



Management of Educational Institutions Integrated Security

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ABSTRACT

The relevance of the paper is conditioned by the multiple threats for social and personal security in the modern world. The purpose of the paper is aimed at supporting of acceptable security risks in real conditions of educational institutions' functioning. The authors present a dynamic model of educational organizations' complex safety. The leading approaches to the research are integrative, process and personality-activities approaches. The authors have developed the landscape of educational organizations, processes, providing comprehensive security. The priorities of the educational organization's activities in the field of integrated security are presented. This paper is intended for educators, researchers, heads of educational organizations involved in the management of education organizations' complex safety.

Keywords: Management, Integrated Security, Educational Organizations, Dynamic Model, Process Landscape

JEL Classifications: I21, I25, I28

1. INTRODUCTION

1.1. Background

At present, the security of citizens is a priority for the Russian government, along with the existing multiple threats of today's world always new ones appear and their nature and degree of danger are changed.

Educational organizations have their own characteristics, causing the features of their safety management (Kozak, 2016; Prokofieva, 2015). First of all, the Russian educational system includes all the youth of the country, within the framework of the educational organizations the younger generation spends much of their time, with the implemented processes of identity formation, training and education. For this reason, the impact of educational institutions, their role and level of education responsibility to society cannot be overestimated. Questions of integrated security, i.e., the consideration of all kinds of security within the framework of the educational organizations' activities should cover all components of the educational environment - social, subjective and infrastructure.

1.2. Status of a Problem

In addressing the security problems of the educational institutions it is necessary to focus on the acceptable risk levels, which are established by federal laws, policies, technical regulations, etc. And these risks should be considered as the maximum allowable under real conditions of technical, economic and social state of the society. In this case, as the quality criteria in integrated security's providing, the degree of risks' reduction can be considered in comparison with the maximum allowable one.

Continuous improvement of the Russian legislation's requirements in the field of integrated security led to the need for a common approach and systematic work for the integrated execution of norms of federal laws against terrorism, protection of population and territories from emergency situations of natural and man-made disasters, fire safety and civil defense, taking into account the specifics of the educational institutions' activities. Therefore, only a comprehensive approach, close inter-agency cooperation between government and civil society's structures and taking into account of regional living conditions can ensure the safety of students in educational institutions, stable and

sustained development in the new realities of life in relation to any crises.

1.3. The Research Hypothesis

In recent years, some health and safety issues are considered in the literature: The prevention of threats of terrorism, prevention of emergency situations, fire safety, information security, security in road-transport environment, and so on (Belov, 2011; Feklin, 2011; Shafikova, 2015; Zagrebina, 2015).

During educational organizations' complex safety managing they face with the following difficulties: Lack of specialized methodologies to assess the current state of the complex safety to ensure the security of the organizations; uncertainty and specificity of destabilizing factors affecting the protected resources of the organizations; the absence of developed methods, techniques, systems, and the algorithms to develop and evaluate the effectiveness of educational organizations' integrated safety (Andreeva, 2006; Balykhin, 2007; Barishev, 2014). In this paper the comprehensive safety of education organizations is examined from the total quality management's position to ensure the effectiveness of processes and their improvement (Crosby, 2004; Ishikawa, 1988; Juran, 1992).

2. METHODOLOGICAL FRAMEWORK

2.1. Methodological Approaches to Ensure Integrated Security of Educational Institutions

To manage the complex security of educational institutions the following methodological approaches are used: A systematic, integrative, process and personal-activities, forming in aggregate its methodological basis.

1. The system approach allows us to consider a comprehensive security of educational organization as a management system functioning in the external environment of more complex system (Schedrovitsky, 1993).

It defines a comprehensive safety as an integrated set of activities and elements in the contradictory unity, and in the interrelationship with the external environment, involves consideration of all the factors' effect influencing it, and is focused on the interrelationships among its elements.

2. The integrative approach is realized in the unity of its manifestations in the following positions - the education system - the region - the level of education - an educational organization. Each of the positions is expressed by the interaction of the variety of social institutions and the individual (student) in the field of security. The presented idea of integration makes it possible to identify and determine the functioning of a set of conditions based on integrating processes through the interrelationship of social, economic, political, educational, resource, personal and pedagogical position with everyone else. The basis of the integrative approach is the leading idea of holistic integrated security management in the regional educational space (Prokofieva, 2015). In this direction the realities and prospects of development of the region are taken into account as a resource for intensification of integrated security management of educational institutions.

3. Process approach considers the management of complex security as a continuous performance of certain complex of interrelated activities and general management functions and focuses on high-quality result, the rational use of resources, continuity and continuous improvement of the educational organization's activities in the field of health and safety (Deming, 2011). Process approach in educational organization is aimed to regulate the management of complex security on the basis of assessment of its condition by specially defined quality criteria for all components of the process itself, as well as the factors that influence the final result (Mukhametzhanova and Levina, 2015; Levina, 2015).

Products of integrated security management system is the satisfaction of interested parties in a secure environment of educational organization's functioning, for that purpose the resources necessary to perform each of the processes are spent. Stakeholders include the educational organization and all those who are involved in its activities in the external environment - social institutions (state, society, profiling department, etc.). One can also talk (based on process models of quality management systems) on the separation of processes into processes of life cycle, resources management, monitoring, measurement and improvement, as well as the senior management's activities process of the educational organization. If there is a quality management system in the educational organization - the experience of complex safety management's processes of the system may appear to be the foundation on which the processes of educational organizations successfully will be build and improve.

4. Personality - activities approach is aimed at the active participation of the individual in forming of the risk thinking, increasing of motivation to ensure the personal and public safety, and active participation in special events within the educational institutions, the orientation of the educational process on the implementation of complex security problems (Ivanaevskaya, 2011; Vasiliev, 2012).

2.2. Principles of Management of Educational Organizations' Integrated Security

The above mentioned methodological approaches allow identifying of a number of management principles of educational organizations' integrated safety:

- The principles of complexity of processes to ensure a comprehensive security management of educational institutions. The integrated security management should possess clearly ordering and coordination of elements of the educational organization, which allows solving of certain tasks.
- The principle of risks' forecasting of educational organizations' security. In order to improve the effectiveness of risk management in the field of security the heads of educational organizations must constantly take measures to predict the risks' occurrence. Forecasting allows preparing in advance for the educational organization to possible negative phenomena and to create the necessary conditions for their localization and neutralization.

- The principle of regionalization of educational organizations' integrated safety. It requires the establishment of the relationship of the educational organization with the conditions and prospects of regional development, taking into account ethnic traditions and native language in the formation of interethnic tolerance of students. An important role in the implementation of this principle a regional system's resources' identifying plays that can meet the needs of the educational organization, from its own resources, the development of relations both of internal and external cooperation, integration and so on in the management of complex safety.
- The principle of continuity of educational organizations' safety. It assumes a continuous process cycle of actions to ensure the safety of educational organization, their monitoring and continuous improvement within the quality management system.
- The principle of the interaction of processes of educational organizations' integrated security. The organization is a landscape of interconnected processes, and the process is any activities where there is the execution of works in the field of integrated security.
- The principle of demand for complex security processes of educational organizations. Each process of the educational organization is to have a purpose, and it results in achieving of comprehensive security and the formation of risk-thinking should be claimed.
- The principle of documenting and controlling of processes to ensure comprehensive security of educational institutions. It allows standardizing of integrated security management process and getting of the basis for changes and further development of the process in educational the organization.

Management of complex safety of the educational organization has a beginning and an end, which define the process boundaries. In the complex security's managing process within defined borders of educational organization should be defined indicators that would characterize the process and its results; responsibility for the process should be defined (in the implementation of complex security's managing process various professionals and employees could be involved, but it is educational organization must be responsible for integrated security management process).

Management of educational organizations' complex safety includes:

- Focus on the development of external and internal environment of the educational system in the field of integrated security;
- Monitoring based on continuous study of the state of educational processes, analysis of the factors and conditions that affect the quality of the integrated security management;
- The availability and updating of information on the impact of current activities in the field of complex safety's management of the educational organization;
- Identifying of ways in achieving of the tasks' solving of integrated security's management of educational organization;
- Need for comprehensive integrated security management's entities of the educational organization.

2.3. The Algorithm of Integrated Security's Implementation of Education Organization

Implementation of an integrated security system of educational organization and its management requires the following stages' realization:

- Evaluation of the educational organization's safety state at the moment (analysis of threats of natural, techno- and man-made nature; threats' analysis with the use of modeling and risk assessment; construction of generalized models of complex safety systems for educational institutions). To determine the list of possible threats to the educational organizations is recommended to explore a detailed description of its structure, relations with other objects, etc.
- An inventory of its property complex, and security resources;
- Analysis of legal maintenance of integrated security, including the legal fire safety, legal security of population and territories from emergency situations of natural techno- and man-made nature, the legal bases of the security from terrorists, the legal basis of social security;
- Assessment of technical safety;
- Definition of processes' landscape of educational organization's integrated security;
- Implementation of measures' system to ensure the educational organization's complex security through dedicated processes and regulation of their inputs and outputs;
- Monitoring of complex security processes of educational organization based on selected criteria (Prokofieva, 2015; Yakimanskaya, 2015);
- Implementation of educational organization's comprehensive security management on the basis of the monitoring results with the aim of their effectiveness's enhance and continuous improvement.

3. RESULTS

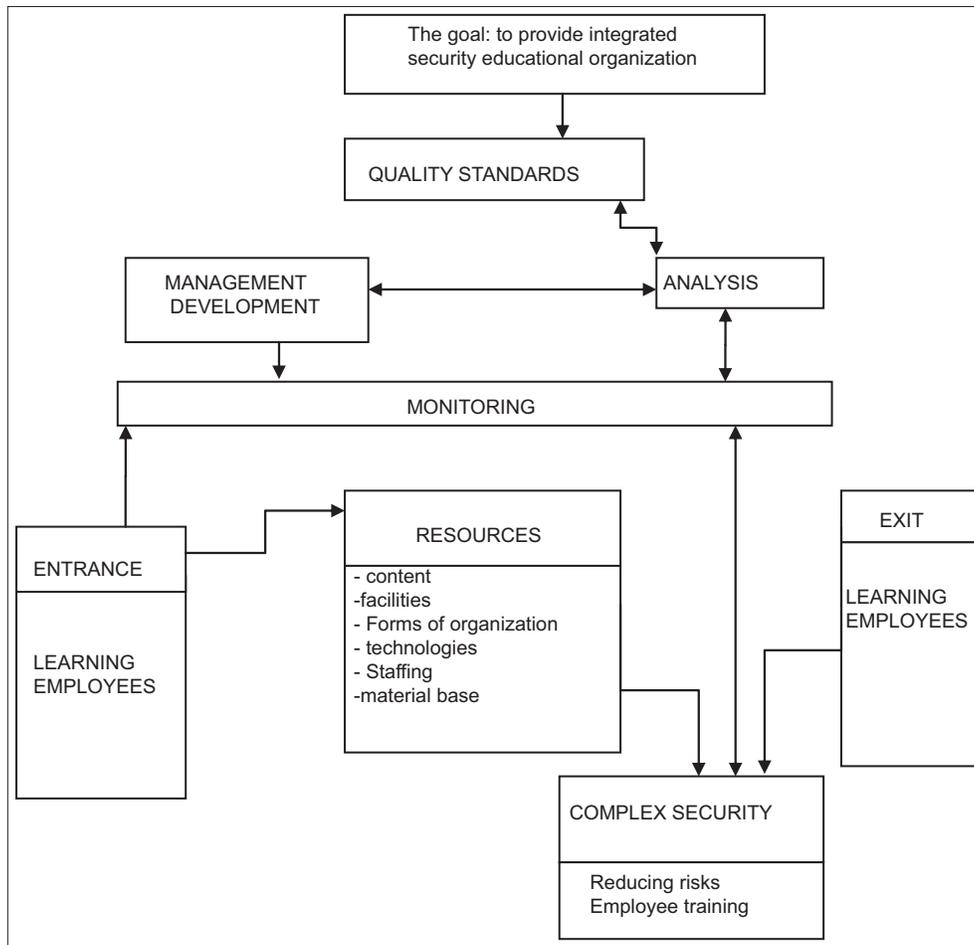
3.1. Components of Integrated Security's Management Process of Educational Organizations

The main characteristic of an integrated security management process of educational organizations of the process is its repeatability and stability of the output characteristics for a given input parameters and processes with resources.

For the formation and effective functioning of an integrated safety management system of educational organization it is necessary to define its parameters. According to a predetermined pattern (Figure 1) the identification of an integrated security management at any level of the process can be performed that will determine the basis for the formation of the security development strategy:

1. Determination of the list of main areas to implement educational organizations' integrated management of safety and their effectiveness
2. Carrying out of a comprehensive analysis of the achieved level of safety quality in the realization of the main complex security management processes;
3. Implementation of forecasting activities in management of complex security, taking into account environmental factors of educational organizations;
4. Coordination of the development's analytical forecasts and

Figure 1: Components of integrated security’s management process of educational organization



internal environment of the educational organization and the definition on the basis of targeted knowledge of the main complex security management processes;

5. Development of scientific-educational, industrial, organizational and economic ways to achieve the goals - the continuous improvement of complex safety management processes of educational organization;
6. Performing of calculations and evaluation of necessary and disposable resources to ensure comprehensive security management, its adequacy in the implementation of the main (educational) process of educational organizations;
7. Monitoring of management processes and ensuring of comprehensive security of the educational organization.

3.2 . The Dynamic Model of Educational Institutions’ Integrated Security Processes Providing

Integrated safety of educational organizations is a state of educational institution’s protection from real and projected threats of the social, natural and manmade nature, ensuring its safe operation (Gafner, 2002; Pylypenko et al., 2006). It can be reached through the implementation of a comprehensive system of measures and activities of the legal, organizational, technical, personnel, financial nature, such as:

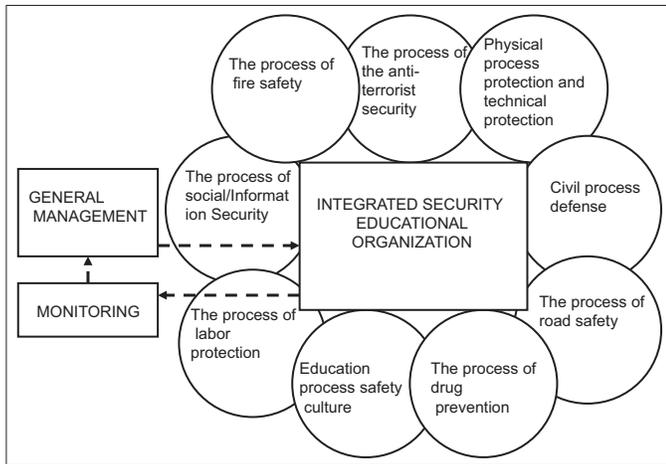
- Organization of civil defense;
- Organization of fire safety of educational organization itself and of the adjacent territory;

- Organization of engineering and technical protection (fences, metal doors, lattices, etc.) and engineering equipment (burglar alarm, “anxious” button, the video surveillance, control and access control, fire alarm);
- Ensuring of antiterrorist protection of educational organizations;
- Organization of check mode, excluding unauthorized entry into the territory of the educational organization of unauthorized persons;
- Organization of events to comply with safety standards;
- The organization of interaction with law enforcement and other agencies, support services and non-governmental organizations in combating with criminal offenses (hooliganism, theft, robbery, violence), extremist manifestations, riots, drug trafficking;
- Inclusion in the educational and training processes of safety culture’s aspects.

Dynamic model - a model reflecting the connection between the elements, ways of functioning of the system, the variability of the model is determined by its adaptation to internal and external conditions of the implementation processes.

Dynamic model of comprehensive security management of educational organization is built on the basis of a systematic, integrative, process, personality-activities approach, when

Figure 2: A dynamic model of the processes network of educational organization's integrated security



management appears as a process of management acceptance on the basis of the information at the input and output of the process. Structure of the integrated safety's management of educational organization is responsible for the progress and results of each of the controlled processes (processes of complex safety's provision of the educational institution) (Figure 2).

A set of processes is presented in the paper aimed at ensuring of comprehensive security of educational institutions. The results of the implementation of each of the selected processes are included in the overall monitoring system, when on the basis of incoming information the managerial solutions in the field of integrated security and activation of these cycles are produced.

The model presented cannot be the final and complete one as periodic audit of integrated security systems and analytical studies to identify new threats of the modern world are required.

3.3. Priority Areas for Actions in the Field of Integrated Security of Educational Organization

Based on the analysis of the current state of educational institutions in the field of health and safety, the study of possible security threats, the following priorities in the field of integrated security of education organization have been established:

- Improving of the regulatory framework of integrated security;
- Improving of the technical support of integrated security, including the introduction of modern technology and integrated security systems provision, different on principle of operating, purpose and design features (such as surveillance equipment, official communications, alarm notification agents, detection of intrusions of offenders or importations of prohibited items into the territory of the educational institution, etc.);
- Improvement of educational-methodical and scientific-methodological support of integrated security, including the division of functions, providing some aspects of integrated security between officials of educational institutions;
- Planning of organizational and financial support of integrated security;
- Organization of informational-technological support of integrated security, where the leading role belongs to the

automated electronic system that provide a high degree of reliability, operational readiness, protecting of information, the automated processing of the received and transmitted information, internal and external communication with the various geographically distributed services and units for network, control of executive and supervisory mechanisms and instruments, etc.;

- Analysis of requirements to ensure the safety of the participants of the educational process and facilities of educational institutions;
- Definition of indicators and monitoring of complex security organization;
- Development of effective comprehensive security management mechanisms.

4. DISCUSSION

A necessary condition for the organization of educational organization's integrated security is to develop not only a security system of provision, improvement of the management and monitoring, but also the understanding by all participants of the educational institutions the necessity to change the approach to personal and public safety, the formation of a culture of safety, where the most important factor is learning.

The risk in this case is a test and measurement instrument for determining of the security level from the perspective of the subjective characteristics of uncertainty, that is where the person not only detects the mismatch of required and available potential in the situation's management, but where uncertainty is the evaluation of the potential of these opportunities. Accordingly, the willingness to take risks will mean willingness to make decisions and to act in such circumstances, subjective uncertainty. This is not giving up of the deployment of intellectual orientation in the situation but readiness for self-control of actions when there is a notorious incompleteness, or unavailability of the necessary benchmarks, as well as the willingness to rely on their own potential.

5. CONCLUSION

The modern world has rejected the concept of absolute security and adopted a new philosophical concept of acceptable risk, including the area of safe operating conditions' creating, the preservation of life and health of personnel trained during the educational process in the educational organization.

Development of a dynamic model and mechanisms of management and an integrated components of the integrated safety management process of educational organizations built from the perspective of quality's achieving, allows continuously improving of the health and safety process. The designed by the authors the components, processes' landscape, direction, dynamic model are applied not only in the interests of anti-terrorism protection, but also to ensure comprehensive security of educational institutions from all kinds of real threats of social, human and natural nature.

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