

**EEIA 2019**  
**International Conference "Education Environment for the  
Information Age"**

**PERSONAL EDUCATIONAL ENVIRONMENT IN THE CONTEXT  
OF PERSONAL SECURITY**

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***Abstract***

The article provides a systemic description of a safe personal education environment, identifies the totality of design actions required to create an environment that ensures psychological security of participants in education relations. The authors consider the security of a personality to be a dominant characteristic, a necessary and obligatory factor that contributes to an effective organized educational process. The process of pedagogic projection of the spatial-object component of the education environment is described in terms of the environmental approach methodology in education, the principle of personalization of the education space taking into account video-ecological factors of the organization of the project field. Requirements to the design of education space are considered by identifying the main levels of the formation of modern social spaces in the structure of education complexes. The authors offer their own definition of a psychologically comfortable education environment. Special attention is paid to the spread of the phenomenon of bullying in the modern educational environment. Characteristics of the design of the educational space area at primary school (vestibule, multifunctional public space, dining room, libraries, calm and play recreation zones, sports grounds, open education space, creative workshop, music class, auxiliary spaces) that ensure psychological security of the individual. On the whole the technology of designing a safe personal education environment is considered by the authors in the context of preventing various manifestations of bullying and abuse and creating comfort zones.

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**Keywords:** Personalization, safety, prevention, bullying, design.



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## **1. Introduction**

Personalization is today one of the key vectors in the development of the world education process. Personalization is dictated by the low effectiveness of a uniform approach to all the learners, the inability of learners to set and achieve goals, and the need for the pedagogues to identify the causes that impede the education process.

The personal education environment has a manifest potential for ensuring psychological security of both students and teachers. It creates prerequisites that enhance the significance and responsibility of all the participants in education relations.

The fact that the instruments required for personalized education are not yet formed, limited possibilities of forecasting and controlling the education process determine the urgent need for systemically organized design of a safe personal education environment.

## **2. Problem Statement**

The problem consists in the lack of necessary value-and-target-related, conceptual and strategic foundations of designing a safe personal learning environment.

## **3. Research Questions**

What are the novel characteristics of a safe personal learning environment?

What should be the criteria of designing a personal learning environment?

What are the design features of educational space at primary school that ensure psychological security of the individual?

## **4. Purpose of the Study**

The goal of research is to determine the axiological principles, methodical benchmarks and the content of designing a safe personal learning environment.

## **5. Research Methods**

The essence of a safe personal learning environment has been identified through the use of the methods of idealization and abstraction. The use of the deduction method made it possible to identify the criteria of designing a personal education environment. The method of induction helped to produce a forward-looking outcome of designing the spatial-object component of the personal education environment. The features of the design of educational space zones at primary school that ensure the psychological security of the individual were revealed through the use of the pedagogical modeling method.

## 6. Findings

The personal education environment implies independent choice by learners of individual learning trajectories (Bergmüller, 2013), materials and resources, information, the pace of the study of the content of disciplines, planning of the overall strategy and time of learning.

Innovative variegated solutions of the educational space design (Findikoğlu & İlhan, 2016; Turcsányi-Szabó, 2012) offer an array of opportunities sufficient for creating a personal learning environment. Successful development of personal independence and security depends on the diversity of types of activity accessible to the learner in which he/she can display a creative attitude (Kiroğlu, 2017; Pisanu & Menapace, 2014) interacting with the environment, proceeding from his/her interests and needs in accordance with their own goals thus effecting a choice of one's own educational pathway.

Various resources are used for the purpose, including news and educational websites, blogs, social networks, online voice communication means, text messages, photographs, video and audio recordings, etc. Offline resources such as interaction with relatives, friends and teachers are also important for creating a personal environment (Findikoğlu, Alci, & Karatas, 2015; Xiao Fen, 2017).

The safety of the education environment is an undoubted priority in organizing the personal environment of teaching children at a modern school (Baeva, 2017; Zhao, 2015). An effective formation of a secure education environment depends on the results of the previous stage, i.e. of its design. Pedagogic design of a safe education environment involves the process of constructing an education environment for the purpose of optimizing natural, social, psychological-pedagogic conditions for the safe development of the personality (Alisov, 2011).

The process of pedagogic design organized in a systemic and planned manner includes successive implementation of design actions at the conceptual, substantive and technological levels of designing. In accordance with the methodology of environment-based approach the complex of technologies of the substantive-activity stage of designing an education environment includes the following types of interaction with the environment: environment design (prognostication of its permissive opportunities); constructing corresponding means; modeling of an environment-forming strategy to assign the necessary meanings to the environment; planning of measures aimed at implementing certain strategies. Let us dwell in more detail on projecting the spatial-object component of the education environment.

In protecting the personal education environment one has to proceed from the objective conditions in which transformative actions may begin. Undoubtedly, an ideal case of the start of projection actions is the case when the school as such does not yet exist. Then one can design the architecture of the school building. There are three main levels of the formation of modern social spaces in the structure of education complexes: the formation of internal social spaces; formation of external social spaces; formation of "intermediate," buffer spaces, i.e. communication spaces that link the external and internal spaces (Pimenova, 2016).

The traditional requirements to the architectural design of a school building are based on the principles of safety, school hygiene, age-related anatomy and physiology. The multifunctional character of the modern school also presents further requirements to designing the education space (Kislyakov, 2017), for example: functional zoning, the presence of transformable spaces (Alonso, 2017; Malan & Van

Dijk, 2016), their diversity and moderately vivid color scheme, interconnection with nature, bringing together participants in education relations of various ages, openness of the premises, etc.

Because the perception of the school building architecture depends primarily on the visual sensory channel (Alisov, 2009), the video-ecological characteristics of the designed field take on particular importance. Filin (2006), the founder of video-ecology as an area of scientific knowledge, has compared the video ecological features of buildings belonging to different epochs based on the following parameters: saturation with elements (small number in a modern building and a large number in an old building); structure of elements (a multitude of straight lines and straight angles in the modern building and many sharp angles and curved lines in an old-type building); the size of planes (one large plane in the modern building and many small planes in the old building); the silhouette of buildings (simplified in the modern building, just a straight line without a single element and an intricate and diverse silhouette in an old building).

A study by Arno (2018) identifies criteria for designing personal education space: diversity and accessibility of materials, equipment and types of activity; removal of behavioral restrictions and free choice of activity; possibility to interact with the space, freedom to choose the space and objects for the student, and freedom to change the spatial environment; an opportunity for self-expression and creative activity; an opportunity of group interaction and informal communication; an opportunity of privacy and quiet rest.

The end product of designing the spatial-object component of the education environment (in terms of the size and spatial structure of the premises, the ease of their spatial transformation, opportunities and ease of spatial movement of subjects) is interconnected with the functional possibilities of the social component (in terms of change of personal and interpersonal space). It is extremely important to take into account the specificities of the activities organized in a given education environment. It is necessary to focus attention on the possibility of spatial transformation of the elements of the structure of premises, its renewal, dynamism, movement determining the frequency and lability of personal impressions, and creative thinking. The indoors spatial structure should seek to avoid the features of aggressiveness and undue homogeneity.

A person feels more comfortable in a delineated, protected and integral space. Breaks, uniform and unstructured empty spaces detract from a sense of psychological comfort. The design of elements of the education environment is functionally capable of preventing such influences on the psyche thus leading to the design of a psychologically comfortable education environment.

A psychologically comfortable education environment implies a system of conditions that make it possible to preserve the psycho-physiological health of the students, ensure their optimal inclusion in education activities, successful self-realization which enhances positive interaction among participants in educational relations.

A comfortable education environment is seen by psychologists and pedagogues as an environment of interaction which has a reference significance for the subjects involved (positive attitude towards it) marked by the prevalence of personally oriented attitudes of the participants (orientation towards the individual's own interests and the interests of other people) as reflected in emotional-personal and communicative characteristics of its subjects. A feature of a comfortable education environment is its

ability to ensure the possibility for effective personal development of all the subjects of the education environment.

Psychological comfort is established through correspondence between the mental qualities, the states of the subject and organization-communicative conditions of the education environment. Psychological comfort is marked by a state of joy, pleasure, satisfaction, and happiness the subject experiences while being inside the education environment.

The state of comfort is a state marked by a complex of long-term pleasant subjective sensations connected with pleasure and satisfaction of the needs that arise. A mentally comfortable state corresponds to an optimum level of mental activity and optimum course of mental processes. A comfortable state has the following components: stable mood; positive feelings and emotions; positive experience of events; stable and a high level of vitality.

One regulator of socio-psychological comfort of the education environment is the ethic of inter-subject relations. Ethical principles and norms must be universal while at the same time being an effective criterion of acceptability and adequacy of the positions of participants in a special kind of education relations.

The effectiveness of the personal education environment would depend in many ways on the ability of the subjects to establish optimal, harmonious relations with each other. This does not cancel out personal interest and satisfaction that provide weighty incentives for good and responsible work (Sitnikov & Savchuk, 2016; CHvanova, Anur'eva, Lyskova, Kotova, & Molchanov, 2015).

However, excessive emphasis on permitting the subjects of the education environment to indulge their personal interests, exercise near-infinite rights and freedoms, and subjugation to often selfish requirements of individual students are fraught with some negative manifestations of inter-subject relations in the modern education environment; one of these manifestations is, regrettably, the growing phenomenon of school bullying (Glew, Fan, Katon, & Rivara, 2008; Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003).

Bullying is defined as “a variety of confrontational destructive interaction when the perpetrator performs recurrent and prolonged violent actions with regard to the victim who is unable to protect himself aimed at causing damage to the victim and raising or preserving the status of the perpetrator in the group” (Solov'ev, 2015, p.14).

Considering the existence of alternatives to the concept of “bullying” which has become widespread in psychological and pedagogical literature outside Russia (such concepts as “hazing”, “abuse”, “harassment”, “discrimination”, etc.) it is clear that this phenomenon is universal in the modern education environment.

Pedagogical activity aimed at preventing bullying traditionally consists in “...competently organized work of psychological enlightenment of all the participants in the education environment,” meaning “the formation of a safe environment, that is, conditions that minimize or neutralize the impact of the factors that provoke violence” (Bykova & Istomina, 2016, p.77).

The empirical facts discovered by researchers are not always expected and are not always uniform:

*With the growth of the size of a school the positive attitude to the school diminishes and the aggressiveness increases: the smaller the school the more the children like it, the more they trust their teachers the less they are less prone to bullying. Moreover, this pattern is manifest in urban schools as well as gymnasiums and lyceums where bullying and cyberbullying levels are highest. (Donskaya, 2019, section 7)*

As a result of pedagogical design of the personal education environment the following features of the design of education space zones at a primary school have been found to ensure psychological security of the individual (Table 1).

**Table 01.** Features of the design of primary school educational space areas ensuring psychological security of the individual

Item No.	Education space zone	Design features
1	Vestibule	Spacious hall with comfortable mobile furniture comprising a gallery with a recreation zone for waiting parents. The walls are covered in marker boards for drawing or with film, magnetic and cork surfaces are attached to some areas of the surface.
2	Multifunctional social space used as assembly hall, movie theatre, recreation zones	Different levels that can be used as a stage and seating area. Soft transformable furniture, easy-to-stack chairs, multimedia and projection equipment, a grand piano, access to the props storage room.
3	Dining room	Buffet service. Area for teaching children to cook simple dishes. Small movable tables seating up to 6 persons which can be put together if necessary; comfortable, light and easy-to-stack chairs.
4	Library	Various types of racks providing easy access to books, individual tables that can be combined for group work, computer stations, niches and poufs.
5	Calm recreation zone	Soft furniture, special niches.
6	Recreation play zone	Soft game blocks, equipment for active developing games, various surfaces for drawing, floor markings for mobile games, cognitive games on a magnetic board, free space, communication zones.
7	Sports facilities	Zone for team games as well as various solutions for outdoor sports activities.
8	Open education space	Mobile individual tables that can be combined, movable chairs, poufs, beanbag chairs. Experimental corner with special desks and materials, areas for artistic and design activities. Walls covered in marker boards with magnetic and cork surfaces in certain places. Niches for individual and small-group work.
9	Creative workshop	Comfortable space for drawing, molding from clay, sewing, application, etc. Stained-glass windows on butt ends.
10	Music room	Glass windows, sliding doors, stage.
11	Auxiliary spaces	Natural materials of various texture, bright colors.

## 7. Conclusion

Without belittling the role and significance of traditional forms of psychological preventive work, the material set forth in this article suggests that closer attention should be paid to the factor of effective design (with subsequent implementation of the project) of a safe education environment. It is necessary to use what may at first glance appear to be non-traditional technologies not expressly aimed at preventing bullying, including a well-thought-out and pedagogically valid technology of designing the personal education environment.

The commitment to reducing the aggressiveness of the educational environment in the modern school must be a dominant factor at the “reference point”, at the stage of design in determining the value aspects of the personal education environment. Thus, preventive design of the spatial-object component of the education environment may be an effective means of preventing school bullying.

## References

- Alisov, E.A. (2009). *Psychology and pedagogical aspects of touch attitude of the personality. Psihologicheskaya nauka i obrazovanie. psyedu.ru* [Psychological science and education. psyedu.ru]. Retrieved from: <http://psyedu.ru/journal/2009/1/Alisov.phtml> [In Rus., abstract in Eng.].
- Alisov, E.A. (2011). *Pedagogicheskoe proektirovanie ehkologicheski bezopasnoj obrazovatel'noj sredy* [Pedagogical design of ecologically safe educational environment] (Doctoral Dissertation). Moscow: Moscow Pedagogic State University [In Rus.].
- Alonso, F. (2017). Perception of road safety in children's environment. *American Journal of Educational Research*, 5(3), 273-278. <http://dx.doi.org/10.12691/education-5-3-7>.
- Arno, A.O. (2018). Project of educational space of elementary school. *Nizhegorodskoe obrazovanie*, 1, 87-90 [In Rus.].
- Baeva, I.A. (2017). Psychological safety of the educational environment in structure of complex safety of the educational organization. *Kazanskij pedagogicheskij zhurnal*, 6(125), 12-18 [In Rus.].
- Bergmüller, S. (2013). The relationship between cultural individualism-collectivism and student aggression across 62 countries. *Aggressive Behavior*, 39, 182-200. <http://dx.doi.org/10.1002/ab.21472>.
- Bykova, E.A., & Istomina, S.V., (2016). Problem of prevention of bullying in the educational organization. *Vestnik Kostromskogo gosudarstvennogo universiteta. Seriya: Pedagogika. Psihologiya. Social'naya rabota*, 3, 75-78 [In Rus.].
- CHvanova, M.S., Anur'eva, M.S., Lyskova, V.YU., Kotova, N.A., & Molchanov, A.A. (2015). Training of specialists in the field of information security: innovative approach to formation of the educational environment. *Psihologo-pedagogicheskij zhurnal Gaudeamus*, 1, 18-31 [In Rus.].
- Donskaya, K. (2019). *Shkola agressii: issledovatel' Daniil Aleksandrov o podrozkovom bullinge i sposobah s nim spravlyat'sya* [School of aggression: the researcher Daniil Alexandrov with him to consult about teenage bullying and ways]. Retrieved from: <https://theoryandpractice.ru/posts/15975-shkola-agressii-issledovatel-daniil-aleksandrov-o-podrozkovom-bullinge-i-sposobakh-s-nim-spravlyatsya> [In Rus.].
- Filin, V.A. (2006). *Videoehkologiya. CHto dlya glaz horosho, a chto – ploho* [Video ecology. That for eyes well and that – is bad]. Moscow. [In Rus.].
- Findikoğlu, F., Alci, B., & Karatas, H. (2015). The correlation between pre-service teachers' attitudes towards technology and achievement in material design. *Anthropologist*, 20(3), 744-753. Retrieved from: <http://avesis.yildiz.edu.tr/YayinGoster.aspx?ID=4753&NO=7>.
- Findikoğlu, F., & İlhan, D. (2016). Realization of a desired future: innovation in education. *Universal Journal of Educational Research*, 4(11), 2574-2580. <http://dx.doi.org/10.13189/ujer.2016.041110>

- Glew, G.M., Fan, M-Y, Katon, W., & Rivara, F.P. (2008). Bulling and school safety. *The Journal of Pediatrics*, 152(1), 123-128. <http://dx.doi.org/10.1016/j.jpeds.2007.05.045>
- Kiroğlu, I. (2017). Innovation, creativity and education researcher. *Social Science Studies*, 5(IV). Retrieved from: [http://rssiudies.com/Makaleler/1311929737\\_409-422-Isil%20KIROGLU.pdf](http://rssiudies.com/Makaleler/1311929737_409-422-Isil%20KIROGLU.pdf).
- Kislyakov, P.A. (2017). Ecopsychology of the educational environment: approaches to design and monitoring. *Ekologiya cheloveka*, 3, 42-50 [In Rus.].
- Malan, L., & Van Dijk, D. (2016). The strategy to align road safety education to the further education and training band curriculum. *Africa Education Research*, 13, 132-146. <http://dx.doi.org/10.1080/18146627.2016.1224557>
- Nansel, T.R., Overpeck, M.D., Haynie, D., Ruan, J., & Scheidt, P. (2003). Relationships between bullying and violence among US young. *Archives of Pediatrics and Adolescent Medicine*, 157, 348-353. <http://dx.doi.org/10.1001/archpedi.157.4.348>
- Pimenova, E.V. (2016). Features of formation of public spaces in structure of buildings of the educational organizations. *Inzhenernyj vestnik Dona*, 3. Retrieved from: [http://www.ivdon.ru/uploads/article/pdf/IVD\\_94\\_Pimenova.pdf\\_867c3e3fe5.pdf](http://www.ivdon.ru/uploads/article/pdf/IVD_94_Pimenova.pdf_867c3e3fe5.pdf) [In Rus.].
- Pisanu, F., & Menapace, P. (2014). Creativity and innovation: four key issues from a literature review. *Creative Education*, 5(3), 145-154. <http://dx.doi.org/10.4236/ce.2014.53023>
- Sitnikov, YU.E., & Savchuk, A.N. (2016). Formation of readiness of future teachers in higher education institution to ensuring social safety in the educational organizations. *Vestnik TGPU*, 9, 135-141 [In Rus.].
- Solov'ev, D.N. (2015). *Ispol'zovanie potenciala pervichnogo kollektiva v profilaktike bullinga sredi shkol'nikov podrostkovogo vozrasta* [Use of potential of primary collective in prevention of bullying among school students of teenage age] (Doctoral Dissertation). Tyumen': Tyumen State University [In Rus.].
- Turcsányi-Szabó, M. (2012). Aiming at sustainable innovation in teacher education – from theory to practice. *Informatics in Education*, 11(1). Retrieved from: [https://www.mii.lt/informatics\\_in\\_education/pdf/INFE197.pdf](https://www.mii.lt/informatics_in_education/pdf/INFE197.pdf).
- Xiao, Fen W. (2017). Research on preschool teachers' safety education in China. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 4(1), 32-35. <http://dx.doi.org/10.20431/2349-0381.0401004>
- Zhao, Y. (2015). A world at risk: an imperative for paradigm shift to cultivate 21st century learners. *Society*, 52(2), 129-135. <http://dx.doi.org/10.1007/s12115-015-9872-8>.