

SAFE EDUCATIONAL ENVIRONMENT AS AN OBJECT OF PEDAGOGICAL DESIGN

Lyubov Alexandrovna Akimova*, Irina Valeryevna Chikeneva
Orenburg State Pedagogical University, Russian Federation.
Email: *lubovakimova@yandex.ru

Article History: Received on 30th August 2019, Revised on 30th September 2019, Published on 11th October 2019

Abstract

Purpose of the study: The main task of this research is to analyze the scientific points of view on a safe educational environment.

Methodology: When writing this scientific work, an analysis was conducted of various sources (scientific monographs and publications) on the topic of creating a safe educational environment. Such methods as analysis and synthesis were used, a systematic approach to data analysis was also applied.

Main Findings: The pedagogical reflection of safety is focused on the problem of providing safe conditions for the reproduction of a viable generation, which actualizes the need for the special design of a safe educational environment for students and the preparation of bachelors of education in this direction. The need to design an educational environment to ensure the safety of students stems from their lack of ability to ensure personal safety and the targeted educational priorities in reproducing a viable generation.

Novelty/Originality of this study: The design of a safe educational environment in its turn is regarded as a special creation of opportunities for human self-development, which involves the introduction of innovations in the organization of the educational process to minimize risks to physical, mental and social well-being, as well as to ensure the quality of education.

Keywords: *Safety, education, educational environment, interaction, behaviour.*

INTRODUCTION

Safety is currently recognized as the main component of people's livelihood, a key area in the professional training of specialists, including in pedagogical universities. The desire for freedom from risks, for relative safety, is the fundamental driving force for the design of a safe educational environment in educational institutions. The key concept in the definition of a safe educational environment is safety ([Behzadkolaee et al., 2015](#)).

The concept of safety has a number of definitions, based on the goals and objectives of research in a particular area of knowledge and the subject position of the researcher. The most common definition of safety is related to the term "protection" with respect to vital interests, and the achievement of an optimal level of risk and a state of well-being.

According to S.V. Belov, safety characterizes such a state of the object of protection when the result of its exposure to the flows of matter, energy, and information has the maximum allowable values ([Belov, 2015](#)). He connected safety with the direct people's livelihood and the impact of external causes on the length, quality of life, and health ([Altemani & Merghani, 2017](#)). The researcher formulated the axioms of the doctrine of life safety that assert:

- The potential danger of the surrounding world;
- Presence of danger of the material world in terms of exceeding the maximum allowable values of the flow of matter, energy or information from sources of danger with respect to the object of protection;
- Possible realization of danger with the coincidence of the source of danger and the object of a protection in the spatial-temporal coordinates;
- Simultaneous impact of negative influences of the source of danger on all objects of protection that are in the impact zone;
- Consequences of damage to the object of protection by exposure to danger.

The existential understanding of the term "safety" as the absence of danger emanates from the subjective perception of reality, determining its understanding by referring to the concept of danger, highlighting its properties in an objective way. Danger, as opposed to safety, is interpreted by the negative property of matter, which can cause damage to itself ([Belov & Simakova, 2015](#)).

A classification of danger types in the study of safety is based on various factors. S.V. Belov distinguished the following grounds for classification: types of sources, types of flows and their magnitude in the flow of living space, the moment of occurrence and duration of negative influences, objects of undesirable influences, the number of people affected by danger, the size of impact zones and their types, sensory perception, probability, etc. It should be noted that the above grounds for the classification of danger types reflect their countess on the subject and objectivity with respect to the environment. It is

important that the organization of the environment should determine the safety of the learner. The classification of danger types in the context of potential, real and realized danger indicates its subjective organization.

The subjective aspect on the grounds for the classification of danger types correlates with reflection, perception, consciousness, awareness, and the ability of a person to eliminate danger (Baeva, 2017; Baeva & Bordovskaia, 2015). It should be noted that danger can be avoidable and unavoidable, planned or spontaneous, direct or indirect, permanently or periodically operating. In the context of the pedagogical understanding of danger, of particular importance is the determination of such its property as admissibility or inadmissibility, characterizing the degree of damage inflicted on the object of safety (Baeva & Bordovskaia, 2015).

Situational danger ("here and now") is analyzed in the works of V.N. Moshkin (2016) in the context of educating the safety culture of students. By classifying situations with regard to the "man-danger", he identifies the prerequisites for causing damage to people from both themselves and others. The researcher pays special attention to safety antonyms, including undesirable consequences, negative impacts or events. At the same time, situations are understood as the totality of the natural segments of social life in the context of a specific place, time, subjects, content of interacting parties, and the considered social context. One should note the presence of conditions and factors of the situation, determined by human activities for preventive measures and possible overcoming of danger by creating conditions for life activity to ensure safety.

Thus, the concept of safety is associated with a subjective-objective relationship, with the mutual influence of people and their environment. The environmental aspect of safety is revealed in the characteristics of the state of the environment, in which with a high degree of probability the possibility of causing damage is excluded, and safety is an objective reality. The subjective aspect of safety is reflected in a person's ability to carry out preventive measures and/or eliminate dangerous factors for successful life activity.

It should be clarified that in terms of safety, it is not only about preserving life and health, but more generally – about reducing the degree of risk in achieving life and professional goals. The concept of safety has a close relationship with the concept of health (*health is the saving function of education*) but is not limited to it, reflecting the social effect of the creative function of education.

The social effect of realizing the constructive function of education in terms of ensuring security draws attention to the formation of a security entity capable of ensuring personal security, inalienable from the security of society and the state (Malik & Rizvi, 2018).

Thus, a safe educational environment as an object of pedagogical design needs to be thought out to ensure safety in education, to highlight its characteristic features for implementation in educational practices, which are the objectives of this study.

METHODS

In the course of work, as a leader, a method of generalizing pedagogical experience to minimize the risks of achieving educational results was implemented. The choice of method is due to the understanding that ensuring safety in education is possible if you think ahead about the path to achieving educational results, highlight the possible risks of achieving them and the corresponding conditions for their prevention, develop a mental model of the forthcoming subject-transforming activity of participants in educational relations. In this regard, a safe educational environment is an ideal fragment of pedagogical reality for the implementation of pedagogical conditions that ensure the protection of participants in educational relations in the physical, psychological, social plan and their positive development; the prerequisite for achieving educational results, ensuring the quality of education.

The generalization of pedagogical experience is based on the study, analysis, and synthesis of studies of various aspects of the safety of the educational environment, allowing to highlight the area of responsibility of the teacher for ensuring safety in education (O'Sullivan, 2015).

RESULTS AND DISCUSSION

The development of the idea of general safety in the Russian education system allowed L.A. Akimova (2018) to highlight its pedagogical meanings. The humanitarian paradigm of education focuses on protecting the lives and health of students, ensuring "their physical, mental and social well-being, autonomy, the realization of rights, freedoms, and creativity, as well as the student's education as a subject of personal safety". In the social paradigm of education, the pedagogical meaning of the idea of general safety is revealed "in students' acquisition of social norms that regulate their relations with the environment, providing for overcoming life risks (social, man-made, natural) and their prevention; the student's education as a subject of public safety" (Akimova, 2018). The pedagogical reflection of safety is focused on the problem of providing safe conditions for the reproduction of a viable generation, which actualizes the need for the special design of a safe educational environment for students and the preparation of a future teacher in this direction.

Consider the characteristics of the educational environment in terms of its safety as an object of pedagogical design. Initially, let us accept that a person since birth is in continuous interaction with the environment, in the relationship of interdependencies and mutual influence.

The term “environment” has many meanings. For example, the European Economic Community in relation to the Russian concept of environment applies the concept of surrounding as a set of elements that, when adding up their relations, makeup space, as well as conditions for human life and activity. The Great Contemporary Encyclopedia defines “environment” as a set of conditions that surround people and interact with them.

The social context of the environment is manifested in the subjective perception of the world by people in the process of their communication, interaction and interrelations. The natural and social environment, according to [V.A. Yasvin \(2018\)](#), in line with the psychological and pedagogical aspect determines the possibility of the individual’s self-development ([Yasvin, Rusetskaya & Osadchiy, 2015](#)).

The relationship of subjective-objective relations of a person with the environment is reflected in the definition of the environment as a correlation of internal (heredity, physical and mental health) and external (surrounding natural, anthropogenic, man-made and social environment) factors ([Neprokina, Bolotnikova & Oshkina, 2012](#)). For our study, the significance is the fact that the internal environment is determined by the state of the human body, the interaction of its systems in the relationship with the individual; and the external environment in relation to people represents reality in the totality of the physical and social environment. Thus, the safety of people as a state of their “complete physical, social and spiritual well-being” ([Gubanov & Byrylova, 2018](#)) is determined by the result of the interaction of the internal and external environment, including the educational environment, requiring special design to ensure the safety of students.

The need to design an educational environment to ensure the safety of students stems from their lack of ability to ensure personal safety, on the one hand, and the targeted educational priorities in reproducing a viable generation (ready to create external safe conditions for their self-development), on the other. In this regard, the educational environment is a factor of education, determining in a spatial-temporal perspective the safety of the individual and the sustainable development of society and the state ([Paharia, 2019](#); [Sharma & Raghuvanshi, 2019](#)).

Regardless of the approaches to the definition of the educational environment, its general characteristic is the state of personal safety. In pedagogical theory and educational practice, there is an active search for countermeasures against its destructive processes ([McRobbie & Thomas, 2000](#)). The study of pedagogical impact on the formation of a person as a subject of safety is the current direction of pedagogical discourse. At the same time, ensuring the safety of participants in educational relations as elements of the educational environment is an urgent scientific and practical task.

A special analysis of the educational environment, conducted by us in line with the characteristics of its safety for participants in educational relations, is based on the “theory of affordances” by [J. J. Gibson \(1988\)](#).

According to J. J. Gibson ([1988](#)), an affordance is a special unity, a set of properties of the educational environment and the subject; it is equally related to the educational environment and to the behavior of the subject. For our study, it is important to define dialogue as a form of the relationship between the educational environment and the subject, which determines their equivalence in bilateral development: the environment contains affordances for the development of the personality; however, the realization of these affordances depends on the activity and capabilities of the personality itself.

In pedagogy and psychology, safety as a property of the educational environment is reflected in various contexts: a developing educational environment, an informationally safe educational environment (social aspect of influence of the educational environment); a psychologically safe educational environment (psychological aspect of influence of the educational environment); an ecologically safe, physically safe, health-saving educational environment (physical aspect of influence of the educational a) ([Martynova et al., 2017](#)).

The social context of safety is reflected in the characteristics of a developing educational environment. It is emphasized that the object of the impact of a teacher should be neither students nor their qualities and behavior, but the conditions and environment of their life activity. The safe informational and environmental activities of future bachelors of education are determined by motivational, personnel, regulatory, informational, scientific, methodological, and material and technical conditions ([Boyarov & Stankevich, 2015](#)).

The psychological context of safety is revealed in the characteristics of a psychologically safe educational environment ([Baeva, 2017](#); [Baeva & Tarasov, 2017](#)). It should be noted that psychological safety is correlated with the preservation of the psyche, with subjective well-being ([Dontsov et al., 2018](#); [Dontsov & PereLygina, 2013](#)), which implies the establishment of a balance of negative impacts of the environment on people, and their stability and ability to overcome them through their own resources and capabilities. It is affirmed that psychological safety and the environment are inseparable, which determines the need to ensure the safety of the individuals in close relationship with the conditions of their functioning. It should be noted that an informationally safe educational environment is related to the renewal of the pedagogical system, which requires the projective nature of its implementation in the development of organizational, methodological, technical and software tools that are relevant to achieving the goals and objectives of education.

The physical context of safety manifests itself in the characteristics of an ecologically safe, physically safe, health-saving educational environment. [E.A. Alisov \(2016\)](#) determines an ecologically safe educational environment as a system of psychological and pedagogical conditions and influences for the development of man in the optimal interaction with the outside world. The sources of risks of the educational environment include the student, his or her family, the teacher, education management, and the organization of the educational process. It should be noted that the comfort and safety of the educational environment are ensured in the interaction of participants in educational relations based on the assimilation of knowledge about safety, and the development of skills for its organization. It is considered as a combination of managerial, organizational, training and health conditions, as well as psychological, pedagogical and medico-physiological means and methods of maintenance of the educational process, and prevention of risk factors of pedagogical influence.

The cumulative sense of ensuring safety in studies of the educational environment allows us to define a safe educational environment by the system of influences and conditions of a spatial-objective environment for the favorable development of participants in educational relations.

Despite the multivariance of safety aspects as a special feature of the educational environment, a crucial role in characterizing the educational environment as safe is played by the balance between external and internal factors of human development, for which the social responsibility lies with the teacher, who needs:

- In terms of the physical safety of students, to design and implement preventive measures to preserve the structural and functional integrity of the human body, its efficiency as the basis of susceptibility to education;
- In terms of psychological safety, to create a favorable psychological climate in the implementation of the educational process;
- In terms of social safety, to strive to ensure the quality of education in the development of a person's subjectivity, to activate students in mastering the content of education. One should take into account the type of pedagogical interaction, based on the joint design of the spatial-objective environment. V.I. Slobodchikov notes that "a person's subjectivity manifests itself only in the meeting, in conjunction, in community, in interaction" ([Slobodchikov, Korolkova & Ostapenko, 2016, p. 105](#)), and in its joint design as a subject and resource for joint activities ([Slobodchikov et al., 2018](#)).

CONCLUSION

Thus, the analysis of the educational environment in the context of safety allows the following generalizations.

1. The term "safe educational environment" stems from the need to minimize educational risks for human development, and to achieve the quality of education. In the context of this study, it is important that the organization of the educational environment should predetermine the safety of learners and their education as a subject of safety. The classification of danger types in the context of potential, real and realized danger indicates its subjective organization.
2. Regardless of the approaches to the definition of the educational environment, its general characteristic is the state of personal safety. In the definition of a safe educational environment, the key concept is "safety".
3. The concept of safety is associated with a subjective-objective relationship, with the mutual influence of people and their environment. In terms of the pedagogical understanding of safety, it is not only about preserving the life and health of participants in educational relations, but more generally – about reducing the risk to their self-development. The concept of safety has a close relationship with the concept of health but is not limited to it, reflecting the humanitarian and social effect of the creative function of education.
4. The pedagogical reflection of safety is focused on the problem of providing safe conditions for the reproduction of a viable generation, which actualizes the need for the special design of a safe educational environment for students and the preparation of bachelors of education in this direction.
5. The need to design an educational environment to ensure the safety of students stems from their lack of ability to ensure personal safety, on the one hand, and the targeted educational priorities in reproducing a viable generation, on the other. The desire for freedom from risks, for relative safety, is the fundamental driving force for the design of a safe educational environment in educational institutions.
6. The multivariance of educational risks determines the multiplicity of definitions of the educational environment in various safety contexts: a developing educational environment, an informationally safe educational environment (social safety); a psychologically safe educational environment (psychological safety); an ecologically safe, physically safe, health-saving educational environment (physical safety). We define a safe educational environment as a system of conditions of a spatial-objective environment for the favorable development of participants in educational relations.
7. A crucial role in characterizing the educational environment as safe is played by the balance between external and internal factors of human development, for which the social responsibility lies with the teacher, who needs:

- In terms of the physical safety of students, to design and implement preventive measures to preserve the structural and functional integrity of the human body, its efficiency as the basis of susceptibility to education;
 - In terms of psychological safety, to create a favorable psychological climate in the implementation of the educational process;
 - In terms of social safety, to strive to ensure the quality of education, to activate students in mastering the content of education, and to increase their subjectivity.
8. We consider the design of a safe educational environment as a special creation of opportunities for human self-development. The teacher must, in a spatial-temporal perspective, foresee the influence of the educational environment on participants in educational relations (in physical, mental and social aspects) and choose the most rational (in terms of safety) model for the implementation of the educational process. The design of a safe educational environment involves the introduction of innovations in the organization of the educational process to minimize risks to the physical, mental and social well-being of participants in educational relations and their self-development, as well as to ensure the quality of education ([OECD, 2017](#)).

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