

# Pedagogical Development of Information Security Professional Competence In Information and Communication Technologies and Communication Specialists Terms And Conditions

**Sh.Sh. Akbaraliyev**

*Ministry of Defense of the Republic of Uzbekistan*

*Department of Military Personnel Training*

*Chief specialist-researcher*

**Abstract:** In this article, the pedagogical conditions for the development of professional competence of information security in information and communication technologies and communications specialists, the reforms being carried out in our country, military reforms, special attention is paid to the training of highly qualified military specialists with high intellectual, moral and moral potential for our Armed Forces. 'attention is being paid.

**Key words:** Information security, Education, Systematic, Person-oriented, Competency, Axiological, Integrative, Consistency and continuity, Subjectivity.

Modern society requires the education system to educate highly qualified, aspiring, competitive, enterprising, spiritually and physically healthy individuals.

It is considered appropriate to use training systems of various organizational structures and training simulators formed on their basis as technical means of training in the development of professional competence of future military specialists in information security. This will help you get a complete overview of the source of the industry. The complete provision of the educational process with the means and complexes of ensuring technical and information security of education develops the professional competence of the specialist in the field.

The development of professional competence of future military specialists in information security is carried out step by step as a result of the correct setting of educational goals. Professional training is formed through forms, methods and technologies.

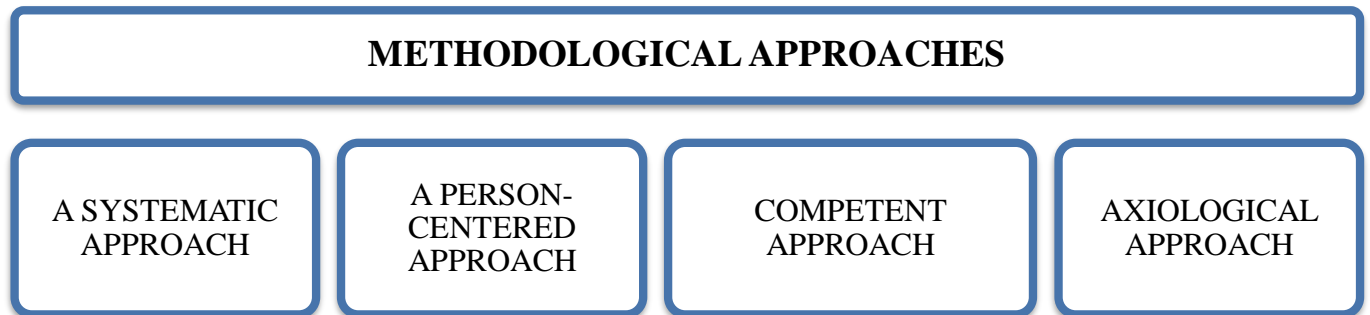
In order for education to be effective, it must be directly developmental, because education that does not implement development factors, i.e., education that is carried out in one form, does not give any results and results. If education does not mature the future specialist, does not develop him and does not help him to improve, the number of poor specialists in the field will increase.

It was noted that the process of developing the professional competence of future personnel should first of all be defined by goals, tasks and principles, and the organization of educational content based on the process.

In the process of research, systematization of the development of professional competence of future military specialists in information security made it possible to identify methodological, psychological and methodological factors in the process. The content of the development of professional competence of future military specialists in information security is determined based on the principle of methodical support.

Based on the analysis, the system of professional competence development of future military

specialists in information security was implemented based on the following methodological approaches (Fig. 1):



**Figure 1. Methodological approaches to the formation of professional competence**

A systemic approach ensures that a system is created as a complete system consisting of interdependent elements and relationships. This, in turn, allows us to organize the process of studying the components of the professional competence of future military specialists in information security, as well as to describe the relationship between the object of our research and the environment.

Person-oriented approach - the main goal is not to acquire knowledge in the field of information security, but to develop his knowledge, taking into account the individual characteristics of the future military specialist in information security.

Competency approach - compatibility of the functions to be acquired by the future specialist in information security with acquired (mastered) competencies.

Axiological approach represents the professional reality and includes a specific professional activity process. in which the main attention is paid to the development of the need to acquire a set of values along with knowledge, skills and abilities. Future military specialist in information security the formation of values determines the increase in the efficiency of his activity as a specialist and the correct establishment of mutual relations. The development of professional competence of future military specialists in information security is based on methodological approaches, as well as professional principles such as active development, integrativeness, consistency and continuity, subjectivity, social responsibility, and axiological. Including:

The principle of active development is a person's professional self-awareness as a specialist and recognition of functional tasks as a priority.

The principle of consistency and continuity is the full implementation of professional training in the course of study, taking into account the need for additional professional training and professional development in the field of information security in the course of professional activity.

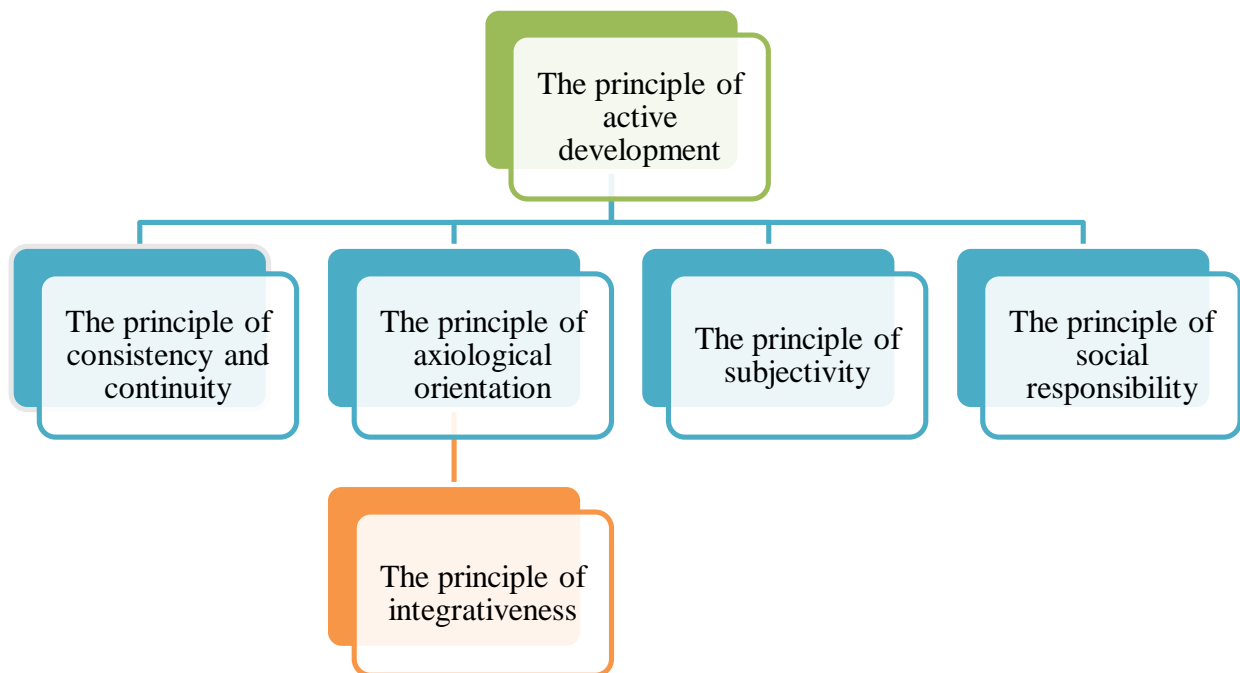
The principle of integrativeness is manifested in various additional educational programs consisting of interdisciplinary and integrative factors of personnel training in the field of information security.

The principle of subjectivity is directed to the development of the internal potential of a specialist as a subject of professional activity.

The principle of social responsibility defines the social importance of the responsibility of future

military specialists in information security in ensuring information security.

The principle of axiological orientation is manifested in the constant presence of motivation for professional achievements and the creation of new tools and methods for its development.



**2- fig. professional principles of future military specialists**

In the development of the professional competence of future military specialists in information security, based on the above approach and principles, the educational method of the educational process, educational and information technologies, as well as modern interactive methods are used correctly and effectively. The following should ensure the mastering of the studied educational material:

analyzing the educational activities of the specialist in information security, identifying the mistakes he made in the process and studying the reasons for their occurrence, as well as identifying the unstudied parts of the educational element;

implementation of the procedure for evaluating the quality of the specialist's educational activities on information security based on the educational goals;

creating an opportunity to logically analyze the tasks given in the training activities of experts in information security training;

to express the results of the analysis of the specialist's educational activities in the scientific language of the studied field of science in a simple understandable language or in a scientific language.

As a result of a comparative analysis of the qualification requirements and educational goals for future military specialists in information security, pedagogical educational goals in terms of the level of mastery of knowledge of future military specialists in information security and the mode of operation based on which it was determined.

The level of mastery of future military specialists in information security is determined based on the methodology of analysis of specific tasks: in particular, the determination of specific tasks related to the activities carried out in the field;

- determining the characteristics of the tasks, that is, the importance of the task, the time of implementation, problems in mastering and implementation;
  - determination of tasks to be mastered using information technologies;
  - to determine the knowledge, skills and qualifications considered necessary for the performance of specified tasks and to divide them into parts;
- comparison of required knowledge with mastered knowledge.

Skillful and conscious use of modern teaching methods by the teacher:

fight against the influence of negative information on the person of the specialist; to know the principles and methods of self-management;

value - a sense of social importance;

forms affiliation to professional activity.

When analyzing the impact of the use of information technologies and interactive methods on the educational process in the study of the field, solving the problem of teaching in science or developing professional skills will have an individualized character, representing an educational element. In this case, individualized education provides a solution to the problem of teaching in science and the development of professional skills.

The owner of a modern profession does not possess a set of ready-made professional knowledge, but he has skills that serve professional growth, he can analyze his professional level, he can quickly acquire specific professional skills, he can meet the changing requirements of society and production. characterized by readiness to acquire new knowledge.

It is considered appropriate to use training systems of various organizational structures and training simulators formed on their basis as technical means of training in the development of professional competence of future military specialists in information security. This will help you get a complete overview of the source of the industry. The complete provision of the educational process with the means and complexes of ensuring technical and information security of education develops the professional competence of the specialist in the field.

The professional competence of future military specialists in information security can be significantly increased by introducing the following organizational and pedagogical conditions in the educational process:

- didactic design, construction and application of professionally oriented training technology based on modeling the professional activities of future military specialists in information security;
  - use of timely and high-quality diagnostics and monitoring of the existing professional qualification level among future military specialists in information security;
  - targeted management of the cognitive activity of future military specialists in information security during their independent work using the didactic complex of information provision, both at the stage of conducting planned training sessions:
- to prepare teachers and future military specialists for practical application of professionally oriented teaching technology, to create positive motivation in them for this;

- creation of infrastructure and educational material base for the use of information media and information products for educational purposes during the educational process.

Based on the above analysis, let's take a closer look at the following: professional competence of an information technology specialist, professionally oriented teaching technology, and providing the educational process with information technology.

The phenomenon of professional competence of future military specialists is determined by the action of general and special laws of military service, and its essence is expressed in the formation of a set of qualities of professional importance. The process of forming the professional competence of future military specialists is determined by the goals, tasks, and nature of the security officer's activity and includes professional theoretical and practical training, as well as the ability to ensure security, solving tasks, directly. The system of professionally relevant qualities, professional positions, acmeological invariants and psychological characteristics necessary for the future graduate to perform the duties of a good job, in other words, to successfully perform professional functions, is considered important.

It is recommended to define the educational technology aimed at developing the professional competence of future military specialists as a system of psychological, general pedagogical, didactic procedures of their mutual relations, taking into account the abilities and inclinations of future military specialists. It is necessary to implement the content, methods, forms and means of training that correspond to the educational goals, the possibility of forming the professional competence of military specialists for their future activities.

The development of professional competence of future military specialists includes:

taking into account interdisciplinary relations;

focus on individual opportunities;

Close connection of theory and practice, control and correction of audience and independent work:

the ability to change the ratio of the size and sequence of tasks; relying on didactic achievements that reflect the interrelated activities of future military specialists.

In our opinion, one of the conditions for the development of high-quality professional competence in information security of future military specialists is to involve each cadet in active cognitive activities. It is important for them to apply the acquired knowledge in practice and to use this knowledge towards the goal. ways to improve the educational and creative activities of military specialists are seen by involving them in active activities. it requires knowledge, initiative, and experience in conducting all kinds of training sessions.

We believe that in any educational process, future military specialists should be given a clear understanding of the structure of the course, its theoretical and practical importance, and its components. In order for the educational result to be effective, it should be structured in such a way that the result achieved at one level will help in the next stages and will be useful in the future professional activity. Continuity of education depends on students mastering the structure of the subject.

### **Summary**

Theoretical foundations of the development of information security professional competence of future military specialists In the analysis of studies on the training of future military specialists, measures

to develop the effectiveness of professional training have been studied. we have considered the aspects of increasing the efficiency of preparation.

Pedagogical factors for the development of information security professional competence in information and communication technologies and communication specialists. It is important for them to apply the acquired knowledge in practice and to use this knowledge towards the goal.

In our opinion, one of the conditions for the development of high-quality professional competence in information security of future military specialists is to involve each cadet in active cognitive activities. It is important for them to apply the acquired knowledge in practice and to use this knowledge towards the goal.

## References

1. Competency-Based Teacher Education: Progress, Problems and Prospects/ Ed. By W.R. Houston, R.B. Howsam. – Chicago: Science Research Association, 2002. – Vol. X. – 182 p.
2. Hamdamov R., Begimkulov U., Taylokov N. Information technologies in education. For higher education institutions. UzME state scientific publishing house. - "Mnllny Encyclopedia of Uzbekistan" State Scientific Publishing House. T.: 2010. p. 54-120.
3. Hamdamov R., Begimkulov U., Taylokov N. Information technologies in education. For higher education institutions. UzME state scientific publishing house. - T.: 2010. State Scientific Publishing House "Mnllny Encyclopedia of Uzbekistan". B. 86.120b.
4. Ikonnikova, K., Ikonnikova, L., Koltunova, E. The organization of a problem-based group learning session Volume 2015, Pages 557-560 p.
5. Mamarajabov Sh. Khalmuratova J. Pedagogical technologies and pedagogical skills. Tashkent: 2015. - 47 p.
6. Mamatkulov A.N. Development of students' creativity in professional education // Modern education / Sovremennoye obrazovaniye, 2019. №12 (85).14 p.
7. Muqimov B.R. Improvement of didactic competence of students based on interactive educational methods during independent work (in the example of vocational education):-Tashkent, 2018. - P. 60. 191 p.
8. Muslimov N.A., and others. Technology of formation of professional competence of teachers of vocational education / Monograph Y. - T.: "Science and technology" publishing house, 2013. - 128 p.
9. Raxmatullaeva Durdona Ravshanovna. (2023). MODERN COMPETENCIES OF FUTURE ENTREPRENEURS. *Frontline Social Sciences and History Journal*, 3(05), 67–70. <https://doi.org/10.37547/social-fsshj-03-05-09>
10. Raxmatullayeva, D. (2022). Yoshlar va xotin qizlar tadbirkorligini rivojlantirish–davr talabi.
11. Рахматуллаева, Д. Р. (2017). Бўлажак мутахассисларни тадбиркорлик фаолиятига йўналтириб ўқитиш технологияси. *Современное образование (Узбекистан)*, (1), 70-75.
12. Рахматуллаева, Д. Р. (2017). Содержание, формы и методы подготовки учащихся профессиональных колледжей к предпринимательской деятельности. *Проблемы современного образования*, (1), 99-104.



13. Durdon, R. (2016). Teach future entrepreneurs to manage in team. *European research*, (8 (19)), 87-88.
14. Рахматуллаева, Д. Р., & Самадходжаева, Д. Р. (2016). Развитие малого бизнеса и предпринимательства в Узбекистане. *Молодой ученый*, (16), 200-201.
15. Рахматуллаева, Д. Р. (2015). Содержание профессиональной ориентации учащихся на предпринимательские виды деятельности. *Молодой ученый*, (21), 825-828.