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The effectiveness of quality assessment systems in early childhood education for preschooler's personal development

Abstract. The study aimed to analyse the effectiveness of assessment systems and their impact on developing and enhancing skills in preschool-aged children. An effective assessment system promotes the development of a child's cognitive, social, and emotional skills. Various approaches to assessment, their effectiveness, and their influence on children's emotional and cognitive development were highlighted. Recommendations for improving assessment practices were explored to ensure a child's harmonious development. The research included data collection for preschool child assessment systems, which involved several stages: observation, questionnaires, interviews, and data processing. An important aspect is that diverse assessment systems are employed in preschool institutions, aiding in determining children's developmental levels and the effectiveness of the educational process itself. The article examined the main types of assessment, including diagnostic, formative, summative, and comprehensive assessment, along with their characteristics. The administrations approved all procedures of preschool institutions and the ethics committee of the respective research organisation. Particular attention was given to the roles of educators and parents in the assessment process, as well as how feedback can contribute to improving learning outcomes and enhancing motivation to learn. Based on the analysis of empirical data, the most effective assessment practices ensuring the harmonious development of preschool-aged children were identified. Information on formative assessment, considered the most effective approach, is presented. Formative assessment is recognised as the most effective due to its regularity, flexibility, and ability to provide timely feedback. The findings of this study can be utilised by educators to improve the assessment systems in relevant preschool education institution

Keywords: preschooler development; skills and abilities; assessment methods; learning outcomes; observation; testing

INTRODUCTION

The quality assessment system in preschool education institutions (PEIs) is a crucial element of the educational process, as it influences a child's social and emotional development, as well as the formation of foundational skills and abilities. A wide range of assessment approaches exist,

differing in both methodologies and criteria. This diversity poses a challenge in identifying the most effective practices that promote positive emotional states, motivation, and learning progress in young children. One of the primary issues is the lack of unified standards and approaches

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to assessment, hindering comparisons of results and the implementation of successful practices across preschool institutions. Additionally, there is a concern about the impact of assessment systems on child development. While adequate assessment can stimulate interest in learning and foster the development of essential skills, an excessive focus on assessment can lead to stress, lowered self-esteem, and a loss of interest in learning. Therefore, it is essential to investigate how various assessment methods, particularly formative assessment, influence different aspects of child development.

There exists a wide spectrum of perspectives and opinions regarding the effectiveness and consequences of assessment systems on young children. Early childhood education is a crucial phase in personal development, as foundational skills and social habits are formed during this period. Assessment systems, particularly in preschool institutions, have been the subject of much debate, given their potential to have both positive and negative impacts on child development (Mettler *et al.*, 2023). As argued by P. Kasparova & J. Greaves (2023), traditional assessment systems often rely on standardised tasks and tests that measure each child's academic achievements. Such systems have been criticised for potentially limiting children's creativity and failing to account for their individual differences. According to J. Kang *et al.* (2024) and B.M. Gustafsson & M. Sund Levander (2024), standardised assessment in early childhood settings can induce stress and anxiety in children, negatively affecting their psychological well-being and motivation to learn. Alternative assessment approaches, such as portfolios and observations, have gained significant traction in recent years. These methods allow for a more in-depth evaluation of a child's individual progress, taking into account their strengths and interests. The use of portfolios enables the tracking of a child's development across various domains through the collection of work that demonstrates their achievements and progress over time, as noted by O. Karpinska *et al.* (2024).

F. Renaud *et al.* (2022) and D. Hao & W. Guohua (2024) assert that assessment in preschool education institutions significantly influences a child's development, encompassing emotional, cognitive, and social aspects. Standardised assessment systems can induce anxiety and lower self-esteem in children, particularly when they fail to meet expectations. Children may feel insecure, negatively affecting their overall emotional well-being and motivation to learn. While assessment focused on academic achievement can stimulate the development of certain skills, such as numeracy, literacy, and writing, excessive emphasis on these aspects may lead to the neglect of other crucial skills like critical thinking and creativity. Research by H.Q. Song *et al.* (2022) and F. Arici (2023) has shown that assessment systems that do not account for social skills and emotional intelligence can also result in the undervaluing of the need for cooperation and interpersonal relationships. Children who receive negative assessments may feel alienated from others, hindering the formation of positive social connections.

Alternative assessment methods such as observations and portfolios can better facilitate a child's development by taking into account individual differences and interests. These methods, as argued by S. King-Dowling *et al.* (2023), enable educators to create more supportive and individualised learning environments, fostering overall child development. Observing children at play can provide valuable insights into their social and emotional skills, as well as their problem-solving abilities and creativity.

C. Gao *et al.* (2024) and J. Dockrell *et al.* (2024) found it crucial to tailor assessment to the individual needs and characteristics of each child, as this allows for a more accurate identification of their strengths and areas requiring support. They also emphasised the need for active involvement of educators and parents in the assessment process, as this fosters a better understanding of each child's development and ensures a consistent approach to teaching and upbringing. Properly organised assessment can positively influence a child, helping to identify and address problems promptly while maintaining interest in learning.

This study aimed to analyse the effectiveness of quality assessment systems in early childhood education for a preschooler's personal development. In line with this aim, the study's objectives were to:

- review literature on the theoretical and methodological aspects of the research problem, existing methods and approaches, criteria, and indicators for assessing the quality of PEIs;
- study the experience of PEIs in using various quality assessment systems and determine their effectiveness;
- conduct an experimental study of the attitudes of educators and parents toward formative assessment, its advantages, and its impact on preschoolers' personal development.

MATERIALS AND METHODS

A mixed-methods approach, combining both quantitative and qualitative methods, was employed to investigate assessment systems in early preschool educational institutions and their impact on child development. This approach allowed for a comprehensive understanding of the issue by integrating statistical analysis with the examination of participants' experiences.

The research was conducted in several preschool educational institutions within territorial communities, namely: PEI No. 712 (Kyiv), PEI No. 424 "Chaika" (Kyiv), and PEI "Yaponskyi sad" (Chaiky Village). The sample consisted of 60 children aged 5 and 6 (39% boys, 61% girls), 20 educators (5% male, 95% female) working in these institutions, 1 head of preschool institution No. 712, and 30 parents (50% male, 50% female) who participated in the study. The timeframe of the study was 3 months (March 2023 – May 2023). This selection of participants and the time frame was based on a random sample to ensure the representativeness of the data. The research was conducted in compliance with ethical norms of Declaration of Helsinki (2013) and including obtaining informed

consent from parents and educators, ensuring the anonymity of participants, and the confidentiality of the collected data. All procedures were approved by the PEI administration and the ethics committee of the relevant research institution. Data collection instruments:

1. Questionnaires – educators (an anonymous questionnaire consisting of 10 mixed-type questions focused on assessment methods, particularly formative assessment, their effectiveness, and challenges encountered) and parents A questionnaire containing 10 closed-ended questions with “yes”/“no” response options, covering the following topics:

- ➔ Are you satisfied with the quality of education provided by the preschool educational institution?
- ➔ Do you believe that formative assessment contributes to your child’s development?
- ➔ Do you receive regular feedback on your child’s progress?
- ➔ Do you participate in parent meetings and other institutional events?
- ➔ Do you believe that the preschool provides a supportive environment for your child’s development?
- ➔ Are you satisfied with the teaching methods used in the institution?
- ➔ Are you satisfied with your child’s social development in the institution?
- ➔ Are you satisfied with your child’s intellectual development in the institution?
- ➔ Are you satisfied with your child’s emotional development in the institution?
- ➔ Do you believe that preschool contributes to the development of positive moral qualities in your child?

2. Observations – over a three-month period, observations were conducted of the teaching and learning processes in the selected preschool institutions and their respective groups of 60 children. Child behaviour and reactions to formative assessment were recorded.

Observation content:

1. Recording of children’s behaviour.
2. Analysis of reactions to formative assessment.

Data collection was conducted in several stages:

1. The first stage involved obtaining permission from institutional administrators and parents, developing questionnaires, and creating observation plans.

2. The second stage involved conducting questionnaires, observations, and interviews. Documents were collected and analysed concurrently.

3. The third stage involved data processing and analysis: questionnaire data was subjected to statistical analysis, and observations and interviews were coded and analysed using thematic analysis, the results of which are presented in the study findings.

The quantitative analysis involved processing questionnaire data using descriptive statistics. Thematic analysis was used to identify the main themes and subthemes related to the impact of assessment on child development. Among the main limitations of the study, one can note the

limited geographic sample and the potential subjective influence of the researchers on observations. Nevertheless, the application of mixed methods of data collection allowed for the minimisation of these risks and ensured the reliability and validity of the obtained results.

RESULTS

Theoretical aspects of the impact of assessment on the development of preschool children

Assessment is a crucial component of the pedagogical process, as it helps educators understand the individual needs of each child and adapt learning programs accordingly to their developmental level. In early childhood, assessment is particularly significant as this period is critical for the formation of fundamental skills and competencies that influence subsequent learning and development (Kompilovic *et al.*, 2023). Specifically, there are several types of assessment. This research highlights formative assessment, which enables educators and teachers to understand at which stage of development each child is. Through this type of assessment, educators can identify a child’s strengths and weaknesses, allowing for the development of individualised approaches to teaching and learning.

Formative assessment, which focuses on the learning process rather than on the end results, is particularly effective in early childhood. It involves regular observations, conversations with children, and analysis of their behaviour and achievements in various activities. Through this, educators can make timely adjustments to the learning process, supporting the individual pace of development of each child. Formative assessment promotes the development of self-reflection in children, helping them to become aware of their achievements and areas that need improvement. Assessment plays a significant role in children’s cognitive development. It enables educators to evaluate children’s skill levels, identify their strengths and weaknesses, and make timely adjustments to the learning process, providing individualised support. Assessment systems can motivate children to learn and foster a sense of responsibility (Stepić *et al.*, 2023). Moreover, assessment helps educators determine which specific cognitive skills need to be developed, such as language skills, logical thinking, or problem-solving abilities. Additionally, assessment is a valuable tool for monitoring the effectiveness of educational programs and pedagogical methods, contributing to their ongoing improvement.

Modern technology opens up new possibilities for assessment in early childhood. The use of electronic platforms and software allows for real-time data collection on children’s development, enabling analysis and the creation of individualised learning plans. Furthermore, technology can provide interactive assessment methods, making the process more engaging and motivating for children. Assessment also has a significant impact on children’s emotional well-being, particularly in shaping their self-esteem. Positive feedback and support from educators contribute to the development of self-confidence, which is crucial for

further learning. Negative or non-constructive feedback can have the opposite effect, reducing motivation and interest in learning. Therefore, it is important that the assessment is balanced and takes into account the child's emotional state. While assessment in early childhood offers significant benefits, it also presents certain challenges. One such challenge is the subjectivity of observations, as they can be influenced by the educator's personal biases. Additionally, there is often a lack of time and resources for detailed assessments of each child. Another challenge lies in communicating assessment results to parents, who may not always interpret them accurately.

The theoretical underpinnings of assessment in early childhood highlight its importance for children's overall development. Assessment helps identify individual children's needs, fostering their cognitive, emotional, and social development, while also supporting the formation of positive self-esteem. Despite the challenges, assessment remains an indispensable tool for educators in preschool institutions. Assessing preschoolers' knowledge is a crucial aspect of the educational process as it allows educators to identify each child's unique needs, promote their holistic development, and detect potential issues early on. The primary criteria for assessing preschoolers' knowledge include (Chou *et al.*, 2023):

1. Language skills.
2. Mathematical skills.
3. Logical thinking.
4. Physical development.
5. Health and hygiene.
6. Emotional and social development.
7. Creative development.
8. Artistic activities.
9. Musical activities.
10. Dramatic activities.

According to the developmental aspects of preschoolers, assessment should be comprehensive and account for various facets of a child's development. Each of the aforementioned criteria helps educators gain a complete picture of a child's development, identify their strengths and weaknesses, and detect potential issues promptly, enabling the development of individualised learning plans. It is essential that the assessment process is ongoing and considers not only current achievements but also the dynamics of a child's development. This allows for the

creation of a supportive learning environment where every child can reach their full potential.

Assessment plays a crucial role in PEIs, contributing to the holistic development of children and ensuring the quality of education. The main reasons for its importance include the ability to determine children's developmental levels. This helps educators and parents understand where a child stands in terms of cognitive, physical, emotional, and social development. Based on assessment results, learning programs can be tailored to meet the individual needs and abilities of each child, promoting effective utilisation of each child's potential and avoiding the stress of tasks that are either too challenging or too easy. In cases of challenges, assessment can identify potential developmental delays or issues at an early stage. Therefore, there is a high likelihood of timely intervention and the provision of necessary support, which increases the chances of successfully overcoming certain difficulties. Assessment is also important due to the possibility of providing feedback, as it allows for aligning appropriate actions and ensuring a consistent approach to teaching and learning. Additionally, assessment contributes to planning and improving the educational process. This is because analysing assessment results enables early childhood institutions to make necessary adjustments to teaching methods and plans, enhancing the quality of the learning process and ensuring alignment with current requirements. Another key reason is motivation for children. The assessment conducted can encourage them to achieve new results and highlight the progress and success of preschool children. The final reason is to ensure quality education. Systematic assessment is an integral part of the system ensuring proper education. It allows for tracking the effectiveness of the preschool institution's work and monitoring compliance with standards.

Assessment of preschool children is distinguished by its focus on a formative approach, which provides continuous feedback and support, whereas traditional assessment often focuses on final outcomes. Formative assessment takes into account the individual characteristics and development of the child, promoting their harmonious growth. In preschool educational institutions, other assessment systems are also used to determine the developmental level of children and the effectiveness of the educational process itself. The main types of assessment include diagnostic, formative, summative, and comprehensive assessment (Table 1).

Table 1. Characteristics of each type of assessment in early childhood education institutions

Assessment type	Purpose	Methods	Timing	Outcome
Diagnostic	Determining the initial level of knowledge, skills, and abilities of a child at the beginning of the school year or before the start of a new curriculum	Observation, discussions with children, use of special diagnostic tests	At the start of the school year or before the new topic begins	Used for planning individual educational pathways and adapting curricula
Summative	Assessing a child's achievements over a certain period (end of the school year, completion of a specific stage of learning)	General observation, analysis of completed tasks, use of summative tests	At the end of the school year or after completing a specific topic	Used to determine overall progress, can be presented as a report to parents

Table 1. Continued

Assessment type	Purpose	Methods	Timing	Outcome
Formative	Supporting and guiding the learning process, monitoring a child's ongoing development	Daily observations, analysis of children's work, discussions, and play situations	Conducted regularly throughout the school year	Helps educators adjust teaching approaches and methods in a timely manner, provides feedback to parents
Comprehensive	A thorough study of a child's development in various areas: physical, social-emotional, cognitive, linguistic, etc.	Combination of different assessment methods, including observations, tests, play tasks, interviews with children and parents	Usually conducted several times a year	Helps create a holistic view of a child's development, identifying strengths and weaknesses, and determining future steps in learning and education

Source: compiled by the authors based on research X. Lv *et al.* (2022), S. King-Dowling *et al.* (2023), S. Heuser & A.Wolf (2024)

By analysing empirical data, the most effective assessment practices that ensure the harmonious development of children in early childhood education can be identified. These practices encompass interactive methods, individualised approaches, and engaging children in self-assessment, which fosters their motivation and interest in learning. A formative approach involves ongoing feedback between the educator and the child. Formative assessment allows children to receive immediate feedback, which helps them understand their achievements and areas for improvement. For example, using praise and encouragement for completed tasks helps children feel confident in their abilities and motivates them to continue learning. Each child is unique and has their own pace of development, interests, and abilities. An individualised approach entails adapting the teaching and learning process to meet the needs of each child. The educator observes the children, records their achievements and challenges, and based on this information, determines the optimal methods and pace of learning. This allows children to develop at their own pace without feeling pressured.

Interactive methods, such as games, creative projects, and group activities, encourage children to actively engage in the learning process. They foster the development of social skills, creativity, and critical thinking. For instance, during group games, children learn to cooperate, share, and resolve conflicts, positively influencing their social development. Involving children in self-assessment helps them develop awareness of their achievements and build reflection skills. Children learn to analyse their actions, evaluate their results, and identify areas for improvement. This fosters critical thinking and independence. For example, after completing a task, the educator might ask the child what they enjoyed, what was challenging, and how they can improve their results next time.

Visual tools, such as charts, graphs, and drawings, help children visualise their achievements and progress. This could include a success journal where the child, together with the educator, records their daily achievements. Visualising progress motivates children to reach new heights and gives them a sense of accomplishment. Effective assessment practices in early childhood education should focus on supporting the holistic development of the child, taking into account their individual characteristics and needs. Formative assessment, individualised approaches,

interactive methods, involving children in self-assessment, and using visual tools are key components that contribute to positive learning and development in preschoolers. These approaches help create a supportive learning environment where every child can reach their full potential and enjoy the learning process.

Additional assessment methods and tools include:

- observation – regular and systematic monitoring of children in natural play and learning settings;
- portfolios – a collection of the child's work (drawings, crafts, writings) that demonstrates their progress and achievements over a specific period;
- surveys and questionnaires – the use of relevant forms and surveys to gather necessary information from parents and educators about the child's development and acquired skills;
- play-based methods – the use of specially designed play tasks and problemsolving situations to assess specific skills and knowledge of children.

Assessment systems in PEIs aim to create a nurturing educational environment where each child can develop according to their unique abilities and needs. The choice of the most effective assessment system in preschools depends on specific circumstances, goals, and the individual characteristics of the child. However, among all types of assessment, formative assessment is often considered the most effective. There are several reasons for the effectiveness of this type of assessment:

- continuous monitoring of progress – formative assessment is carried out regularly, allowing for the constant tracking of a child's development and the timely identification of areas that require corrective action;
- individualisation of learning – by assessing the child consistently, educators can quickly adapt learning materials and approaches to suit the individual needs and development pace of each child;
- feedback – this assessment provides continuous communication between the child, educator, and parents, contributing to a better understanding of the child's achievements and challenges;
- engagement and motivation of children – assessment that takes place during the learning process can be a motivating factor for children, as they see their own progress and begin to realise what they still need to work on, what they are succeeding at, and where they may face challenges;

→ prevention of problems – formative assessment helps identify and address issues at an early stage, promoting more successful development for each individual.

Compared to other assessment types, diagnostic assessment is crucial at the beginning of learning to determine the initial level of knowledge and skills, but it does not provide ongoing monitoring. Summative assessment, on the other hand, gives an idea of a child's developmental achievements at the end of a specific period but does not allow for timely adjustments to the learning process. Comprehensive assessment is detailed and comprehensive but can be time-consuming and therefore not always practical for regular use.

II. Practical significance of formative assessment in preschool educational institutions and experience of its use

An anonymous survey of educators regarding formative assessment in preschool groups and the percentage of responses is presented below.

1. What assessment methods do you use to assess children's development in your group? (Fig. 1)

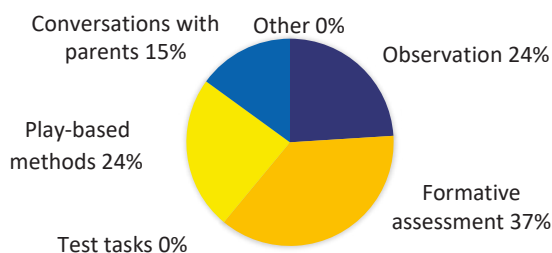


Figure 1. Results of respondents' answers to the first question

Source: compiled by the authors based on own research

Figure 1 shows the assessment methods used in the selected preschool groups in the study to determine children's development. It was determined that formative assessment, accounting for 37% and 24%, is primarily used to assess children's development. Specifically, observation, conversations with parents, and play-based methods are additional methods. The interplay of these methods helps to comprehensively assess both the cognitive and social skills of children, ensuring an individualised approach to each child.

2. Do you use formative assessment in your work? (Fig. 2)

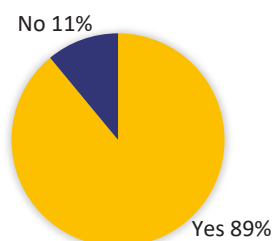


Figure 2. Results of respondents' answers to the second question

Source: compiled by the authors based on own research

According to the respondents' answers, particularly the educators (89%), formative assessment is a widely used system for assessing preschool children. Specifically, formative assessment helps to continuously monitor children's progress, providing feedback and adjusting teaching approaches. The use of formative assessment ensures an individualised approach and promotes the development of each child, supporting their interest in learning.

3. If yes, what specific formative assessment methods do you use? (Fig. 3)

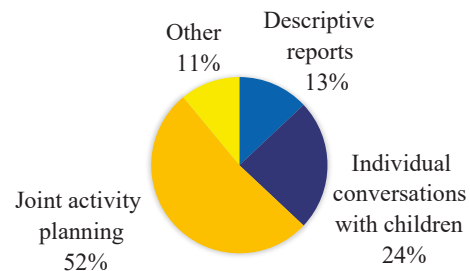


Figure 3. Results of respondents' answers to the third question

Source: compiled by the authors based on own research

This study has determined that respondents use several methods of formative assessment. Firstly, joint activity planning (52%) was conducted regularly, including various types of activities, recording their achievements and difficulties. Secondly, by using individual conversations, educators were able to discuss with the child their successes and identify areas that needed attention. Therefore, individual conversations account for 24% of responses. In addition, children were actively involved in self-assessment, being offered opportunities to reflect on their actions and results. Portfolio collections of achievements were also used, where children's works reflecting their progress were gathered.

4. How do you evaluate the effectiveness of formative assessment compared to traditional methods? (Fig. 4)

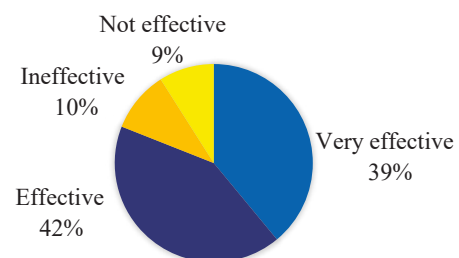


Figure 4. Results of respondents' answers to the fourth question

Source: compiled by the authors based on own research

Formative assessment is a highly effective tool compared to traditional assessment methods, as it creates a more dynamic and adaptive learning environment that promotes a deeper understanding of the material and the development of skills necessary for successful learning and

future life. Therefore, the majority of respondents indicated that formative assessment is very effective (59%).

5. What advantages do you see in using formative assessment? (Fig. 5)

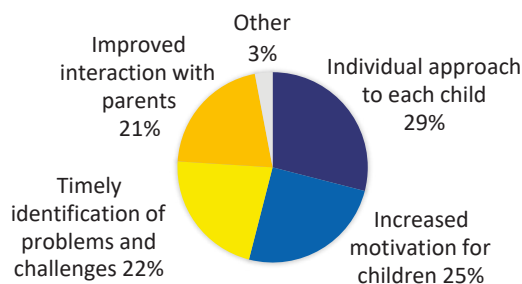


Figure 5. Results of respondents' answers to the fifth question

Source: compiled by the authors based on own research

The responses provided by the participants suggest that formative assessment offers many advantages, making it an effective tool in the educational process. These include improving the quality of learning, increasing motivation, an individualised approach, reducing stress, and providing feedback for teachers and parents.

6. What difficulties do you encounter when using formative assessment? (Fig. 6)

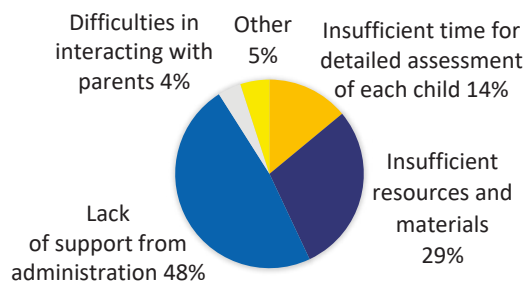


Figure 6. Results of respondents' answers to the sixth question

Source: compiled by the authors based on own research

To overcome the aforementioned challenges associated with formative assessment, the following measures can be taken. Firstly, to address the lack of resources, it is advisable to utilise freely available online resources, educational platforms, and materials. Secondly, to improve interaction with parents, regular meetings and workshops should be organised for parents, explaining the importance and benefits of formative assessment. It is essential to provide parents with clear and understandable information about the assessment process and the outcomes it can yield for their children. Thirdly, to avoid difficulties in assessing each child, it is advisable to use technology and specialised software to automate part of the assessment process. Fourthly, to obtain support from the administration, regular meetings should be held with the school administration, discussing the advantages of formative assessment and its impact on the quality of education. It is important to provide

specific examples of successes and achievements that have been attained through formative assessment. Additionally, it is possible to initiate the creation of working groups or committees that will support and implement this approach in the educational process.

7. How do you address these challenges? (Fig. 7)

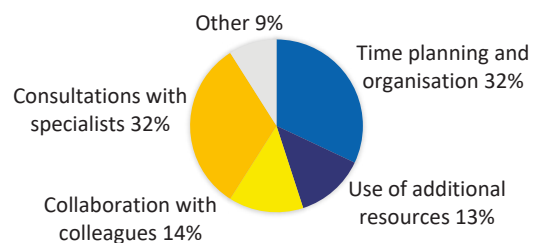


Figure 7. Results of respondents' answers to the seventh question

Source: compiled by the authors based on own research

If all methods are used in combination to overcome problems and difficulties, then it is possible to resolve them and thereby continuously improve formative assessment as a method for developing preschool children.

8. Do you require additional training or support regarding the use of formative assessment methods? (Fig. 8)

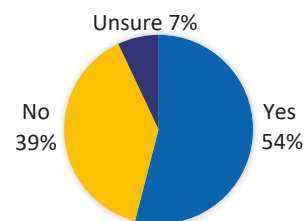


Figure 8. Results of respondents' answers to the eighth question

Source: compiled by the authors based on own research

While using formative assessment may not require additional training or support for educators, it is beneficial to attend specialised training and seminars to master formative assessment techniques. This includes learning how to develop assessment criteria, use technology to collect and analyse data, and provide effective feedback to students.

9. How often do you assess children in your group? (Fig. 9)

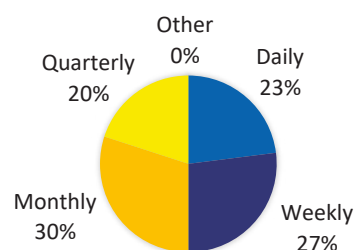


Figure 9. Results of respondents' answers to the ninth question

Source: compiled by the authors based on own research

Children in groups are assessed with the following frequency: weekly 27%, daily 23%, monthly 30%, and quarterly 20%. Importantly, any frequency is correct and necessary. There is no strict mechanism regarding the regularity of formative assessment. The final question, “What

are your recommendations for improving the assessment process in preschool institutions?”, was open-ended. By analysing the various recurring responses from educators, they were systematised into Table 2 according to the frequency of repetition.

Table 2. Results of educators’ responses on improving the assessment process

No.	Recommendation	Description
1	Individual approach	Taking into account the unique needs and abilities of each child for more accurate assessment
2	Observation of play	Assessing a child’s development through their play and interaction with others
3	Regular feedback with parents	Constantly informing parents about the child’s progress for joint decision-making on next steps
4	Creation of a positive emotional climate	Providing a comfortable environment for the child so they feel confident and can realise their potential
5	Use of technology	Utilising educational apps and programmes for a more interactive and engaging assessment process
6	Collaboration with other educators	Sharing experiences and methods among educators to improve the quality of assessment
7	Considering emotional and social development	Assessing not only academic knowledge but also emotional stability and social skills
8	Combining different assessment methods	A combination of observations, interviews, tests, and creative tasks for a comprehensive assessment

Source: compiled by the authors based on own research

Based on the data obtained, it was found that 89% of educators in the selected preschool educational institutions actively use formative assessment, indicating its high popularity and recognition among them. However, for its successful implementation, support from the administration, provision of necessary resources, and continuous professional

development of educators are required. An anonymous survey of parents of children also consisted of 10 questions regarding their perception of formative assessment, the level of satisfaction with their child’s development, and participation in the educational process. After analysing the obtained data, the results are presented in Table 3.

Table 3. Results of the parent survey in quantitative terms

Question	Responses	
	Yes	No
Are you satisfied with the quality of education provided by the preschool educational institution?	24	6
Do you believe that formative assessment contributes to your child’s development?	29	1
Do you receive regular feedback on your child’s progress?	13	17
Do you participate in parent meetings and other institutional events?	15	15
Do you believe that the preschool provides a supportive environment for your child’s development?	21	9
Are you satisfied with the teaching methods used in the institution?	26	4
Are you satisfied with your child’s social development in the institution?	27	3
Are you satisfied with your child’s intellectual development in the institution?	25	5
Are you satisfied with your child’s emotional development in the institution?	29	1
Do you believe that preschool contributes to the development of positive moral qualities in your child?	30	0

Source: compiled by the authors based on own research

Overall, parents highly appreciate the quality of education, teaching methods, and the level of development of their children in PEIs, and they have a particularly positive attitude towards formative assessment. However, some aspects, such as regular information about children’s

progress, require improvement. Observations of the teaching process and adherence to formative assessment in the selected preschools were assessed based on four criteria, with each criterion defined by three levels: high “+”, medium “+/-”, and low “-” (Table 4).

Table 4. Results of observations of children's learning and assessment in PEIs

	Individual approach to each child	Systematic and regular assessment	Active interaction with parents	Support for emotional and social development
Preschool educational institution No. 712	+	+	+/-	+
Preschool educational institution No. 424 "Chaika"	+/-	+	-	+
Childcare facility "Yaponskyi sad"	+	+	+/-	+

Source: compiled by the authors based on own research

All three PEIs demonstrate a high level of support for children's emotional and social development and carry out systematic and regular assessments. The most varied results were observed in the criteria of an individualised approach and active interaction with parents, where levels ranged from high to low. Observations of children were conducted to study their behaviour and reactions to formative assessment in various situations, including play, learning activities, and interactions with adults. Children demonstrated a high level of activity and creativity during play. The following behavioural patterns were observed: cooperation in group games, leadership qualities in individual children, and instances of conflict, which were usually resolved independently or with the help of adults. They exhibited varying levels of interest in learning activities. Most children were focused and active, but some required additional motivation and support. Children responded positively to feedback from adults. They quickly acquired new skills and adjusted their behaviour according to the recommendations received. An individualised approach allowed for a better understanding of the needs and characteristics of each child. Children who received individual consultations demonstrated a higher level of motivation and academic success.

To understand the approaches to assessing children in preschool institutions, an analysis of the preschools' internal documents was conducted, such as curricula, methodological recommendations for assessment, and children's development reports. It was found that preschool institution curricula are generally aimed at the child's all-round development. They include areas such as physical, cognitive, emotional, and social development. Curricula are often divided into different age groups, taking into account the specific needs and abilities of children. Methodological recommendations for assessing preschool children describe various methods and approaches to assessment, including observations, conversations, analysis of children's work, and testing tasks. Formative assessment, which focuses on the learning process rather than just the results, is emphasised. Children's development reports reflect the dynamics of each child's development throughout the academic year. They are compiled based on regular observations and assessments, as well as conversations with parents.

Based on the analysis of the activities of selected preschool education institutions, educators, parents, and children, prospective directions for developing an

effective assessment system for preschoolers have been identified: integration of technology in assessment (electronic platforms allow for the automation of data collection and analysis on children's development), individualisation of assessment approaches (individual learning plans, developed based on assessment results, allow for the adaptation of the learning process to the needs and abilities of children, promoting their harmonious development), personalised formative assessment (involves continuous monitoring of the child's achievements and difficulties, with adjustments made to teaching strategies according to their needs), collaboration with psychologists and specialists (ensures a comprehensive approach to assessing children's development), and educational programmes for parents (help explain the importance and methods of assessment and can foster better understanding and cooperation with educators).

DISCUSSION

The obtained percentage of responses indicating that systematic assessment is an integral part of ensuring proper education in this study confirms the opinions of researchers K. Krzysztofik (2024) and S. Nivins *et al.* (2024). It allows for monitoring the effectiveness of the preschool institution and ensuring compliance with standards. As revealed, assessment has a significant impact on the emotional level of children, particularly in shaping their self-esteem. Positive feedback and support from others develop self-confidence. Various assessment systems are used in preschool educational institutions to determine the level of children's development and the effectiveness of the educational process itself, however, formative assessment should be considered the most effective.

Research by scientists confirms the importance of assessment systems in preschool educational institutions and their impact on child development. In particular, the issue of early childhood assessment is uncertain and has both positive and negative aspects. On the one hand, research has shown that appropriately designed assessment systems can contribute to the early identification of children's abilities and developmental problems. This allows educators and parents to adjust the learning process in a timely manner and provide the necessary support to the child. These assessment systems must be flexible enough to take into account the individual characteristics of each child. After all, standardised approaches may not always

reflect the actual level of knowledge and skills of pupils. Moreover, the effective use of such systems requires highly qualified teachers who can correctly interpret the results and adapt the learning process to the needs of each child.

On the other hand, researchers V. Bedeković & M. Zeleničić (2022) and C. Cohrsen *et al.* (2024) warn about the potential negative impact on children due to an excessive focus on grades, which can lead to stress, decreased motivation, and self-esteem. The research confirms the above information and emphasises the importance of an individualised approach to each child, as standardised assessment methods do not always take into account the unique developmental characteristics and needs of each child, which can lead to incorrect conclusions and actions. This research, in comparison with the arguments of scientists, supports the idea of formative assessment, which involves ongoing monitoring and feedback. Such assessment helps to understand how a child learns and develops, and not just what they know or can do at a particular point in time. The assessment system should not displace play activities, which are the primary activity for preschoolers and an important means of their development. Play contributes to the development of creative thinking, social skills, and emotional resilience.

This research highlights the need to acknowledge the significant role of educators and parents concerning the assessment process. Their support and understanding are crucial for creating a supportive environment where a child can develop without fear of judgment. This study adds to the arguments about assessment systems in preschools, which should be well-considered and focused on supporting a child's all-round development. Assessment must be not only a means of measuring achievement but also a tool for improving the learning process and creating favourable conditions for children's development. Research by prominent scientists such as A. Chandio & M. Ali (2019), and K.F.B. Strooband *et al.* (2023) helps to understand how early assessment can contribute to identifying gifted children, as well as those who require additional support. This allows for the timely provision of necessary assistance and support for the development of each child. They determine that assessment can have a significant impact on the self-esteem, motivation, and emotional state of children. The research helps to understand how to create assessment systems that minimise stress and promote a positive emotional climate.

The study of the effectiveness of various assessment methods presented in this research and scientific research by A. Demangeon *et al.* (2023) enables educators to implement more sophisticated approaches in their work, contributing to better acquisition of knowledge and skills by children. In particular, such studies help to develop assessment systems that take into account the individual developmental characteristics of each child. This contributes to the creation of more personalised and effective learning programs. Notably, early experiences with assessment can influence attitudes towards learning throughout life. It is important to investigate how to create positive

assessment conditions that will foster a positive attitude towards learning and motivation for self-development.

The results found in this study contradict the views of J. Dockrell *et al.* (2024) regarding the significant impact of assessment systems on the development of social skills and cognitive abilities. An important aspect is understanding how these systems affect children's interactions within a group and their ability to cooperate and solve problems. The results of this study correlate with the views of M. Erfan *et al.* (2020) regarding the possibility of developing educational policies and standards that ensure fair and effective assessment of children in preschools. Moreover, the analysis of the effectiveness of assessment systems helps to improve the overall quality of early childhood education, ensuring better outcomes for children and society as a whole.

This research identifies the need to create favourable conditions for children's development and improve the quality of education in preschool institutions. The problem of assessment systems in preschool educational institutions and their impact on child development is more relevant than ever. In modern world, approaches to education are constantly changing, including assessment methods. Studying and improving these approaches helps to ensure more effective learning and development of children, following the latest scientific research and practices. In many countries, there is a growing focus on the importance of early childhood development. Assessment at the early stages of a child's life can have a significant impact on their future academic success and social adaptation. More and more preschool educational institutions are implementing inclusive programs where children with diverse developmental needs learn together. Assessment systems must be adapted to meet the needs of all children, making research on this topic extremely important. The research of N. Bikić *et al.* (2024) links the relevance of this topic to the constant striving to improve the quality of education. Effective assessment systems help educators better understand the needs and progress of children, contributing to a more personalised and effective approach to learning. Contemporary society faces rapid social changes that affect the structure and functions of the family, society, and educational institutions. Assessment systems must take these changes into account and help children adapt to new conditions. Assessment in PEIs is important for preparing children for further schooling. It helps to identify a child's strengths and weaknesses to ensure a continuous and successful educational process. Obviously, assessment results can be an important tool for parents, helping them better understand their child's development and support their learning at home.

Discussions regarding assessment systems in PEIs and their impact on preschoolers' development are critically important for building effective assessments to ensure the comprehensive and harmonious development of children in contemporary settings. Preschool children develop at different rates, and it is important to understand that

standardised assessments may not account for the individual characteristics of each child, leading to inaccurate conclusions about their abilities. This research has found that assessment helps determine a child's readiness for school. However, researchers L. Salaroli *et al.* (2024) and Gao *et al.* (2024) argue that school readiness should focus more on the development of social and emotional skills rather than academic achievement. Both educators and parents may feel pressure to achieve certain results. This can influence their approach to raising and educating children.

The aforementioned aspects form the basis for discussions on how to strike a balance between assessment and children's natural development, providing them with the best conditions for growth and learning. Contemporary researchers and their studies help to develop more effective and child-sensitive assessment systems that contribute to their harmonious development and preparation for further learning. This research refutes the opinions of other researchers and identifies priority directions for developing an assessment system for preschool children in modern conditions.

CONCLUSIONS

Assessment systems in preschool education institutions contribute to the allround development of children, fostering motivation, confidence, and an individualised approach to learning. Assessment in PEIs is a key tool that promotes children's holistic development, improves the educational process, and ensures highquality early childhood education. It has been found that formative assessment is considered the most effective due to its regularity, flexibility, and ability to provide timely feedback. Based on the analysis of data, conclusions have been drawn regarding the effectiveness of existing assessment methods and the main problems and difficulties have been identified.

Recommendations have been developed to improve the assessment process, which may include the introduction of new methods, the professional development of educators, the involvement of parents in the assessment process, and the use of modern technologies. Research on the topic of early childhood assessment through interviews and questionnaires has made it possible to develop practices, identify its strengths and weaknesses, and develop effective strategies for improving this important aspect of early childhood education.

Research into assessment systems for preschool children holds great potential for improving the quality of teaching and upbringing. The integration of modern technologies, comprehensive approaches, the professional development of educators, the active role of parents, and the introduction of alternative assessment methods are promising directions that can significantly improve the effectiveness of this process. Further research in these areas will contribute to the creation of a more comprehensive assessment system, promoting the harmonious development of children, preparing them for continued learning and life. However, like any other study, it has its limitations, namely, the age and individual characteristics of children. Preschool age covers a wide range of development, and assessment may vary for children of different ages within this group. Views on child development and learning can vary significantly. Prospects for further research include increasing the age range and the number of preschool children.

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CONFLICT OF INTEREST

None.

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Ефективність систем оцінювання якості дошкільної освіти для особистісного зростання дошкільника

Анотація. Мета дослідження полягала у аналізі ефективності систем оцінювання та їх впливу на розвиток та удосконалення навичок дітей дошкільного віку. Ефективна система оцінювання сприяє розвитку когнітивних, соціальних та емоційних навичок дитини. Виокремлено різні підходи до оцінювання, їх ефективність та вплив на емоційний і когнітивний розвиток дітей. Розглянуто рекомендації щодо покращення оцінювання для забезпечення гармонійного розвитку дитини. У дослідженні проведено збір даних для системи оцінювання дітей дошкільного віку, який складався із декількох етапів: спостереження, анкетування, інтерв'ю, обробка даних. Важливим аспектом є те, що у закладах дошкільної освіти використовуються різноманітні системи оцінювання, які допомагають визначити рівень розвитку дітей та ефективність самого освітнього процесу. У статті проаналізовано основні види оцінювання, які включають діагностичне, формувальне, підсумкове, комплексне оцінювання та їх характеристику. Усі процедури були узгоджені з адміністрацією дошкільних закладів та етичним комітетом відповідної дослідницької установи. Окрема увага приділялась ролі педагогів та батьків у процесі оцінювання, а також тому, як зворотний зв'язок може сприяти покращенню навчальних результатів та підвищенню мотивації до навчання. На основі аналізу емпіричних даних визначено найефективніші практики оцінювання, що забезпечують гармонійний розвиток дитини в дошкільному віці. Подано інформацію про формувальне оцінювання, яке вважається найбільш ефективним. Виявлено, що саме формувальне оцінювання вважається найбільш ефективним через свою регулярність, гнучкість і здатність забезпечувати оперативний зворотний зв'язок. Отримані результати дослідження можуть бути використані вихователями з метою удосконалення системи оцінювання у відповідному закладі дошкільної освіти

Ключові слова: розвиток дошкільника; вміння та навички; методики оцінки; навчальні результати; спостереження; тестування