

Feedback and Feedforward Practices in Early Childhood Education: Perspectives from Classroom Practice in Sri Lanka

G. A. J. Poornima*

Dept. of Special Needs Education, Faculty of Education, The Open University of Sri Lanka

Abstract

Feedback and feedforward are essential components of the effective teaching and learning process in ECE. When children engage in different activities, feedback and feedforward motivate and support their learning. The main aim of this study was to identify how feedback and feedforward practices are implemented in preschool classrooms and how far these concepts enhance the overall development of a child. This study used a survey design with a qualitative approach and collected data through classroom observations and interviews with twenty preschool teachers from the Colombo district in Sri Lanka. The stratified random sampling method was used to collect data, and the data were analyzed descriptively. Overall, the findings revealed that preschool teachers operate with limited attention to feedback and feedforward practices. Both the strengths and weaknesses of teachers in the teaching-learning process were identified through the way teachers provide feedback and feedforward. Thirty-five per cent of preschool teachers from governments and some private international preschools pay attention to enhancing children's developmental areas using different methods and strategies to use for feedback and feedforward to motivate children. This behavior could be identified throughout the process. However, many preschool teachers were not concerned about these matters. Some teachers did not use practical activities or provide play opportunities for children. Most children were seated on chairs and engaged in writing activities. The teachers checked their final work and marked it as correct or asked them to do it again. It was clear that many teachers lack philosophical and psychological perspectives on child development.

Keywords: Early childhood education, Feedback, Feedforward, Formative assessment

Introduction

Every child has the right to receive education as expressed in the United Nations Convention on the Rights of the Child (1989). Early childhood education (ECE) is of great value to all children because it provides a sound basis for learning, development of knowledge, skills, attitudes, personal competencies, confidence, and a sense of social responsibility. The national policy on preschool education has mentioned that ECE in Sri Lanka occupies a critical position in supporting children's cognitive, social, emotional, and language development (Ministry of Women and Child Affairs, 2019). Preschool education is shaped by the Sri Lankan national policy frameworks that promote children's holistic development, play-based learning, child-centered approaches, and learning environments.

However, classroom practices differ, with some using traditional teacher-directed methods and others adopting emerging child-centered pedagogies. (Hattie & Timperley, 2007) defined these two concepts. Feedback can be understood as information given by teachers, peers, or learners themselves to help improve understanding and performance. Its purpose is to help the learner reduce the difference between their current level of understanding and the desired learning goal. Feedforward refers to information that helps a learner understand what the next steps are for improving future performance. It is future-oriented guidance that indicates how to close the gap between current understanding and future learning objectives. Accordingly, feedback refers to information provided to learners about their current performance, while feedforward focuses on guidance that supports future learning and improvement.

In early childhood classrooms, these practices are typically embedded in daily interactions rather than assessment processes. Despite their importance, feedback and feedforward in Sri Lankan ECE settings remain under-researched, particularly from the perspective of classroom practice.

However, since the ages of three to five years is a very sensitive period, it is essential to work closely with children. The teacher needs to have a good understanding of the child's freedom, likes and dislikes, and their thoughts. The teacher must understand the physical and mental conditions of the children and act with an understanding of what they can do. The role of the teacher is very important in the overall development of the child. Children need to acquire all the basic skills they need at this stage. Among the facts expected of the teacher's role are providing love, care, and security to children, as well as understanding the basic concepts that children need to acquire, understanding the methods and techniques that provide children with learning experiences, good communication skills, evaluating children, and constantly encouraging children are essential for their development. According to this, the main aim of the study was to examine how early childhood educators provide their maximum support to children for their holistic development.

Feedback and feedforward are important practices in ECE because they support children's cognitive, social, and emotional development. Feedback and feedforward play a crucial role in guiding children's learning and behavior. It could be a simple word or a simple instruction at this level. The writing of letters is very minimal for young children studying in preschools in Sri Lanka. Simple letters are introduced, perhaps in the last term of preschool. Some preschools also introduce writing letters and words. However, this is usually done after formal education begins. That is, after children enter first grade. However, preschool children express

themselves through various forms of verbal communication, creative drawing, singing, and acting. According to the researcher's direct experiences, it is clear that the preschool teachers have demonstrated a limited understanding of these concepts in classroom practice, particularly regarding how to provide feedback and feedforward effectively in their teaching-learning process.

Therefore, it is essential to act in a way that motivates the child to learn successfully. Accordingly, it is essential to provide the necessary guidance and quality feedback in ways that support children's overall development. The teacher should provide constructive feedback regarding children's behaviour in the classroom when they are engaging in activities. Through constructive feedback, children can start their learning journey happily and positively. This study explores the feedback and feedforward practices used in Sri Lankan preschool classrooms, as well as teachers' understanding and application of these practices.

Aim and Objectives

Aim

The main objective is to understand and implement feedback and feedforward in preschools to enhance children's development.

Objectives

- 1.To explore feedback and feedforward practices used in preschool classrooms in Sri Lanka.
- 2.To identify the impact of feedback and feedforward on children's language, social and emotional development.
- 3.To explore teachers' awareness and application of effective feedback and feedforward practices.

Literature Review

Theoretical Views on Feedback and Feedforward

In the developmental perspective, embedded in child development theories, feedback and feedforward support individual cognitive development and meaning-making. Emphasizes that young children respond differently to these two concepts depending on age and developmental stage. This finding supports the constructivist perspective, which posits that children learn actively through exploration and discovery (Piaget, 1952; Bruner, 1961).

Vygotsky's (1978) Dialogic/Social Constructivist perspective explains that Feedback and feedforward are viewed as interactive, communicative processes

between the teacher and the child. The child's knowledge, skills, and attitudes are greatly enhanced by learning experiences gained through communication between the teacher and the child. Accordingly, constructive feedback and feedforward provided to the child for their overall development are always very important. Feedforward supports shared understanding by helping children see future possibilities in learning. Vygotsky introduced the idea that learning occurs through social interaction, particularly through the Zone of Proximal Development, where feedback and feedforward can act as scaffolding.

Dewey (1938) also presented his ideas regarding the child's learning as experiential and continuous. According to his views, feedback helps reflection, while feedforward supports future action and growth. (Maslow, 1943; Rogers, 1969) also focused on the whole child, self-esteem, and motivation - supporting positive, future-oriented (feedforward) approaches.

In this way, theoretical ideas related to feedback can be examined, and it is important to provide teachers with a good understanding of this.

Empirical Views on Feedback and Feedforward Practices

Google et al. (2022) conducted an empirical study on preschool teachers' classroom practices using real-time feedback and video analysis. The study used a multiple-probe single-case research design involving preschool teachers and found that performance-based feedback improved teachers' instructional strategies and enhanced children's communication responses in classroom activities. The findings emphasized that constructive and immediate feedback can significantly improve teaching quality and children's learning experiences.

Furthermore, a humanistic perspective emphasizes the importance of positive, future-oriented feedback that enhances motivation, confidence, and holistic development in young learners (Acharjee, 2025). All these perspectives position feedback and feedforward as essential, interactive processes that support continuous learning in ECE.

Herth and Jayathissa (2024) examined the role of early childhood educators in developing preschool children's social skills in Sri Lanka. Using a mixed-methods approach involving teachers and parents, the study found that teacher interaction and classroom guidance strongly influence children's personality development and social behavior.

Accordingly, International literature and local research highlight feedback as a powerful tool for enhancing learning, motivation, and self-regulation. In early

childhood settings, feedback is most effective when it is immediate, specific, and developmentally appropriate. Studies have shown that supportive preschool teacher responses encourage children's confidence, participation in learning, self-regulation and motivation in classroom learning activities. Feedback also helps children recognize their strengths and areas for improvement, while feedforward guides them toward future learning outcomes. In the Sri Lankan context, empirical studies related to preschool education have focused on classroom quality, child development, and learning environments rather than feedback and feedforward practices.

Although these empirical studies contribute valuable knowledge to ECE, there is still limited research specifically examining feedback and feedforward practices in Sri Lankan preschool classrooms. Existing studies do not adequately explore preschool teachers' understanding, application, and challenges related to providing effective feedback and feedforward to support children's holistic development. Therefore, this study aims to fill this research gap by investigating feedback and feedforward practices from the perspective of classroom practices in Sri Lanka.

Methodology

Research Design

A qualitative research design was adopted to explore feedback and feedforward practices within Sri Lankan early childhood classrooms. This approach enabled an in-depth examination of educators' practices and perspectives in real-life teaching contexts.

Population and the Sample of the Study

The target population comprised preschool teachers in the Colombo district. Participants were selected early childhood educators working in Sri Lankan preschool settings, Government and non-government organizations, and private. The stratified sampling method was used to collect data. The study focused on classroom practice learning in children aged three to five years.

Table 1

Sample of the Study

Preschools	Government	Non-government	Private
Urban	2	2	4
Semi-urban	1	2	3
Rural	1	2	3
Total	4	6	10

Table 1 shows that 10 preschools are run by the private sector, four by government authorities, and six by the non-governmental sector. Ethical considerations, including informed consent and confidentiality, were observed throughout the study.

Data Collection

Data were collected through classroom observations, teachers' interviews and reflective practices provided by educators. Observations focused on teacher-child interactions during play, routines, and structured activities. Reflective accounts allowed educators to articulate their intentions, challenges, and beliefs regarding feedback and feedforward.

Data Analysis

Data were analysed descriptively. Themes were identified related to the research questions in line with the objectives of the research.

Result and Discussion

The analysis of survey data has been done under the following themes in line with the objectives and research questions of the research.

Background of the Preschool Environment

The following basic information was gathered through observations and interviews with teachers. Each teacher had completed their educational qualifications as a preschool teacher, and each teacher had also obtained a preschool diploma certificate.

Table 2

Teachers' Experience

No of Years	Preschool Teaching Experience
0-2	2
2-4	1
4-6	1
6-8	4
8-10	5
10-12	5
> 12	2
Total	20

According to this, Table 2 shows the distribution of preschool teaching experience among 20 respondents. Most teachers have between 8 - 10 years and 10 -

12 years of experience (5 each), followed by 6 - 8 years (4). Smaller numbers have 0 - 2 years (2), more than 12 years (2), and 2- 4 years and 4 - 6 years (1 each).

Types of Feedback and Feedforward Strategies Currently Used in Preschools

Feedback and Feedforward Practices in Sri Lankan Classrooms

The findings revealed that feedback practices differed significantly among preschool teachers. Some teachers provided encouraging, child-friendly responses, while others used directive or corrective approaches that limited children's creativity and confidence. This finding supports the constructivist perspective, which posits that children learn actively through exploration and discovery (Piaget, 1952; Bruner, 1961).

According to the findings, feedback and feedforward are essential to early childhood classroom practice; however, it is clear that does not always happen in classrooms. Feedback was predominantly verbal, immediate, and emotionally supportive. Some educators use praise, repetition, and corrective statements to guide behaviour and reinforce learning. Also, some preschool teachers' non-verbal feedback, such as gestures and facial expressions, was observed. Feedback often emphasized social behaviour, cooperation, and adherence to classroom routines.

Both positive and negative behaviours of teachers in the teaching-learning process were identified. Thirty-five percent of preschool teachers some government and some private international preschools pay attention to enhance children's developmental areas using different methods and strategies such as giving positive symbols, (smiling face, stars) clapping for their work, touching their hands, different verbal expression (very good, well-done, wow, this is very good and think other way, good effort, we will hang on the wall). This behaviour could be identified throughout the process. The children appeared happy and were encouraged by these actions.

Also, findings are consistent with the Social Constructivist theory of Lev Vygotsky, particularly the concept of the Zone of Proximal Development, where children learn through social interaction and adult instructions. Feedback and feedforward acted as scaffolding that supported children in completing tasks and developing new skills. However, in some classrooms, limited interaction and teacher-centred practices provide inadequate opportunities for children's learning experiences. The majority of teachers who were close to the children could be identified. The children were happy and worked with their teachers.

Extract 1.

The teacher divided the children into four groups and asked them to sit on the floor. She gave them different wooden shapes and allowed them to construct what they liked. The children created various types of buildings.

The teacher divided the children into four groups and asked them to sit on the floor. She gave them different wooden shapes and allowed them to construct what they liked. The children created various types of buildings. While they were engaged in the activity, she moved close to them and asked questions. The children responded to her. She encouraged them to complete their work using positive feedback, saying things like, ‘Very good effort. You are trying well. Add more shapes...you can build even more. When you go home, you can continue building, and in the future, when you are older, you could build houses like this.’

The children also asked questions to the teacher. One child said, ‘Teacher, I will build many buildings. Are these good?’ The teacher replied, ‘Yes, very beautiful. Try more.’

However, other preschool teachers were not concerned about this. Some extracts are given below.

Extract 2.

“The teacher asked to draw a flower garden. The children started to draw the pictures. Within the limited time (4 - 5 minutes), they finished their work and tried to show their drawings to the teacher. The teacher asked the child Is this a flower? Garden, where are the flowers? Go back and draw flowers. The second boy came and showed his drawing. The teacher asked immediately where the grass. If you need to draw a flower garden, you need to draw grass. The third girl came and showed her drawing. The teacher asked why you use the black colour for the sky. Erase all and use different colours. Go back to your place and draw it again”.

She was sitting in her place, and she did not observe what the children were doing.

Extract 3.

The preschool was situated in a rural area, with a total of 11 children. The school had a permanent building and basic facilities such as a play area, water, and sanitation. The teacher gave each child a picture of a butterfly along with different coloured papers. She began the activity by giving instructions.

‘First, tear the paper into small pieces,’ she said.

The children started tearing the coloured papers. Then the teacher continued, 'Now, take one piece of paper at a time, apply glue, and paste it onto the butterfly picture. Do not paste everywhere on the paper.' As the children worked, she added, 'When I ask you to stop, everyone should stop working. Now start-hurry up.'

The children followed her instructions and began pasting the pieces of paper onto their pictures. Thus, it is clear that the actions of many teachers regarding these concepts hampered children's learning.

Extract 4.

As soon as the teacher arrived in the classroom, she asked the children to all stand up and line up. It must be said that the teacher's tone of voice was quite strong and did not suit pre-school children. The teacher instructed the children to sit on the floor. The main reason for this was to tell the children a story. She set the scene properly, and the story began. There were eighteen children in the classroom, and they sat according to the available space. The teacher asked questions from time to time as she told the story. However, the children were noisy, and the teacher had to silence them from time to time. Several children in the back were talking about things that were seen in the surrounding environment. Even though the story was over, a group of children were not listening. The main reason was that the way the teacher presented the story was not proper, even though the appropriate environment was chosen. However, due to the failure of the presentation, only a few children answered the questions asked by the teacher. The entire process rarely encourages the children.

Most of the questions the teacher asked were about the information contained in the story. The teacher did not use any resources or relevant material to keep the children interested in the story.

The existence of such an environment in preschools hinders the overall development of children. Keeping children in one place, restricting their freedom to do the activities they enjoy, and the way the teacher, a powerful factor, works hinder the early start of children's education. It can be pointed out that the lack of familiarity between the voices of many teachers and the lack of familiarity with the instructions given are not conducive to children's learning.

Feedback and Feedforward Practices Influence Children's Development

When considering the performance of sample preschools in relation to these concepts can greatly help children's development and motivate them for further education. When considering the performance of preschools in relation to these concepts, it can be identified how they support children's development for further

education. Accordingly, quality learning experiences for children can be developed based on factors such as building children's confidence, providing positive feedback, offering regular praise, avoiding criticism, and providing opportunities for children to learn happily, both physically and mentally.

By providing positive experiences, a child's development, including language and pre-literacy development and social and emotional balance, is impacted. However, the above-mentioned characteristics are clear from direct observations that the teacher's performance in some pre-schools is negative. Often, getting close to the child or exchanging ideas with some children is rare, which is very disruptive to the overall development of the child.

Accordingly, this creates obstacles to the proper development of essential concepts that should be developed within this age range.

Preschool Teachers' Perceptions and Knowledge of Effective Feedback and Feedforward

The knowledge and understanding of these concepts could be clearly identified through teachers' discussions with the preschool teachers in the sample, as well as through the teachers' behaviours in the teaching-learning process. When asked about these concepts in particular, some teachers responded that they were helping the children as much as they could, while others stated that they were not aware of these. They also stated that they heard both of these concepts for the first time in relation to preschool.

Further, it was stated that the preschool's function is to ensure that its children are learning according to our curriculum. Some children act accordingly when told something, while others need to be helped several times. Many preschool teachers stated that they may have to act at the discretion of parents. They also stated that they are not very interested in providing children with opportunities to learn through play or providing learning opportunities for children through activities.

Accordingly, preschool teachers requested that we conduct teacher training sessions that include these concepts and educate them.

Need for Professional Development and Teacher Training

Another important finding of the study was that several preschool teachers had limited awareness of the concepts of feedback and feedforward. Some teachers stated that they had heard these concepts for the first time during the research discussions.

This indicates a gap in professional knowledge related to effective classroom communication and assessment practices in ECE.

Conclusion and Implications

This paper examined feedback and feedforward practices in ECE from classroom perspectives in Sri Lanka. While feedback is widely practiced, feedforward remains under-recognized despite its potential to support future learning. However, limited instructional time poses challenges for individualized feedback and feedforward. Exploring classroom practice provides insight into how educators negotiate these contextual constraints while supporting children's learning.

While it is possible to be satisfied with the performance of teachers in several government-affiliated preschools and a limited number of private preschools, the general understanding of these concepts among teachers is limited. Their primary role was to ensure that the relevant syllabus was followed. It is also clear that many preschools did not provide a good learning environment for children.

Every teacher regularly welcomes a child to school in the morning, and this should be appreciated; such a welcome rarely occurs for children who arrive after the scheduled time. Children act according to the teacher's instructions and are given the initiative to complete the task assigned by the teacher. Although each teacher had completed a diploma course in preschool education lasting six months to a year, it was clear from their behavior in the classrooms that their knowledge of education philosophy and psychology was limited. Also, it was clear that the teacher did not have a clear understanding of who the child was and what they could do. Providing positive feedback and motivating teachers to prepare for future learning was not enough. It was clear that since many private schools operate based on the fulfillment of parental expectations, children do not have the physical and mental freedom they need. It was also clear that very few focus on the holistic development of children. However, it must be said that the support the child receives from teachers for these two concepts is insufficient.

The study suggests the need to provide professional development focused on feedback and feedforward strategies; Align curriculum and policy frameworks with formative assessment practices that value reflection and child agency. It is also essential to provide practical experience in how to provide feedback and feed forward for children. When planning the curriculum, it should include information that guides these concepts. The findings support and emphasize that teacher training and professional development improve classroom practices and children's learning experiences. Teachers in the present study also requested training programmes on

child-centered learning (psychological and philosophical perspectives), feedback strategies, and teaching-learning methods. Therefore, educational authorities and preschool training institutions need to organize continuous professional development programmes to improve teachers' awareness and implementation of effective feedback and feedforward practices in Sri Lankan preschool classrooms.

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