

FORMATION OF PROFESSIONAL COMPETENCE IN THE FIELD OF INFORMATION SECURITY AMONG FUTURE ECONOMISTS

Khusniddin Saidakbarov
Karshi Engineering and Economics Institute

ABSTRACT

The successful implementation of the model of the process of forming professional competence in the field of information security for future economists in the context of university education is ensured by the creation of the following pedagogical conditions: a group of general pedagogical conditions that are determined by the requirements for the training of future economists in the field of information security: ensuring consistency with the general information preparation, the development of teaching materials with a focus on the rapid development of the subject area, the use of active and interactive forms of training, the use of modular learning technology; a group of specific pedagogical conditions that are determined by the requirements for the content of the training of future economists in the field of information security: the identification of the main areas of professional activity of economists (small and medium-sized businesses, large businesses, government agencies, telecommunications and information technologies, finance and credit) them priority blocks of content training.

Keywords: Information, security, model, competence, economist, technology, professional, activity.

INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

Based on the analysis of the research literature on modeling in pedagogy, under the model of the process of formation of professional competence in the field of information security among economists, we understand a system that includes targeted, organizational, substantive and analytical units. When building a model of the process of formation of professional competence in the field of information security among economists, we focused on the generally accepted ideas in the pedagogical and philosophical science of the model as a system that includes goals, content, methods and means, as well as the results of the educational process, as well as a number of identified and principles of a systematic approach substantiated in the scientific literature, [1-3]: consistent progress through the stages of model creation, coordination information, resource and other characteristics, the correct ratio of various levels of model construction, the integrity of the individual stages of model design. We consider the developed model from the position of a systematic approach as a set of regular, interconnected elements that make up a certain integral system, which allowed us to break it into the following blocks: target, organizational, substantive, analytical.

Dedicated blocks provide an opportunity to more clearly present the purposeful process of forming competence in the field of information security with an economic specialist. First of all, a systematic approach requires the definition of a target block, which includes the goals and objectives of the development of the system. The target block reflects the interest of the state, society and an economic specialist in an adequate level formed by professional competence in the field of information security. The system we are exploring pursues the goal:

the formation of professional competence in the field of information security among economists.

Since we distinguish three groups of essential characteristics of the economist's professional competence in the field of information security (motivational, cognitive, activity), and in the content of this competence we identified five blocks that reveal these characteristics, concretization of the goal allowed us to identify the following tasks:

1) the development of a value attitude to the problem of ensuring information security in professional activities;

2) stimulation of interest in improvement in the field of information security;

3) the development of systemic and analytical thinking;

4) the formation of theoretical knowledge in the field of information security;

5) the development of skills in the implementation of activities in the field

In implementing these tasks, we were guided by the following principles:

- we single out the principle of fundamentality and professional orientation as the basic principle of the formation of professional competence in the field of information security among economists; This principle requires a combination of the general informational training of economists and its logical continuation in the field of information security, the general development and development of special professional abilities of an individual;

- the principle of systematicity assumes that teaching materials are projected in the consciousness of students at the level of systematicity, i.e., not only in a certain sequence, but also in interconnection;

- the principle of complementarity involves the use of additional educational resources to ensure the integrity and completeness of the process of forming professional competence in the field of information security for future economists;

- the principle of integrability implies close interconnection and integration with related disciplines, eliminating duplication and illogical content of the training of economists in the field of information security, included in the structure of the general information training of economists.

The formation of professional competence in the field of information security among economists is manifested in groups of laws:

- conditionality: the formation of professional competence in the field of information security among economists is due to the value attitude to professional education, self-education and professional activity; available experience in social, educational, scientific and industrial activities; the integrative influence of the characteristics of the economic sector and the education system on the formation of the components of the professional competence of an economist.

- formation, the formation of professional competence in the field of information security among economists is a manifestation of the professional formation of the individual and is one of the key stages; the professional competence of the economist in the field of information security includes the prerequisite base (individual abilities and personal qualities) and the main part; on a prerequisite basis during the educational process, the competence of an economist in the field of information security is formed, which then develops in the conditions of professional activity.

- changes: the content of the economist's professional competence in the field of information security in the context of global informatization of society and the rapid development of information and communication technologies are subject to constant changes.

-actualization: the actualization of competencies in the field of information security among economists occurs with different intensities depending on the existing education and the experience of the student's professional activity; performed asynchronously for various

components; subject to the ambiguous influence of the characteristics of a particular sphere of professional activity.

-results: the result of the formation of professional competence in the field of information security among economists is an integrative professional and personal characteristic - competence in the field of information security; the formation of professional competence in the field of information security among economists ensures the formation of an appropriate level.

The analytical unit of the developed model includes criteria, indicators, and also the formed levels: professional competence of economists in the field of information security: low, medium, high, advanced. This block is a diagnostic toolkit.

The formation of professional competence in the field of information security among economists is carried out in stages with the help of a target setting, determined by tasks, on the basis of identified principles and patterns.

Successful implementation of the model of the process of formation of professional competence in the field of information security for future economists in the conditions of higher education is possible when certain pedagogical conditions are created.

In the course of theoretical and experimental research, this work, we have identified and justified the necessary and sufficient pedagogical conditions for the successful implementation of the model of the process of formation of professional competence in the field of information security for future economists in the context of university education:

1) a group of general pedagogical conditions, which are determined by the requirements for the training of future economists in the field of information security, namely:

- ensuring consistency between the training of future economists in the field of information security and their general information preparation (integration and interconnection with related disciplines, general information preparation, elimination of redundancy and duplication of content, etc.);

- development of teaching materials for the training of future economists in the field of information security with a focus on the rapid development of the subject area and providing the ability to quickly bring them into line with the current state of the problem of ensuring information security without compromising integrity and quality;

- maximum use of the possibilities of active and interactive forms of training corresponding to a given level of formed competence and contributing to the development of basic professional and personal qualities that ensure the economist's competitiveness;

- the use of modular training technology, which allows to distinguish typical tasks and generalized methods of professional actions of economists related to ensuring information security, into separate functional units (modules) and to maximize individualize the training process for future economists.

2) a group of specific pedagogical conditions, which are determined by the requirements for the content of the training of future economists in the field of information security:

- the content of the training of economists in the field of information security in the conditions of small and medium-sized businesses should be focused on the development of maximum independence when a specialist solves the emerging problems of information security by forming more detailed knowledge about the methods and means of ensuring information security at the economist's workplace;

- in the content of the training of economists in the field of information security in the context of large business, special attention should be paid to the legal support of information

security, which includes aspects of the main international regulatory documents in the field of information security and information protection;

- in the content of the training of economists in the field of information security in the system of state institutions, the main emphasis should be on the study of the Russian regulatory framework in the field of information security and information protection, as well as features of information and information systems as an object of protection;

- the content of the training of economists in the field of information security in the context of professional activities in the field of telecommunications and information technologies should be focused on a more detailed consideration of threats to information security for information resources;

- in the content of the training of economists in the field of information security in the financial and credit sphere in information security, the principles and content of organizational support of information security, the main aspects of Russian and international law in the field of information security and information protection, as well as the specifics of threats to information security should be highlighted financial and credit sphere.

Thus, during a theoretical study of the problems of personality formation and modeling in pedagogy, we came to the conclusion that under the model of the process of building professional competence in the field of information security for future economists we mean a system that includes targeted, organizational, substantive and analytical blocks.

REFERENCES

1. Кумунжиев К. В. Теория систем и системный анализ: учебное пособие / К. В. Кумунжиев. - Ульяновск : УлГУ, 2003. - 240 с.
2. Шодиев Р.Д., Тўраев С.Ж. Дастурий воситалар ёрдамида педагогик тажриба-синов натижаларини таҳлилий умумлаштириш. «Муғаллим ҳам ўзликсиз билимлендириў». Нөкис. №3.2018. 22-28-б.
3. Shadiev R., Khimmataliev D., Fayzullaev R., Chorshanbiev Z. Professional culture of the future teacher of vocational education: a communicative aspect // Journal of critical reviews. ISSN -2394 – 5125. Vol 7, Issue 4, 2020 – p. 399-400.
4. Штофф В. А. Моделирование и философия / В. А. Штофф. - М. Наука, 1966. - 302 с.