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**IMPROVING THE PROFESSIONAL COMPETENCIES OF STUDENTS
OF A DIFFERENT MILITARY EDUCATIONAL DIRECTION IN THE
INFORMATION AND EDUCATIONAL ENVIRONMENT**



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**MINISTRY OF HIGHER AND SECONDARY SPECIAL EDUCATION OF
THE REPUBLIC OF UZBEKISTAN TASHKENT STATE PEDAGOGICAL
UNIVERSITY**

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India– 2021

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In this dissertation, special attention is paid to the complex tasks that ensure high - quality education for the preparation of modern personnel before the educational system of rapid changes caused by the development of information technologies in the world. Basically, in the information and educational environment, information is given on improving the professional competencies of students of various military Educational Directions, and based on their analysis, this dissertation is written with reference. The world is aimed at developing high-tech, educational competencies using modern information technologies in the field of Education.

World Information Technology, modern training of Personnel, non-military education, professional competencies, high-quality education, technological competencies, educational competence, Information, Youth Education, Social Competence, electronic education platforms, innovation, interactive methods.

Introduction

Relevance and necessity of the topic of the dissertation. The world is undergoing rapid change as a result of the growth of information technologies, necessitating complicated duties that guarantee high-quality education prior to the educational system for the training of modern workers. The implementation of information and technology education and the development of open virtual education courses in terms of the use of e-learning platforms developed in the world's top higher educational institutions are given considerable attention in the context of the integration process in the field. The creation of the most fruitful initiatives in the area of didactic environment implementation is increasingly dependent on an object-oriented dynamic educational environment as well as information and technology instruments.

In the area of global education, scientific study is being done with the goal of fostering high-tech educational competences through the use of contemporary information technology. Even while the environment of higher education institutions is a significant sociocultural reality process, its didactic potential has not yet been fully realized. In this regard, particular focus is placed on establishing a scientific basis for recognizing the information and

technological educational environment and outlining the best approaches to integrate information and communication technologies into the educational system.

Large-scale work has been done in recent years to drastically restructure our nation's higher education system, enhance the standard of personnel training, and prepare competitive higher education staff in accordance with worldwide norms. The law of the Republic of Uzbekistan "on Education" defines the need for "further improvement of the system of continuing education in order to develop the field of Education and science."¹ Large-scale work has been done in recent years to drastically restructure our nation's higher education system, enhance the standard of personnel training, and prepare competitive higher education staff in accordance with worldwide norms.

PD-4947 of the president of the Republic of Uzbekistan dated February 7, 2017 "on the strategy of actions for the further development of the Republic of Uzbekistan", PD-6079 of October 5, 2020 "digital Uzbekistan - Decree No. 5349 of February 19, 2018 "on measures to confirm the strategy and its effective implementation", No. 5349 "on measures to further improve the field of information technologies and communications", No. 20 PP-2909 of April 20, 2017 "on measures for the further development of the higher education system", as well as the research of the dissertation in the implementation of the tasks set

The dependence of the study on the **priorities of the development of Republican Science and technology**. Research for a dissertation on the nation's science and technology development. It was done in accordance with the priority of "improving an innovative economy, and spiritual, moral, and cultural growth of a democratic and legal society."

The degree of study of the problem. To improve the educational system of our country, to use modern methods that increase the interactivity of the educational process in the organization of teaching, to increase the technical training of students A.A.Abdukadirov, M.X.Allambergenova, M.M.Aripov, U. S. Begimkulov, F.I.Zakirova, N.A.Moslimav, Q.T.Alimov, R.H.Hamdav, J.A.Hamidov and others conducted scientific research.

To solve the problems of creating automated educational systems in the countries of the Commonwealth of Independent States (CIS), the application of information technologies

1. Law of the Republic of Uzbekistan "on education". (National database of legislative information, 24.09.2020., 03/20/637/1313-San) <https://lex.uz/docs/-5013007>

in education, the organization of training systems A.A.Andreev, N.V.Apatova, A.G.Gain, B.S.Gershunsky, A.P.Ershov, E.I.Mashbits, I.V.Robert, E.G.Studied.

The restoration and development of the methodological foundations of a competency approach is carried out by foreign scientists a.Poangare, F.Galtom, P.Bimmel, J.Raven, K.Kleppin, G. Neuner was reflected in the research work.

the relationship between the dissertation's research and that of the higher education facility where the dissertation was completed. Dissertation Tashkent State Pedagogical University "Technologies of organization and management, quality and effectiveness of pedagogical processes in the system of Continuing Education" (2018-2019).

The purpose of the study is to improve the professional competencies of students of a different military educational direction in the information and educational environment.

Objectives of the study:

strengthening the professional competences of students from a diverse military educational direction in the information and educational environment through pedagogical-psychological study of theoretical-methodological issues;

the development of students' professional competencies in the information and educational environments on the basis of predictive methodologies;

enhancement of the instructional modules' content for military pupils under superb leadership using didactic methods;

improvement of the model for the development of professional competencies of students in information technology through electronic educational resources of students of a different military educational direction.

As the object of the study, 326 students of a different military educational direction were involved.

The subject of the study is the form, means and methods of improving the professional competencies of students of a different military educational direction in an information and educational subject.

Methods of research: Analysis of psychological and pedagogical literature, synthesis of theoretical and empirical materials, application of a systematic approach, study of the

problem based on mathematical modeling, generalization, and analysis of the problem's state in educational practice were some of the methods used in the study.

The scientific novelty of the study is as follows: based on their application in proportion to the organizational meaningful-acmeological and didactic algorithm associated to the activity, students from a different military educational direction's professional competency in the information and educational subject is improved;

the technical framework for the development and use of technology tools to enhance students' professional competencies in the area of information and education in diverse military educational directions. the organizational structure of information exchange is determined in order to increase training levels;

based on their application in proportion to the organizational meaningful-acmeological and didactic algorithm associated to the activity, students from a different military educational direction's professional competency in the information and educational subject is improved;

the technical framework for the development and use of technology tools to enhance students' professional competencies in the area of information and education in diverse military educational directions. the organizational structure of information exchange is determined in order to increase training levels;

Practical results of the study: methodological recommendations have been developed on the development of professional competence of students of the military educational direction to work with information technological means;

recommendations have been developed for the development of professional competence of students in the field of military education for working with information technological means;

from the materials and conclusions of the dissertation, the training modules “systematic patriotic education”, “initial training up to the call”, “Officer courtesy” were improved at the continuous stages of Education.

The reliability of the research results is explained by articles published in scientific journals of foreign and Oak lists, materials of international and national scientific

conferences, the practical implementation of scientific and methodological proposals, the application of research methods suitable for Research tasks, the results of processing by methods of mathematical statistics on the results of pedagogical experiments and tests, and the approval

Scientific and practical significance of the research results. The scientific significance of the research results is explained by the fact that educational and methodological manuals, methodological recommendations developed and put into practice on the development of professional competence of students in Information Technology of higher educational institutions.

The practical significance of the research results is determined by the fact that the conclusions and developed recommendations lead to a positive indicator of the organization of the processes of development of professional competencies of students of a different military-educational direction to work on the basis of information technological means, enriching their content, improving their quality and efficiency.

Introduction of research results. On the basis of methodological and practical proposals developed for the development of professional competencies of students of the military educational direction in the information and educational environment:

the criteria for the development of professional competencies of students of a different military educational direction in the information and educational environment (motivational, cognitive and activity-reflexive) were used to develop proposals for the diagnostic design of the student's base, private, and methodological competence in the higher education system based on their requirements for content and quality. As a result, at the expense of theoretical-methodological and pedagogical-psychological analysis, the stages of development of competence in working with information in students have been improved;

proposals on improvement of prognostic methods of periodization of stages of work with students of different military Educational Directions in the information and educational environment were used in the implementation of the tasks set within the framework of the practical project "development of pedagogical activity on the basis of cooperation in

educational institutions" PD-7124, which was completed in 2018-2020 at Tashkent State Pedagogical University. As a result, the possibility of improving didactic and educational-methodical complexes was created due to the improvement of prognostic methods of Information work competencies.

the content of the textbook of proposals on the content of educational modules of higher educational institutions, forms of the natural and virtual environment, a modular motivational approach and improvement of the model for the development of competence in Information work in higher educational institutions. As a result, the diagnostic system for working with information in students has been improved due to the improvement of the content of educational modules of higher educational institutions by didactic means.

"Aprobasiya" of the research results dissertation results:

The article was discussed at 7 Republican and 2 International Scientific and practical conferences.

The publication of the results of the study. A total of 9 scientific works were published on the topic of the dissertation. In particular, the doctoral dissertations of the Higher Attestation Commission of the Republic of Uzbekistan were published in the recommended publications for the publication of the main scientific results of 6 articles, of which 4 were published in Republican and 2 in foreign journals.

The structure of the dissertation: the dissertation consists of an introduction, three chapters, conclusions and recommendations, a list of used literature and applications, the main text of which is 156 pages.

THEORETICAL FOUNDATIONS OF IMPROVING THE PROFESSIONAL COMPETENCIES OF STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS ON THE BASIS OF INFORMATION TECHNOLOGICAL MEANS

1.1-§. Psychological and pedagogical phenomenon of improving the professional competencies of students of a different military educational direction in the information and educational environment

In achieving the ultimate goal pursued by the comprehensive reforms carried out in our country, the field of education plays an important role, in the process of which the effectiveness of the training system in Article 7 of the law "on Education" sets the task of increasing the effectiveness of the activities of higher educational institutions on the basis of modern requirements. In the implementation of this task, students in higher educational institutions are required to have a high professional potential and human qualities from each. "First of all, that he has patriotic and patriotic qualities, that he loves and pursues his native land with all his heart, that he does not spare himself for his country, that he should be ready to sacrifice his life on this path. A master of his profession, a true connoisseur of this work, expects to become an example for others in this regard. Hence, it is important that the pedagogical person has an independent worldview, broad thinking, far-sighted ability, and his faith should be firm, strong-willed, honorable, inquisitive, regularly enterprising, entrepreneurial qualities.

A sufficient number of scientific works are devoted to the consideration of the problem of the explanation of the terms "competence". These terms are currently used in various fields and have no ancient history. Research of professional competence in pedagogy as a scientific category began to be actively carried out in the 90s, and scientists from the country and abroad V.I.Baydenko, G.E.Belitskaya, A.A.Verbisky, N.A.Grishanova, I.A.Zimnyeya, V.V.Zuev, V.V.Itshenko, A.S.Kazurova, G.B.Carnival, B.G.Kalamies, N.V.Kuzmina, A.D.Latshuk, A.V.Makarov, L.G.Makarova, A.N.Navikov, L.G.Semoshina, N.A.Selezneva, Yu.G.Tatur, V.D.Shadrikov, P.Bimmel, J.Raven, K.Kleppin, G.Neoner and reflected in his work.

The meaning of the word competence can be found in various sources, for example, in the dictionary of large foreign language words competence [lot. competent according to the right of belonging is the scope of the powers of some body or official; 2) the range of issues that the person possesses the knowledge, experience [31].

Let us consider the historical aspect of the introduction of the concepts of "competence" and "competence" into the scale of education in relation to the educational process.

The first stage is characterized by the creation of initial conditions in relation to the scientific apparatus "category of competence" and the separation of the concepts of

“competence” and “competence”. At this stage, scientists mainly considered different language competencies. For the first time, the term “competence ” was introduced and considered by the scientist Haberman, who used it as a sociological term within the framework of the theory of speech communication [18].

"Competence" as a pedagogical phenomenon began to be studied in scientific research since the 1970s of the XX century. Scientific research related to increasing the competence of the teacher in the innovative organization of the educational process is carried out in the leading scientific centers and higher educational institutions of the world, including the Institute of Education at the University of London, Great Britain, the Bavarian Institute for accreditation, certification and quality assurance, the French University of Nant, the Universities of California, Ohio,

During the study of the pedagogical and conceptual nature of the issues of development of professional competencies of students of a different military educational direction in the information and educational environment, the presence of various scientific views in the literature on the field is manifested in the fact that in the research of scientists there are different interpretations.

In national pedagogy, the term competence came into science in the 90s of the XX century. Uzbek pedagogical scientists M.Ochilov, H.Inoyatov assessed competence as a special activity of the individual and substantiated the fact that as a result of this activity, the individual can manifest social and technologised abilities, and be able to moderate the ability to correctly distribute labor.

M.Ochilov believes: competence – on the basis of knowledge, knowing the eye of the work and functioning, - expresses the opinion.

Sh.A.Abdullaeva and B.B.Sobirovs in relation to the requirements for the competence of a modern teacher “research competence - knowledge and techniques as the ability to adapt according to the situation, and in this activity characterize the pedagogical as critical observation, the ability to make the right decisions, substantiate the facts of the field, the ability to apply effective results in practice.” It is also substantiated that today there are several manifestations of competence.

E.Gaziev describes the concept of" competence "as:" Knowledge, Skills, Qualifications, value, other personal qualities, the appearance of positive results in activity.""This means that competence in the teacher is manifested in a general and special way.

In the British approach, "competence " is understood as a set of professional qualifications that determine the range of specific reasons and the ability of a worker to perform specific activities at the standard level, which determines the standard in the conditions. The system of professional qualifications adopted in the UK consists of two subsystems: national secondary qualifications (Primary, general and effective degrees) and national professional qualifications.

N.N.Azizkhodjaeva in her research pays special attention to professional and pedagogical knowledge, orientation to humanism, pedagogical technique, experience and pedagogical personality as the basis of pedagogical skills. "It provides an opportunity to see, understand the laws and directions of development of the pedagogical system in the integrity and in combination with the entire structure of the logic of the sensory – pedagogical process, facilitates purposeful planning."

M.A.Yuldashev noted:"the quality of education is measured not only by the degree of assimilation of academic knowledge by educators, but also by the degree of stagnation of motivations such as the formation of competencies in various areas of vital activity, readiness to read and learn for a lifetime, personal and professional development."

In the American approach, the creative component of individual activity is put forward, being a distinguishing mark of the concepts of" competence "and" competence". That is, students with competence are distinguished by the presence of critical thinking and the choice of the most convenient solution [196]. To the structure of student competence, skills are added that allow you to quickly assess the situation and find a specific way out of it. Also the American approach provides for the appropriate implementation of tasks for students with competencies for specific reasons.

The design of state educational standards and curricula based on the competency approach, a promising model for introducing a competency approach in general secondary

schools, was considered [73]. The study shows the material and technical base, pedagogical potential, the system of taking into account the individual characteristics of students, administrative-management personnel, pedagogical-teaching personnel, methodologists, monitoring specialists, infrastructure, building equipment, which will be necessary for the introduction of a competency approach in general secondary schools. At the same time, in the model, indicators, tools, methods, processes that will be produced in the assessment of the quality of Education have been expressed.

The term “competence” is described from the point of view of teaching biology, highlighting the system of competencies that future students acquire during their lifetime in the introduction into personal, social, spiritual and educational, economic and professional relations. The study also discusses the features of creating an innovative educational environment based on competency approaches in teaching the discipline “evolution doctrine”, so that students can learn and work with science –related and base competencies, including communicative, Information-Communication Technologies, self-development competencies as individuals, socially active citizen competence, general competencies, mathematical literacy, awareness of Science and technology innovations, and access to them.

"Competence" is understood as the potential of a person in relation to a particular problem and issue, phenomenon, to have knowledge, experience, mutualism and to solve them. **"Competence"** -awareness of the solution of events, issues, expresses in itself the acquisition of a certain prestige.

The analysis of research, scientific developments, critical analyzes carried out, as a result of research, in the scientific, methodological literature related to the problem, shows that scientific developments devoted to the problems of developing competence in students in information and technological means are not sufficiently formed. Therefore, in the study, we focused on finding a solution to the problem of the development of professional competence of students in higher educational institutions by an information and technological tool, and studied the stages of development of students ' professional activity in the higher education system.

The concept of “competence” is then considered in works related to the field of Social Psychology, which are defined as the foundations of professional skills [197]. Competence is considered as the work performed, the essence of the task to be solved, the relationship between certain signs, phenomena and processes, the complexity of methods and means of achieving the existing set goals.

The third stage of the restoration of the competence approach can be described according to the fact that the concepts under consideration began to form in UNESCO documents and materials. At this time, the sum of the so-called Main competencies is determined, which is put forward as the results of compulsory education. According to experts from EU countries, competence should be considered as the ability to effectively and creatively apply knowledge, skills and abilities in interpersonal relationships and professional activities.

In its international documents, competence is defined as the ability to competently carry out and carry out some kind of activity, assignment and work. In this, the very concept of “competence” includes knowledge, skills and abilities that allow an individual in a professional sphere or specific activity to perform one or another function aimed at effectively acting or achieving certain standards.

Competence is characterized by a certain level of education and forms of personal activity that allow comfortable work in society within the limits given by individual abilities and status [60]. In this definition, human knowledge, skills and experience in a particular field are clearly observed, however, based on the analysis presented, the concept of competence has a broader meaning. For Example, Yu.F.Maysuradze organized approaches to describe competence into groups:

- inclusion of competence in knowledge of one's own work, Management Science;
- inclusion of educational level competence and student work experience in the concept of competence;
- determination of competence in the interconnection of the practical application of knowledge and tools.

In Psychological Science, there are three approaches that consider the problem of competence:

- socio-psychological;
- psychological and pedagogical;
- universal.

Competence is a defining assessment category as a specific activity that allows an individual to make key decisions that allow him to successfully achieve the goals set, plan activities, and perform a specific job in the need for implementation [144]. That is, competence is promoted as a fixed ability to carry out activities through knowledge of work and includes the following components:

- acquisition of experience in a particular area and active independent improvement;
- be able to choose methods suitable for solving specific tasks;
- the presence of feedback when carrying out some kind of activity to correct erroneous actions;
- the presence of a sense of responsibility for the results obtained.

M.A.Choshanov also proposed an approach to competence, recommended to include in the competence formula the ability to choose the most correct among a large number of decisions, and to substantiate and exclude information that was wrong in this in advance. Professional competence provides for the systematic updating of knowledge, the acquisition of new information in order to successfully solve professional tasks. That is, students with competencies can both understand the essence of the problem and know the practical solution, taking the most applicable solution method in these conditions.

Competence refers to the level of personality qualifications that reflect the conformity of a particular competence and allow constructive implementation of activities under changing social conditions [54]

Competence is the personality of a person who gives a person the right to make decisions in a particular area, to give his comments. In this case, knowledge and experience of human socio-professional activity should be considered as the basis [177].

Competence is defined as a combination of certain knowledge in a specific field as well as the ability to reason about the field and to move [185].

Scientists from another country, having studied the pedagogical phenomenon of competence, consider this concept in relation to the activity of the subject and express the opinion that “competencies” combine the concepts of “competence” and “professional competencies” as synonyms, all of which combine the general possibility of carrying out professional activities.

Allocates three main competencies-competence [66, 68, 69]:

- competencies that belong to oneself as a person and determine an individual as a subject of life activity;
- competencies that determine the interaction of an individual with other people;
- competencies belonging to all types and forms of individual activity.

Thus, summarizing the above, it is necessary to conclude that competencies are a generalized abstract sum of the qualities of an important person (A.V.Khutorskoy), psychological new derivatives of the individual (I.A. Zimnyaya), a field of professional activity that includes the rights and obligations of students (A.A.Verbisky), the use of a rule (action) to solve a specific task (V.A.Kalney)

As a general facet of the approaches considered by us, one can single out the understanding of competence as abilities to solve various problems arising in the process of professional activity. That is, the components of competencies manifest themselves as a description of the integral personality, which is acquired in the process of training.

Thus, by now there are a number of definitions that belong to one or another aspect of competence. However, the study makes it possible to conclude that in recognizing the

inevitable importance of basic and social competencies for individual life activities, professional competencies are the main ones that determine the level of student skill in a particular type of activity.

In other words, considering professional competencies as a pedagogical category, it is necessary not only to imply a certain sum of knowledge, qualifications and skills, but also to take into account professionally significant qualities that determine human professional skills in a particular field of activity.

That is, based on the results of the analysis carried out, it can be concluded that professional skills:

- includes the necessary knowledge, qualifications and skills for a specific type of professional activity;
- characterized by the qualities of professional importance of a specific individual, who in general should clearly understand the surrounding being and master the art of setting and solving professional tasks in particularly difficult non-standard situations.

The analysis of various approaches to the essence of such concepts and structures as "competence", "professional competence", "professional competencies" allows us to conclude that at present there is no clear and uniform definition of these terms. Understanding competencies as an individual's ability to solve various problems arising in the process of professional activity is considered common to all approaches. Competence is promoted as an integral description, qualities of a person who can be mastered in the process of teaching, such as competencies.

Thus, in pedagogy there is no single approach to the definition of the concepts under consideration, however, by now the concept of "professional competencies" has been consolidated, where the main professional competencies that students of the Higher School should master are listed.

A system of relative Internal new derivatives (mental reserve, programs and algorithm of actions, personal qualities, value system, etc.), embodied in topical functional

manifestations that allow an individual to apply knowledge, skills and abilities for the successful implementation of professional activities.) can be defined as.

At present, the structure of competencies that a student should occupy is clearly defined in the state educational standards of higher professional education for the purpose of understanding. This structure is given according to the requirements for the results of basic educational programs of student training

Modern research educators offer various solutions to this task, in particular, the use of active and innovative teaching methods, modern educational technologies in the pedagogical process. One of the options for building Subject-subject relations with tax collectors and their more active involvement in the educational process is, at the same time, appropriate moral education, which is carried out along with the process of improving knowledge about the requirements for their professional and moral protection by society; improving the perception of the social significance of service activities in tax recipients; creating conditions that stimulate moral improvement of tax recipients; principles and norms with tax recipients, as well as appropriate moral feelings (responsibility in relation to the profession, alertness, pride, etc.) consists in the implementation of moral and significant activities that condition its understanding.

It is also necessary to emphasize that, in addition to the functions of training and education, it is also necessary to develop a student in the process of improving professional competencies. Therefore, classes in the subject under consideration should be organized and conducted, taking into account the features of the age and individual-psychological development of students.

The personality of the tax collector can be comprehensively developed by applying a personality-oriented approach to professional training and provides for a detailed study of the individual characteristics of each tax collector and the characteristic of the appropriation of educational material with them. At the same time, a sharp increase in the volume of information in professional orientation does not allow students to master it at the necessary level, and the teacher to organize individual self-education with the student using traditional teaching methods and tools.

Thus, studying the essence, structure and meaning of the concept of "professional competencies", as well as the set of professional competencies that students should master within the framework of the study of exact science, the research carried out was carried out by educators who studied the pedagogical process as a holistic phenomenon (Yu.K.Babansky, A.V.Barabantsnikov, V.P.Davidov, M.A.Danilov, L.F.Zheleznyak, V.V.Graevsky, B.T.Likhachev, A.I.Mitshenka, V.A.Slastenin, N.F.Fedenko and H.) aspects of activity, specific laws in a holistic pedagogical process, comparing with the idea of, we will consider the process of improving professional competencies in future graduates of the CPSU according to the principles of organization and management.

The holistic pedagogical process is characterized, first of all, by the internal unity of its components and their harmonious interaction. This is done in continuous dynamics of casual link, in the process of eliminating various conflicts, with the repeated division of subjects in casual link into groups and the redistribution of roles, the acquisition by the pedagogical system of new qualities that were not previously inherent in it.

We believe that the established professional competencies of students in the process of professional training can be improved in the creation and implementation of effective educational technologies of professional training, which provide for the use of innovative teaching methods and the organization of the corresponding educational process, as well as taking into account the aspects of the main entire pedagogical process.

Within the framework of communication, the teacher regularly carries out communicative actions to convey educational material that contributes to the development of professional interest and cognitive activity in students, the improvement of the functions of independent development and independent education, the acquisition of the necessary professional skills. Within the framework of collaborative activities, the teacher applies professional self-knowledge to the exchange of actions, demonstrating the methods of perception of each other and practical actions in the most correct and purposeful way.

In the process of improving professional competencies, in the framework of the application of educational functions and psychological training, the pedagogue directs the pupils to the acquisition of signs of social culture, mental and physical labor activity; forms

the foundations of the general worldview and public behavior; combines general and professional competencies into the field of future professional activity as a whole,

Thus, within the framework of a given pedagogical organization, the teacher must carry out the following [20]:

- manifestation of a valuable attitude towards the person of the tax collector (wishes and proposals of the student should generate the interested influence of the educator, personal attitude towards the tax collectors is removed from the assessment of their activities, the educator focuses on the positive qualities of students necessary for the implementation of educational tasks, etc.) –);

- implementation of new pedagogical functions with the educator, who provides for the implementation of the pedagogical activity as an interlocutor, researcher, psychologist, expert;

- implementation of the arxeological orientation of professional activity and communication.

In turn, the tax collectors should actively and comprehensively participate in the educational process, constantly carry out self-control and self-assessment, and in the process of improving independent professional competencies, strive to master various educational actions, independent learning and independent methods of development, solve various tasks set by the teacher.

In the type of pedagogical interaction, which is given from the point of view of a subject student, the following is expressed:

- *activity presupposes* the desire of students to deviate from the generally accepted framework, deepen and expand the sphere of their educational activity;

- *independence presupposes* the ability of the tax recipients to act independently, to show mental initiative, to be ready to perform various actions at the expense of their own forces;

- *willingness* to choose implies the willingness of the recipients to consciously and responsibly respond to the results and consequences of their actions, behavior.

Summing up the foregoing, it can be concluded that the basis of the process of improving the professional competencies of students of a different military educational direction in the information and educational environment is the joint educational and cognitive activity of educators and subordinates, which allows students to creatively understand and apply the acquired knowledge, skills and skills to perform the tasks of professional activity.

Next, we will consider the process of developing professional competencies in terms of its qualitative peculiarities through the laws and laws of the pedagogical process. In this, as the main law defining the application of the pedagogical process, a strict trend towards the transfer of social experience of older generations to the growing generation is put forward [23].

Students of a different military educational direction in the information and educational environment the process of improving professional competencies directly depends on various conditions implemented in it (moral-psychological, material, social, etc.). These conditions began with the socio-political and economic situation and were involved and completed in the educational process, conditioned by various factors. It should also be noted that, as a holistic pedagogical process, the process of improving professional competencies of students of the CPSU is determined and related precisely to the requirements given in the management documentation, which determine the degree of conceptual development of a special office, the development of techniques and armament, principles and methods of their application.

In this case, as well as the objective dependence of the results of the educational process on the characteristics of the casual link, which are with the direct participants in the educational process considered above, the content of the process of improving professional competencies, the correspondence of forms and methods to the individual characteristics of the tax recipients, is closely related.

In order to organize the direct practice of implementing the process of improving the professional competencies of students of a different military educational direction in the information and educational environment, it was considered an important stage to establish their structure and laws that determine the internal connections between its components. For example, the content of a specific training session is determined by the goals and objectives described, in which the method, form and means used are in accordance with the tasks and content of a specific pedagogical situation [23].

The process of improving professional competencies is complex, multi-factor and multi-stage, it is conditioned by the development of society, the formation and restoration of the team and the implementation of cognitive activities in it, and pedagogical laws are inherent in it, which undoubtedly reflect the dependencies and relationships that define this process.

Thus, the unity of the components of the educational process in the improvement of professional competencies of students of a different military educational direction in the information and educational environment is not achieved on their own, but in this it is necessary to carry out strict, regular actions both by the tax collectors and teachers.

The unit of external influence and internal activity of the teacher is determined by the type of self-education chosen in the process of carrying out the educational process. For students of a different military educational direction in the information and educational environment, this factor is considered more defining, the reason is that it is not easy to achieve in a strict hierarchical subordination system to establish reliable partnership relations and strengthen appropriate training. In the work, the results of the educational process are understood as the degree of improvement of clearly given professional competencies, therefore, it is necessary to describe the goals of training and select the appropriate pedagogical tools taking into account exactly this level, making adjustments in teaching when necessary. In the information and educational environment, it is advisable to correlate the results of training, upbringing and psychological training of students of a different military educational direction with the professional activities of those who are studying, applying the principle of strength and ability to practice, since the application of this

principle is associated with the development of memory of understanding and the development of This makes it possible to compare the new complex educational material with the professional activity of the student and to introduce the acquired knowledge into the structure of the personal student experience.

Thus, the process of improving the professional competencies of students of a different military educational direction in the information and educational environment indicates in students a holistic pedagogical process aimed at the acquisition by them of abilities in the implementation of professional activities (operational, organizational-managerial and production-technological) as a result of improving the abilities to identify and use essential personality traits, rules

It can be concluded that the improvement of professional competencies in students of a different military educational direction in the information and educational environment is a pedagogical problem, since it is the result of the exit of the process and is students with a wide set of comprehensive and professional knowledge, qualifications and skills that allow them to adapt and work without difficulty.

1.2-§. Structure and criteria characteristics of the essence of professional competence in a specialist in the study of special disciplines

The construction of such a training process as the possibilities of improving the professional competencies of students of a different military educational direction in the information and educational environment requires taking into account the pedagogical aspects. At present, it is difficult to imagine the construction of a learning process without the implementation of modern information and telecommunication technologies, be it the development and use of information teaching tools or the organization of interaction between the teacher and the trainee. Based on the development of the established trend, the modern society in which information processes based on information and telecommunication technologies lie are closely connected with the generally accepted process of informatization, which concerns all aspects of life activity. The development and implementation of

information and telecommunication technologies in various fields of human activity has also given impetus to the emergence and rapid development of the global informatization process, which is the main part of the universities.

Among the main state tasks in the field of education, the tasks of ensuring the access of all students of each educational institution to the scientific and educational literature, information and didactic programs technologies, network and database are distinguished.

Analysis of scientific literature and pedagogical practice has shown that the concept of informatization of education is understood differently with modern pedagogical researchers. For Example, P.I.Pidkasiy gives the following definition: informatization of education is a comprehensive measure for the re - creation of pedagogical processes based on the introduction of information products, tools into teaching and upbringing [25].

In the "Explanatory Dictionary of the concepts of informatization of Education", informatization of education is understood as an organized process aimed at providing the educational sphere with the theory, technology and practice of the creation and accelerated use of scientific and pedagogical, educational-methodical, software-technological developments aimed at applying the didactic capabilities of information and communication technologies used in favorable and health conditions [164, 165].

In the "encyclopedia Dictionary of pedagogy", informatization of education is understood as the process of providing the educational system with the methodology and practice of the development and accelerated use of modern information technologies aimed at applying the goals of psychological and pedagogical training and education [28].

At the same time, it is common for the listed concepts to help the informatization process in the field of Education:

- improving management in the educational system based on the application of various automated databases with scientific and educational information, information resources and information delivery networks;

- improving the strategy and methodology for the selection of the content, methods and organizational forms, individual development goals of training and education of students in the conditions of the modern Information Society;

- methodological training is aimed at creating and developing systems, increasing the intellectual potential of students, improving skills for mastering independent knowledge, carrying out various experimental studies, etc.;

- computer tests, control and evaluation of the levels of knowledge of the tax recipients development and application of diagnostic processes.

Considering it as part of the educational system, it should be noted that the qualitative change in the state of the information environment of the educational institution is one of the mandatory organizers for the progressive and comprehensive development of the personality of each student. Relying on a systematic approach, it is necessary to consider the OTM informatization process as a process that affects the pedagogical system, which has its own characteristics and laws. The system is investigated as a single organism, taking into account the internal connections between certain signs and external relations with other systems and objects.

In particular, it can be said that an important feature of higher educational institutions, from the point of view of informatization of education, is their “closure of information”, conditioned by the specificity of the subjects taught.

Summarizing what has been said, the following can be distinguished as private goals of Higher Education informatization:

- integration of the educational system into the scientific, social and cultural education, infrastructure of the country, the world community when there is an opportunity;

- preparation for the full-fledged and effective implementation of professional activities of improving the professional competencies of students of a different military educational direction in the information and educational environment.

Thus, it can be concluded that before the higher education system there is a task of informatization of the process of Higher Education on the basis of modern information and technological means in the possibility of implementation within the framework of promising teaching models.

However, to date, not a single point of view has been developed on this problem, which is used with all scientists. Analyzing scientific, methodological and educational literature, it is possible to substantiate the following types of educational process support – methodological, informational, software, didactic, personnel, documentation, material and technical-application.

In general, the provision of the educational process can be considered as a process and result. If we talk about the educational process as about the procedure for execution, then the provision is changed to the Planning, Development, creation of the optimal system necessary for the effective application of the didactic process. The provision of the educational process as a result implies the totality of documents, educational and methodological resources, which consists in its systematic definition for the subsequent application of the educational process in practice.

Methodological support is understood as a set of teaching technologies for improving the level of necessary professional competencies, documents describing the criteria for formed professional competencies, as well as methods for designing and implementing the educational process in the information and educational environment.

Educational process information support provides for ensuring the full and regular functioning of all recipients with the necessary information related to the basic educational programs, planning of activities, the organization of the educational process and the conditions for its application.

Educational process software is understood as a set of software necessary for the implementation of the educational process in various academic disciplines, either using the Bank of software and methodological support information in the directions of the activities of the university, or using the appropriate information and educational technologies.

The implementation of the organization of the didactic supply of the educational process with up-to-date educational and methodological resources, the creation of the base of the required volume of such resources, its periodic verification and updating.

In addition, the term methodological support of the educational process in most cases is not used “in its pure form”, but is used to refer to educational-methodical, systemic-methodological, scientific-methodological, normative-methodological. Taking into account the semantic and morphological analysis of these Language units and the need for informatization of the educational process, it can be concluded that, in addition to constant service, provision of documentation, it is similar in essence and has a common designation. As a sign, information and methodological support of the educational process is put forward, in which we understand that the educational process is provided by other materials used in the educational and educational process of the necessary scientific-pedagogical, educational-methodical, information-informational, instructional-organizational, regulatory-methodological, technical and specific educational institution [164, 165].

The main characteristics of the presented considered educational process provision indicate that in most cases their content is revealed through a set of applicable teaching methods, tools and forms that allow the teacher to constantly increase the quality and productivity of the educational process and carry it out at the required level.

However, in the conditions that are changing today, it is not enough to rely on classical information and methodological support of the educational process. With the introduction of a new generation curriculum, requirements for the structure and content of educational and methodological support of the educational process were given, a number of management and regulatory documents were adopted, in which criteria and indicators for state accreditation of universities were determined.

Basic educational programs also impose requirements for academic disciplines, where requirements are also imposed on the use of innovative techniques in the educational process. In addition, the above-mentioned documents talk about the content of education and the development of a training system in accordance with certain didactic goals, which

includes the totality of such self-contained components as the purpose, method, form and means of training in accordance with it.

As you know, in the conditions of intensive informatization of students of a different military educational direction in the information and educational environment, the use of modern information and telecommunication means in the educational process, the types of educational process support considered taking into account the requirements of management documents in the educational sphere at the full level do not allow to reveal and reflect.

§.1.3. As a means of improving professional competence of students of non-military education in the information and educational environment

Thus, in the approach to teaching, it is necessary to develop certain rules. One of the components of these rules, in turn, includes the information and technological support of the educational process, which is promoted as the basis for improving the professional competencies of its students. This concept is included in the theory of pedagogy, which in its general form has two components: an information component that implements the content aspect of teaching, and a technological component that allows the application of the procedural aspect of student training [57].

Combining historical similarities in the process of development and development of various types of ensuring the educational process in higher professional education, it can be observed that their restoration is directly related to the improvement of the components of various methodological training systems. This law is clearly traced by the emergence of various innovative teaching methods and the introduction of fundamentally new didactic tools – educational and methodological complexes and software and methodological complexes.

The introduction of a methodology based on the unification of the processual and content aspects of the educational process is also associated with the large-scale use of various informative didactic tools in the educational process in combination with information teaching technologies. Thus, it is based on the integration of information and pedagogical

technologies. In the process of improving professional competencies, we will analyze the essence and consider the components.

The information component carries out the content side of the educational process, which is aimed at the full and appropriate presentation of the necessary educational and various additional information to the content of students and professors in order to achieve the imposed Didactic, Educational and developmental goals and obtain a guaranteed result in the form of the level of formation of the necessary professional competencies. Previously, the implementation of this function was provided at the expense of some pedagogical software products, but they were not systematically used and carried out certain tasks within the framework of the implementation of a particular teaching methodology, either a teaching methodology was developed under a certain set of software products. In the process of implementation, this approach has identified a number of disadvantages, which include:

1. Some software and didactic tools are not intended for integration into a single didactic system that allows solving the problem of improving professional competencies in students of a specific direction.
2. Most often, pedagogical software products are developed in different information environments using various software and technical means. This factor does not allow combining them into a single information and technological environment.
3. Software pedagogical tools in most cases are aimed precisely at computer teaching methods and do not allow solving the entire spectrum of didactic tasks within the framework of the science curriculum.

Relying on the practice of analysis of pedagogical literature and the introduction of informatization tools in the educational process[87, 140, 155, 167], we believe that with the introduction of appropriate teaching technologies that implement didactic information support complexes and, accordingly, information and procedural components in the educational process, it is possible to eliminate the shortcomings listed above.

Next, we will consider the structure of the main components that determine the basis. The complex of didactic information support of educational science expresses such a system

that a set of didactic tools and methodological materials is combined into one whole, which comprehensively provide and support practical software pedagogical products, information base and knowledge of the field of science being transformed, as well as teaching technology used by the pedagogue [40].

It is similar to an educational and methodological complex, which, according to its structure and functional task, should contain a complete list of necessary information for conducting an educational discipline. The substantive part is determined by the requirements given in the educational program of the main discipline and other OTC regulatory documents that determine its smallest (either strictly defined) composition.

Taking into account the above-defined properties and listed characteristics as a pedagogical system, the structure of the didactic complex given in Figure 1.3 was developed.

The following main signs are included as supports: information and Information System and interdisciplinary communication base, methodological materials for conducting classes, regulatory documents, Electronic Science Library, control and assessment block, audio-video materials on science, science course project, computerized laboratory practise, a set of works of teachers and subordinates, user instructions.

All listed structural signs are combined into a common software-information shell, consisting of a set of tools that contribute to programming and graphic formalization. The function of each structural character, its definition and specific application are indicated.

The analysis carried out makes it possible to conclude in such a way that its implementation allows the application of the following educational, developmental and educational functions:

- information and training (systematization, deepening and improving skills and abilities of students in the field of studied science);
- communicative (consists in the implementation of a virtual dialogue between the participants of the entire educational process);

- control (each student applies comprehensive measures to control the formed professional competencies and purposefully improve the individual-cognitive process);
- motivational (stimulates the need for independent development in students, at the same time development in the service-professional sphere);
- educational (aimed at fostering independence and responsibility in the study of science).

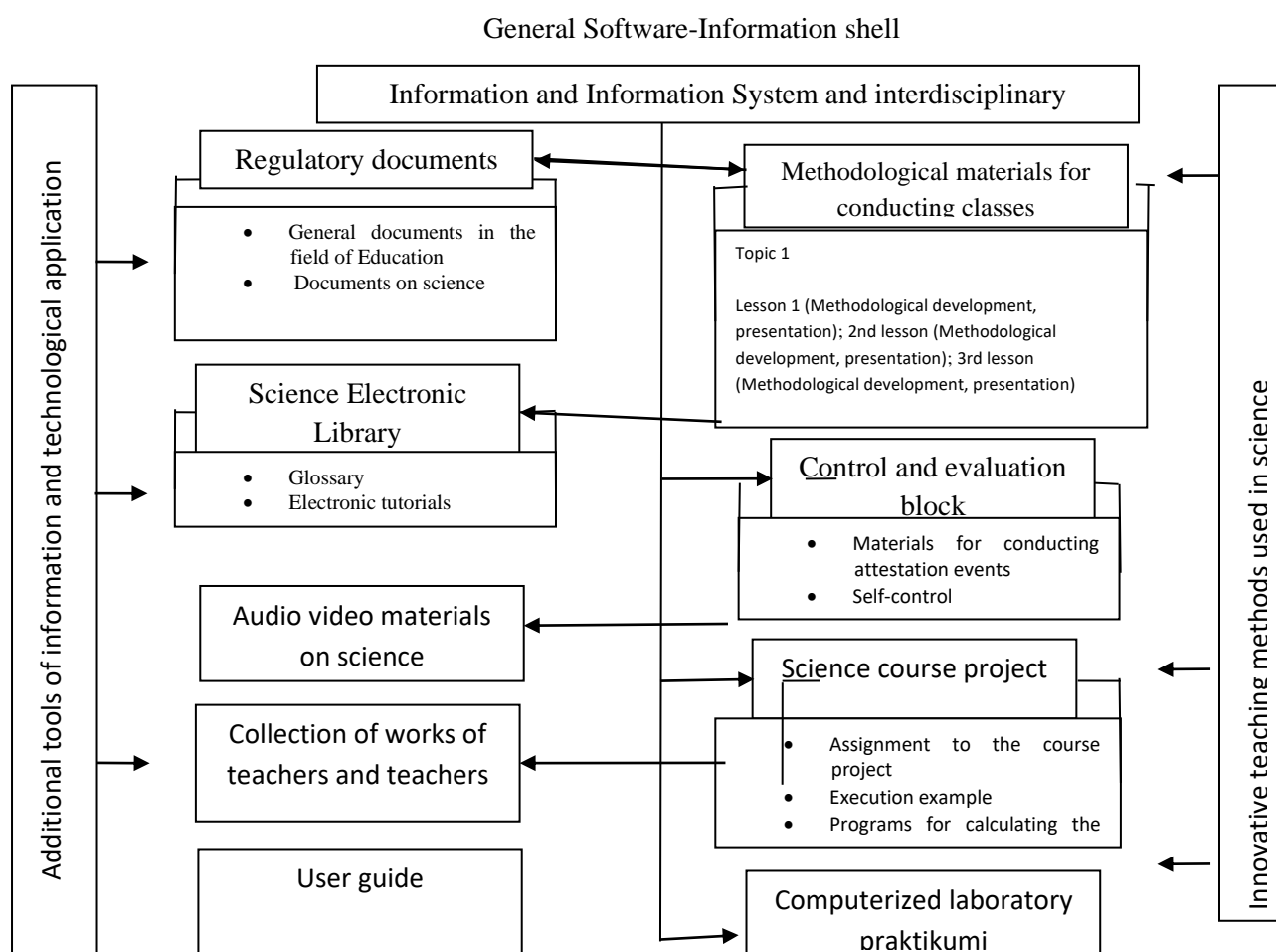


Figure 1.3. - Structure of the complex of didactic information support of educational science

Thus, the didactic information support complex is considered a full-fledged didactic system, which makes it possible to apply all its necessary functions not separately, but based on the received information training technology.

Being an important organizer, the OTM is a technological organizer that allows the application of the procedural aspect of student training. The design and implementation of information teaching technology is necessary for the implementation of the process of developing professional competencies of guaranteed quality, which allows students to be ready to carry out their professional activities to the fullest extent and actively apply their creative potential and acquired knowledge, skills and abilities.

Information teaching technology performs the function of a connecting character that creates and unites around itself the necessary information environment that contributes to the favorable pedagogical interaction of the student and faculty. Based on the mentioned, we will consider the role and place of information and pedagogical technologies in the structure of the educational process.

In education, the technological approach assumes a clear imposition of training goals and methods of guaranteed achievement of them, while the competency approach implies the level of formation of certain professional competencies that must be included in the educational process using the following as a result of the exit:

- educational technologies;
- educational content provided in basic education programs;
- Higher Education features and specificity;

– accepted forms of uzarota'sir" Teacher-Teacher-Teacher", " as part of the training group of the tax collector". Analysis of pedagogical literature [24, 26, 33, 47, 49, 64] as it turned out, the following signs of teaching technologies can be distinguished:

1. The presence of a two-sided uzarota'sir, organized between the teacher and the Attending Physician. Since the Administrative-Service, which is a systemic pillar in this, should pay special attention to the construction of partnership relations, which allows you to build this process within the framework of reliable and mutually beneficial relations.

2. Provide tax recipients with conditions and opportunities in the development and application of the necessary personal potential for the implementation of future professional activities.

3. The presence of an ordered set of didactic methods, methods and Means combined in a strictly logical sequence determined in the process of designing and organizing the educational process.

In addition to the guaranteed achievement of teaching goals, researchers as the main ones scrape the component of information learning technology: the totality of forms, methods and means of teaching, as well as the corresponding educational goals and content (Didactic, Educational, Psychological, etc.) [70, 86, 98, 99, 110] a system of processes with the required variety of characteristics, conditioned by.

Scientists, speaking about the technology of information training, argue that it should have a methodically provided set of organizational actions that determine the favorable conditions for the educational process using various means of informatization [30, 88, 121].

By combining the presented information teaching technology signs, it can be concluded that the task of teaching technology, which determines the optimal construction and application of the educational process, taking into account the guaranteed achievement of the training goals set for many researchers, is considered general.

Thus, having determined the confirmation indicated as the founder and, relying on the ideas outlined in the works of scientists-researchers[41, 110, 141, 128], in order to improve the professional competencies of students of a different military educational direction in the information and educational environment, we distinguish the consistency of the stages of design and implementation of the following information training technology:

- determination and definition of general training goals and their maximum approximation to the content of their preparation;
- the imposition of the described private didactic goals, taking into account the planned achievement of the results of systematic-professional training;

- determination of optimal teaching methods, forms and means in terms of organization and conduct of the educational process;
- exercise control at different training stages by improving when necessary.

The main aspects and features of the implementation of the established stages of information training technology of improving the professional competencies of students of the military educational direction are substantiated and considered in the second chapter of the work of this dissertation:

- in order for the teacher to apply the educational process in pedagogical practice, it is necessary to design it in advance;
- the goal setting should be specially organized and provide for the objective control of the level of achievement of didactic, developmental and educational goals;
- in the information and educational environment, a different direction of military education should be structurally and content-holistic, that is, changing one of the stages of the educational process will lead to a change in the technology of teaching as a whole;
- having organized the educational process, the educator must choose the methods, forms and means of teaching according to certain legal links of the components that are part of the teaching technology;
- at all teaching stages, the teacher must control the educational process, and improve when necessary.

It should be noted that many researchers distinguish between the concepts of "teaching technology" and "information teaching technology". These definitions combine a number of synonymous concepts that arise with the introduction of new information technologies in the educational environment: "computer teaching technologies", "computer pedagogical technologies", "computer design and test-taking technologies", etc. It should be said that the concept of "information teaching technology" did not come into its own, but was conditioned by the emergence and use of new software and hardware in the educational process and the differentiation of information educational technologies into a number of

components: technical (used technical means), software (used software), science-related (precisely studied field of Science) and methodological (regulatory) [142, 181].

Analysis of relevant scientific and scientific-methodological literature of students of a different military educational direction in the information and educational environment made it possible to distinguish certain directions in the definition of the essence of the concept of "information teaching technology".

Some researchers consider information learning technologies as a didactic system that can be organized using a system for introducing innovative techniques and tools into the structure of the educational system, aimed at the development, storage and reflection of software information products according to the principles of laws and laws of organizing the pedagogical process.

Other researchers are talking about the development and implementation of an appropriate training technical environment based on information educational technologies.

Thus, the first direction determines the use of information technology as a teaching process, and the second shows the introduction of Information Technology in teaching with the implementation of various pedagogical software and technical means.

The priority of the second approach to the definition of students of a different military educational direction in the information and educational environment can be explained from the point of view of the rapid development of informatization tools, as well as by the fact that the development, assimilation and introduction of these tools into the educational process are carried out in educational institutions (departments) This is undoubtedly conditioned by the specificity of the subject area of technical universities and departments and the appropriate qualifications of the teaching staff.

However, it should be noted that the problem established for technical system universities is also expressed in lagging behind with the introduction of information training technologies in the educational process and plays an important role in improving professional competencies in future graduates. This problem is conditioned by the specificity of special disciplines studied by students with a state secret and the inability to use technical means that

are not specifically checked in training for these disciplines and the availability of appropriate software.

When teaching technologies are considered from the point of view of the introduction of information technologies into the educational process, the idea that teaching is rather limited within the framework of understanding the essence of informatization is significant. That is, in the second established approach, from our point of view, it is only about increasing the perception of the material at the expense of some degree of automation of the educational process and visualization of educational information by transferring information resources into electronic assemblies.

Information teaching technology is used when a student has the opportunity to use a holistic system of modern technologies and technical means selected according to the didactic goals set in the process of teaching, and this information technology is applied within the framework of the same or similar academic disciplines to the generally accepted descriptions of traditional teaching technology (pre-developed and planned implementation,) we believe that if compatible, it will be able to perform the functions considered above in full size.

Conclusions on the first chapter

1. Thus, the information teaching technology used by the educator means the guaranteed achievement of the goals set in the form of the formed professional competencies given in the framework of the improvement of the professional competencies of students of a different military educational direction in the information and educational environment, and in order to obtain a guaranteed result between the teacher and the, we understand the systematically specially designed and organized didactic process with the implementation of modern information and technological tools that allow the organization of a comfortable and optimal environment.

2. In this case, a systematic pedagogue, having designed a certain teaching technology within the framework of educational science, must clearly give the target vector, relying on

certain scientific ideas, develop an organizational form of self-education with tax collectors filled with a certain content, plan the output result, evaluation criteria and indicators.

3. This process stipulates a change in the content of the subject of educational disciplines at different educational levels of improving the professional competencies of students of a different military educational direction in the information and educational environment, which, in turn, requires the development of fundamentally new models of improving professional competencies in students. In the conditions of systematic and professional training of students, this can be done most successfully through the development and introduction of information and technological tools in the study of special disciplines in a systematic University.

CHAPTER II. IN THE INFORMATION AND EDUCATIONAL ENVIRONMENT OF STUDENTS OF DIFFERENT MILITARY EDUCATIONAL DIRECTIONS.IMPROVEMENT THROUGH TECHNOLOGY TOOLS FOCUSED ON PROFESSIONAL COMPETENCE

2.1-§. .Design and construction of a didactic information support complex

The design and construction of information and technological support of the educational process has a preliminary development of the activities of teachers and students on its basis. In this regard, it is mentioned by educators who consider this problem that, along with organizational, Gnostic and communicative functions, design is one of the main functions of the educator. In its most general form, it distinguishes the following pedagogical system, process or situation design invasions [182]:

Based on this, it is recommended to design and build based on the general structure and internal content of the developed theoretical functional model of the information and technological provision of the educational process, which contributes to the improvement of professional competencies of students of a different military educational direction in the information and educational environment and relying on the basic principles of technological, In this case, within the framework of the established stages, at the stage when the first is modeling, it is necessary to approach and adapt the proposed model for improving

the professional competencies of students of a different military educational direction in the considered information and educational environment to the learning process within the framework of professional-oriented information training technology.

Design and construction of a didactic information support complex

modeling	design	build
practical activities for the development of new, previously absent educational systems and types of pedagogical activity	formation and understanding of different values;	formation and understanding of different values development of the image of an predictable result
the field of innovative knowledge that develops and improves pedagogical reality	development of the image of an predictable result;	development of a program for achieving the set goal, which determines step-by-step planning in time intervals
pedagogical practical scientific direction determining the solution of various tasks for the reconstruction, transformation and improvement of modern educational systems	coordination and improvement of the project when conducting a comprehensive examination of the estimated results.	coordination and improvement of the project when conducting a comprehensive examination of the estimated results
it is defined as a method of rationing and	moving the general strategy to the level of tasks that	determination of

transmitting pedagogical, methodological and scientific activities	determine the conditions for the implementation of the project	feedback;
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Going directly to the stages of design and construction, it is necessary to consider and analyze the corresponding concept-categorical apparatus. By design in general (lat. projectus-sent forward) is understood to be an activity closely related to science and engineering that provides for the development and creation of a future presumed image [78]. In a different way, design is a targeted process for creating a project, prototype, of a supposed object or state, which provides for the implementation of a laid-back in an existing product.

Also with pedagogical design, individual connects the processes that determine the development of various specific methods of development and various teaching technologies.

In pedagogical design, the main concept is, without a doubt, a project is put forward, which is considered the main one for the analysis of various aspects of the specified process. Relying on an active approach in pedagogy [149, 150], the project can be defined as the purpose and result of design, while in philosophy it is considered as the result of activity. As a pedagogical project, a targeted transformation of the pedagogical system can be promoted with the requirements for the quality of the planned results determined at the time and with certain limits of the expenditure of pedagogical resources.

An analysis of the scientific and pedagogical literature, in which the issues of the methodology of pedagogical design are considered, showed that there are various approaches to the gradual construction of this process.

For example, it says that the process of pedagogical design should be divided into a number of consistent steps, which are [116]: in the logic of pedagogical design allocate the following sequence: Content Development; Goal determination; giving consistency and conditions that determine new derivatives of the individual; developing a general description of the pedagogical situation; determining options for the likely pedagogical activity and

Construction refers to the implementation and implementation of the design activities of the educator, which includes the identification, development, selection and composition of the appropriate educational material in modern pedagogy, that is, the understanding of the creation of a material basis for the practical application of the developed project is accepted [42, 141, 187].

Summing up the foregoing, it is possible to determine the active joint activities of tax collectors and pedagogues, which are carried out in the conditions of the educational process as pedagogical design and construction and are aimed at its development and more productive work.

Based on the principles of pedagogical design methodology considered above and relying on the analysis of the practice of teaching special disciplines in the context of the technological approach, we carry out the design and construction of the process of improving professional competencies in its future specialists in the following logical consistency [142]:

- identify and put didactic goals according to the levels of the developed target component;
- primary preparation up to the appropriate call determination of the structure and selection of the content of the educational material according to the requirements given in the basic educational programs for the discipline;
- drawing up educational material taking into account the requirements given according to the degree of improvement of professional competencies;
- identification of the system of management of cognitive activity of students and organization of teaching staff and pedagogical education of students.

The consistency of the actions given corresponds to the definition of the previously considered information training technology as both a process and a result, the reason for which, in a clear way, reflects the exchange of its states, and ultimately the exact resumption of pedagogical actions ends with the receipt of the outgoing scientific project of the didactic process, which guarantees the

However, it is necessary to note that within the framework of this dissertation work, it is impossible to fully reflect all the listed stages of pedagogical design and construction due to the limited volume of work within the established limits. In this case, some aspects of information and technological provision were considered at the stage of developing a model for improving professional competencies in future specialists of the Military University.

Taking into account the introduced restrictions, we proceed to the definition of the implementation of the established stages and distinguish certain actions that give the structural, content and technological basis of project actions.

The division of the module of the target component of the developed model of this work determined the goal setting at four levels: systematic, subject-specific, modular and setting a goal within the framework of the training session.

At the systemic level, goals are formed on the basis of basic educational programs of higher professional education of training specialists, taking into account the general requirements of higher professional education and special departmental requirements in the direction of "military training for conscription".

According to them, a person who provides distance information exchange and Information Development and storage in extreme conditions with the use of radio, electro, optical communication systems, complexes and means in a special task should occupy competencies that allow him to perform professional tasks according to his task in various fields of Science and technology, combining a set of information and communication technologies, methods and

Based on the competency approach and according to the structure of the considered specialist competencies, the specified requirements can be given as an information group of general and professional competencies.

-the ability to determine the natural scientific nature of the problems arising in professional activity and to be able to implement the appropriate physical and mathematical apparatus for their improvement, analysis and decision-making ;

- the ability to use software tools, computer modeling instrumental tools to solve various research and professional tasks ;

- the ability to understand the essence and importance of information in the development of modern society, to be able to understand the risks arising in this process, to comply with the basic requirements for the provision of Information Security ;

- the ability to take into account the trends in the development of modern information and communication technologies in their professional activities ;

- ability to use basic techniques, methods and tools to obtain, store, develop and protect information ;

- ability to collect, develop, analyze scientific and technical information and systematize it in the field of professional activity, use the achievements of the country and foreign Science, Technology and technology ;

- the ability to master modern measurement, diagnosis and work on technological equipment, which is used to solve various scientific and technical tasks in the field of information and communication technologies, to think manically, summarize, analyze, critically understand, systematize, be able to say as before, be able to put Research tasks and choose ways to achieve them

- ability to apply basic techniques to protect employees and residents from the consequences of possible accidents, disasters of nature ();

- ability to model information and communication processes and objects using application packages;

- ability to accelerate special communication systems and complexes using various mathematical techniques ;

- ability to prepare summarized summaries and reports on the results of the studies to be carried out ;

-the ability to determine the optimal indicators of switching systems and the likely-timed characteristics of the use of communication networks in a special task ;

- the ability to develop proposals for the implementation of special-purpose switching systems and communication networks with similar nationwide communication network ranges of protocols and interfaces.

It should be noted that at the Faculty of military education, pre-call primary training the study of subjects takes place in all courses, therefore, the subject **"Information Communication Technologies in teaching pre-call primary training"** in question is involved in improving professional competencies according to the trajectories considered in paragraph 1.3 of this work. It is necessary to note that the goals set at the systemic level have a generalized appearance, while their clarification in relation to the characteristics of the military-professional training of specialists of the required direction is carried out at the level of science.

The goals of the science level, aimed at the direction of training a specific specialist, are given in the educational programs of the subjects of initial training up to the call to be studied at a military ATM. Based on this, in this work, according to the restrictions introduced, the initial preparation until the bar call is not advisable to consider the subjects, let's move on to the level of the next goal setting – the modular one.

We describe the goals of the modular level based on the requirements given in the curriculum of the science "fundamentals of cryptographic information protection".

According to them, the future graduate should acquire the competencies necessary for successful activities in the field of application of cryptographic information protection techniques in accordance with the requirements for the level of specialist training in the study of this discipline. The obtained competencies should be the basis for an independent study of new methods, tools and systems that will be implemented in the specified field of activity.

According to the developed model, at the qui level of goal setting, the goals (modular and within the framework of the training session) are described in accordance with

the planned high level of goal setting (systematic and subject-specific) by implementing re-Alua and correcting it when necessary. From here, the task arises in the gradual improvement of the quality of diagnostic goals and military-like training of tax collectors.

The maximum determination of the goals that allows you to describe the result of the cognitive activity of students is carried out in the setting of goals within the framework of a specific training session. The type of training, general instructions and general recommendations for conducting are determined by the "instructions for the organization and implementation of educational and methodological work" at the Military Institute [76].

- to understand the essence and significance of information in the narration of modern society, to understand the danger arising in this process, to comply with the basic requirements for ensuring information security

- taking into account the trends in the development of modern information and communication technologies in their professional activities

- the use of basic methods, methods and means of obtaining, storing, developing and protecting information to improve the professional qualities of a future Officer-Engineer: deep knowledge, competence, independent analysis and thinking, creative approach to solving tasks.

2. Nurturing awareness and emotion when working with documents, literature, and items that are gripped to acquire abilities:

- it is necessary to organize and carry out activities for the protection of state secrets and information security.

It is also important to note that according to the functioning approach in pedagogy, the goals of the training session are maximally brought closer to the future military-professional activity of students, and with a competent approach, each goal is coordinated (participates in the formation) with a specific professional competence that determines the application of requirements for a future military specialist.

With the previously given logical sequence, the design and construction of the process of improving professional competencies in future specialists of the military higher educational institution is promoted, taking into account the given requirements for the degree of formation of professional competencies in place of the next stage of its construction, the selection and compilation of the content of educational material.

Relying on the generalization of pedagogical experience, it is expressed in the fact that it is possible to combine these stages of design and preserve in this the general logic that reflects the essence of the projecting process. It is advisable to carry out on the basis of the module of the content-process component of the model for improving professional competencies developed in future specialists of the military higher educational institution of the specified stages.

Within the framework of the applied technological approach, the introduction of the educational process in the Military University into the development and educational process, which applies the information component of information and technological provision deserved to service.

The developed function, principles of construction, structure, features and functions were previously considered. Let us dwell on a more detailed description of the main signs of the presented didactic complex.

As the main ones, we consider it appropriate to include the following main characters in the composition: an information and Information System and a database of interdisciplinary contacts, methodological materials for conducting classes, regulatory documents, an Electronic Science Library, a control and assessment block, audio-video materials on a subject, materials for a course project, a computerized laboratory, to practise a set of works

The listed signs of the bar are united by a common software and information shell consisting of a set of tools, with the help of which programming and graphic formalization are performed.

Next, we will briefly describe the didactic functions of the task, content and structural signs of educational science.

The base of information and Information System and interdisciplinary Communications is in essence a superstructure, and performing the function of the internal menu, the information provides in this section the role of Science in the system of the structure of the general educational program, its interaction with other studied disciplines, as well as the trajectories of achieving the determined competencies.

Methodological materials for conducting training include the materials of all training classes, which are compiled according to the plan of topics of educational science. This section allows you to show the methodological development and training materials for each training session in a visual manner

The control and assessment block consists of a set of materials that determine the content and conduct of intermediate and final attestations, as well as a set of control and training programs that allow students to independently assess the mastery of the knowledge and skills acquired in the study of science. This block can be performed separately, or control and evaluation processes are carried out in the logical order of studying the discipline and are included in the methodological materials of the training.

Audio-video materials on the subject, which allows students to activate the activity of educational and cognitive activities and intensification of the educational process at the expense of increasing the exhibitionism and responsiveness of the educational material, complement the materials of the Electronic Library.

Innovative teaching methods used in science are included in a separate block, which allows the educator to correctly build and further design and complement the educational process.

It should be noted that the structure and functions of the main components presented are strictly defined and are not considered immutable.

Thus, the design and construction of the process of improving professional competencies in future specialists in the conditions of transition to a new generation determined the mobility of the overall structure and filling of certain signs. The didactic complex developed accordingly (its dialogue bottlenecks are given in Appendix D) implies work in two ways: "developer" and "user".

The "developer" provides an opportunity to supplement with training and additional material at the initial stage and in the process of use (if necessary). In this order, the entrance is made according to the password and is assigned to the developer educator of the complex. Provides for free access to the components of the "user" procedure without the right to change them.

Thus, educational science is promoted as a holistic didactic system, allowing the educator to apply the technology of teaching, the content-process component of which is accepted through the information organizer. At the same time, the Ministry of Education fully meets the modern requirements for educational and methodological complexes reflected in the management documents.

It is considered to be one of the main factors that allow the guaranteed achievement of the teaching objectives set for implementation in the learning process. It should also be noted that the presented technological decisions make it possible to use the general structure for various academic disciplines.

The final stage of the design and construction of the process of determining the system of management of cognitive activity of students of the **Faculty of military education and improving the professional competencies** of future specialists, consisting of the teaching staff of professors and teachers and teachers, is given in paragraph 1.1 of this dissertation.

Thus, having carried out the application of all the stages of pedagogical design and construction, determined in advance in a certain logical consistency, we will have a project to improve the professional competencies of future specialists within the framework of the subject of primary training up to the training call given at the Military University. The

developed project was considered as the basis for organizing and conducting the formative stage of experimental work.

2.2-§. Model for the development of professional competencies of students of a different military educational direction in the information and educational environment

The design, structure and application of any pedagogical system presupposes the conduct of pedagogical research. One of the effective techniques that allows you to significantly reduce material costs and time expenditure in the course of the study is modeling, which is being actively applied at the last time.

In pedagogy, modeling of the content of education, as well as educational activities, is adopted. In this case, in general terms, a model is understood as an artificially created object in the form of a drawing, physical constructions, a symbolic form or formula that resembles an object (phenomenon) under study and reflects the structure, properties and relationships of this object in a simpler form between its signs [53].

Researchers distinguish two types of pedagogical modeling according to the nature of research tasks: fragmentary-subject and sign modeling, pedagogical models according to the specificity of the phenomenon are divided into dynamic and statistical.[53].

Based on what has been said, in the construction of a model for improving professional competencies in students through information and technological means of provision, it is advisable to combine this phenomenon with the structure model and the model for its implementation, and divide the construction process of the model into the following stages. Determination of modeling goals.

1. The construction of a system of open components of the structure of the process of improving professional competencies in a student through the means of information and technological support of the educational process with maximum completeness.

2. Determination of the possible set of base organizers at the maximum level in the separated main components.
3. Establishment of criteria for consideration and assessment of the process of formation of professional competencies in the dynamics of expected results through the means of information and technological support of the educational process.
4. Determination of control and improvement steps to obtain a guaranteed optimal output result.
5. At the final stage, it is also necessary to check the model developed for pedagogical validity, in which the examination must be carried out in a complex way, that is, conceptual, criterion and quantitative.

The theoretical model for improving professional competencies in students of the presented systemic University through the educational process information and technological means is based on the information database (laws in the field of education, educational standards, programs for studying subjects, etc.), allows you to use the techniques and tools provided to achieve the goals set.

In accordance with the applied technological approach [139] the purpose of modeling in this case is to obtain the result of guaranteed training, which is expressed in the form of the formed level of professional competencies in a systematic OTM student.

The system of components of the Model is shown in Figure 1.4. We believe that the correlation of its hierarchical construction and structural signs is indicated by the need to improve each of the stages of training the process of formation of future graduate professional competencies, which allows us to carry out an initial diagnosis based on a set of requirements, the setting of goals, the identification of the content-process apparatus and the verification.

A model for improving the professional competencies of subjects of a different military educational direction in the information and educational environment

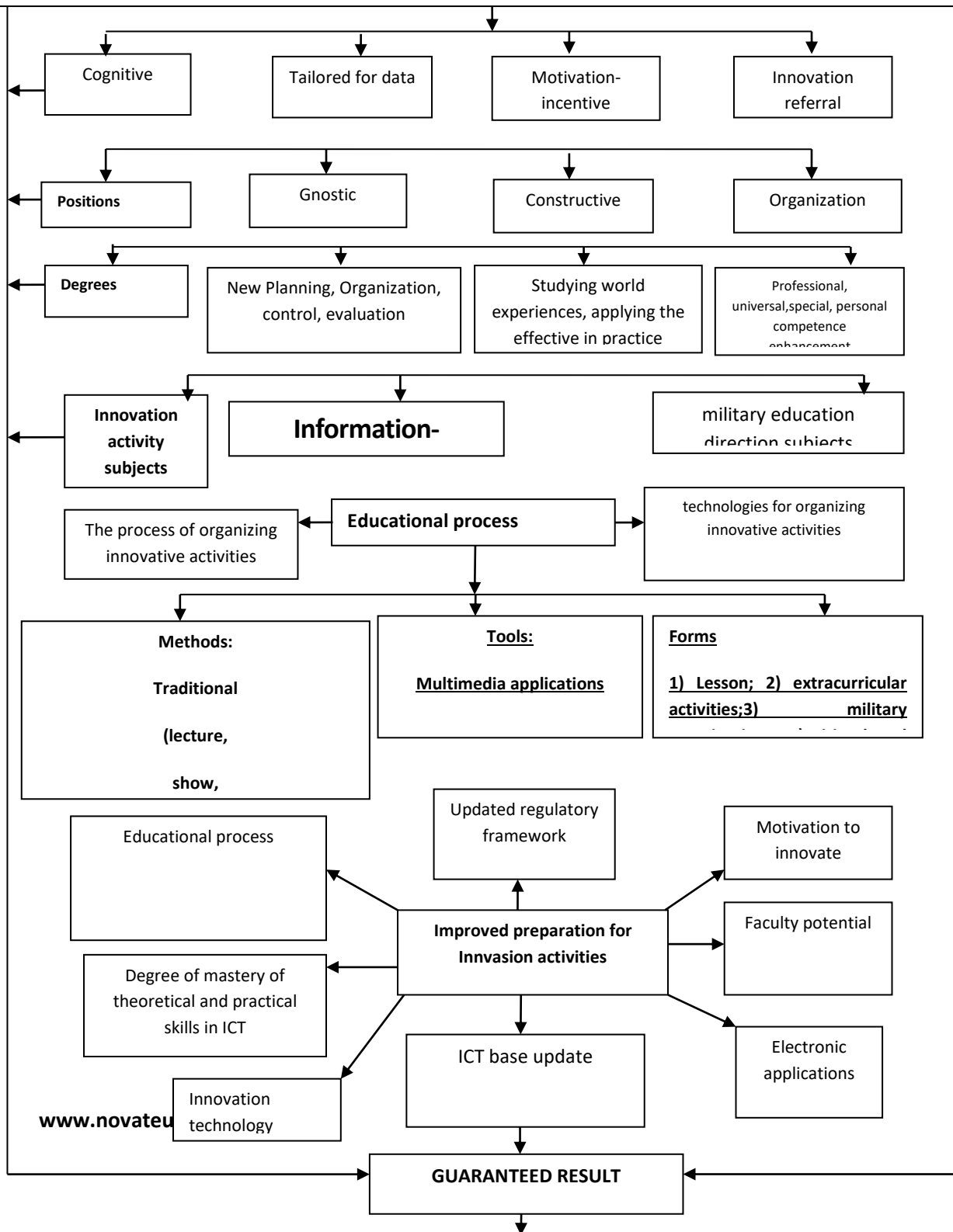


Figure 1.4-a model for improving the professional competencies of students of a different military educational direction in the information and educational environment

Determining the structure of the process of improving the professional competencies of students of a different military educational direction in the information and educational environment, applying the methodology of structural analysis, supporting the interaction between its main components and, to formalize this process, we consider it expedient to use software product instrumental tools within the framework of the technological approach in pedagogy. This product allows the analyst to create complex functional models at minimal costs. This technology supports three types of modeling notation, which allows a more complete and systematic definition of the field of science (functional modeling), (modeling the flow of certain objects) and (modeling the flow of works). This requirement applies to the clear and understandable logic of the casual link of the organizers of the modeling system. In this case, the model in its methodology is the definition of a graphic and textual system that must answer certain questions in advance, the models themselves have the following characteristics:

- the model has a hierarchical structure and a diagram of several levels;
- each level indicates a specific construction.

The presented block of signs is considered to be a sign of a functional system that changes the input flow of information to the output in the presence of control and using a specific mechanism.

For the model presented as "work", we determine the process of improving the professional competencies of students of a different military educational direction in the systemic information and educational environment.

Thus, the presented theoretical functional model consists of modules of interconnected work-processes in a certain way and allows you to improve the professional competencies of students of a different military educational direction according to the given requirements, the harmonious development of the person of the representative and in the interests of the state and society in a systematic information-educational environment. The educational process model is given the context in which the whole system is described as a single whole. The Model structural and components of casual links are as follows.

The social order is promoted in the role of a mechanism for the application of social necessity at the expense of reflecting the general legal ties governing the orientation of educational activities to the solution of priority social problems in education. Currently, in the face of the state, leading political and public figures, innovation informs about the need to move to reform economics, the armed forces and special agencies. Clarifies the mandatory introduction of management documents for improving the professional competencies of students of a different direction of military education in the information and educational environment: universal statutes, laws: "on systemic commitment and systemic service", "on the status of systemic servants", systemic Charter and documents defining various directions of viability of units of systemic educational institutions.

Education is understood as the process of single-purpose education and training, which is considered socially significant goodness and is carried out in the interests of a person, family and society, as well as the sum of acquired knowledge, skills, necessary instructions, experience of activity and competencies of a person in a certain volume and complexity in order to develop a person intellectually, spiritually This concept is important in determining the concept of building a model from the point of view of showing a vector that determines the direction from the initial data to the output result.

Primary training in the information and educational environment up to the call in improving the professional competencies of students of a different military educational

direction studies the subjects. Requirements for their assimilation are described in educational science programs. They also include a number of professional-specialized competencies. These competencies are subject to restrictions and are not considered in the work. But there are a number of features that need to be taken into account, relying on the model presented in the study of elementary preparatory disciplines up to a systematic call. Thus, the process of improving the professional competencies of students of a call-free military educational direction in the information and educational environment can be effective only in the comprehensive development of questions related to the requirements set forth in the laws of the educational sphere, conundrum and regulatory documents, and on their basis in the qualitative development of training programs.

UNTIL THE CALL, THE INITIAL PREPAREDNESS IS CARRIED OUT TO LET GO AND THE METHODOLOGY OF ITS TEACHING

Type of training	Allocated hours	Semester				
		2 course		3 course		4 course
		III	IV	V	VI	VII
Theoretical (lecture)	144	16	30	36	24	38
Practical	396	40	52	106	104	94
Workshop	90	2	8	28	10	42
Total audience hours	630	58	90	170	138	174
Independent Education	476	42	102	112	106	114
General training hour	1106	100	192	282	244	288

METHODS OF TEACHING SAF TRAINING

Type of training	Allocated hours	Semester
		II
Theoretical (lecture)	8	8
Practical	50	50
Workshop	2	2

Independent Education	60	60
Total audience hours	60	60
General training hour	120	120

Based on the foregoing, it can be concluded that the managerial influence in relation to the specific academic discipline given in the model is changed to the information and technological provision of the educational process in accordance with the calculation of one of the components of the didactic information support complex under consideration of the work of this dissertation. In the information and educational environment, at the center of the model for improving the professional competencies of students of a different military educational direction is served by the proposed model, in which the main model components are implemented, which are promoted as objects of the pedagogical process and at the same time subjects.

Based on the methodology of the above-described standard, one of the “mechanisms” for improving the professional competencies of students of a different military educational direction in the information and educational environment is promoted by the staff of professors and teachers who are considered “production personnel” in the system of higher professional education. In doing so, the National Program of National Education recognizes the leading role of the state educator in achieving educational goals and undertakes to ensure the following obligations [132]:

- conditions of creative growth, improvement of skills and timely retraining of teachers of all educational levels, the procedure of which is determined by the founders and the Charter of the educational institution;

- attracting talented students to the educational system capable of carrying out a high level of educational process, conducting scientific research, mastering new technologies and Information Systems, raising spirituality and morality in the tax collectors, training highly qualified students;

- responsibility of pedagogical and scientific personnel in relation to the quality of education and education of children and youth;

- conditions for the constant increase in the prestige and social status of employees of the educational sphere of teachers.

The professional portrait of a modern educator includes the following structural components:

- personal qualities that characterize the teacher as an individual;
- communicative pedagogical qualities;
- professional-activity pedagogical qualities.

In the information and educational environment, the features of improving the professional competencies of students of a different military educational direction can be attributed to the fact that a systematic teacher should be ready to carry out not only educational and executive, but also managerial functions. That is, the structure of systematic professors and teachers should be ready in their own way to pedagogical and methodological management of the educational process. This feature consists in the High role of a unit of requirements and principles, which is determined by systematic statutes and position guidelines.

In particular, the teacher answers:

- the quality of the performance of educational, educational, methodological and scientific work with students;
- the necessary level of formation of competencies in the framework of educational disciplines taught with them;
- the quality of conducting scientific research according to the plans of the department within the framework of the tasks of the subject-methodical panel, which includes the teacher;
- the level of personal scientific, technical, methodological and systematic training.

Thus, a high and necessary level of development of professional competencies is able to provide a teacher with a high level of professional competence, who is interested in constantly improving his professional-pedagogical skills and has the necessary socially significant and professionally significant set of qualities.

Next, we will consider in more detail this concept, determining the educational and material base of the quality of students of the military educational direction whose model resources are different. Educational and material base-a complex of material and technical means that ensure the training of students and graduates in specialties determined according to the requirements of curricula, curricula and modern teaching methods. for students of a different military educational direction, its basis is the following: educational and educational buildings, field educational and material base, means and complexes of communication and armament, systemic-educational property and laboratory equipment, technical means of teaching and means of computing equipment, textbooks, teaching aids and other educational and methodological materials.

A different direction of military education a field educational and material base is created to instill in students practical skills of movement with armament and communication techniques on the ground, which usually includes a field training center with a communication training ground, a stationary training center and other necessary signs and objects.

Non-military educational direction the permanent educational and material base of the department includes auditoriums, apparatus training auditoriums, teacher and laboratory assistant rooms for conducting various training sessions. The direction of military education is provided in the department by system-educational property and laboratory equipment according to the signs of the standards of supply. In accordance with the basic education program, the supply of textbooks and teaching aids developed at the department is determined by the national state educational standards, and at the same time the initial preparation up to the call is developed on the account of 1 to two subjects studying the subject.

Development and evolution of the educational and material base of the Department of military educational direction is planned through a separate section of the department in the work plan on the basis of the work plan of the scientific and methodological panel of the Department. Classes are provided by the engineering and technical composition of the Department on the basis of the teacher's request before training with material and technical means, technical means of training and electronic computing machines.

The amount of educational and material and technical means is determined by the purpose of the training, the tasks to be solved, the composition of the tax commissioners and the conditions of the ICRC, however, each employee should not exceed 3-4 tax recipients in the place, and the accounting of educational and methodological manuals should interpret the fulfillment of their functional duties according to

Thus, it is planned to obtain a given result by considering the input and output current of this model, the controlling effect, mechanism and resources. For this, it is necessary to carry out a system division in relation to the diagram of the lower levels, which describes the aspects of the operation of the system in general one by one.

As breakdown diagrams, we give the following model components:

1. Component of diagnosis.
2. Target component.
3. Graduate-process component.
4. The resulting (Control-evaluative) component.

Further analysis of the process, which takes place in small systems, was carried out to decompose the given functional blocks to 1-3 degrees for their interaction and mutual penetration.

Below we will consider the components of the basic model, that is, the main "original" module division, which improves the professional competencies of students of a different military educational direction in the information and educational environment. Let's consider

the diagnostic part of the presented model. It is necessary to note that until the call elementary preparatory disciplines are studied in students in Higher courses of study, when basic general and professional competencies are formed. At the beginning of the study of Science, an opportunity arises to assess the initial state of the level of formation of professional competencies.

Primary training up to the call serves and substantiates the improvement of professional competencies of students of a different military educational direction in the information and educational environment in the study of disciplines. As a special one-the science of" Information Communication Technologies in teaching initial training for a call " is indicated. This science is part of the main part of the professional cycle of the structure of students of the specialty" information and communication technologies and special communication systems". Assessment of the initial level of formed professional competencies methods of Social Research (questionnaire, interview, questionnaire, etc..)) can be done with.

Also, at the initial stage, when **students have just begun to study special courses**, it is important to determine their motivational organizers, that is, the degree of interest of tax collectors in the component of the educational program associated with the upcoming professional activity.

At the same time, up to the call elementary training the presence of knowledge of the subject from the study of the sciences to an important call to assess the cognitive components of professional competencies earlier. For this, qualitative pedagogical tests in certain disciplines can be used [66].

Options for test tasks in many disciplines (combining active disciplines in improving specific professional competencies) up to the call initial training before studying the disciplines, the formed professional competencies of the tax collectors make it possible to evaluate the cognitive components.

Thus, the formation of professional competencies through the means of information and technological support of the educational process, as well as initial training up to the call

Express assessment of the degree of interest in the study of subjects allows the educator to accurately implement the goal and, if necessary, make adjustments to the technology of teaching science.

One of the main components of the holistic pedagogical process is the goal setting, which is considered to be the most important categorical description of the didactic process. To research the problems of setting a pedagogical goal V.A.Slastenin, V.P.Bespalko, T.A.Ilina, V.V.Graevsky, N.F.Talyzina works are dedicated. Taking into account several approaches to the solution of this problem, it can be said that the scientific level and current state of the development of the problem of goal setting in pedagogy are extremely complex and contradictory.

It should be noted that the goal is a harmonious picture of the result of the activity of the subject, which is formed in the consciousness of the subject in the process of his interaction with the surrounding being [154]. Therefore, the goal set involves the foresight of the appropriate signs of planning and methods of execution of actions.

The target component of the presented model primarily determines the assignment of training goals by a systematic pedagogue. In this case, the level of achievement of these goals is determined, the results of which are changed by students to the system of graduate professional competencies. It is also necessary to emphasize that the achievement of goals depends on the conditions of pedagogical training, and if for some reason the conditions are not satisfied, then the goals set will have to be reduced to Real ones.

Relying on an active approach (from the point of view of professional orientation of future systematic students), we divide the target component of modeling into four organizers according to the degree of goal setting (fig.

At the above systemic level, basic requirements for future systemic students are formed, while the goal-setting process acquires a clearly socially expressed character.

The objective is to choose the general orientation of the objectives according to the training of students in the direction (apprenticeship) in which the degree of science is given.

In a systematic OTM, didactic goals are formed through a modular level in the study of an exact academic discipline. In this, modularity provides for the division of Sciences into subjects (sections) and with the attachment of objectives to each subject to be studied.

The lower level of goal setting implies the formation of private didactic goals of a specific training session.

Thus, by changing the process of setting goals for the corresponding levels and maximizing the goal of organizing work with the tax collectors, the systematic pedagogue is able to describe the result of their cognitive activity to such an extent that this definition leads to a way of constructing a content-process component of the studied science.

The complex of didactic information support consists of various practical software pedagogical products, a set of knowledge and databases for science, as well as didactic and methodological tools that provide applied teaching technology [142].

In the model, the technology of teaching science can be applied in the form of a technological map denoting the passport in which the indicators of the educational process are determined: the definition of the didactic process in the form of step-by-step, step-by-step actions of the educator, indicating the purpose, diagnosis, logical structure, distribution of material and control tasks,

In turn, it is advisable to divide the module of the didactic information support complex into three modules in accordance with (fig.

The definition of the components of the developed didactic information support complex is given in paragraph 1.2 of this work.

The validity period of the output data in the form of the level of formation of professional competencies of students was not established, while the model could use it within the framework of a technological approach to teaching without a consequential component, which allows to determine the level of achievement of the set goal based on its main criteria and indicators in accordance

There are many approaches to assessing professional competence (A.M.Navikov, E.Ya.Kogan, V.A.Kalney), but most of them are united by a general research structure, which includes the criteria, indicators, definition of levels and the development of instruments and methods of measurement in which student professional competencies are formed.

1. Personality motives, a component that determines the necessary guidelines, allowing the recipients to realize and self-evaluate their personal actions.
2. A component that determines the acquired knowledge, formed skills, as well as methods of obtaining them.
3. A determining component of the acquired knowledge and the ability to apply the formed skills in future professional activities.

Relying on the requirements for the degree of mastery of the discipline determined in the subject program to be studied according to the listed organizers (which the applicant should know, be able to do, master) and taking into account the interest of the subjects in the study, the awareness of their personal actions, the presence of the ability to independent educational and cognitive activity.

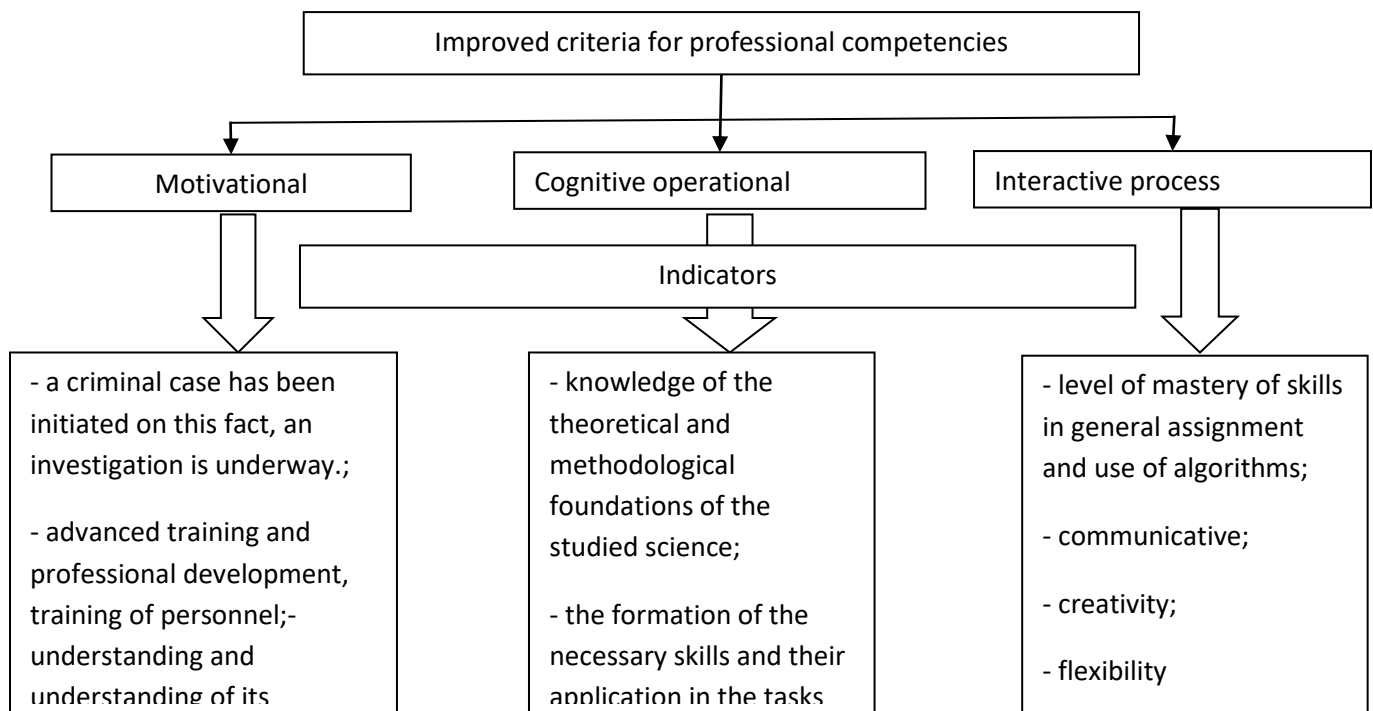


Figure 1.12-criteria and indicators for improving the professional competencies of students of a different military educational direction in the information and educational environment

As a motivational criterion, it is promoted that the level of formation of motives and necessary directions correspond to the goals and objectives of the study of a given science. The indicators that reveal this criterion are the following:

- the necessary attitude to the science studied in adulthood with the future profession;
- knowledge and professional interest in students, the presence of activity in the study of science;
- awareness and understanding of their activities in the process of teaching.

The cognitive-operational criterion is characterized by the correspondence of the degree of formation of universal and special knowledge in the field of Science under study. As the main indicators that reveal this criterion, the following are identified:

- knowledge of the theoretical and methodological foundations of the studied science;
- the formation of the necessary skills and abilities to be able to apply them in tasks that resemble future professional activities.

The Integrative-activity criterion determines the degree of formation of the necessary practical skills for the implementation of the tasks of future professional activity, as well as the structure of creative intelligence, readiness to accept fundamentally new ideas, the ability to adapt in the conditions of new systematic and educational work, the correspondence of the level of personality traits of a person. The main indicators of this criterion are as follows:

- general issue and level of mastery of the skills of using algorithms;
- a set of necessary personal qualities for the successful implementation of educational and professional activities: communicativeness, creativity, flexibility, etc.

Taking into account the fact that in the process of studying exact science, the improvement of professional competencies by means of information and technology of the educational process takes place in one rhythm, the competencies themselves are not considered to be invariable organizers in the structure of the personality of the ascendant, but to develop, improve or fade, taking into account. We will determine the correctness with the stages separated by S.A. Druzhilov [57, 58]. The first acquaintance with the new material (professional knowledge, qualifications and concepts) and the description of the process of professional training with these levels in the process of completion with the formation of professional competencies are shown in Figure 1.13.

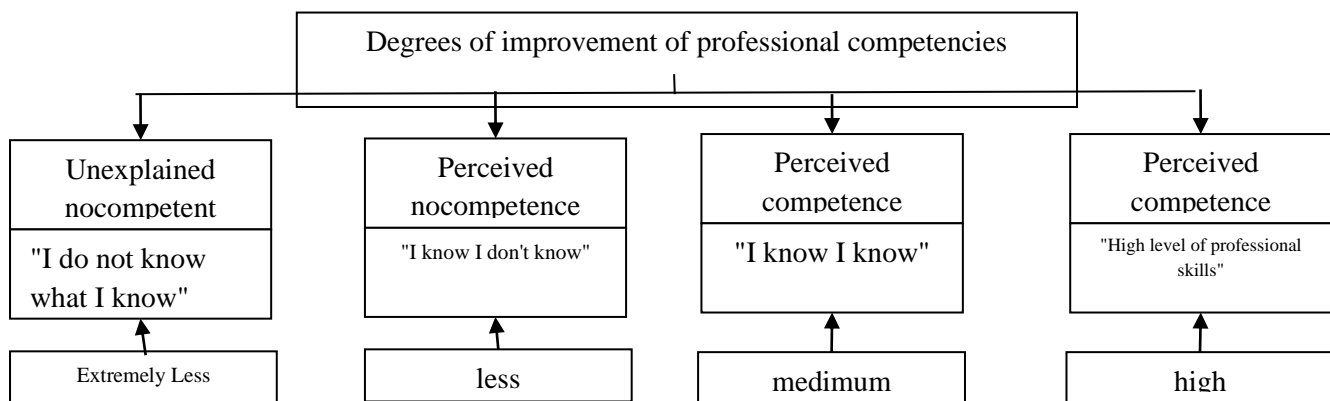


Figure 1.13-improved levels of professional competencies

The high level of improvement of professional competencies implies:

- ability to carry out the effectiveness of educational activities to the maximum;
- possession of in-depth, systematic and true knowledge of software material;
- possession of professional skills and abilities in the literate implementation of future professional activities;
- reliable acquisition of methods of handling weapons and equipment.

The middle level is characterized by:

- ability to carry out educational activities at a relatively high level;
- the presence of solid knowledge of programming material in science without significant errors in answering poured questions;
- ability to correctly apply the knowledge gained in solving practical questions;
- the fact that the methods of handling weapons and equipment are mastered with sufficient confidence.

The lower level is described:

- ability to carry out partially effective activities;
- the presence of knowledge only about the main material, without gross errors in the answer;
- unreliable implementation of methods of handling weapons and equipment.

The level in the Tang position is described:

- lack of ability to carry out effective educational activities;
- having the smallest volume of knowledge within the science to be studied;
- the absence of the ability to apply the knowledge gained in practical activities when working with weapons and techniques.

The levels of formation of these professional competencies make it possible to adequately distinguish between tax collectors and, in general, correspond to traditional criteria for assessment. However, in order to increase the exact and appropriate determination of the degree of formation of professional competencies, the basis V.P. It is correct to use the model for assessing the results of training organized by the methodology and the level model of pedagogical measurable materials [120].

In this case, the objectivity of the assessment will depend on the correct choice of pedagogical criteria, the correctness of the systematization and clarification of the indicators for which the assessment opinion is issued. In this case, there is talk of measurement, which determines the process of quantitative comparison of the character to be studied with a given level, together with the development of a system of indicators in contrast to the assessment. As they are, materials of pedagogical measurement can be put forward, it is advisable to divide them into three blocks according to the structure of the general educational program of science within the framework of the model of competency training.

1. Assignments at the level “know” + “be able to”.
2. Assignments at the level of “know” + “can” + “occupy”.

Blocks of pedagogical measuring materials

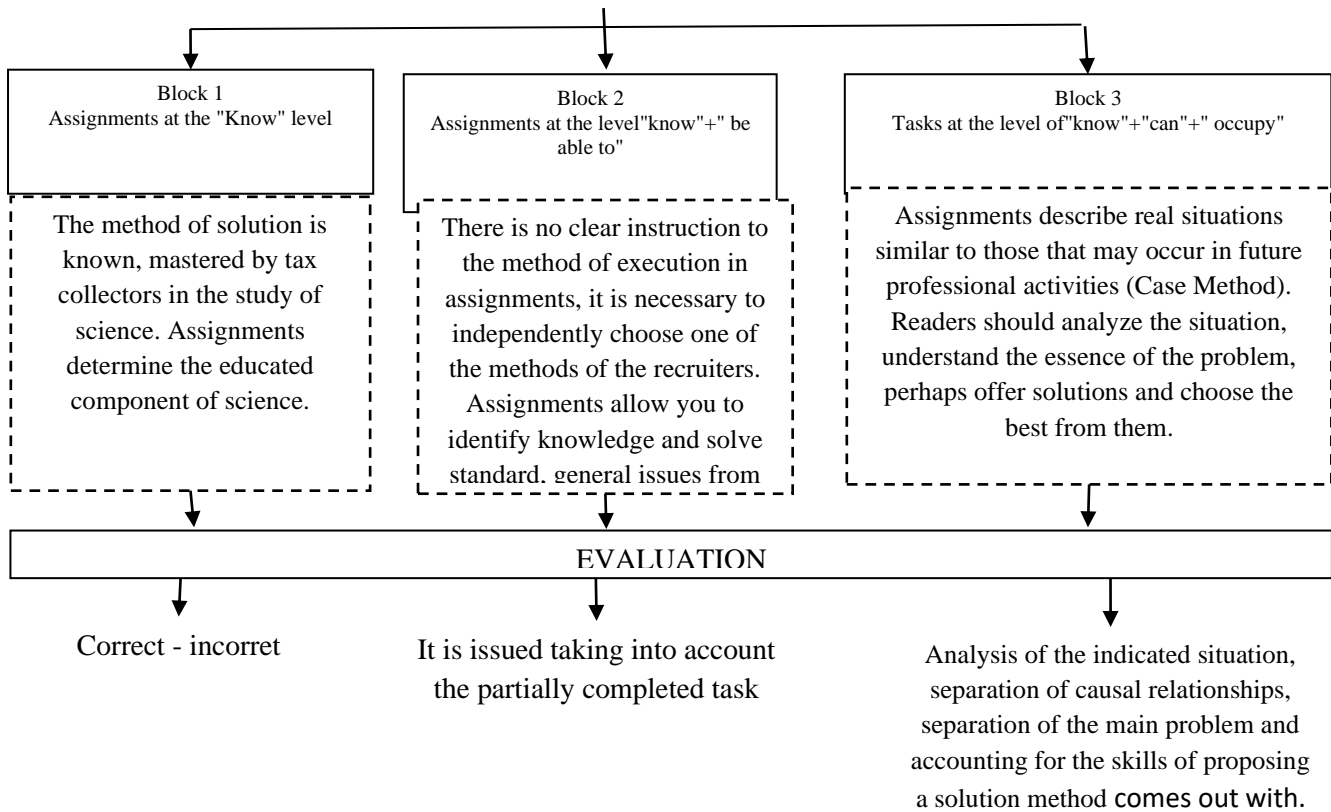


Figure 1.14-level model of pedagogical measuring materials

The degree of expression of a specific sign entering the professional competence, which is being formed as a result of measurement, is a quantitative assessment, in which the degree of complexity of the assignment must strictly correspond to a specific block of the given model. The implementation of practical-oriented tasks by tax collectors allows the educator to draw conclusions about the level of self-sufficiency in the study of Science and the formation of professional competencies in tax collectors according to the requirements established in the proposed model. This fundamentally distinguishes the control system in the model of competency training, in contrast to formal-educated training.

At the last stage of the construction of the proposed theoretical functional model, it is necessary to carry out certain formulated processes that record the rules for coordinating the

activities of model creation workers. Students of different directions should take part in the development of the model: the author of the model, a team of experts, a control group when necessary.

Thus, the proposed model makes it possible to describe the improvement of the professional competencies of students of a different military educational direction in the information and educational environment, the components of which are closely related to self-sufficiency, the model is variable, and the change of one component leads to a change in others, but the model structure remains unchanged.

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