonstrate that the module under consideration is linked to other modules, including related subjects of study.

The integration of these principles is important in ensuring a high level of training of troops, based on the characteristics of modern warfare, the experience of combat operations with terrorist groups in various regions, in particular, attempts to invade the territory of our country.

4. The principle of motivation. Principles of consciousness and activity of military students. The essence of the principle of motivation (arousal of interest) is to stimulate the student's educational activity.

The principle of motivation and consistency of the principles of consciousness and activity of military personnel is based on the fact that the consciousness and activity of students have a deep understanding of their military duty and on this basis master their professional specialties. In this case, it is important to increase the desire of personnel to acquire knowledge, develop cognitive activity, increase their interest in acquiring practical skills and abilities.

The following didactic factors contribute to increasing the activity of personal content during training:

1. Organization of military work on a scientific basis as an important condition for creating an environment of creative struggle for high results in the educational process.

2. Develop the creative thinking of soldiers, help them master effective methods of mental and practical activity.

3. The content of the training material is constantly updated for the soldier.

In fact, many factors influence the formation of motivation, because the most important thing is that learning is a process that depends on the person. This is achieved through personal motivation and personal interest. Motivation - the reasons that prompt you to act are understandable, to arouse curiosity. It is advisable to divide these reasons into three groups:

A) The environment in society that creates the need for education.

B) Reasons related to initial needs.

C) Reasons related to the learning process.

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It would not be an exaggeration to adopt the activity-based approach as the basis for motivation in professional education. This approach requires linking the educational material with the production activity of the future specialist. At the same time, the student's interest arises, the desire and assimilation of the educational material in the classroom increases. As a result, the goal of training is achieved.

5. The principle of modularity. This principle serves as the basis for individualization of learning.

Firstly, the dynamic structure of the module allows the content of science to be presented in two different ways:

- the full cut is shortened;
- the choice of one or another type of training remains with the student.

Secondly, modularity is also manifested in the acquisition of the module content, in the diversity of methods and forms. These can be activated forms and methods of teaching (dialogue, independent reading, developmental and simulation games, etc.), as well as problematic lectures, seminars, consultations.

Thirdly, modularity is ensured through the step-by-step development of new material, that is, teaching in each subject and in each module, oriented from simple to complex.

This principle does not contradict the pedagogical rules reflecting the basic laws of the military-pedagogical process, and they are accepted as an innovative approach to the teacher's activities to equip students with knowledge, skills and abilities. However, the teacher is obliged not to deviate from the pedagogical rules reflecting the basic laws of the military-pedagogical process in the individualization of training.

6. The problem principle. This principle allows for the efficiency of learning the educational material to be increased by the practical focus of problem situations and lessons. Although the problem principle does not manifest itself as a principle in military education, problem methods are widely used in military education. But it would be appropriate to recognize the problem principle as important in military education. Because in the daily activities of military personnel, commanders at different levels must make decisions one way or another.

The complexity and uncertainty of the combat situation, the abstract nature of the enemy's plans and the unpredictability of their intentions put commanders and commanders in a much more difficult position.

Their leadership qualities and organization, ingenuity, initiative and the ability to make and implement independent decisions, the ability to perform unconventional and unexpected actions for the enemy are related to martial arts. Once the commander is in charge, he will have to make a decision depending on the situation. Before making a decision, as required by the military situation, it is necessary to carefully study the situation, analyze it and understand the consequences of this decision.

The principle of problem solving, thanks to the practical focus of problem situations and exercises, allows commanders to form the above-mentioned qualities. During the course, a hypothesis is put forward, its validity is confirmed, and the masters themselves must find a solution to this problem.

Masters are given a difficult combat task to make a decision. Such a situation interests the student, stimulates creative thinking and activity in it.

7. The principle of cognitive visualization. The principle of demonstration in military education. The principle of cognitive visualization stems from psychological and pedagogical

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laws, according to which exhibitions in training increase mastering productivity only if they perform the function of speed, as well as a cognitive task.

The principles of cognitive visualization (visual) and military education do not contradict each other, they complement each other. The principle of demonstration in military education is based on a person's perception of the environment, events and processes through the senses and implies a connection between the teacher's words and live perception in the learning process.

Demonstration is widely used in the process of teaching personal content and plays a different role in different contexts. For example, when studying new educational material, visual aids serve as a source of intuition and perception; When repeating material, it helps to expand memory, expand and deepen knowledge of what was previously studied. During practical classes, visual aids will help develop the necessary skills and abilities. In any case, they facilitate the process of acquiring knowledge, increase interest in education.

The following types of exhibitions are widely used in military education:

a) natural representation:

- real combat and training weapons (including parts of some of them);
- military equipment (for example, cars, tanks, armored personnel carriers, infantry fighting vehicles, their engines, shears of some mechanisms and parts, etc.);
- training grounds, tankodrome, training ground, various equipment there, etc.;
- various devices (for example, machines, equipment necessary for repairing equipment), etc.;

b) visual representation:

- three-dimensional visual aids: models, models of technical objects, stands, diagrams, etc.;
- screen media: films, slides, videos, slides, slides, computer images;
- graphic (drawing) visual aids: posters, diagrams, charts, tables, charts, computer graphics, etc.;

c) audiovisual means:

- use of tape recorders, radio receivers;
- sound imitators, etc.;

d) demonstration in practice:

- personal demonstration of certain methods and actions by the teacher;
- show the movement of units, crews, combat scores, etc.

The cognitive principle is based on psychological and pedagogical laws, according to which exhibitions in training give good results only when mastering both the photography function and the cognitive function. Cognitive graphics is a new problem area of artificial intelligence theory, where complex objects are depicted as computer images. The structure of the module is served by cognitive-graphic training elements (block of pictures) executed in color. Therefore, images are the main basic element of the module. These are:

Firstly, it develops the student's ability to see and think spatially, that is, the rich right hemisphere of the brain is added to the learning process.

Secondly, an image (picture) that clearly shows the content of the educational material helps to form systematic knowledge in the student.

Thirdly, color pictures increase the efficiency of receiving and recalling educational information material, and also serve as a means of aesthetic education for students.

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Thus, it can be concluded that the combination of the cognitive principle and the demonstration principle in military education has a positive effect on further improving the quality of military education.

8. The principle of relying on errors. This principle will be aimed at creating conditions for a constant search for errors in the educational process, developing didactic materials and tools aimed at forming a structure of preliminary perception within the framework of the functional system of students' mental activity.

The principle of relying on errors is important in teaching the subject of "Physical Education in the System of Command and Military Education". The reason for this is that the commander must ensure that his decision to organize an offensive or defensive battle is error-free. This is due to the fact that the commander is obliged to show deep knowledge and wise initiatives to take into account unforeseen situations in combat situations in order to avoid situations that may lead to serious consequences, such as loss of personnel or siege. In the process of forming such qualities of the commander, we are convinced that the principle of relying on errors to create conditions for finding errors in his decision, forming an anticipation structure in the functional system of students' mental activity is very effective.

9. The principle of saving study time. This principle will be aimed at creating a reserve of study time for students to work individually and independently.

Correctly organized modular training can save 30% or more of the training time. This can be achieved when all the principles of modular training are fully implemented, the training process is computerized, and the curricula in related disciplines are coordinated. The principle of saving training time complements the principles of military education or didactic principles. Since all links of military education are interconnected, this is a single integral process, the principle of saving training time enhances interdependence. complement each other and never deny each other.

10. Integration of the technological principle and the principle of systematicity, consistency and coherence in military education.

The principle of systemicity, consistency and coherence. Experience shows that a serviceman can perform his duties as a master of his profession only if his knowledge, skills and abilities are not only perfect in a specific discipline, but are also deeply and consistently acquired in such a way that they form a single complex with all disciplines based on specialization.

Systematization in education, consistent and sequential printing ensure the provision of educational material on the basis of a clear sequence and logical order, in relation to each educational science in other disciplines, constant guidance and care for the educational work of educators, the entire educational process is carried out on the basis of a clearly defined system.

In military education, programs and plans for professional, combat and socio-political training of troops are developed in accordance with the requirements of the principle of structure, consistency and coherence.

The principle of structure, consistency and coherence in education requires that new learning materials provided during the training of military specialists build on what they have already learned, extracted from them, and at the same time expand and deepen them. To do this, the facilitator must know not only the content of the topic, but also the following ones, and on this basis must plan future lessons and lay the foundation for new knowledge.

The principle of structure, consistency and coherence in education requires compliance with the following basic requirements:

- provide educational material based on a clear sequence and logical order;

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- constant guidance and care for the educational work of students;
- correct planning of combat and socio-political training;
- reliance of new educational material on previous one, etc.

The integration of the principle of systematicity, consistency and coherence with the technological principle improves the quality of teaching natural sciences. Because this principle means that the teaching and learning process is carried out on the basis of a systematic modular approach, which guarantees the achievement of the desired learning outcomes by students.

The principle is ensured by:

- development of maximally specific learning objectives, selection of criteria for their measurement and evaluation;
- development and clear description of the educational process aimed at achieving the set learning goals;
- orientation of learning objectives and the entire learning process towards the guaranteed achievement of learning outcomes;
- prompt assessment of learning outcomes and adjustment of learning;
- final assessment of learning outcomes.

The technological principle also allows learning to become a repetitive process.

To achieve the goals of education, it is necessary to create basic conditions that ensure the continuity of educational norms. For these purposes, it is recommended to apply the principle of membership.

The combination of both principles and the actions that need to be followed will contribute to increasing the effectiveness of education.

11. Membership principle. The principle of structure, consistency and coherence of military education. The principle of continuity of modular training improves the principle of systematization, consistency and coherence of military education. This principle implies a systematic approach to the development of curricula and programs to ensure the achievement of training objectives.

It should be noted that the specifics of military training do not cancel the idea of using modular training technology; on the contrary, mastering the most complex training materials by masters creates a well-thought-out foundation and strengthens their motivation, ensuring the planned learning outcomes.

From now on, it will be appropriate to create all the necessary conditions for training in accordance with the principles of mutually compatible, modular training and didactic principles of military education, that is, to equip the student with modern approaches aimed at creating an atmosphere of curiosity.

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