

# **Kindergarten Teachers' Perception on Preschoolers' Formative Assessment**

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# Kindergarten Teachers' Perception on Preschoolers' Formative Assessment

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## Abstract

### Keywords:

formative assessment, kindergarten teachers, qualitative study

Formative assessment is a primary process within the preschool education system because it contributes to the optimization of the instructional actions carried out by the teacher. Working directly with preschoolers need to lead to a constant observation of their evolution, progress, development. Assessment in early childhood should be performed for the primary aim of supplying teachers with useful information to plan more careful children's ongoing development and to involve evaluation strategies that develop rather than threaten children's feelings of self-confidence and positive social attitudes. Kindergarten teachers are important catalyst for developing opportunities to increase preschoolers' abilities, knowledge and validate/improve their performances through formative measures in terms of assessment. This study is conducted to investigate teachers' perceptions on formative assessment in kindergarten. Through a focus group we planned to gather responses of 12 kindergarten teachers, therefore our approach presents results of this analysis. At the same time, present article emphasizes on importance of using different formative instruments and methods in order to facilitate children progress and knowledge development along the way in the didactic process.

## Zusammenfassung

### Schlüsselworte:

formative Beurteilung; Kindergärtnerinnen; Qualitative Studie

Die formative Beurteilung ist ein primärer Prozess im vorschulischen Bildungssystem, da sie zur Optimierung der vom Lehrer durchgeführten formativen Maßnahmen beiträgt. Die direkte Arbeit mit Vorschulkindern muss zu einer ständigen Beobachtung ihrer Entwicklung, ihres Fortschritts und ihrer Entwicklung führen. Die Beurteilung in der frühen Kindheit sollte mit dem vorrangigen Ziel durchgeführt werden, Lehrern nützliche Informationen zu liefern, um die weitere Entwicklung der Kinder sorgfältiger planen zu können, und Beurteilungsstrategien einzubeziehen, die das Selbstvertrauen und die positive soziale Einstellung der Kinder fördern und nicht gefährden. Kindergärtnerinnen sind wichtige Katalysatoren für die Entwicklung von Möglichkeiten, die Fähigkeiten und das Wissen von Vorschulkindern zu erweitern und ihre Leistungen durch formative Beurteilungsmaßnahmen zu validieren/verbessern. Diese Studie wird durchgeführt, um die Wahrnehmung von Lehrern zur formativen Beurteilung im Kindergarten zu untersuchen. Im Rahmen einer Fokusgruppe wollten wir die Antworten von 12 Kindergärtnerinnen sammeln. Daher stellt unser Ansatz die Ergebnisse dieser Analyse dar. Gleichzeitig betont der vorliegende Artikel die Bedeutung des Einsatzes verschiedener Bildungsinstrumente und -methoden, um den Fortschritt und die Wissensentwicklung der Kinder im Laufe des didaktischen Prozesses zu erleichtern.

## 1. Introduction

Preschoolers from kindergarten need to have the opportunity in experiencing effective assessment that encourage their learning and development, they have the right to be assessed under formative cases responsive to their requirements. They enter the educational system with specific needs, interests, learning styles and some meanings of the world (Buldu, 2010). On the other hand, parents develop their own perspectives on what is useful for their children and have expectations for learning experiences of their children in the middle of kindergarten classrooms and for evaluation practices used by teacher in order to assess children's competencies.

Therefore, teachers have the responsibility to meet each child needs using objective assessment tools.

Teachers experience various interactions with these children in order to capture the meaning and of what/how they learn as well as how they adapt at world's developmental challenges.

Nowadays, there is an increased interest surrounding the issues of assessment in early childhood. Assessment of children's development and learning in early childhood settings is both informal and conducted in a methodical way, with a focus on evaluating learning as a product, not a process (Krechevsky & Stork, 2000). Early childhood care has been integrated into the wide formal educational system due to educational reform; moreover, it became compulsory before proceeding to primary school. It has been proven that early childhood education is an essential foundation in children life



development, both cognitively and socially (Asare, 2015), especially in today's society dynamic progress. We conclude that every teacher who wants to implement formative assessment must reconstruct the traditional didactic approach to develop skills and practices acquired by his pupils (Black & William, 2010)

## 2. Theoretical foundation

Formative assessment has been defined as “activities undertaken by teachers—and by their students in assessing themselves—that provide information to be used as feedback to modify teaching and learning activities” (Black & William, 2010, p. 82). Formative assessment aim is primarily to educate and improve child performance, not supervise it (Dixson, 2016). In addition to delivering an ongoing source of data to educators about current preschooler understanding so that they can adjust teaching to maximize children learning, formative assessments are also used to develop instruments and methods to improve child learning (Shepard, 2006).

“Teachers of young children are moving from more traditional strategies of assessing for knowledge and facts to assessing the students' ability to reason and solve problems” (Worham, 2005:13). Formative assessment gathers information about student learning in order to facilitate knowledge development. Teachers are exploring different didactic manners and assess preschoolers to ensure that teaching and learning become more meaningful to both teacher and learner. Formative tools are being used during a lesson or unit of study. It is constantly used to provide descriptive feedback, to track children progress, to make changes into instruction process, to improve formative process. Most frequently used formative methods are observations, homework question and answer sessions, self-evaluations, portfolios, reflections on performance, curriculum-based measurement games, discussions, informal interviews (Lungu et al., 2021). Planned formative assessments also include activities such as quizzes that are assigned to assess child progress.

Furthermore, some studies (Gullo & Hughes, 2011; Pyle et al. 2020) indicate four main priorities for assessment actions in kindergarten: (1) assessment of children learning should be a continuous process; (2) assessment should involve multiple formats (observation, conversations) suitable for different children; (3) evaluation should describe children's learning toward academic standards and developmental targets; (4) assessment must develop a

child-centred approach and developmentally appropriate practices.

When placed in kindergarten, assessment involves collecting evidence of children progress toward curricular goals in order to draw conclusions regarding their achievement (summative assessment). On the other hand, assessment means more than that and we can underline the difference between assessment of learning and assessment as learning (Braund et al., 2021; de Luca et al., 2019).

Assessment for learning and assessment as learning practices are developed to be child centred and involves regulation of their cognitive processes; they are active participants in bridging assessment and learning. Assessment for learning is a process where formative aspects are just a purpose because the focus is on collecting data in the present moment. Assessment as learning is a key function of assessment in the early years as developing learning independence is one of the main aims of kindergarten education (Pyle et al. 2020, p. 2258). When projected to enhance the instructional process, assessment means gathering information on children learning in an ongoing manner in order to develop teaching practices. Also, children can be engaged in monitoring their learning having the teacher feedback in order to support their independence through metacognitive and self-regulation development.

Formative assessment practices are growing in early education policies as core elements of kindergarten learning contexts. Teachers are integrating assessments throughout their teaching because formative assessment represents daily actions implemented by teachers. Therefore, kindergarten teachers are required to integrate evaluation throughout their daily practice in order to identify children's learning objective and assess learning toward academic and developmental standards (Roach et al., 2010). Formative assessment is the process of gathering data about student learning, which results in feedback to adjust instruction and inform student learning on the way. It is important to note that both teachers and students can be active agents throughout formative assessment (Braund et al., 2021).

In kindergarten, formative assessment involves daily practices that enable teachers and preschoolers to observe learning toward standards (conversations about learning intentions, aims, instruments or self-assessment). This kind of practices necessarily involve that teachers will make learning visible (noticing and

naming) by elaborating learning goals, monitoring learning and giving feedback more frequently.

### 3. Research methodology

Our research aimed to identify kindergarten teachers' perception about the formative assessment used in early education system. This qualitative study was carried out through an exploratory approach, using the focus group method and applying the categorical thematic content analysis. In this regard, we gathered information about formative assessment in kindergarten. Therefore, for each theme we develop some categories that describe the opinion about what formative assessment means.

#### 3.1. Objective

Analysis of preschool teachers' perception about formative assessment in kindergarten.

#### 3.2. Participants

All 12 participating teachers were women with a working experience in preschool between 5 and 18 years. The teaching staff gave their informed consent to participate and they were informed about the data recording and the confidentiality of the data usage.

#### 3.3. Data Collection and Analysis

The focus group is based on the requirement to gather information that will help understanding formative assessment applied in kindergarten. The following stages were completed:

- 1) Develop an organizing focus-group;
- 2) Transcript of discussion;
- 3) Apply the thematic categorical analysis.

#### 3.4. Research Tool and Procedure

First, discussions were preceded by integrating the participants within the group (each of them was asked to introduce themselves). The participants were given a time of 10 minutes for getting to know better the moderator and other group members.

Next, the moderator presented the discussion topic, the reason why the participants were brought together in the focus group, the research topic, the scientific relevance of discussion and usefulness of the obtained results. Participants received assurances regarding the anonymity and confidentiality of information and opinions they expressed. Group discussion lasted between 30-40 minutes. We have developed an interview guide based on open questions that offer the opportunity for the teaching staff to freely express their opinions and attitudes regarding

the proposed subject, questions formulated in close connection with the initially established objectives.

The interview was structured in 5 relevant questions addressed and structured on the following dimensions:

1. Analysis teachers' perceptions regarding the importance of formative evaluation.
2. Identify the advantages of formative evaluation.
3. Describe effective formative assessment methods.
4. Detect disruptive factors in the formative evaluation process.
5. Elaborate solutions through which we can make formative assessment more efficient.

### 4. Results

A mixed categorical thematic content analysis was created, following the recording of answers to interview guide questions addressed to participants.

Here are the questions and the future themes and categories:

1. Analysis of teachers' perceptions regarding the importance of formative evaluation.
  - What is the importance of preschool formative assessment in kindergarten from your point of view?
  - What are the attributes of an effective preschool formative assessment in your view?
2. Identify the advantages of formative evaluation.
  - What are the advantages and barriers/limitations of formative assessment in kindergarten?
  - How does formative assessment influence children's development/progress?
3. Identify effective formative assessment methods.
  - Describe the most effective formative assessment methods.
  - What effective formative assessment methods are you using?
4. Identify obstacles in fair formative evaluation process.
  - What are the obstacles in conducting an objective formative evaluation?
5. Identify solutions through which we can make the formative evaluation more efficient.

- What are the reasons why some preschoolers do not acquire the minimum knowledge and what methods should be applied to prevent stagnation?
- What solution should be applied to prevent ineffective formative assessment?

Table 1. Theme and categories of the responses to research question 1

| Theme  | Category  | Relevant response/Frequency  |
|--|---|--|
| Analysis teachers' perceptions regarding the importance of formative evaluation. | Importance of preschool assessment in kindergarten        | <ul style="list-style-type: none"> <li>- formative assessment aims to measure children's knowledge in short periods of time and to notice the learning process efficiency;</li> <li>- is a key factor in planning of instructional activities. Through this process, we know clearly from which level we start and which aspects must be followed in order to improve them;</li> <li>- involves designing and organizing instructional activities to assess children's knowledge in order to conduct them towards good results and performances;</li> <li>- in kindergarten, it reflects ways to individualize learning, to facilitate knowledge acquiring, but above all to train younger generation integrating into a dynamic and demanding society;</li> <li>- it creates a link between the completed stage in accomplish pedagogical objectives and the next one;</li> <li>- it helps preschoolers consolidate knowledge through repetition and validation; it stimulates and conducts learning, contributes to self-esteem development and discourages negative behaviours;</li> <li>- encourage teachers to design instruments that facilitate adapting pedagogical content to children's needs, to discover learning gaps and to design remedial activities;</li> </ul> |
|  | Attributes of an effective preschool formative assessment | <ul style="list-style-type: none"> <li>- attributes are determined by the person applying the assessment - teachers must take responsibility for pedagogical content to children's needs;</li> <li>- main attribute is to fairly determine child's progress and establish their developmental level;</li> <li>- effective assessment means taking into account other indicators besides cognitive performances, such as behavior, social attitude, emotional development and turning the child into a permanent partner of the educator;</li> <li>- teacher must describe assessment as a playful task, not as a</li> </ul>  |

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|  |  | punishment. |
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Responses given by participants indicated a fundamental role attributed to formative evaluation which is considered a key factor in planning school contents according to the daily learning needs of preschoolers. Also, it is considered to stimulate and conduct learning, encourage self-esteem development and it can be set up as a playful task due to preschooler's age. Teachers reported that formative assessment encourage them to design instruments that facilitate adapting pedagogical content to children's needs, to discover learning gaps and to design remedial activities. Teachers are aware that many social, emotional, intellectual factors can arise in preschoolers' personality development, so that formative assessment has to take into account all these external conditions.

Table 2. Theme and categories of the responses to research question 2

| Theme   | Category   | Relevant response/Frequency  |
|---|--|--|
| Identify the advantages of formative evaluation | Advantages and limitations of formative assessment in kindergarten         | <ul style="list-style-type: none"> <li>Advantage: adapts pedagogical content to actual learning needs (x2);</li> <li>A: improves learning process day by day (x2);</li> <li>A: familiarizes children with different assessment contexts;</li> <li>A: stimulates self-knowledge, self-appreciation;</li> <li>A: develops communication with families;</li> <li>Limit: educators can be influenced by subjective factors (x2), some children are shy or refuse to cooperate;</li> <li>L: does not deliver enough information in order to know the real potential (x2);</li> <li>L: formative assessment only allows short-term predictions about child's cognitive and behavioural development;</li> </ul> |
|   | The influence of formative assessment on children's development / progress | <ul style="list-style-type: none"> <li>L: external factors which can influence formative aspects;</li> <li>- formative assessment aims to establish day by day the cognitive and behavioural acquisition level and to design remedial learning activities when necessary (x2);</li> <li>- it gives valuable information about what children need in everyday school interaction;</li> <li>- following the results obtained by preschoolers, it is necessary to establish additional training programs for those with very good academic results and recovery programs for those with poor</li> </ul>   |

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|  | academic results (x2);<br>- influences consists in identifying children's learning competencies, the level of knowledge, skills and socio-cognitive abilities required;<br>- through evaluation, educators prepare the child for a functional integration in school, but also can fundament the bases for following his progress after finishing kindergarten;<br>- help children to recover pedagogical content that was not appropriated. |
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Most mentioned advantages surprised the possibility of filling learning gaps on the go, during the teaching process and initiate remedial measures. Regular discussions with families about the child's results intensifies the cooperation between school and parents, an aspect that facilitate complete development of the child personality. On the other hand, some respondents consider that assessment along the way do not deliver enough information in order to know the real child potential.

The formative assessment influence on children's development/progress consists in offering valuable information about what children need in everyday school interaction. Also, teachers reported that following the evaluation results obtained by preschoolers, it is necessary to establish additional training programs according to preschooler's level.

Table 3. Theme and categories of the responses to research question 3

| Theme  | Category   | Relevant response/Frequency   |
|--|--|---|
| <b>Describe effective formative assessment methods</b> | The most effective formative assessment methods used by teachers in kindergarten | - an objective assessment involves a plurality of methods because when you have a lot of instruments used it accurately captures all the child's abilities;<br>- I most frequently apply didactic game;<br>- observing children during their daily routine represents the organized, systematic, long-term image of children's behaviour in various situations. It involves setting a goal, developing a plan, specifying the tools, recording the data, interpreting them from a pedagogical point of view (x4);<br>- didactic instruments and methods like gallery tour, storytelling chair, pyramid, cube (x2);<br>- practical works, portfolios with children's works (drawings, paintings, collages) |

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|  | (x3), verbal evaluations, self-evaluation, didactic play (x4), role-playing games;<br>- day by day pedagogic conversation with verbal feedback (x2);<br>- graphical recording of preferences: allows sampling and interpretation of the data obtained about each child, by highlighting the areas of interest, child preferences, but also the areas where he encounters difficulties;<br>- instruments that mark the progress they have made in small time units.<br>- assessment sheets (x4). |
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According to the content analysis, using different assessment instruments for formative aim assures accurate captures all the child's abilities and marking the progress made in small time units. Teachers reported that they use diverse tools for preschoolers, such as: practical works, portfolios with children's works (drawings, paintings, collages), verbal evaluations, self-evaluation, didactic play, role-playing games, assessment sheets, storytelling chair, pyramid method, cube method. Responses included references to planning the formative assessment process: it involves setting a goal, plan developing, specifying the tools, data recording, interpreting them from a pedagogical point of view. Teachers also reported to have used formative assessments such as homework, oral questioning, collection of samples, portfolios and interview guides.

Table 4. Theme and categories of the responses to research question 4

| Theme  | Category  | Relevant response/Frequency  |
|--|---|--|
| <b>Detect disruptive factors in the formative evaluation process</b> | The obstacles in conducting a fair formative evaluation | - some obstacles could be overestimation or underestimation of results, factors related to organizational environment;<br>- the lack of fairness of the teaching staff who apply the assessment (x2);<br>- assessment tests that are not adapted to age or personal characteristics of preschoolers;<br>- nature of assessment tests, tools used, the educator's expectations;<br>- influence of teacher's general impression of a preschooler knowledge level;<br>- teacher's behaviour to avoid the extremes of the grading scale due to the desire not to make mistakes and not to depreciate the children;<br>- wrong choice of evaluation methods and strategies in relation to the assessment aim; |

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|  |  | <ul style="list-style-type: none"> <li>- some particularities of the teacher-preschooler relationship;</li> <li>- direct influences of the social environment in which children grow;</li> <li>- some influences due to the pedagogical context in which the assessment is carried out;</li> <li>- lack of cooperation between educator and preschoolers.</li> </ul> |
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Participants' responses indicated multiple obstacles that can interfere with an objective formative assessment process, such as: overestimation or underestimation of results, teaching staff lack of fairness, didactic tools used, the educator's expectations, particularities of the teacher-preschooler relationship, teacher's general impression of a preschooler, instruments not adapted to age or personal characteristics of preschoolers. At the same time, teachers are aware that assessment at early ages involves taking into account the influence of some factors like emotional development or cultural aspects.

Table 5. Theme and categories of the responses to research question 5

| Theme  | Category  | Relevant response/Frequency  |
|--|---|--|
| <b>Elaborate solutions through which we can make the formative evaluation more efficient</b> | Reasons why preschoolers do not reach the minimum knowledge level | <ul style="list-style-type: none"> <li>- no progress is recorded when preschoolers who are absent a lot (x2), those who are hyperactive (x2) or who have other social problems;</li> <li>- preschooler's medical problems (x2);</li> <li>- intellectual disorders or deficiencies; sensory and motor disorders; visual perceptual disorders; auditory perceptual disorders; language disorders; attention and concentration deficits; impulsivity.</li> <li>- action solutions for teachers and parents: managing time allocated to the child; emphasis on learning and self-control; establishing a clear activity program; using a system of symbolic rewards and sanctions for desirable or undesirable behaviours; using clear addressing formulas;</li> <li>- it is important that the educator makes sure that child's attention is drawn before relevant explanations regarding work tasks are transmitted to him;</li> <li>- increasing time spent with their family;</li> </ul> |

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|  |  | <ul style="list-style-type: none"> <li>- lack of adequate intellectual training;</li> <li>- states of fatigue and overwork;</li> <li>- absence of breaks between activities;</li> <li>- non-compliance with the principle of progressive dosing (decreasing the intensity of effort during the day and the week);</li> <li>- large volume of knowledge that must be acquired in a short time;</li> </ul>  |
|  | Solution applied to prevent ineffective formative assessment | <ul style="list-style-type: none"> <li>- set out the accurate goals, establishing some behaviours that interest us, observe in as varied conditions as possible, different places and different times, avoiding interpretations or subjective labels, taking notes about important new aspects for the child's development;</li> <li>- we can prevent stagnation by setting clear short-term goals, remedial plans tailored to the needs of each preschooler;</li> <li>- remedial instruments (3);</li> <li>- improvement of the formative assessment instruments and methods leads to complete achievement of real school progress;</li> <li>- the formative assessment aim is not to reach certain data, but to improve the educational process;</li> <li>- preschoolers constantly need new and interesting methods, so that they become active in the teaching-learning-evaluation process. Interactive methods create skills, facilitate learning at one's own pace, stimulate cooperation, not competition and are attractive also;</li> <li>- being a fair examiner involves exercise and self-control.</li> </ul> |

Teachers' responses mentioned as reasons why preschoolers don't achieve minimum knowledge level the following: when they don't attend kindergarten for a long time, those who are hyperactive, who have other social/medical intellectual/sensory/motor/language attention and concentration deficits; impulsivity. At the same time, they proposed some solution for erasing obstacles in formative assessment: set out the accurate

goals, establishing some behaviours that interest them, taking notes about important new aspects for the child's development, constantly applying new instruments to assess children progress.

## 5. Discussions

Formative assessments occur in two primary forms: spontaneous and planned. Spontaneous formative assessments are improvisation, such as: (a) when a teacher notice misunderstanding in the body language of child during a class session and discuss about that; (b) when an educator calls on a child to provide an example of a concept just covered; (c) when question and answer sessions are conducted during a lesson (Dixson, 2016). These kind activities and tools provide relevant information about preschoolers' learning in "real time."

Formative assessment should be used during instruction to help students learn material throughout the learning process. Formative assessment develops preschoolers' success on these more summative assessments by providing ongoing and continuous feedback on where children are in their lesson learning path.

Continuous evidence from classroom didactic discourse, observation and analysis of preschoolers' in-process working and social interactions, formal checks afford the diagnostic information teachers and child need to take immediate steps to fill in any gaps and keep children on the pathway to success. The evidence gathering of formative assessment may utilize both formal and informal methods and be more dynamic, interactive and individually oriented than that of summative assessment (Brookhart & McMillan, 2019).

## 6. Conclusions

Feedback to any preschooler should include specific qualities of their work, with advice on what can be improved and should avoid comparisons with other children. We conclude that the feedback on tests should offer each preschooler guidance on how to work on the improvement and offer them help on the way (Black & William, 2010). Formative assessment needs to be productive and that is the reason why children should be trained for self-assessment starting with kindergarten because this is the way they can understand main purposes of their learning and grasp what they need to do in order to achieve it.

Learning activities in kindergarten have to be developed in terms of the aims that they serve and preschoolers can work efficiently only if opportunities

for them to communicate their growing understanding are set into the planning. Discussion, observation, role play, marking of written work can be used to provide essential information, but it is also important to look at or listen carefully the conversations, the writing and the actions through which preschoolers enhance and expose their understanding level. Also, formative conversation with teacher provides the opportunity to respond and explain all the necessary aspects that has to be improved in the next learning steps.

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