Designing the Educational Environment in the Formation of Adaptation and Integration Strategies in Children from Migrant Families

N. M. Komarova¹ and T. F. Suslova¹

¹Moscow State Regional University, Moscow, Russia

Abstract

This article is devoted to the study of the possibilities of educational environment design in the arrangement of the schoolwork with children from migrant families so that they could positively adapt to the conditions of school and integrate into the culture of the host country. Based on a generalization of the problems faced by migrant children, the characteristics of educational environment design models and technologies, and international experience in developing and designing electronic educational resources, designing the process of teaching and educating children from migrant families, regardless of their social status, the role and place of educational environment design, as well as the conditions and mechanisms of increasing the effectiveness of designing the educational environment of educational and training processes for children from migrant families are outlined. The reasons for the introduction of interactive methods of teaching and educating migrant children, especially during the adaptation period, are outlined. Educational environment design is considered from the position of a systematic approach to the design of the educational process, in which the content, methodology and conditions of the organization are subordinated to a single goal, and the roles of not only teachers, but also the families of migrant children, peers, other people and organizations are defined in this system.

Keywords: educational environment design, adaptation and integration strategies, migrant children, migrant families

Author Note

N. M. Komarova
T. S. Suslova
We have no known conflict of interest to disclose.
Correspondence concerning this article should be addressed to: N. M. Komarova, Candidate of Pedagogical Sciences. Associate Professor, Moscow State Regional University, Moscow, Russia. Email: nmkomarova@mail.ru
Designing the Educational Environment in the Formation of Adaptation and Integration Strategies in Children from Migrant Families

The educational system and interaction in the dyads "child from migrant families - teacher", "teacher - parent - migrant", "child from migrant families - indigenous child", "family of migrant children - family of indigenous children", etc. has great influence on the successful adaptation period of children from migrant families in the host country. We have identified, from our point of view, the most important dyads, on the success and constructiveness of relations which depend on the socialization of children from migrant families, their personal development, psychological state, potential to build their future in the host country, social, educational and later professional activity, as well as psychological and physical vitality. However, for this it is extremely important to form strategies for successful adaptation to the conditions of residence in the host country and integration into its culture and education.

The importance of forming adaptation and integration strategies in children from migrant families can be explained by:

First, the fact that today population migration is more of a global problem than a benefit. This is evidenced by the serious difficulties faced by most countries of the European Union, where a large number of illegal migrants are registered, and migrants who aspire to the United States and European countries in order to improve their lives, family life and security. Most of the migrants are families with children. This situation will continue, as evidenced in reports by the Organization for Security and Cooperation in Europe (OSCE). In particular, in most European countries it is noticed that since the beginning of the 21st century the share of children of foreign origin among students of secondary schools in such countries as Austria, Denmark, Ireland, the Netherlands, Norway, Sweden, Finland, etc. has been steadily growing. Increases are primarily due to children from immigrant families from
Asian and African countries, but for some states (for example, Ireland) there are large numbers of immigrants from Eastern European countries. The proportion of children whose primary language of instruction is not the state language is growing. Thus, in some areas of Vienna, The Hague, Amsterdam, Utrecht, Stockholm, Malmo, and other major cities already in 2007 every third student in public schools belonged to this category, and it is obvious that the past ten years have further increased the ratio in favor of children from immigrant families (Omelchenko 2018; 2019; Education: Gross Enrollment Ratio by Level of Education 2016).

The number of migrant families with children is also growing in Russia. For example, in some districts of Moscow, the number of children can reach 40% in school classes. It is true that the period of the coronavirus pandemic, which covered almost the entire world, has somewhat reduced the flow of migrants with children, but this is a temporary situation. It is also worth noting that some migrant children who come to Russia do not attend educational organizations. And although there are no open statistics on children from migrant families outside the Russian educational system, but the results of expert surveys indicate that not all children from migrant families regularly attend kindergartens and schools. Thus, a study of the problems of children without Russian citizenship conducted in 2017 in Moscow by the Migration Research Center (sample size - 529 foreign citizens with children aged 1-17 years) showed that about 15% of school-age children (among them natives of Syria, Afghanistan, Kyrgyzstan, Uzbekistan) do not attend school, while 49% of respondents whose children attend school reported overcoming several problems in getting them into school (Omelchenko, 2018: 74);

Secondly, the presence of serious problems faced by children from migrant families in the host country. On the basis of generalization of the results of researches of scientists from different countries, let us single out the problems most often mentioned in scientific
publications: 1) problems of ethno-cultural socialization and personal adaptation, difficulties of getting used to the environment where the traditions are not the same as in the native country and own family and, as a consequence, often arising states of alienation and rejection, anxiety and aggression (Artemyeva, 2014; Gulyaeva, 2010; Komarova et al., 2018; Kupriyanova, 2014; Konstantinov & Mali, 2016; Kurtz-Costes & Pungello, 2000. ); 2) difficulties in communication with classmates, caused by poor knowledge of the language of the host country, violation of norms of verbal and nonverbal communication, non-compliance with rituals of behavior and interpersonal interaction, different perception of values, culture, sometimes, rejection of another culture (Artemyeva, 2014; Zheleznyakova, 2019; Nesterova, 2018; Suslova, 2014); 3) uniting into a community of representatives of their own culture or migrants like them, the reason for which is not ethnicity, but "otherness" and the construction of communication on the principle "native - alien", which is a conflictogenic factor in the educational organization (Zheleznyakova, 2019; Makarov, 2010); 4) poor educational training and mismatch of educational programs content and requirements for their mastering the receiving and the sending country. Combined with poor knowledge of the indigenous language, this leads to a decrease in cognitive and emotional activity, the formation of children from migrant families with low self-esteem, high levels of anxiety, lower levels of social status in the classroom and, as a consequence, inhibition in cognitive, mental and physical development (Batyrshina, 2018; Zheleznyakova, 2019; Kupriyanova, 2017; Molodtsova, 2013; Chiu et al., 2012; Nesterova, Suslova, 2014); 5) the formation of negative social perceptions and stereotypes about migrant children in the minds of the host society due to the difficulties encountered in integrating and engaging (as appropriate) students in the school space, which also leads to difficulties in intercultural interaction (Soldatova, 2016; Carter-Thuillier et al., 2018); 6) discrimination against children from migrant families on the basis of nationality and social status of the child, determining the
difficulties of getting used to the new environment of communication and states of aggression and increased conflict, which may determine their future in the field of labor and social relations (Gavronova, 2016; Tikhonova & Kufťák, 2007; Carter-Thuillier et al., 2018; Rumbaut, 2005); 7) psychological stresses associated with a forced change of residence and disruption of the structure of habitual cultural and communicative, family, natural-territorial and other ties (Gritsenko & Shustova, 2004; Nesterova, 2018; Suslova, 2014; Shaposhnikova, 2012); 8) despite the socializing potential of school in the adaptation of children from migrant families, it usually chooses an assimilationist strategy, which damages their native culture, inhibits integration processes, causes not only cultural conflicts, but also conflicts between the education system and the child from migrant families (Domenech, 2010); 9) a significant number of migrants are victims of wars, ethnic conflicts and ethnic clashes, which leads to formation of posttraumatic disorders in migrant children (Soldatova, 2016; Farrada - Noli, 1996), and this in turn makes it difficult for children to enter the educational and upbringing environment of the educational organization and build constructive interpersonal relationships (Farrada - Noli, 1996); 10) fragile relationships in migrants' families, conflicts, divorces and lack of family support for children as well as social support from other significant adults (Gritsenko & Shustova, 2004; Savoskul, 2012; Smolina, 2012).

At the same time, it is important to note that most children from migrant families still connect their future with the host country, have the needs and high level of motivation to receive a decent education, and in the future, to build their professional career. "Coming to school as a representative of another, non-mainstream ethnic group, the child can quickly adapt to the features of life, behavior, the main language of the environment, preserving the family traditions of their ethnic group, winning from this in his diverse representation" (Bondyreva, 2004: 22).
Undoubtedly, a migrant child can adapt, but only when his peculiarities are accepted as an objective reality, as a due in the big common world. If adequate conditions are created for his/her integration into the educational and social space, if assistance is provided by adults and peers; if the educational organization presents a system (training and education) in which there is a place for a migrant child; if teachers and children of the main nationality in this school also accept this reality; if work with children from migrant families is carried out purposefully and constantly, rather than being spontaneous, as it is noted in some schools in Russia. And in order for this system to develop with a well-thought-out and designed structure (program), it is necessary to pay much attention to: the educational environment design as an educational and upbringing organization; the activities of teachers as the main implementers of this design, who know various educational and project technologies; building tolerant relationships of indigenous children and teenagers as actors capable of helping children from migrant families take their worthy niche in the social and educational; involvement in interaction with the subjects of the educational organization of the parents of migrant children, as significant adults on whom the quality of family, social, material and other support for children in the process of adaptation and building relationships with the world of the host country depends.

Thus, the general provision of pedagogy and psychology of formation of adaptation and integration strategies in children from migrant families should be pedagogical technologies of work with migrant children: the allocation of this category of students; the focus in work with migrant children on humanistic principles and the principles of individual, differentiated and systemic approaches; the need for intercultural adaptation and assistance in establishing and determining social status and social position; the introduction of the global theory of multicultural education and upbringing into educational programs, which, from our
point of view, is possible if the educational environment design of the school is built competently.

The Essence of Educational Environment Design

Building the educational process for the positive adaptation of children from migrant families involves the widespread introduction of information and communication technologies into the process of training and education, which, in turn, determines the search for appropriate ways, conditions, and methods of its implementation. One of the effective ways of providing effective organization of education is information and communication technologies developed within the framework of theories and models of pedagogical design that have been widely used for decades in developed countries, which make it possible to organize such an information and educational space in which students would have the opportunity to fully reveal their abilities and master the proposed material with greater effect and result.

In order not to mislead the reader, let us explain why, speaking of pedagogical design, the title of this paragraph is designated as "the essence of educational environment design". From our point of view, the concept of "educational environment design" is much broader, it includes a wide range of methods and technologies of pedagogical and psychological design, and also combines into a single system the resources of a large number of subjects of the educational process, including both specific professionals, children and their parents, and organizations, for example, institutions of additional education, culture, etc., which is most relevant for building work with migrant children during their adaptation to the conditions of school and country. Moreover, educational environment design also includes ways of managing the educational process and influencing the managed subjects by scientific justification of planning, organization and control of their activities.
Design in education is a special field that allows extrapolating methods and means of design culture to all levels of education in order to optimize them (Klimov, 2010). As a developmental aspect of educational environment design are forms and methods of development not only cognitive processes, but also socially significant personal qualities of students, as the development of social intelligence is an important basis for the success of human self-actualization in the future. In the learning process the problem of developing cognitive and personal qualities is presented in the form of specific goals: to teach to refute, define and explain concepts, to set and solve problems, to support actively new ideas of their own and others with constructive interaction in a peer group (Mikhaylova & Kostales, 2011).

Despite the fact that the research in Russian pedagogy and psychology of the problem of practical implementation of educational process design has a long history, the concept of "pedagogical design", "educational environment design" entered relatively recently in scientific and practical use but became actively used in the study of the system of training and education of children in the educational organization (we mean the use of both terms).

Considering the concept of "educational environment design", we turn to the study of the essential characteristics of pedagogical design, the methodology of which is the understanding of educational environment design, which we, as noted above, is understood more broadly and covers a large number of educational actors, the educational organization itself, its relationship with other organizations, etc., which is relevant and effective for helping children from migrant families in the process of their adaptation.

Scientists and pedagogues note a slender structure of pedagogical design methodology, developed and developed by American scientists since the middle of the last century.

It is noted that the concept "pedagogical design" is an integrative scientific branch providing the development, implementation and monitoring of information and educational
space, contributing to the formation of the subject of educational activity the level of information maturity, sufficient to ensure the independence of the individual in various spheres of life of the information society (Kurnosova, 2012).

The main goal of pedagogical design is to create and maintain an environment for the learner in which, on the basis of the most rational representation, interrelation and combination of different types of educational resources, psychologically comfortable and pedagogically reasonable development of subjects is ensured (Krechetnikov, 2005; Tokareva, 2014).

It is emphasized that pedagogical design is a systematic approach to the construction of the learning process. The main thing is that it allows you to build a unified system of learning objectives, learning material and tools available for the transfer of knowledge. At the heart of pedagogical design is the importance of course content, style and sequence of presentation of the material, as well as ways of its presentation (Belenko, 2016; Kurnosova, 2012; Mikhailova & Petrushina, 2016; Tikhomirova, 2019; Tokareva, 2014).

The role of pedagogical design methodology is fixed on the development of the most effective methods of teaching, which are aimed at mastering and transforming the educational environment that provides the solution of professionally oriented, communicative-developing and cognitive task; enhancing professional motivation; equipping with specific techniques and skills of work. Its most important feature is reproducibility at the level of the pedagogical process and pedagogical result (Belenko, 2016).

The focus of pedagogical design is on the development of interdisciplinary, integrative, project-oriented thinking of students, creation of opportunities to adapt in various project contexts demanded in the socio-professional sphere (Belenko & Isaev, 2017).

Almost all scientists and practitioners formulate the goal of pedagogical design, which is to increase the efficiency and effectiveness of learning materials, to expand
cognitive capabilities of students, to contribute to the increase in the volume and quality of information assimilated by students through both traditional educational technologies and when using electronic educational resources (the latter is given more attention when constructing pedagogical design).

As we see, when organizing training and education of children from migrant families there is a need to introduce an additional aspect of educational environment design - the design of the educational organization itself, which will allow children to interact comfortably with the educational actors (teachers, other professionals, peers, and the educational environment itself), as well as the design of other significant actors involved in the educational process, such as migrant families, cultural institutions, organizations of additional education and others, as well as diaspora organizations.

In our understanding, educational environment design is a complex system involving a large number of educational (training and educational) subjects whose activities are aimed at developing and implementing a model of environmental, educational, educational, informational and technological, teaching, motivating and helping system of relations between children from migrant families and the culture of the host society.

Thus, from our point of view, when it comes to the effectiveness of building the activities of an educational organization to form adaptation and integration strategies in children from migrant families, we should talk about the development of educational environment design as a systemic product, with a wide coverage of various technologies of the educational process.

**Formation of Adaptation and Integration Strategies in Children from Migrant Families**

It is obvious that the development of educational environment design for migrant students requires: monitoring to study and understand the educational resources and opportunities of the educational environment; studying the features of psychological, social
Adaptation and Integration Strategies in Children from Migrant Families

and educational development of migrant students; developing and mastering the technology of studying and taking into account the features of the mentality of students; formation of students' ability for dialogic communication; design and implementation of cross-cultural integrated courses in the educational process for migrant students; identification and justification of educational and scientific and pedagogical problems, the solution of which will contribute to more successful adaptation and integration of migrant children (Silantieva, 2007).

By revealing the theme of this section, our goal was to analyze the global experience of using technologies of educational environment design in forming adaptation and integration strategies for children from migrant families. We will focus on the most effective technologies, in particular on the technologies of developing programs and projects successfully implemented in educational organizations.

As the analysis of scientific and practice-oriented publications shows, in the current period. During development of the educational environment design the priority was given to technologies using computer technologies and virtual methods of teaching the state language, basics of history and culture, norms of behavior accepted in the host country. IT-technologies make it possible to implement the principles of adequate selection and visual presentation of teaching material and educational means; multiple reproducibility of material; activity of all subjects of the educational process - teachers, children from migrants' families, their parents who, as we noted, should be involved in this process; evaluation of the quality of learning material, success and failure rate in the process of mastering knowledge and skills.

Linguodidactic computer resources are popular in world educational practice for online training of state language and culture, computer game technologies (Baidurova & Shaposhnikova, 2002; Bogomolov & Uskova, 2004), which promote both development of
tolerance and communicative competence necessary to organize interethnic interaction and understanding in a modern multi-ethnic environment. Cultural assimilators, pioneered by American scientists and practitioners and actively used in the global educational space, can serve as an example.

We have also developed and implemented computer programs based on the methodology and technology of cultural assimilation. For example, in 2016, a Composite Situational Computer Game was developed to teach migrants "Citizenship and Compliance with Laws in the Russian Federation" or "How to Become a Law-abiding Citizen of Russia.” The computer game simulates interactive interaction within the framework of specially developed scenarios, where a migrant must correctly orientate himself and give the right answer in resolving a specific situation related to legal actions on the territory of the Russian Federation. To a greater extent it is focused on adolescents and young men, as well as parents of migrant children. The program makes it possible to raise the migrant's awareness: 1) about the legal grounds for staying on the territory of the Russian Federation; 2) about the laws regulating citizenship in the Russian Federation; and 3) about legal forms of employment in Russia.

This program also allows to diagnose the current level of knowledge of migrants about the laws of the Russian Federation related to the situation of resettlement and obtaining citizenship. It provides the following functions: 1) presentation of a specific situation to be analyzed and give a correct answer; 2) game method of case study (analysis of specific situations that a migrant may encounter); 3) game space, which relieves stress during diagnosis and is well perceived by both adults and children; 4) possibility to diagnose the level of awareness of migrants about RF laws; 5) designer layouts, using character avatars, which makes training person-oriented and close to reality; 6) user-friendly interface (Nesterova & Suslova, 2015).
Another development was the computer program "Ethnocultural Navigator" (for adolescents from migrant families). The development belongs to the field of psychological correction and psychological counseling in the sphere of helping teenage children from migrant families to positively adapt to the conditions of living in Russia. The program can be used in psychosocial counseling and education for migrant parents, educators, social workers, psychologists, and representatives of ethnic and cultural centers of diasporas working with migrant children. Ethnocultural Navigator is based on the creation of a virtual script describing Russian symbols, traditions, and culture, as well as tips for migrant children to establish constructive intercultural contact and resolve conflicts in the process. Correction and expansion of knowledge about the cultural and historical traditions of the peoples of Russia and intercultural interaction can be carried out first in a virtual space with the help of the "Ethnocultural Navigator", which is a database management program; after successful assimilation and consolidation of the educational elements of the "Navigator", this material can be transferred to the real space, for example, in the structure of classes of the educational organization or psycho-corrective and psychological counseling sessions in individual or group formats (Suslova et al., 2019).

The development of the listed computer programs relies on the principles of multimodal perception: instead of complex names and words - visual images; instead of verbal descriptions - visual images of specific life situations; instead of complicated and incomprehensible for migrants verbal descriptions, searches for analogues in the native language - simple actions and visualization.

Examples of projects based on integrated and systemic approaches to the development of educational environment design can be the projects implemented in most Russian schools, such as "School - center of development of multicultural space". The peculiarity of these projects is the use of educational resources not only of the school, but
also institutions of additional education, city libraries, cultural and sports institutions, etc. The multicultural nature of the educational environment contributes to the creation of ethnic culture clubs in schools and the holding of "Days of National Culture", which have become a substantive feature of the educational environment design of the educational institution, whose goal is the successful adaptation and integration of migrant children into the conditions of the educational and social environment.

It is advisable to include in the educational environment design of the school various projects to prepare teachers to work with migrant children due to the lack and undeveloped psychological and pedagogical and methodological tools, which has been repeatedly noted by representatives of the teaching community. Such projects are already being implemented in Russian schools. For example, the project "Environment of Opportunities: Training Teachers to Work with Migrants in Schools", which is implemented both in person and remotely.

Interesting projects have also been developed in European Union countries. For example, schools in Germany successfully implement projects called "Integration of Muslims and Muslim organizations in Germany"; "Intercultural Education in Schools"; exhibition projects with the use of computer technology - "Foreigners in Germany - Germans abroad", "How to live in a multinational society?", which aim to integrate migrants into education and promote tolerant interaction between Germans and newcomers and to overcome xenophobia.

The development of different models of involvement of subjects of educational and other organizations in the process of helping migrant children during the adaptation and integration periods is also important within the framework of educational environment design. For example, the model of socio-psychological support for the process of ethno-cultural adaptation of children from migrant families. The model, on the one hand, characterizes the capabilities of the agents of ethno-cultural adaptation of migrant children based on the application of strategies and principles of integrative activities of the
educational organization, social institutions, families and diaspora organizations, and, on the other hand, the combination of resources of the mentioned organizations and migrant families acts as a condition for effective adaptation of migrant children. In this case, the joint activity of the educational organization, social institutions, diaspora organizations and family is seen as a dynamic system in the totality of its most important internal and external interactions, which are conditions, mechanisms and technologies, in order to ensure the effectiveness of socio-psychological support of the process of ethno-cultural adaptation of migrant children (Suslova et al., 2019).

Thus, one way to realize the potential of design-based learning is to rethink the traditional ways of developing curricula and their dissemination and use. It is reasonable to use more visualized computer programs that will help teachers make children's learning creative, combine educational resources, children's own potential and capabilities, and direct the latter's activities towards learning creativity (Brown, Edelson, 2003).

The characteristics of good educational environment design by American scholars include: 1) the ability to assist students in obtaining and comprehending new information; 2) informed adoption of certain or other technologies; 3) consideration of students' needs; 4) consideration of the educational environment as a holistic reality and perspective that integrates all aspects of the educational environment (What is educational environment design?, 2015).

**Conditions and Mechanisms of Educational Environment Design**

German scholars note that the upbringing and education of children from migrant families (intercultural upbringing and education) should not be an additional aspect of educational, social, other organization and family activities, but should be understood as a social condition and mechanism, as a permanent principle of activity (Uslucan, 2003; Ethnokulturelle Sprachcamps, 2018; Sommer, 2018).
Based on the analysis of the problems faced by children from migrant families, the essential characteristics of educational environment design and the experience of educational organizations it is possible to identify conditions and mechanisms, taking into account and using which it is possible to ensure a psychologically comfortable and pedagogically sound educational environment for the development of migrant children during the adaptation period and further during their integration into the social and educational environment of the host country.

Then let us consider those conditions highlighted and described by scientists which they do not directly connect with educational environment design, but which, from our point of view, are important to consider when developing it as a process that includes analysis of the situation, choice of technology, development and implementation of teaching and education methods in order to create the most rational and comfortable environment to achieve the pedagogical task of helping children from migrant families in adaptation and integration. These can include:

1) reliance of the educational organization on the rich opportunities and powerful resource of vitality for migrant children in order to pass the process of adaptation and integration. This is due to the fact that they are more included in different aspects of the new culture (educational system, acquaintance with the culture of the host country in educational institutions, constant language practice due to intensive communication in a non-native language, opportunities for expanding social network, etc.);

2) consideration of the educational environment (volume and quality of educational services, power and intensity of educational information, design of premises, symbols and attributes of educational events and others), as constructive, creative, transformative activity of teachers, migrant children and children - representatives of the indigenous population, as well as parents - migrants and the titular population of the country.
3) formation of friendly relations and emotional well-being in the educational organization, which determines the success of the child's adaptation in general and mastery of language competence by migrant children as one of the main resources for adaptation.

4) expanding opportunities for the child to learn a new language, but also providing opportunities to use their native language. It has been proven that equal attention to both languages (mother tongue and language of the host culture) is very important for optimization of the child's adaptation process (Suárez-Orozco, Suárez-Orozco, 2001);

5) Taking into account the age specifics of migrant children, because children, in particular adolescents, more often hold and maintain cultural beliefs formed in the country of origin. These beliefs may be very different from the beliefs held by their teachers, peers, people of reference for them, and this certainly affects the way adolescents behave in the society;

6) understanding and acceptance of children's gender differences, despite the fact that a kind of "revolution" on this issue is currently taking place in the world. The role of gender is often underestimated in studies on the adaptation and integration of migrants. In most studies, gender is either not taken into account at all, or acts as a control variable in statistical analysis. Meanwhile, in relation to adaptive processes in migrant children, gender is of great importance in the study of child behavior patterns in different social contexts (family, school, etc.). Firstly, this is due to the specificity of communication and interaction style of boys and girls depending on the rules adopted in their culture of origin (Portes, Rumbaut, 2001). Second, the "rules of behavior for boys and girls" are also found in the host culture, which predetermines the child's expectations of the accepted and normative form of behavior in the child's new cultural context (Williams, Alvarez, Hauck, 2002). For example, it has been observed by many scholars from different countries that migrant boys have more unstable school adjustment rates compared to migrant girls. This statistically significant difference is
found in many ethnic groups (Brandon 1991; Faliciana, Rumbaut, 2005; Lee, 2001). In general, the factor of gender cannot be discarded in the construction of educational environment design in order to form adaptation and integration strategies in children from migrant families;

7) formation of adequate self-esteem and level of self-respect in migrant children, which contribute to motivation, thus determining the child's involvement in educational and upbringing activities, which gives an opportunity to improve their results and increase the number of achievements;

8) reliance on the migrant child's ethnic identity. Research shows that children with a clearly defined ethnic identity have higher rates of psychological well-being compared to children with an unspoken ethnic identity (Abubakar, et al., 2012). However, the migrant child often receives very contradictory "input" from significant others regarding his or her identity, which can lead to some cultural bifurcation. This process depends not only on the child himself, but also on his parents, teachers, peers, which confirms our idea about the inclusion of not only the educational institution, but also other actors in the model of educational environment design;

9) understanding and taking into account the existence of cultural distance (culture of origin and host culture). Similarity or, on the contrary, discrepancy between the culture of origin and the host culture can also affect the child's adaptation. If religion, customs, traditions, social norms and rules, and ways of life are more or less similar in both cultures, adaptation should be easy. For example, migrant children who move from China to Russia will have a completely different adaptation experience than children who migrate from Belarus to Russia. This switch between different requirements, cultural norms, transmitted by the educational organization, is not easy for the child, because it can cause a feeling of ambivalence, confusion, not understanding what is wanted from him. This bifurcation is
especially acute in a situation of significant difference between the culture of origin and the host culture, which is extremely important to consider in the model of educational environment design;

10) an important condition is the construction of educational environment design taking into account the following principles:

- “scientific”, which implies the use of such techniques and methods of organizing educational material, which will be theoretically justified and tested in practice;
- clarity: the maximum number of information perception channels should be involved in the training process;
- visualization: aspects of psychology of perception and learning should be taken into account as much as possible during the planning and implementation of the educational process;
- continuity and succession, which implies ensuring the consistency of training courses, orders, rules and means of their mastering;
- comfort: students should be provided with comfortable and ergonomic perception (Krechetnikov, 2005);
- accessibility: the whole set of educational and methodological materials, aimed at migrant children, should correspond to the capabilities of their perception and understanding, and the level of complexity should be in the zone of the nearest development.

The mechanisms of educational environment design for the formation of adaptation and integration strategies in children from migrant families we include:

1) reliance on design and computer modeling technologies;

2) selection of the adaptation strategy which will be leading in building the model of educational environment design: what this model will be aimed at - integration or
adaptation. From our point of view, the most effective strategy is the integration of the child into the educational culture of the host country as a strategy in which the person psychologically responds positively to tangible socio-cultural changes. Ideally, migrant children should be integrated into both cultures: the culture of origin and the culture of the host community. Children who are more closely aligned with their culture of origin, while also responding positively to the host culture, have much more pronounced psychological well-being (Abubakar, et al., 2012);

3) social connections and social networks, that is, in this case we are talking about social support as a mechanism that plays a huge role in the development of an effective model of educational environment design when teaching and raising a migrant child. The child's social connections and networks are very important. There is nothing better, as some scholars believe, for a child's psychological well-being than support from friends, peers, and family during acculturation and migration (Suárez-Orozco, Suárez-Orozco, 2001). Dense social ties help the child to feel accepted, significant, to form a sense of belonging to both the culture of origin and the host culture;

4) attitudes towards migrants. In this case we are talking about the mechanism of understanding the subjects of the educational organization of cultural diversity, encouraging children to think of each other as individuals and not as representatives of any cultural or ethnic groups. The model of educational environment design should create a positive attitude towards migrants, which will avoid social isolation, exclusion and discrimination;

5) a powerful mechanism of educational environment design for effective training and education of migrant children is the methodology and technology of educational and social inclusion. It is known that migrant children have special educational needs associated with the situation of migration, with a change of environment, entering a new culture. If we are talking about a child who was forced to leave his/her home country (a refugee child), the
process of adaptation is aggravated by the factor of loss, stress, forced separation from the usual circle of communication (Abubakar, et al., 2012), and not taking this into account means turning the process of migrant child adaptation into a "struggle" with himself/herself and others;

6) based on the description of the previous mechanism, we can highlight another one - the development of an individual educational and educational route for a migrant child. The inclusion of an individual educational route in the educational environment design of migrant children is necessary to quickly "enter" a migrant student in the language environment in order to overcome the "lag" in the mastering of educational programs. It is advisable to develop a learning trajectory for each migrant who arrives at school, taking into account his/her capabilities and past language experience. It should be noted that with the same age of students in one case only teaching the terminology of special subjects (geometry, physics, biology, etc.) is required, while in another case a Russian language teacher and a speech therapist should be involved in geometry, physics, etc. lessons. Maximum inclusion in the language environment implies teaching in mixed classes, where both migrants and indigenous children study. It is advisable to provide additional funding for intensive (daily) short-term courses for mastering the language of the host country (Pogrebetskaya, 2016);

7) professional assistance in accompanying the adaptation of migrant children. Every child's migration experience is different and related to individual, social and economic factors that require overcoming, adjusting and adapting, so when building an educational environment design it is important to include effective practices of accompanying a migrant child, including assessment of both the child's personality and all the factors that accompany his/her individual migration journey;

8) Involvement of parents in the implementation of child support programs, because parents play a central role in the lives of their children, their attitudes and lifestyle also affect
the adaptation of the child. This is especially true for communities that unite a large number of migrant families of the same ethnic origin. Parents in these communities guide their children in different ways to adapt;

9) involvement and reliance on national diasporas. Diaspora associations are also social investors who develop the institution of legal and social protection of migrant children and families, can, using their own resources, contribute to the positive adaptation of migrant children in the educational organization and in the country as a whole. National diasporas can participate in outreach activities, mediate between the educational organization and migrant families, develop projects of national and cultural orientation, contribute to the formation of a positive image of the migrant, etc.

Conclusions

Thus, educational environment design can be considered an indispensable component of the educational system of an institution where children from migrant families study. It is important to take it into account when designing modern learning tools. Electronic educational resources built on the basis of educational environment design models can most effectively convey educational material and create conditions for its quality assimilation by children. When developing an educational environment design to help children from migrant families it is advisable to take into account curricula, the infrastructure of the organization, human capacity, the capabilities of various organizations - institutions of additional education, social and cultural institutions, national diasporas and families, as well as the specifics of educational and socio-cultural development of migrant children.
References


Adaptation and Integration Strategies in Children from Migrant Families


Brown, M., Edelson, D.C. (2003). *Teaching As Design: Can we better understand the ways in which teachers use materials so we can better design materials to support their changes in practice? The Center for Learning Technologies in Urban Schools, a partnership among:* Chicago Public Schools, Detroit Public Schools, Northwestern University, University of Michigan, Funded by the National Science Foundation. URL: http://www.inquirium.net/people/matt/teaching_as_design-Final.pdf


[http://www.rusdeutsch.eu/Nachrichten/2897](http://www.rusdeutsch.eu/Nachrichten/2897)


Adaptation and Integration Strategies in Children from Migrant Families


Klimov, V. P. Versions and principles of education design. The functioning of the college as a unified educational-scientific-production complex: a collection of scientific materials. Moscow: OOO "AutoPrint. 74-78.


http://www.socialstudies.org/sites/default/files/publications/se/6402/640210.html


https://sputniknews.com/analysis/201802081061489233refugee-worker-bashes-german-refugee-policy/


http://www.trainings.ru/library/articles/?id=11059

Tokareva, A. V. (2014). Psychological design as a structural unit responsible for the formation of the environment of the educational institution. Modern pedagogical technologies. 5. 36-42.

https://www.liga-kind.de/fruehe/603

Adaptation and Integration Strategies in Children from Migrant Families


This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.