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PROSPECTIVE ANALYSES ON EFFECTIVE MANAGEMENT QUALITY AT PRESCHOOL EDUCATION IN UZBEKISTAN (Evidence from innovative curriculum and international practical standards)

Abstract: Implementation of innovation into education system were beneficial at all times. Emerging market and developing countries practice can best example for further learning at the field of preschool education management for Uzbekistan. Current article analyzes the structure and content of education quality management in the system of preschool education in foreign countries, the features, advantages, main directions, quality indicators of ECERS-R - a tool for international evaluation of preschool education organizations and draws conclusions. Main purpose of the research paper id demonstrates concept of new programs for obtaining prospective results. Outcomes can be drawn as an implementation ways and areas of the innovation methods and programs.

Key words: Education quality management, quality of preschool education, ECERS-R scale, ECDA agency, SPARK program.

Language: English

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Introduction

The ongoing reforms in the pre-school education system of the Republic of Uzbekistan will lead to a change in the development trends of the sector in the near future. Currently, there is a change in the demand for educational services for preschool children in the regions, especially in large cities. Although the area (proximity of distance between MTT and home) remains the main criterion in choosing a preschool organization, many families have begun to focus on the quality of educational services. This is primarily due to the fact that many private and public-private MTTs have been established, with a significant increase in choice, making it possible for most families to choose an MTT with programs and conditions that suit their needs and the child.

In this context, it is important to assess and manage the quality of education in preschools in order to assess the results of investments in the preschool education system, to provide parents with the

opportunity to choose truly pre-school educational institutions. The research in this area analyzed the features of independent quality assessment systems in preschools in the United States and Singapore.

United States: NAEYC Standards and the Pennsylvania Experience. Almost all states in America have financial aid programs for early childhood education. Accordingly, their effectiveness needs to be determined and this requires first and foremost an assessment of the quality of educational services. This was the basis for the implementation of external evaluation programs for state-funded kindergartens and child development centers. The main coordinator of the implementation of these programs is the Department of Education General Administrative Regulations (EDGAR).

Literature review

Key to this focus has been the acknowledgement that investment in the early years, in both time and

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money, has been shown to be far more cost-effective than investments made at any other time [1], [2], [3].

In particular, the experiences of children in early childhood education and care (ECEC) have received considerable focus, partly as a result of the increased uptake and also as a result of policy initiatives and investment in this area. Many of these policy initiatives were due to the desire to improve labor participation rates, particularly those of mothers, but the positive developmental and broader societal impacts of increased ECEC exposure have become increasingly apparent [4].

Early interventions targeted toward disadvantaged children have much higher returns than later interventions such as reduced pupil-teacher ratios, public job training, prisoner rehabilitation programs, tuition subsidies, or expenditure on police. Later interventions, although important, are considerably less effective if these early foundations are lacking [5]. The incidence of these negative outcomes is significantly lower in the general population, and therefore the scope for savings is similarly dramatically reduced [6]. There is little reliable evidence on the relative contribution that each of these makes to a child's developmental outcomes [7].

In contrast, poor quality child care can produce deficits in language or cognitive development. Having nurturing, warm and attentive caregivers is the most critical attribute of quality in any child care setting, especially for younger children [8]. Although there may be some developmental benefits for other very young children from time spent in formal child care settings, there is also a potential for negative effects such as the emergence of behavioral problems later in childhood [9]. Therefore, has great potential to close academic performance and attainment gaps between children from different socioeconomic backgrounds [10].

Impact of child care quality, reported that in settings achieving higher levels of quality, children's cortisol levels dropped during the day, whereas cortisol levels remained high in poorer quality centers [11], [12]. The effects of attending preschool programs on promoting improved socio-behavioral outcomes were, however, found to have faded somewhat by the age of 14 [13]. Developing children's social competency and emotional health, and preparing children for a successful transition to formal schooling. These effects have been demonstrated to have significant economic and social benefits for the lifetime of participants [14].

Methods

The research reported in this paper was initiated by a literature review, followed by a ground theory and document study, with the aim to gather the

necessary qualitative data to properly address the research questions.

Research questions

1. International educational programs motivate management quality at preschool education in Uzbekistan;

2. Management quality can be effective by collaborative global practice at preschool education in Uzbekistan.

Results

As a rule, the assessment is based on test results and examination of children's academic skills: here it is important how the child came to kindergarten and how he graduated. The main parameter of the assessment is satisfaction with the quality of education and positive feedback from parents about the kindergarten.

The National Association for the Education of Young Children (NAEYC), the largest non-profit organization in the United States, has proposed an independent accreditation system for preschool education to set its own professional independent standards and help parents determine the best quality. Currently, NAEYC accreditation is an indicator of the quality of preschool education in the United States.

Of particular note is the experience of Pennsylvania, which has had a voluntary program to assess the quality of preschool education in the United States since 2002. The ECERS-R (Early Childhood Environment Rating Scale, Revised) scale is used as a tool for evaluating preschool education institutions [15].

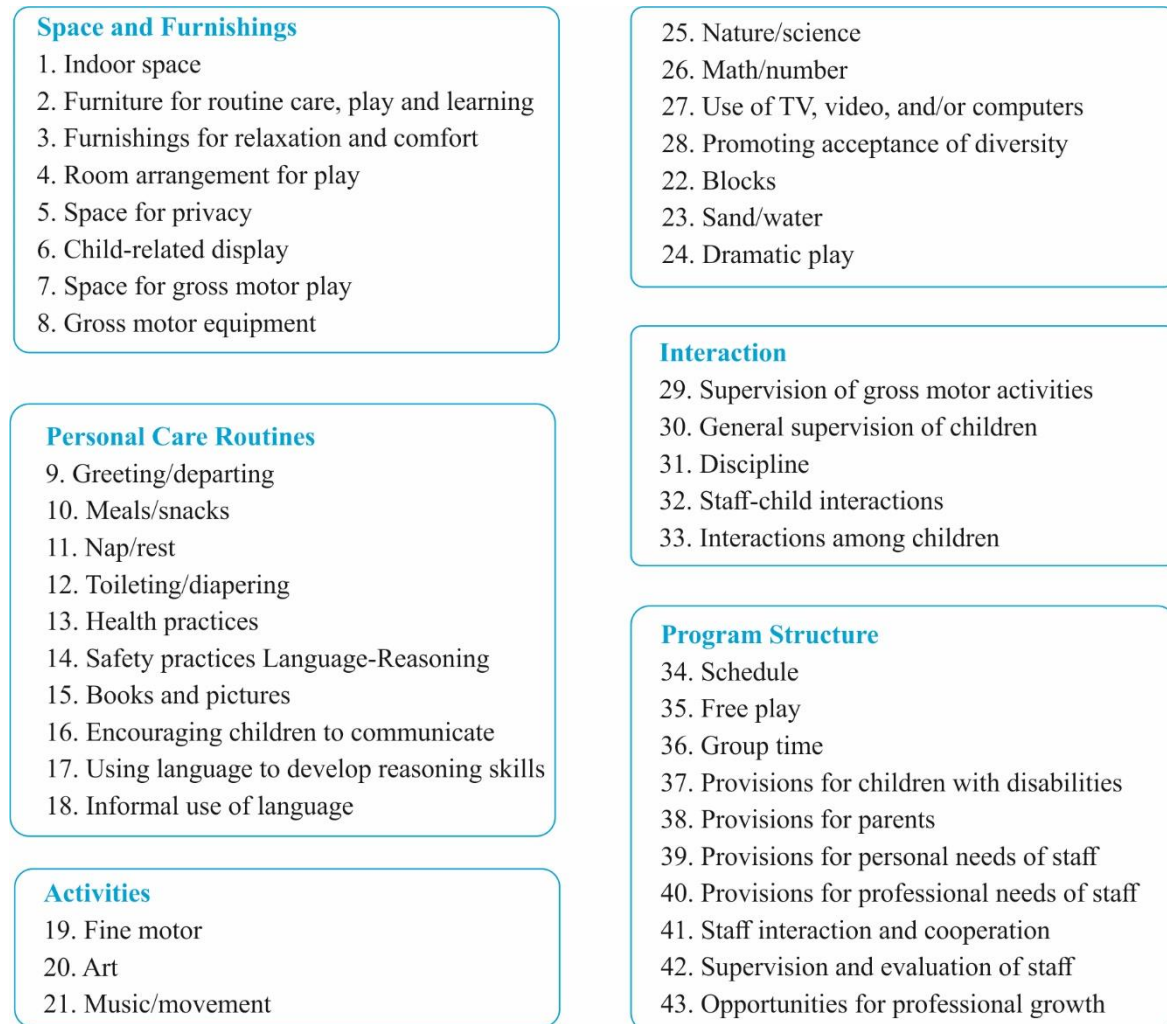
This learning environment assessment scale was developed by scientists at the University of North Carolina (USA, 1980) and has been tested and improved over several years.

The ECERS-R assessment scale allows assessment of a child in terms of the conditions created for socialization. The ECERS-R scale is positively rated as it does not depend on the characteristics of the country. In assessment, these methods are based on the "should be" criterion, which makes them a universal tool for assessing the quality of education. In addition, the scale is suitable not only for independent assessment, but also for self-assessment. It is also important that ECERS-R is primarily based on the laws of child development and that the assessment criteria are focused on assessing the learning environment rather than on the outcomes of the learners [16].

The ECERS-R scale is an observation scale that allows to evaluate a single specific educational group of a preschool institution, during the assessment the expert monitors the work of the group, determines the results according to certain criteria (indicators), interprets the scores [17].

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Picture 1. The ECERS scale consists of 43 items organized into 7 subscales [18]



Source: [http://static.pdesas.org/content/documents/Early%20Childhood%20Environment%20Rating%20Scale%20\(ECERS-R\).pdf](http://static.pdesas.org/content/documents/Early%20Childhood%20Environment%20Rating%20Scale%20(ECERS-R).pdf)

The scale conducts assessments in seven areas (created conditions, supervision and care, speech and thinking, types of activities, interactions, program structure, parents and staff). Each direction is further subdivided into indicators, which make up a total of 43 [19].

Indicators in the direction of the created conditions: equipment of a group room; furniture for daily care, play and exercise; recreational furniture; play area; area for personal use; child-related environment; a place for developmental games; tools for developing large motor skills.

Indicators for supervision and care: greeting / farewell; nutrition; sleep / rest; use of toilets; hygiene; security

Indicators of speech and thinking: books and pictures; encouraging communication between children; development of mental abilities through speech; daily use of speech.

Indicators in the field of activity: fine motor skills; art; music / movement; cubes; sand / water; role-playing games; nature / fan; math / calculation; use of television, video or computers; promoting diversity.

Indicators in the field of interaction: monitoring the development of major motor skills in children; general supervision of children (except for major motor activities); discipline; staff and children interaction; the interaction of children with each other.

Indicators in the direction of the structure of the program: agenda; independent play; group lessons; conditions for children with disabilities.

Indicators in the direction of parents and staff: conditions for parents; conditions to meet the individual needs of employees; conditions for meeting the professional needs of employees; employee interaction and cooperation; support and evaluation of staff performance; career growth opportunities.

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Each indicator is evaluated from 1 to 7 points, and their maximum sum is 301 points.

The ECERS-R scale meets the basic requirement of a modern high-quality assessment system: it assesses the state of the preschool organization's learning environment rather than the child's skills, which distinguishes this methodology from traditional methods. In addition, an expert working with this scale does not directly interact with children.

It can be said that the ECERS-R scale, focused on a specific goal and value, meets the state requirements for the development of primary and preschool children in the Republic of Uzbekistan:

The Pennsylvania Preschool Education Assessment System is tiered in nature. The name of the program stands for STARS (English Standards, Training / Professional Development, Assistance, Resources, Support) (standards, training and development, assistance, resources, support). Based on the results of the assessment, a number of stars from one to four can be assigned to preschools or a center: Two stars can be assigned to an organization based on a written application containing the required information. Three or four stars may be assigned to an educational institution based on self-assessment and evaluation by an external expert.

Thus, the difference between the different levels of the STARS program is as follows:

1 stars:

- The institutional education program meets the requirements of the Pennsylvania Early Childhood Education Standard and provides important steps for child development;
- parents receive a certificate containing all information about family and social security services;
- educators meet with parents during the registration of a child in preschool education institutions;
- when the child is ready to move on to the next stage of education, parents receive all the information and advice to ensure the best transition process;
- preschool staff make plans to improve their skills each year.

2 stars:

- at least half of educators have specialized knowledge in the field of early childhood development;
- educators arrange a meeting with the family when the child enters the preschool organization; take care of children's daily development and diversity;
- an annual teachers' conference is held to discuss the success of each child;
- once a year, children's achievements are assessed;
- educators plan children's day-to-day activities using the Pennsylvania State Education Standard;
- educators use standardized assessment scales (ECERS-R) to improve the child's developmental

environment and the quality of education in the preschool organization;

- the program provides special types of activities that facilitate the child's transition from one learning group to another;
- preschool educators are provided with at least two different social protection components, such as health insurance. This will reduce staff turnover;
- employees undergo additional training each year.

3 and 4 stars.

- at least half of educators must have a bachelor's degree in early childhood development. The rest must have specialized education at the secondary special level;
- educators arrange a meeting with the family when the child enters the preschool organization; cares about the daily development and diversity of children;
- every year a pedagogical conference is held to discuss the achievements of each child;
- assessment of children's achievements is carried out three times a year (the first 45 days after the registration of the child).
- educators use Pennsylvania education standards to improve curricula and performance appraisal systems;
- the quality of the learning environment is assessed annually using a standardized ECERS-R scale;
- the preschool organization works in partnership with the family and the school to ensure that the child adapts easily from family to kindergarten and then to school;
- kindergarten educators are provided with at least three social protections (for a three-star degree) and four social protections (for a four-star degree), such as health insurance. This will reduce staff turnover;
- employees undergo additional training each year.

Currently, more than 5,000 preschools in Pennsylvania are certified under the STARS program.

Singapore: SPARK Kindergarten Support and Independent Accreditation Program.

In Singapore, the term "early childhood education" refers to preschools and child care centers. There are currently about 600 kindergartens and 900 centers in Singapore.

Before the start of the new millennium, learning two languages and preparing for primary school education in Singapore was a priority before preschool education. The focus is on academic achievement and educational content.

However, as Singapore progresses toward building a science-based economy, the need to reconsider priorities in the areas of creative thinking, flexibility, and innovative approaches has become increasingly acute.

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The Singaporean government has recruited qualified professionals, including foreign ones, to radically change the situation and carry out radical reforms in the pre-school education system. As a result of the reforms, a number of programs have been launched to externally assess the quality of preschool education, the most common of which is currently the SPARK (The Singapore Preschool Accreditation Framework) program.

In April 2013, The Early Childhood Development Agency (ECDA) was established. It is an independent organization sponsored by two ministries - the Ministry of Education and the Ministry of Social and Family Development. The functions of the agency include working with key aspects of child development in kindergartens and child care centers [20].

Discussion

Nine fundamental reforms that we believe will significantly advance the evolution of our federally supported early childhood education system, improve child outcomes, and ensure system accountability, as well as operational consistency and greater efficiency. Specifically, we recommend that the government:

1. Partner with states to align early learning standards that define expectations for all early learning programs;

2. Invest with states to build assessments and assessment systems that demonstrate standards are being met;

3. Increase consistency, quality, and systemwide access to federally procured and federally required, locally procured technical assistance;

4. Implement a more consistent, state-of-the-art approach to high-quality professional development for existing staff and help determine the optimal set of skills and knowledge that should be imparted in preparation programs for early childhood program staff;

5. Improve early childhood data and harmonize reporting requirements to help increase knowledge of inputs and outcomes;

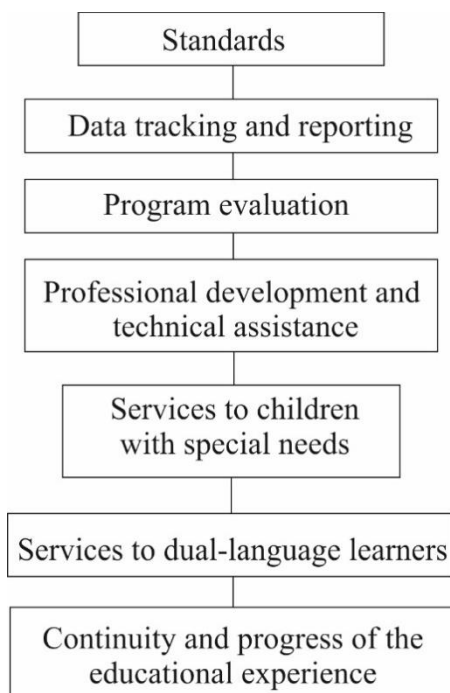
6. Promote the replication of successful strategies to build continuity from early childhood programs to kindergarten and continue to remove data and other bureaucratic barriers to successful continuity systems;

7. Build more federal, state, and local capacity to meet the increasing demand for culturally and linguistically appropriate services for children who are dual language learners;

8. Close the gaps in universal developmental screening across all federally supported early learning or care programs;

9. Require expanded early learning program participation as a means of boosting performance of failing elementary schools;

Picture 2. Prospective development ways for effective quality management in preschool education [21]



Source: Literature review of the impact of early childhood education and care on learning and development, Working paper. Australian Institute of Health and Welfare Canberra, 2015.

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Currently, this agency is engaged in the implementation of the SPARK program. The program has two main purposes:

- 1) assistance to kindergarten staff in improving the quality of education;
- 2) assist parents of preschool children in choosing an educational institution.

So that they pay attention not only to the territorial proximity of the preschool organization, but also to the quality of educational services provided in accordance with modern international concepts.

The SPARK program provides prestige and support to kindergarten leaders in the process of improving the quality of education to ensure the holistic development and well-being of children in kindergartens. The program sets development guidelines and at the same time helps organizations organize self-assessment more effectively.

The SPARK accreditation program is optional. Kindergartens and child care centers can apply for an assessment and certification at any time.

The program structure consists of four stages:

- 1) Registration and editing. Minimum standards for the performance of the organization are assessed.
- 2) Self-assessment. Once registered, it is recommended that all kindergartens go through a self-assessment phase.
- 3) Quality rating. At this stage, kindergartens determine what level of quality they are eligible for and check the results of the self-assessment using an outside expert's recommendation.

- 4) Accreditation. Based on the results of the external evaluation, a rating of kindergartens will be made based on the quality of educational services. Organizations at the top of the rankings receive a certificate.

The SPARK program supports five key aspects on the basis of which rating criteria are formed:

1. **Focus on the child.** Children thrive in a safe learning environment where learning depends on experience and age. Every child has different abilities, learning needs and interests. The high qualification and quality training of the educator ensures that each child fully discloses their abilities and creates a strong starting point for further education.

2. **Leadership skills.** Managers set development directions for the institution and employees. To solve problems in the field, good leaders need to adapt to a changing learning environment: to be aware of the latest development trends in pedagogy, to see and solve problems earlier than others. They should inspire and guide staff to implement the concept of kindergarten development.

3. **Professional reputation.** Educators shape children's behavior, revealing their potential as they grow older. Kindergartens need passionate educators who are ready to dedicate themselves fully to the profession, who are well aware of their responsibilities, and who are highly qualified enough

to engage the child in a meaningful, focused education. Educators must, on the one hand, develop children and, on the other hand, constantly look for opportunities for their professional growth.

4. **Goal-oriented innovations.** Working with preschoolers requires kindergartens to engage in innovative work and adapt to change. All updates should be in line with the concept of kindergarten development. If the kindergarten meets the requirements of the time and adopts innovative pedagogical approaches, it will provide an opportunity for children to acquire the necessary knowledge and skills in the future.

5. **Social partnership.** Relationships with family members and other economic entities in the community have a significant impact on children's learning and development. Kindergartens need to establish close partnerships with parents and the local community to ensure the full development of their children.

Currently, 409 of the 1,500 preschools in Singapore have SPARK certificates. 56 kindergartens have SPARK privileged certificates. It is the management of the educational process and its strong level, the implementation of an integrated program, the recognition of the existence of an effective learning environment that leads to the holistic development of the child.

The certificate is valid for three years. Modern research in Singapore shows that the SPARK certification is becoming a key criterion for parents to choose a kindergarten for their children, and this has led to a change in the public's need for a pre-school education system in general.

Based on the study, it is possible to draw a number of general conclusions on the quality indicators, which are primarily defined as guidelines for the development of preschool education institutions and care centers in countries with developed education systems.

1. In many cases, children's academic achievement is not a basis for drawing conclusions about the quality of kindergarten. Analysis of child outcomes is only included in partial assessment systems in the United States (from the countries analyzed). The central object of monitoring is "environmental indicators" - the organization of the educational environment, social relations, equipment, safety and staff skills.

2. The "Leadership" indicator is remarkable. It gets a lot of attention, especially in Singapore: whether the head of a kindergarten or care center has an organization development strategy during his or her career, how it is perceived by the community, and how that strategy is organizationally and financially supported. The initiative of the leader, taking responsibility for the larger team and educators is a key condition for improving the quality of education provided by the organization.

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3. Friendly relations of the kindergarten with the society, organizations and parents, the level of their participation in the life of the children's community is an important indicator of the quality of education.

Thus, the process of assessing the quality of preschool education in foreign countries is carried out not by officials or parents, but by independent organizations, qualified professionals in the field of preschool education, and the development of this quality and its results. identifies areas for improving educational services to meet development needs.

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Conclusion

As for the conclusion, as an important feature of external quality assessments in the U.S. and Singapore

is that they are voluntary: kindergartens and care centers decide for themselves how much to apply for and participate in the external assessment of invited professionals. This means that the process of preparation for certification itself gives a strong impetus to the development of the organization.

Thus, the foreign experience of assessing the quality of preschool education, which we have considered, helps to understand the need to form an internal system of independent examination of the quality of preschool education at the stage of developing new regulations and updating the social order for high quality education services. We do believe that current innovative standards and curriculum will promote better changes in management field for raising quality of the education at preschools in Uzbekistan. We will enrich and keeping best methodology for research current area in future.

References:

1. Heckman, J. (2004). Skill formation and the economics of investing in disadvantaged children. *Science* 312:. Heckman J & Masterov D. The productivity argument for investing in young children. Washington, DC: Invest in Kids Working Group. Committee for Economic Development.
2. (2003). *Keatsdale. Report into the cost of child abuse and neglect in Australia*. Albion: Kids First Foundation.
3. Moore, K., Steward-Streng, N., & Daneri, P. (2012). What constitutes a strong start for babies? *Child Indicators Research* 6:137-60.
4. (2015). PwC. Putting a value on early childhood education and care in Australia: September. Viewed 1 February.
5. Silburn, S., Nutton, G., Arney, F., & Moss, B. (2011). The first 5 years: starting early. Topical paper commissioned for the public consultations on the Northern Territory Early Childhood Plan. Darwin: Northern Territory Government.
6. Melhuish, E., et al. (2006). *Effective pre-school provision in Northern Ireland (EPPNI) summary report*. Belfast: Department of Education Northern Ireland.
7. Burchinal, M, Howes, C., & Kontos, S. (2002). Structural predictors of child care quality in child care homes. *Early Childhood Research Quarterly* 17:87-105.
8. (2007). CCCH. Early years care and education. Policy brief no. 8. Melbourne: CCCH, The Royal Children's Hospital.
9. Houg, B., Jeon, S., & Kalb G. (2015). The effects of child care on child development. Viewed on 7 August .
10. Elliott, A. (2006). *Early childhood education: pathways to quality and equity for all children*. Victoria: Australian Council for Educational Research.
11. Sims, M., Guilfoyle, A., & Parry, T. (2005). What children's cortisol levels tell us about quality in child care centres. *Australasian Journal of early Childhood* 32:29-39.
12. Sims, M., Guilfoyle, A., Kulisa, J, Targowska A & Teather, S. (2008). Achieving outcomes for children and families from culturally and linguistically diverse backgrounds. Perth: Australian Research Alliance for Children & Youth.
13. Sammons, P., et al. (2014). Influences on students' development in Key Stage 3: Socio-behavioural Outcomes in Year 9. London: Institute of Education, University of London. Viewed 5 August .
14. Schweinhart, L., et al. (2005). Lifetime effects: the High/Scope Perry preschool study through age 40. Ypsilanti MI: High/Scope Press.
15. Wright, R.W. (2010). Multifaceted Assessment for Early Childhood Education. Sage Publications, Inc. p. 331.
16. Veraksa, N.E., & Veraksa, A.N. (2011). Otsenka kachestva doshkolnogo obrazovaniya: zarubejnyy opyt. Sovremennoe doshkolnoe obrazovanie. *Theory and practice*, №3.

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	JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

17. Levan, T.N. (2016). Razvivayushchaya otsenka kachestva doshkolnogo obrazovaniya s ispolzovaniem mezhdunarodnyx shkal kompleksnoy otsenki ECERS: problemy i perspektivy. *Detskiy sad: teoriya i praktika*, № 10 (70), pp. 50-65.
18. (n.d.). Retrieved from [http://static.pdesas.org/content/documents/Early%20Childhood%20Environment%20Rating%20Scale%20\(ECERS-R\).pdf](http://static.pdesas.org/content/documents/Early%20Childhood%20Environment%20Rating%20Scale%20(ECERS-R).pdf).
19. Leksakova, N.V. (2019). International instrument «Scale ECERS-R»: issledovanie kompleksnoy otsenki kachestva doshkolnogo obrazovaniya. *Vestnik Tambovskogo Universiteta*. Series: Humanities. Tambov. T. 24, № 180, pp. 118-123.
20. (n.d.). Retrieved from <https://www.ecda.gov.sg/>.
21. (2015). Literature review of the impact of early childhood education and care on learning and development, Working paper. Australian Institute of Health and Welfare Canberra. .