# Educational Assessment

# Educational Assessment:

## *Perspectives, Strategies, and Challenges*

Edited by

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# PREFACE

Assessment is a fundamental aspect of education that plays a crucial role in shaping teaching and learning practices. It serves as a measure of student learning, an indicator of instructional effectiveness, and a bridge connecting educators, students, and parents. This book provides an in-depth exploration of various assessment strategies across different educational contexts, focusing on their impact, challenges, and potential to enhance learning experiences.

Drawing from a range of qualitative research studies, the book delves into the complexities of educational assessment, starting with early childhood education and moving to primary and middle school settings. It examines how assessment methods, when thoughtfully designed and implemented, can significantly influence not only student learning outcomes but also teacher practices and parental involvement.

In early childhood education, effective assessment methods are essential for capturing the developmental needs and learning preferences of young children. The importance of assessments that are tailored to children's social and emotional growth is highlighted, emphasizing tools such as observation, documentation, and checklists. The research underscores the value of providing regular feedback to parents, using diverse formats like learning stories and work samples, to keep them engaged and supportive of their child's development. By involving parents and focusing on holistic growth, assessments in early childhood settings can foster more supportive learning environments.

As children progress into primary education, the focus shifts to the integration of Higher-Order Thinking Skills (HOTS) in teaching and assessment practices. These skills—critical thinking, reasoning, creativity, and analysis—are increasingly recognized as essential for student success in today's complex world. However, many teachers face significant challenges in incorporating HOTS due to limited knowledge, resources, and institutional support. The book sheds light on these barriers and advocates for systemic changes, including comprehensive teacher training and a shift away from rote learning. It calls for a paradigm shift in

education that prioritizes critical thinking and problem-solving skills, thus better preparing students for future challenges.

The exploration continues with the concept of authentic assessment, which is designed to bridge the gap between classroom learning and real-world application. Authentic assessments provide students with tasks that require them to apply their knowledge and skills in meaningful contexts. While this approach has the potential to greatly enhance student engagement and learning, the research presented in the book highlights several practical challenges faced by educators, such as time constraints, resource limitations, and the difficulty of grading complex tasks. These findings underscore the need for robust support and training for teachers to effectively embed authentic assessment practices into their classrooms.

The book also considers the impact of assessment practices on parents, particularly in the context of middle school education. Parents play a crucial role in their children's academic journey, and their perspectives on assessment policies significantly influence how they support their children. The research reveals that traditional assessment methods, which often rely heavily on rote memorization and standardized testing, contribute to high levels of anxiety among parents. The findings call for a reevaluation of assessment practices to include more practical, skills-based approaches that better align with both student needs and parental expectations.

Lastly, the book addresses the role of formative assessment in primary education as a tool for enhancing learning and improving summative assessment outcomes. Formative assessments, which provide ongoing feedback to both students and teachers, are shown to be instrumental in identifying learning gaps and tailoring instruction to meet individual needs. The research emphasizes the importance of professional development and support for teachers to implement formative assessment effectively, thereby creating a more responsive and supportive learning environment.

Throughout the book, a recurring theme is the need for a more comprehensive, learner-centered approach to assessment. By highlighting the diverse challenges and opportunities associated with different assessment strategies, this book invites educators, policymakers, and researchers to rethink traditional paradigms and embrace more innovative practices that prioritize the holistic development of learners.

I hope that this book will serve as a valuable resource for those committed to enhancing the quality of education through thoughtful and effective

assessment practices. The insights shared here reflect the dynamic nature of education and the ongoing need to adapt and innovate to meet the evolving needs of students, teachers, and parents alike.

—Dr. Sarwat Nauman

# CHAPTER 1

# EFFECTIVE ASSESSMENT METHODS FOR EVALUATING THE LEARNING OF STUDENTS IN EARLY YEARS EDUCATION

## SONIA RIZWAN AND SARWAT NAUMAN

## Abstract

The purpose of this research on effective assessment methods in early childhood education is to identify and evaluate the assessment techniques that are most appropriate for young learners. The study aims to investigate the effectiveness of various assessment methods, such as observation, documentation, and checklists, in assessing the development and progress of children in early childhood education. The research seeks to provide insights into the advantages and disadvantages of various assessment methods and their impact on children's learning and development. Ultimately, the study aims to help educators make informed decisions about selecting appropriate assessment methods to ensure that young learners receive the best possible education and support for their development. A qualitative research methodology of the exploratory method was used with semi-structured interviews. The interviews were then transcribed, coded, divided into themes, and analyzed through thematic analysis. The results depicted that there are many methods to assess different learners, and the assessment has to be tailored according to learners' preferences and social and emotional development. Regular feedback should be given to parents in the form of learning stories, work samples, observation reports, and conferences to keep parents up to date and to gain their support for improving learning and social and emotional milestones.

**Keywords**: Checklists; continuous assessment; differentiation; feedback; observation; play- based learning

# Introduction

Effective assessment is crucial to evaluating students' learning and development in the early years of education. It involves collecting and analyzing data about children's knowledge, skills, and attitudes and using this information to inform instructional decisions and improve learning outcomes.

Assessment in early childhood education is perceived differently by educators, parents, and policymakers. Some view it as crucial for identifying a child's strengths and progress, while others view it as unnecessary or harmful. A balanced approach that considers a child's developmental needs is needed, using various assessment methods and involving parents and caregivers. The first and fundamental goal of assessment is to promote each child's holistic development and identify tools that can be used for young children, ensuring that they are being assessed in a fair and developmentally appropriate way. The second goal is to provide insights into the impact of assessment on a child's learning and development. Lastly, to create more effective learning aiming to identify methods or expectations for children who may be at risk of developmental delays or learning difficulties, allowing for early intervention and support (Denham, 2016).

Education researchers provide valuable insights into effective assessment methods for young children. Swiniarski (2008) emphasizes the importance of observation; Meisels (2005) stresses the need for valid and reliable tools; Kagan (2018) highlights the use of data to inform policy decisions; Curenton (2012) advocates for careful consideration of standardized assessments and Buysse (2006) emphasizes a balanced approach. Vygotsky's (1986) view on assessing children was that assessment should not be focused solely on measuring a child's performance in a particular subject or task; instead, he believed that assessment should be used to understand a child's thinking process and problem-solving strategies. Learning from these experts can improve early childhood education assessment practices.

The Finnish way of assessing early childhood children is focused on creating a supportive and individualized learning environment that promotes the holistic development of each child. Assessment is done in a way that is collaborative, holistic, and supportive of children's well-being. Therefore, the individual approach used to evaluate a child's development

focuses on each child's unique needs, while the collaborative approach involves all stakeholders, i.e. educators, parents, and children working together. Both approaches promote a supportive and individualized learning environment that promotes the holistic development of each child (Karta et al.,2021).

Assessment techniques for early childhood in the UK and USA involve a variety of methods to provide a comprehensive understanding of a child's progress and development, such as observation, portfolio assessment, standardized testing, parent and teacher conferences, developmental screenings, and play-based assessment. These techniques aim to assess a child's holistic development, including their social, emotional, cognitive, and physical development. Collaboration between educators, parents, and other caregivers is vital in this assessment process. Overall, assessment in early childhood education in the UK and the USA takes a holistic approach and aims to create a supportive and individualized learning environment that promotes the development of each child (Denham, 2016).

Culturally responsive assessment practices are essential in Pakistan's early childhood education to ensure equitable access to high-quality education. Assessment supports growth and development by providing insights into individual students' strengths and needs and teaching effectiveness. Assessment practices should align with the goals of play-based learning and skill acquisition. Ongoing, performance-based assessments that provide immediate feedback promote authentic learning. The goal of assessment should support young learners while promoting equity and cultural responsiveness.

In the Pakistani context, effective assessment methods for evaluating the learning and development of students in early years education include observation-based assessments and formal and informal assessments (Ali and Aftab, 2020). Informal assessments, such as checklists and anecdotal records, can also be used in the Pakistani context to assess children's progress in specific areas, such as social-emotional development and language skills (Ali and Aftab, 2020). The Pakistan National Curriculum Framework for Early Childhood Education advocates for a comprehensive approach to assessment that includes observation, documentation, and child-initiated learning experiences. Assessment methods should involve parents and caregivers and aim to promote each child's holistic development.

The purpose of this research is to identify reliable ways of assessing children which support their emotional development and social interactions. This research seeks to determine a combination of techniques that can give conclusive holistic assessment techniques for early childhood educators. The above will be done by answering the following questions:

1. According to the ECE (Early Childhood Education) practitioners, what are effective assessment methods for evaluating the learning of students in early years education?
2. How does social /emotional development impact the learning and assessment of early childhood students?

# Literature Review

Competency-based approaches have been included in US higher education programs for half a century as changes to teacher training and vocational education in the 1960s and 1970s took place. Chomsky (1969) brought the concept of competence into educational theory and practice. According to him, competence refers to a cognitive system of norms that generates speech rules (Nodine, 2016), whereas a system of academic instruction and evaluation centered on pupils proving their mastery of a subject is known as competency-based education. This approach emphasizes asking students to 'show what they know' and apply what they have studied to assessments that demonstrate their thorough understanding of the material. Because neurodiversity is the norm, competency-based learning systems are built to accommodate neuro-diverse students. It should have been long since disproven that pupils of the same age have the same learning demands. It is crucial to prevent leading young children into patterns of frustration and failure from which they may never recover throughout the early years of learning. All students at the same age have different experiences, speeds of development, or levels of preparation for learning. Instead of following an age or pacing guide, students receive teaching and support based on their needs. Advancement depends on mastery rather than on time. In a competency-based approach, the golden rule is to provide children with what they require at their level of preparedness (Sornson, 2015).

## *Assessment in Early Childhood Education*

Early childhood assessment describes the formative purpose of assessment as a tracking instrument to see how an individual child is

progressing toward the achievement of instructional objectives. This assessment further helps in planning the instructional strategies and the lesson. It is an effective way to give feedback on children's performance and adjust classroom practices (Bodrova and Leong, 2018). It also helps teachers deepen their understanding of the development and learning of the children they are teaching and provides essential information about how individual children are gaining skills and knowledge, making learning progressions critical for formative assessment (Bodrova and Leong, 2018). Formative assessments range from informal to formal, reflection on action to plan, and brief to comprehensive (Mendenhall et al., 2019; Orland and Anderson, 2013). Professional learning, reflection, planning, and assessment tools and processes all must work together to transform practice. Teachers need dedicated time to observe and learn the progressions of children and to plan their growth (Mangione et al., 2019).

Flexible assessments, including observations with running records to collect information about a child, help teachers assess a child more holistically than standardized and mandated tests (Blessings, 2019). These assessments gauge learning and cognition, language development and communication, emotional and social development, and health and physical development (Blessing, 2019)

Learning Stories of students recorded over time serve as a meaningful pedagogical tool to assess children's strengths and help educators reflect on their roles in the complex processes of teaching and learning (Carr and Lee, 2012; 2019). Educators can share their strengths and areas of development with families. Formative assessment in early childhood is observing, writing, reflecting, and documenting classroom life as a way to understand better and teach children (Escamilla, 2021). Teachers' documentation of children is essential to identify strengths and assess development (NAEYC,2019).

## *Models of Early Childhood Education*

The three most influential models of early childhood education promoting freedom of children are Montessori, Waldorf, and Reggio Emilia. They have their assessment methodologies. Montessori negates traditional paper assessment and promotes listening and observing children as they develop skills. A combination of alternative assessment policies, such as portfolios and anecdotal and non-graded reports, are used (Roemer, 1999; Mavric,2020). The Montessori teacher interacts with and

encourages children in different learning experiences and spontaneous activities. It also includes problem-solving and resolving group conflicts. The teacher regularly writes notes about observation and gives insights into the children's responses and behaviour. These notes give insights into a child's development both academically and socially and help educators to design experiences. These observations and notes are taken to parent-teacher conferences to inform parents and develop educational plans (Hamidi et al., 2023).

The Waldorf educators assess the curriculum attainment holistically, and the child is observed individually through a collection of children's work and by talking to them. The Reggio approach to teaching and assessment promotes a teacher to observe, record, and interpret the observations of a child's project work. The resulting information is passed on as a valuable record of learning (Aljabreen. 2020). The Early Year's Foundation Stage (EYFS) advocates continuous assessment through observations and the provision of varied learning experiences. It also promotes the use of paperwork, which is necessary to communicate with parents (Cameron and Moss, 2020; DfE, 2017).

## *Dimensions of Learning*

One of the most essential learning dimensions of early childhood education is gross and fine motor skills. Gross motor skills measure abilities such as jumping, hopping, and climbing and involve large muscles. Fine motor skills, however, involve skills like picking objects and building blocks.

Research on motor skills suggests that these skills are fundamental for early learning and that they are malleable during the early childhood period. Preschool years have been said to be the prime age of motor development (Benouda et al., 2011; Escolano-Pérez et al., 2020). However, there is no correlation between academic achievement and the development of gross or fine motor skills.

Students may achieve more significant academic outcomes because they are better at initiating, sustaining, and regulating their motivation for goal-directed learning compared to those with poor emotional skills. Knowing their emotions can result in better interactions with peers and can contribute to academic achievement. Not considering emotional development can result in adverse effects on academics and also related to not attaining

a high school degree if behavioural and social problems are not taken into account in early childhood (Panayiotou et al., 2019). Education and learning are forms of social interaction between adults and young children, following learning resources and aiming to create responsible adults. Social development is an integral factor that affects academic performance and assessment (Kolhar et al., 2021).

According to Becker et al. (2022), the main aim in the early years should not be to assess knowledge but to engage. To develop proper engagement, the teacher must provide a safe and appropriate environment where the child is willing to learn. In such a classroom, engagement and learning patterns can be assessed through individual observation of children. Learning outside the classroom is an activity that presents learning in an exciting and fun way (Aladağ et al., 2021).
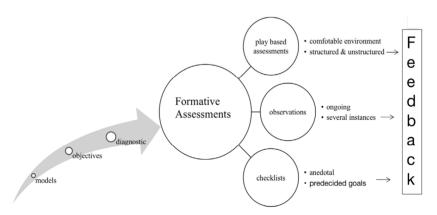
### *Conceptual Framework*



**Table 1: Conceptual Framework**

The figure shows how formative assessment can help assess different early childhood students in a comfortable environment during structured and unstructured play. Observations are ongoing over several instances. Whether diagnostic or specific goal-oriented observations and assessments, they should all be communicated through different mediums and are for feedback for parents, caregivers, and teachers to keep them up to date with the learners' performance.

# Methodology

## *Study Design*

This qualitative exploratory research explored effective assessment methods used and preferred by early childhood practitioners to assess early years learners. Since qualitative research effectively captures the thoughts and feelings of individuals about a phenomenon (Given, 2008), this research design was used to get in-depth insight into the early years assessment methodologies. This approach is an intentional and systematic approach to data collection (Starman, 2013). This approach helped to gain new insights into effective assessment methods for young children. This approach can improve the accuracy and reliability of assessments, leading to better outcomes for young children and more effective early childhood education programs (Given, 2008).

In the framework of qualitative research, semi-structured interviews were used to identify effective assessment methods that teachers found authentic through experience, and they helped them gauge the development of learners ranging from age 2 to 6 years. Through interviews, a deeper understanding of the learning outcomes for young children was achieved and effective ways of measuring progress were identified and developed. These interviews were conducted face-to-face and online. These types of interviews aim to generate a detailed response to the participant's experiences with the phenomena investigated. It helped to comprehensively answer the research and rephrase and explain during this study (Adams andand Manen, 2008). A semi-structured interview was used because a completely unstructured interview has the potential to obtain information that deflects from actual research questions (Rabionet, 2011); however, in semi-structured interviews, the prepared questions were used as a guideline, and it was encouraged through prompts and hinge questions that they explain more when it gave a better understanding of the research topic and supported the research (Silverman, 2013). The interviews were conducted in a relaxed, discussion-like manner, first attempting to break the ice and then with frequent acknowledgements during the interview to be careful not to steer the conversation in a desired direction and, at the same time, make the interviewee being heard (Legard et al., 2003).

## *Sample*

A purposive sampling technique was used to generalize findings from the sample being studied using an analytical method. It aims to concentrate on particular traits that are appropriate for the study and are not representative of a whole population; they are a subset of the population. The sample was homogeneous, as the participants had similar experiences and characteristics (Rai andand Thapa,2015).

A sample size of 28 female teachers was selected for an online/face-to-face interview. The criteria for selection only include early childhood teachers/consultants having a minimum of 3 years of experience teaching multiple levels of early years classes from playgroup to Kindergarten. They all belonged to private schools catering to middle-income, upper-middle-income, and high-income group schools in Karachi. The selected sample had completed several courses in early childhood practices from renowned training institutes or trained by in-house trainers of early years.

## *Data Analysis*

The interview was conducted in English and recorded; notes were also written to write any underlying meanings as identified through the tone of the interviewee. Hinge questions were used to build upon the conversation. It was kept in consideration that the interview was conducted in a non-judgmental and respectful manner, keeping biases, attitudes, and dispositions aside. The recorded interviews were then transcribed. The data was analyzed keeping in mind that a single interview is the perspective of that person and their circumstances at that time and is only reported when compared with other interviews (Merriam, 2009). The results are reported accordingly (Merriam, 2009).

A manual thematic approach to coding data was used to analyze the data. It is a helpful way to identify common themes in data and develop hypotheses about the topic being studied. Prominent ideas were turned into categories or codes. Similar codes were then merged into themes (Given, 2008). These themes were then analyzed to derive results through the data collected under each theme. The following three themes were identified from the thematic analysis: 'Effective Assessment Tools and Impact of Social and Emotional Development, Reporting, feedback, Parental Role, and Challenges and Differentiation'.

# Findings

For research on effective assessments of early childhood education, research was conducted using semi-structured interviews with early years - educationists. The interviews were transcribed, analyzed into codes, and then broken into three themes that impact the study of learners of this age group and reliable assessment to gauge their development.

## *Effective Assessment Tools and Impact on Social and Emotional Development*

The teachers believed that the assessment of this age group was carried out to identify the academic milestones of this age group. Assessments for this age group are ongoing and have to be conducted when students are involved in a task, in different environments, and using resources that are favourable to them. Their responses will be different in different environments and with different tasks. Interaction with peers and teachers, as well as being socially accepted by them, is imperative for young learners to respond to, as they need to be happy and feel important. As one of the teachers stated while emphasizing the importance of social and emotional development and academic competence as they go hand in hand,

> "I believe it is my responsibility to help children to reach their full potential, both academically, socially, and emotionally as one cannot be achieved in the absence of the other."

An early childhood consultant emphasized continuous/ ongoing assessment and stated,

> "In my experience, ongoing assessments and maintaining analogue notes for each child have been the most effective methods. They allow us to monitor their progress and development closely over time."

Many teachers stated that they take baseline assessments and diagnostic tests at the beginning. Then, they develop checklists for measurement according to pre-set benchmarks that are mutually agreed upon with parents, keeping in view the observations they have done while the children were at most ease and focusing on their development benchmarks. They can tailor the checklists to individual learning styles of children while pinpointing where they need additional support according to their learning styles. As quoted by a teacher taking Nursery students of

age group 4-5 years about the importance of utilizing checklists as a means of assessment,

> "Checklists are a valuable tool in assessing young children's development, but it's important to remember that each child is unique and may develop at their own pace. As teachers, we need to use checklists in conjunction with observation and other assessment tools to differentiate instruction and support each child's individual needs."

Three teachers stated that sometimes, using a similar checklist for different age groups of learners helps them recognize how they are performing in comparison to each other and aids us in bringing the ones at risk to a level that should be an average of the observed class. Observation diaries were pointed out as a valuable resource to note as it occurs.

An effective assessment, as identified by kindergarten teachers who dealt with learners aged 5-6 years, believed that the most constructive method to assess a child's learning is assigning them a specific task and watching them as they complete it. This observation helps to evaluate skills like problem-solving, critical thinking, and behaviour in real-time.

In response, teachers should maintain portfolios with sample work to show and observe progress. This will allow for a comparison and realistic overview of children's improvement and the results of teachers' instructional methods measured against learning objectives.

The teachers were of the opinion that children perform best at play. Cognitive development can be best observed in assessments that are designed around play. The way a child solves a puzzle or relates a problem with real-life situations while involved in role play and open-ended exploration activities is reflective of social, emotional, cognitive, and academic development. A teacher quoted,

> "By striking a balance between the assessment and allowing children to explore through play can promote children's learning outcomes and their knowledge and understanding of the world around them and the teacher is better able to gauge their adaptation and coordination of mind, brain, and body"

Assessing young children is a comprehensive process. There is no one single way, but a combination of different tools gives a conclusive assessment of a child. Each child develops at its own pace, so no two children are the same

## *Reporting, Feedback, and Parental Role*

The interviews revealed that keeping parents and caregivers informed of the procedure and progress is an integral part of the assessment process.

A teacher emphasized that giving feedback about strengths and weaknesses and displaying the learning journey through parent-teacher conferences, digital portfolios, and one-on-one meetings, stating,

> "Sharing observations, work samples, and assessments, we can celebrate the child's success and provide constructive feedback, helping create a collaborative environment to help the child reach his/her maximum potential."

The opinion that sending weekly reports along with observation notes is effective in keeping parents informed was emphasized by many. Learning stories of children at work or while completing a task and sending them to parents through digital platforms like Google Classroom not only keeps parents informed but also helps teachers to get feedback from parents so they can provide additional support to parents to guide them about areas they need to reinforce at home.

Sharing learning objectives and an initial assessment keeps parents abreast and in collaboration with the teachers to provide additional support for the students where needed. Some teachers felt that developing an individual education plan makes the assessment process very transparent and visible to parents. Events like morning assemblies and concerts also aid parents in having a fair picture of their child's social, emotional, cognitive, and academic development.

A teacher who previously taught nursery and now kindergarten said that providing objective feedback in clear rhetoric, which is non-judgemental, helps a parent welcome feedback positively. Non-judgemental feedback can be given verbally weekly at dismissal time or through short meetings as it is a more frequent update. Since the feedback is not comprehensive, waiting for parent-teacher meetings is optional, as waiting for a conference can delay the delivery of feedback. She feels regular feedback helps build a positive relationship with parents, promotes a climate of concern and allows them to collaborate effectively in efforts to work on areas of improvement and the holistic development of a child.

During interviews, it was found that keeping parents and caregivers informed about the assessment process and their child's progress is crucial. Teachers emphasize the importance of providing feedback on strengths and weaknesses, and they use various methods such as parent-teacher conferences, digital portfolios, and one-on-one meetings to display the child's learning journey. Teachers believe that sending weekly reports and observation notes to parents effectively keeps them informed. Sharing learning stories and objectives through digital platforms like Google Classroom not only updates parents but also allows teachers to receive feedback and provide additional support. Individual education plans and school events like assemblies and concerts also contribute to parents' understanding of their child's development. Teachers stress the need for objective feedback delivered regularly to establish a positive relationship and promote collaboration in supporting the child's improvement and holistic development.

## *Challenges and Differentiation*

As expressed by several teachers, the main challenge faced by them in assessing children of this age is their low attention span and their inability to focus on a task for a long. They cannot be observed through long observations as a teacher expressed simple reasons like irregular sleep patterns or poor nutrition, which can deteriorate learner performance. Several teachers have committed to the stance that since every child develops his/her behaviour and temperament differently, there is no one definitive way of assessing, and summative assessment is impossible. They are unpredictable, belong to different cultural backgrounds, and develop language and expression at varying paces, which poses the biggest challenge in matching instructions and pedagogies with instructional objectives. A head teacher of a school was of the opinion that,

> "Though extremely challenging, it is important for us to recognise that each child develops at their own pace, and we must use a variety of assessment tools and tailor our teaching strategies to meet their individual needs."

Few teachers thought that even taking diagnostic and baseline assessments was unreliable and a good standpoint for identifying strengths and weaknesses. Many results need to be more accurate as the child is not comfortable with the teacher. A teacher with more than ten years of experience said that over the years, she has learned that we vary our

assessments continuously, and many of them are improvised through trial-and-error methods. She said,

> "There are successes and failures. We struggle hard to reach a conclusive judgment where we can assure ourselves that we have been successful in efficiently imparting curriculum and have been able to meet the learner's requirements."

Teachers face the main challenge of assessing children of a young age due to their low attention span and inability to focus on tasks for long periods. Factors such as irregular sleep patterns and poor nutrition can impact their performance. Teachers believe that since every child develops differently in terms of behaviour and temperament, there is no definitive way of assessing them, making summative assessment impossible. The diverse cultural backgrounds and varying language and expression development rates further complicate matching instructions and pedagogies with instructional objectives. Some teachers find diagnostic and baseline assessments unreliable due to the child's discomfort with the teacher. Experienced teachers rely on continuous assessment variation and improvisation through trial and error to ensure effective curriculum delivery and meeting learner requirements.

## Discussion

The study revealed that there is no one way of assessing children of this age, and it has to be a combination of different tools and a compilation of several observations. Social and emotional development is directly linked or proportional to academic development.

The teachers believed that the assessment was ongoing and could not be done at one dedicated time; it had to be done in different environments. However, according to the literature, teachers need dedicated time to observe and learn the progressions of children to plan the further progression of the children (Mangione et al., 2019). The need for dedicated time may be true as the teacher has to focus on each child individually to conduct the observation. However, hoping to get a complete view in one instance seems impossible as social, emotional, cultural, and linguistic factors strongly affect their performance. Coherent with literature that formative assessment is observing, writing, reflecting, and tailoring the classroom environment (Carr and Lee 2012, 2019), the interviewed teachers also felt that they could best tailor their assessment tools by observing the children and setting benchmarks for them. An evident

finding of the research was that assessments can provide information on how well children are doing in specific areas of the curriculum or in achieving personalised goals. Teachers believed that by taking a diagnostic assessment, they could devise personalised goals that can be communicated. It is coherent with the literature that assessment deepens the understanding of a child's performance and helps the teacher to reflect and set goals (Bodrova andand Leong, 2018).

Another consistent viewpoint of the teachers supported by the literature was that it was crucial for students to feel accepted socially and emotionally and that failing to take into account emotional development can have a detrimental impact on academic performance if behavioural and social issues are not addressed in early childhood and its the responsibility of the teacher. (Panayiotou, et al. 2019).

Baseline assessments were noted as an effective assessment by the teachers as a starting point for getting to know the children and a standpoint for knowing their interests and prior academic capabilities. Literature advocates that baseline assessment can be helpful in getting to know children and their background; however, if the teacher is spending too much time taking the assessment and not utilising time to know the child and building a rapport, then baseline assessments can rather be redundant (Fauser, 2016). Aladağ et al., (2021) advocate similarly to the early-year practitioners in research that assessing through play-based activities and observing the learners in an environment of choice helps them to show a true reflection of academic learning.

Though observations were highlighted as a potential tool by our students, some literature negates its validity. Observations can have observer biases, and the skills and training of teachers may also vary. Their preconceived notions of a child can affect their observations and reporting. Caution was also reported by Wortham (2001) for checklists that it should only be used for describing curriculum or sequences in development but not a sole technique for observation; however, the interviewed teachers found it to be a valuable tool for assessment.

Sending feedback notes through regular meetings and parent-teacher conferences was found to be an effective method to keep parents abreast with the child's performance. Continuous engagement with parents was also highlighted in EYFS and a study by Cameron and Moss (2020) that the feedback received from observations should be taken to parent-teacher

interactions. Learning journeys through portfolios give a realistic view of the progress of children, and the teachers will use this as a reflection of teaching and curriculum, which was also mentioned in previous research by Hilary Seitz and Carol Bartholomew (2008). The teacher's expression that feedback and reporting should be taken to parents as perceived by the teacher as it aids in the support provided by parents and is a valuable record of learning coincides with Aljabreen.2020.

The challenges highlighted by the teachers in the study about assessment were coherent with the literature (NAEYC, n.d) that it is often difficult to assess young children effectively. An accurate and thorough assessment is challenging due to the complexity of children's learning and development, including the unevenness of growth and the likelihood that children will ultimately demonstrate their knowledge and abilities in many contexts. Mood and emotional development are critical determinants of how children perform at the time of assessment (Peterson and Elam, 2020). Baseline challenges are often inaccurate, and the teachers find it challenging to assess the development of children due to the complexity of children's development and learning.

## Conclusions and Recommendations

According to ECE practitioners, ongoing observations, formative assessments, portfolio evaluations, and parent/caregiver involvement are effective assessment strategies for gauging children's learning in early years education. Continuous observations require paying great attention to children's development, behaviours, and interactions to gather qualitative information on their strengths and potential growth areas. Informal and ongoing formative evaluations are used to check comprehension and spot learning deficits. Portfolio evaluations gather examples of children's work, tracing their growth through time and including parents in the evaluation procedure. Through open communication, sharing of observations, assessments, and feedback, parent/caregiver involvement is essential.

Their social and emotional development substantially impacts early childhood students' learning and assessment. Assessments must take both social-emotional and cognitive development into account. ECE professionals observe children to evaluate their social and emotional skills. Continuous observations, formative assessments, portfolio evaluations, and parent/caregiver involvement are considered to be helpful assessment procedures for assessing children's learning in early years education,

according to ECE practitioners. In order to acquire qualitative data on children's strengths and possible growth areas, continuous observations involve paying close attention to children's development, behaviours, and interactions. Informally conducted ongoing formative assessments are used to identify learning gaps and assess comprehension. Portfolio assessments compile samples of children's work, charting their development over time and including parents in the assessment process. Parent/caregiver engagement is crucial and can be achieved through open communication and the sharing of observations, assessments, and feedback.

The social and emotional growth of young children has a significant impact on their learning and assessment. Both social-emotional and cognitive growth must be considered in assessments. This approach supports the whole child, fosters a positive learning environment, and promotes their overall well-being in the early years of education. Therefore, following are the recommendations for ECE practitioners:

1. Comprehensive assessments should be conducted using various techniques, including continual observations, formative evaluations, and portfolios, to get a full picture of each child's development.
2. Parents/caregivers should be incorporated into the evaluation process by open communication, exchange of observations, and participation in parent-teacher conferences in order to establish strong partnerships with them.
3. Assessments should consider social/emotional development by assessing abilities like interactions, emotions, problem-solving, and self-regulation.
4. Parents should receive regular, constructive feedback that emphasises their children's development, strengths, and opportunities for growth while also offering advice and support.
5. In order to develop self-awareness, autonomy, and metacognitive abilities in children, it is essential to encourage them to evaluate themselves, create objectives, and reflect on their feelings.
6. Educators should have access to ongoing professional development opportunities to improve their comprehension of efficient assessment techniques and methods for including social/emotional development.

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# CHAPTER 2

# CHALLENGES IN INTEGRATING STRATEGIES TO TEACH AND ASSESS HIGHER-ORDER THINKING SKILLS IN PRIMARY CLASSROOMS

## MARIA SAHAR KHAN AND SARWAT NAUMAN

## Abstract

Higher Order Thinking Skills (HOTS)based teaching is considered one of the fundamental abilities a teacher needs to have to foster students' critical thinking and learning in every classroom. Though educators recognize the importance of HOTS at the secondary level, unfortunately, the development of HOTS has not been focused on at the primary level in Pakistani schools due to several challenges. This study aims to identify those challenges that restrain the integration of HOTS-based teaching strategies and assessments in primary classrooms. Twenty-two primary teachers of a private school in Karachi were interviewed to collect data regarding HOTS-based teaching in Mathematics, Science, Computer Science, Social Studies, and English. Document analysis of the lesson plans and question papers prepared by the teachers was also done alongside the classroom observation of 5 classes, one class of each subject. The findings of the study revealed insufficient teachers' knowledge regarding HOTS, lack of resources and support from the institute, lack of teachers' expertise to teach and assess HOTS, and scant lesson and assessment planning as four significant challenges faced by the primary teachers while integrating HOTS-based teaching in their classrooms.

**Keywords**: higher-order thinking skills, HOTS-based assessments, HOTS-based teaching, primary classrooms