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TO THE ISSUE OF SUBJECT-SPATIAL DEVELOPING ENVIRONMENT ASSESSMENT IN PRESCHOOL ORGANIZATIONS

The article demonstrates the approaches to subject-spatial developing environment assessment quality in preschool educational organizations. The theoretical positions developed by V.A. Yasvin have provided the basis of our research work. The quality of the subject-spatial environment is measured through the fixation of a set of conditions regarded as a set of environmental opportunities for the child development. In the research work the diagnostic capabilities of ECERS-R methodology in assessing the subject-spatial developing environment quality in Karaganda region have been studied.

External assessment of the subject-spatial developing environment quality in the case of Karaganda region allowed us to identify the current state of the environment in preschool organizations and thereby to create a basis for eliminating problems and deficiencies.

The article demonstrates legitimacy of application ECERS-R methodology, adapted by the Russian scientists to assess preschool education quality in Kazakhstan. This diagnostic tool opens up new opportunities to ensure functionality and effectiveness of the preschool organizations quality assessment system in the region.

Key words: subject-spatial developing environment, quality of pre-school education, educational environment, conditions for the development of preschool children, ECERS-R method for assessing pre-school education quality.

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Білім беру ұйымдарының мекемелі және өткізу саласының бағалауы сұрақтарына

Мақалада мектепке дейінгі білім беру ұйымдарында пәндік-кеңістіктік дамушы ортаның сапасын бағалаудың тәсілдері қарастырылады. Біздің зерттеуіміздің әдіснамалық негізі ретінде В.А. Ясвин әзірлеген теориялық ережелері алынды. Пәндік-кеңістіктік ортаның сапасы баланың дамуы үшін орта мүмкіндіктер жиынтығы ретінде түсінілетін жағдайлар кешенін тіркеу арқылы өлшенген. Қарағанды өңірінің пәндік-кеңістіктік дамыту ортасының сапасын бағалаудағы ECERS-R әдістемесінің диагностикалық мүмкіндіктері зерттелді.

Қарағанды өңірі мысалында пәндік-кеңістіктік дамыту ортасының сапасын сыртқы бағалау мектепке дейінгі ұйымдардағы ортаның өзекті жай-күйін анықтауға және сол арқылы проблемалар мен тапшылықтарды жою үшін негіз құруға мүмкіндік берді.

Бұдан басқа, біз пайдаланған диагностикалық құрал аймақтың мектепке дейінгі ұйымдары қызметінің сапасын бағалау жүйесінің функционалдығы мен тиімділігін қамтамасыз ету үшін жаңа мүмкіндіктер ашады.

Түйін сөздер: пәндік-кеңістіктік дамыту ортасы, мектепке дейінгі білім беру сапасы, білім беру ортасы, мектепке дейінгі балалардың даму жағдайы, ECERS-R мектепке дейінгі білім беру сапасын бағалау әдістемесі.

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К вопросу об оценке предметно-пространственной развивающей среды в дошкольных организациях образования

В статье рассматриваются подходы к оценке качества предметно-пространственной развивающей среды в дошкольных организациях образования. В качестве методологической основы исследования послужили теоретические положения, разработанные В.А. Ясвиным. Качество предметно-пространственной среды измерено через фиксацию комплекса условий, понимаемых как совокупность средовых возможностей для развития ребенка. Изучены диагностические возможности методики ECERS-R в оценке качества предметно-пространственной среды Карагандинского региона. Внешнее оценивание качества предметно-пространственной развивающей среды на примере Карагандинского региона позволило выявить актуальное состояние среды в дошкольных организациях и тем самым создать основу для устранения проблем и дефицитов. Показана правомерность применения методики ECERS-R, адаптированной российскими учеными, для оценки качества дошкольного образования в Казахстане. Данный диагностический инструментарий открывает новые возможности для обеспечения функциональности и эффективности системы оценки качества деятельности дошкольных организаций региона.

Ключевые слова: предметно-пространственная развивающая среда, качество дошкольного образования, образовательная среда, условия развития дошкольников, методика оценки качества дошкольного образования ECERS-R.

Introduction

Updated content of secondary education in the Republic of Kazakhstan sets the task of overhauling the approaches to assessing the contribution of preschool education system and training children into their development and preparation for school.

In modern Kazakhstan educational policy, a cardinal improvement in the quality of preschool education becomes priority. Modern preschool education system is characterized by a change in value, purpose, and motivational attitudes, which is reflected in the tasks of the State Standard for Preschool Education and Training in the Republic of Kazakhstan (hereinafter referred to as Government).

One of the important tasks is to increase the developing effect of educational work with preschool age children through educational environment organization, allowing children to show independence and activity, providing support for children's initiatives, creative activity of every child.

The relevance of creating a subject-developing environment in preschool education organizations is confirmed by numerous scientific studies. The issues of influence the environment on children development are being considered in the world concepts of preschool education. Thus, in the Reggio Emilia program, the environment is considered as the "third teacher of the child" – after the parents and the edu-

cator. Children learn in interaction with the environment and other people (Surudina, 2018).

New researches in the field of brain neurophysiology convincingly demonstrated that many properties of behavior and development, which were previously considered due to heredity and the human genotype, are in fact the result of a child's interactions with the human and objective world during early childhood. Moreover, the quality of these interactions depends on the possibilities inherent in the genotype that are realized in a given situation. It turns out that not only genes determine the nature of human interaction with the world, but also the nature of this interaction "controls" genes (Zagvozdin, 2010).

Literature review

Nowadays, science witnesses a variety of approaches to understanding and defining what educational environment is, and, accordingly, there are various models of educational environment: environmental personal (V.A. Yasvin); communicative oriented (V.V. Rubtsov); anthropological and psychological (V.I. Slobodchikov); psycho didactic (V.P. Lebedeva, V.A. Orlov, V.A. Yasvin); ecopsychological (V.I. Panov).

A number of authors put forward ideas that substantially develop common ideas on this issue. Therefore, V.I. Slobodchikov draws attention to the fact that the educational environment is not a set of

conditions, but dynamic education, which is a product of participants' joint activities in the educational process. Particular mission of educational environment according to V.I. Slobodchikov is to integrate into the child mechanism of development (Slobodchikov, 2000).

The perspectives for preschool education study quality are in V.A. Yasvin ideas about the structure and content of educational environment. In his works the relevance of educational environment diversity study has been justified from their hierarchy point of view. V.A. Yasvin justified the “embeddedness” of lower-level environment into higher-level one (for example, educational groups micro-environments — into the local educational environment of educational institution, the institution's environment — into the environment of educational settlement and so on, to general mankind cultural educational environment (Yasvin, 1997) [4].

V.I. Panov considers the educational environment as a system of pedagogical and psychological conditions and influences that create the opportunity for the disclosure of hidden interests and abilities, and for the development of the interests which have already been revealed, in accordance with the individual natural inclinations and age socialization requirements (Panov, 2007) [5].

Methodologically, J. Gibson's theory of possibilities seems to be particularly significant. He introduces the concept of “opportunity”, emphasizing active principle of the subject mastering the living environment. Opportunity is a kind of bridge between subject and environment; it is determined both by the properties of environment and the subject properties itself (Yasvin, 2017) [6].

Over the past few years, the foreign researchers of early development claim that “a child innate potential development is determined only by the quality of the environment”, and “... the difference due to the environment creates a huge gap in children intellectual level development (The laws of the natural development of the child, 2018: 38) [7, P.38].

As scientific study review shows, the approaches to the educational environment are currently being worked out. And though the authors are not unanimous in defining “educational environment” term, most of them agree with the statement that the educational environment is a set of all conditions and influences in sociocultural and the subject spatial-subject environment, determining the possibilities of its development.

According to the State Compulsory Standard of Preschool Education the subject-spatial developing environment is regarded as a system of

conditions that ensure personal, emotional, social and intellectual development of preschool age children. The main requirements for the developing environment are: saturation, transformability, polyfunctionality, variability, accessibility, safety (State obligatory standard preschool education and training, 2018) [8].

These regulations allow us to identify a number of basic criteria for research aimed at obtaining reliable information about the state of the educational environment in preschool organizations and assessing their contribution to the children development.

In our research we posed the following questions: what the objective situation is in preschool organizations in Karaganda region from the standpoint of regulatory requirements, how much the current subject-development environment of preschool education organizations meet the needs of modern children.

Materials and research methods

The methodological basis of our research turned out to be the following theoretical positions developed by V.A. Yasvin. The design “epicenter” of educational environment is the “point of interpenetration” of spatial-objective, social and technological components of educational environment, on one hand, and the subject of educational process, on the other one. Around this “epicenter” a “zone of developing opportunities” is formed (Harms, 2016: 275) [9, p.275]. “The dominant role in the pedagogical organization of “developing opportunities zone” belongs to the technological component design, which is designed to mediate adequately, to transform appropriately the interaction of the educational process subject with the spatial-object and social components of the educational environment” (Harms, 2016: 275) [9, p.275].

As a diagnostic tool for our research, we have used the international ECERS-R method: The scales for an integrated assessment of pre-school educational organizations quality (Shmis, 2015) [10].

The ECERS-R scale was developed in 1980 (North Carolina, USA) for an integrated assessment of educational organizations quality implementing preschool education programs for children from 2.5 to 5 years old.

Later, this scale was actively used in cross-cultural studies in order to assess environmental conditions.

The authors of the methodology use the “spirit of ECERS” formula interpreted as the value of environment containing conditions for the children's emotional well-being, as well as the arbitrary development, which allows to start actively at school (Ibragimova, 2018) [11]. The concept of “educa-

tional environment” is used in a broad sense: “educational environment” covers both the quality of the entire educational process and the conditions for a child development.

The creators of ECERS-R distinguish the following environment components: space organization (furniture, setting, equipment, etc.), time organization (daily routine, the ratio of regulated and free time activities), interaction (the nature of children and adults interaction, as well as the relationships in the children groups and adults with each other). Thus, the methodology focuses on three dimensions of the environment: space, time organization, children and adults interactions.

The results of environment assessment using ECERS-R scales are recognized in the expert community as reliable. The tool is well balanced because it collects information from the fact level where an overall assessment of environment quality is formed.

The ECERS-R methodology is adapted by the Russian scientists and can be applied in Kazakhstan, since we carried out a comparative analysis of the regulatory framework for preschool education and the mechanism for its assessment in Kazakhstan and Russia. We have pointed out closeness of education quality basic characteristics formed the basis of this methodology target guidelines and characteristics recorded in the State Standard of Preschool Education in the Republic of Kazakhstan (Ibragimova, 2018) [11].

The scale provides filling forms due to the observation basis, when the expert marks the presence or absence of the environment element (indicator). Thus, education quality is measured indirectly, through the fixation of a set of conditions regarded as a set of opportunities for the child development. At the same time, the principles of educational environment organization (accessibility, variability, polyfunctionality, etc.) are “embedded” in the subscale indicator.

The ECERS-R scale includes 7 subscales:

- Subject-spatial environment
- Supervision in child care
- Speech and thinking
- Types of children’s activity
- Interaction
- Program structuring
- Parents and staff

These subscales correspond to 43 indicators of 470 indicators, which are assigned a score from 1 to 7 points. According to the results of the assessment, the “quality profiles” of the educational environment line up in accordance

with the following scale:

- 1 point - unsatisfactory quality;
- 3 points - minimum quality;
- 5 points - good quality;
- 7 points - excellent quality

In particular, high grades (5-7 points) of the preschool organization receive the subject-spatial educational environment when it is saturated (there are enough materials for a fully-fledged expanded game for a group of children), available (the materials are publicly available for most part of the day and can be freely used by children), focused on supporting children’s individuality (there is space for solitude, rest and comfort, there is a balance of group and individual forms of organized learning activities etc.).

From cross-cultural studies conducted Gothenburg (Sweden) and Seoul (South Korea) using ECERS-R scales, it was found that education quality is better in Sweden than in South Korea. According to the researchers opinion, one explanation for this, limited physical space in kindergartens (for example, there are no separate spaces for learning and recreation and the possibility for children to be alone or with some friends) (Sheridan, 2009) [12].

Results and their discussion

The research sample consisted of 7 preschool organizations in Karaganda region (73 preschool groups). Each group was evaluated by 2 independent experts. The expert observation was carried out by using evaluation sheets, interviews with teachers and kindergarten staff.

Let us analyze the results of subject-spatial developing environment study in pre-school organizations in Karaganda region using ECERS-R scale.

Graphically the results are presented in Table 1. For privacy reasons, the names of the educational organizations are replaced by conditional ones.

According to evaluation results of 7 surveyed kindergartens (73 preschool groups), the average value of the quality index was 3.9 points. (Standard deviation 0.87). This value can be considered as the border between the “minimum” and “good”.

As we can see from the graph the above middle value (3.9) indicators are evaluated by the subscale: “Parents and staff” (4.6), “Structuring the program” (4.2), “Supervision in child care” (4.1).

“Types of activity” (3.5), “Interaction” (3.6), “Speech and thinking” (3.8), “Subject-spatial-object environment” (3.8) got below 3.9. These subscales can be defined as the “zone of trouble.”

Table 1 – The results of evaluation education quality in pre-school organizations in Karaganda region

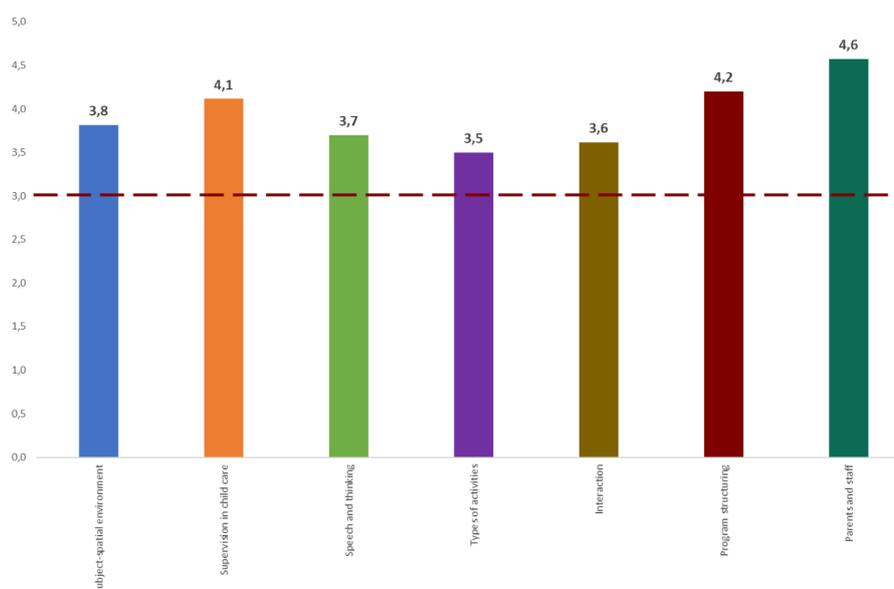
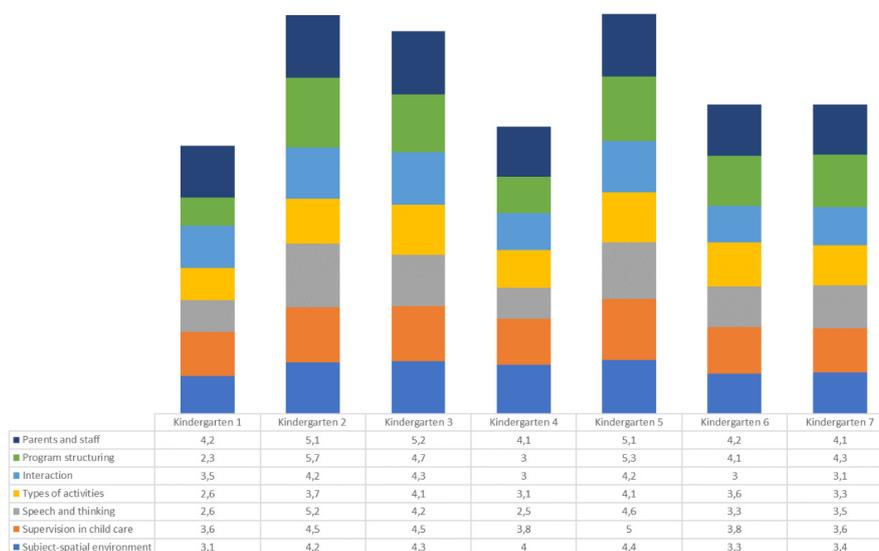


Fig.1 – Average values for all indicators of the scale (quality profile for the whole sample)

Let’s interpret the results for the subscales that have been rated below the mean (3.9).

According to the indicators, the “Types of activity” subscale in the examined preschool organizations varies from 2, 6 points to 4.1 points.

There is an insufficient number of different materials for children fine motor skills development, role-playing games, art and self-expression. The materials such as sand and water are mainly used outdoors only in summer. “Kinetic” sand, produced by the industry, is rarely used in kindergartens.

Materials related to nature / science (collections of natural objects, measuring devices, equipment for physical experiments, microscopes, etc.) are available in limited quantities and are used only in educational activities.

The conditions for the children with disabilities are difficult to assess, since in most preschool organizations this category of children is absent or there are children with minor impairments of hearing and speech. For them, professional staff speech therapist and defectologist provide some support.

However, regarding this category of children, it is possible to predict a low value of the indicator, which hinders the implementation of inclusive education in Kazakhstan.

The indicator “Promoting Acceptance of Diversity” demonstrated in groups total absence of didactic materials, books, paintings, toys for children to get acquainted with the cultural traditions of different people. For surveyed preschool organizations the presence of national corners (Kazakh and Russian) is quite typical. It should be noted that Kazakhstan is a multinational country where people of over 121 nationalities live. In the State Department of Public Relations, one of the target values is the “upbringing universal human values, patriotism and tolerance, based on the nation-wide idea of “Magic EI”. According to the results of our research, this requirement has not been fully met.

According to the indicator “Music, movement”, in groups the tendency of musical corners with instruments absence, musical content monotony have been revealed. The same situation is with the indicator “Role Playing”. The experts noted insufficient coverage of various topics: professions, various cultures, gender differences (men’s, women’s clothing), etc.

By the “Speech and Thinking” subscale (3.8), low speech activity of children in combination with teachers “monologism” has been established. The teachers read children books, tell stories, talk, ask questions. At the same time, the possibilities for developing speech and stimulating children’s mental skills (search questions, creating problem situations, reflection, etc.) are not being used sufficiently. Spatial-subject environment assessment (3.8) is close to the average value. The scatter of values is from 3.1 points to 4.1 points. The indicators: “Interior”, “Furniture for everyday life, games and exercises”, “Space Arrangement for games”, “Equipment for large motor skills development” in most of the preschool organizations are rated as “good.” It is common to all preschool organization that all of them lack places for solitude, personal space, space for free movement activity. Thus, the results of the study and average score for

the surveyed kindergartens (3.9) reflect the real state of affairs, provide an opportunity to see the shortcomings and problems in the organization of subject-spatial developing environment in preschool educational institutions. Quality profiles allow you visually introduce the results and select indicators for improvement.

Reflexive work with the surveyed pedagogical teams allowed us to reflect on and discuss the results, to draw up Educational Organization Development programs (preschool educational organization that participated in the study – according to identified trends and symptomatic nature deficits).

Conclusion

Thus, on the basis of the conducted research, we can conclude that in the examined pre-school educational organizations the average value of the quality index was 3.9 points. This value can be considered as the border between the “minimum” and “good”.

This study revealed the current state of subject-spatial developing environment in pre-school organizations and thus created the basis for eliminating problems and deficiencies.

In addition, the diagnostic tool used by us opens up new opportunities for ensuring the functionality and efficiency of the system for assessing the quality of the activities of preschool organizations in the region.

The article demonstrates legitimacy of application ECERS-R methodology, adapted by the Russian scientists to assess preschool education quality in Kazakhstan. This diagnostic tool opens up new opportunities to ensure functionality and effectiveness of the preschool organizations quality assessment system in the region.

The education quality in Karaganda region was measured through fixing a set of conditions regarded as a set of environmental opportunities for the child development.

In addition, the diagnostic tool used by us opens up new opportunities for ensuring functionality and efficiency of the system for assessing the region preschool organization activities quality.

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