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A Study of the Pedagogical Practices in ECCE Centres of District Dhanbad, Jharkhand

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Abstract

The National Education Policy (NEP) 2020 highlights a huge learning crisis at the foundational stage. It is essential for children to acquire Foundational Literacy and Numeracy (FLN) competencies. The facilitation of FLN at the Foundational Stage starts from quality pre-schooling. Considering this, the present study adopted an exploratory research method to find out the pedagogical practices adopted in terms of development of FLN in the ECCE centres of Dhanbad district, Jharkhand. Stratified sampling method was adopted for the study. Ten ECCE centres from two blocks, namely Govindpur and Dhanbad were taken as samples. A total of 247 students and 10 ECCE teachers were part of the study. Observation and interview methods were adopted to collect the qualitative data. The findings show extensive use of conventional teaching methods, unavailability of adequate infrastructure and learning resources, and lack of professional skills among the teachers as major challenges in developing FLN skills among children.

Introduction

Education is regarded as a basic human right and hence a strong foundation in education has a positive impact on lifelong learning experiences. Studies reveal that children who get proper training during the preschool years have a better understanding, socio-emotional development and positive attitude towards learning (Chandra, 2017). The importance of the early years of education cannot be denied as it develops confidence and school readiness among children. Conversely, a child who does not undergo preschool programme faces difficulty at the Primary level and may

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end up either being a slow learner or a drop-out (Chowdhury, 2018). The National Education Policy (NEP) 2020 also highlights the fact that over 85 per cent of a child's cumulative brain development occurs prior to the age of six, indicating the critical importance of appropriate care and stimulation of the brain in the early years. Thus, investing in early childhood, a period marked by the most rapid brain development, delivers the highest returns compared to the investments made during later stages of childhood and education (Heckman & Masterov, 2007).

Learning delays can be greatly reduced with the help of intervention in the early years (NCF-FS 2023). Unless quality pre-schooling is focused, the aim of enabling young minds to participate and flourish in the educational system throughout their lives cannot be achieved. Universal provisioning of quality early childhood development, care and education must be achieved as soon as possible, and no later than 2030, to ensure that all students entering Grade 1 are school-ready (NEP 2020). Realising its significance, the policy endorses a strong base for a Foundational Stage from 3 years of age for promoting better overall learning, development, and well-being.

In this regard, guaranteeing a caring and stimulating play-based environment for every child in the age group of 3–8 years is essential. Children enjoy playing, so, creating activities focused on play is the key to providing a joyful learning environment. Children who are exposed to age-appropriate, physical, educational, and social activities through play-based methods learn better and grow better. However, when the quality of stimulation, support and nurturing is lacking, it can have a detrimental effect on the overall development. This signifies that the period of early childhood lays the foundation for lifelong learning and is a key determinant of the quality of adult life. That is why providing quality pre-school education is listed as one of the important goals covered under the 2030 Agenda for Sustainable Development. "Our highest priority must be to achieve universal foundational literacy and numeracy in Primary schools by 2026–2027. The rest of this policy will be largely irrelevant for such a large portion of our students if this most basic learning (for example, reading, writing and arithmetic at the foundational level) is not first achieved." (NEP, 2020).

Consequently, the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat Mission was launched in 2021, with a dedicated focus on attaining the goal of Foundational Literacy and Numeracy within the targeted time. This concern is evident in the first ever National Curriculum Framework for Foundational Stage (NCF-FS) 2022 developed by the National Council of Educational Research and Training (NCERT) based on the suggestions of NEP 2020. It offers an integrated curriculum

framework for children aged between 3 and 8 years. As a follow-up, the Jaadui Pitara was launched in 2022, which consists of a variety of play-based teaching–learning materials for the Foundational Stage, such as activity books and story books, worksheets, flashcards, posters, toys, etc. The wide range of resources connect the local culture and social context. Its main focus is to enable children to learn through play and fun.

Practices like play-based, toy-based pedagogy are very effective in involving young learners in the classroom. Children should feel free to explore, experiment, and experience new things. A stress-free and child-centric conducive environment enables children to feel valued, thus, providing them opportunities to talk, connect with the surroundings, and share their experiences. Use of concrete materials and manipulatives, like puzzles and games, develops problem-solving skills. Experiential learning activities integrating art, craft, music, dance, etc., helps to develop physical fitness, alertness, emotional balance, cognitive, and linguistic abilities among children, making them school-ready and motivating them for lifelong learning.

These efforts were geared towards the overarching goal of attaining FLN within the stipulated time period.

Rationale of the Study

Quality early learning experiences are crucial for developing foundational literary and numeracy skills, ensuring a smooth transition from home to school. First-generation learners may not have an academic environment at home, so they may not be exposed to experiences related to literacy and numeracy. Research points that family and community also play a crucial role in building the basis for reading and numeracy (Vasoya & Vansdadiya, 2023). Therefore, conscious efforts are required to minimise the number of school dropouts. A joyful learning environment can be created through activities involving counting, colours, shapes, drawing, painting, indoor and outdoor play, puzzles, logical thinking, art, craft, music, and movement.

The aim is the integrated and holistic development of children through three developmental goals as highlighted in the NIPUN Bharat Mission (2021):

Goal 1: Children maintain good health and well-being.

Goal 2: Children become effective communicators.

Goal 3: Children become involved learners and connect with their immediate environment.

Language and literacy development in early primary school years is crucial, requiring oral language development, exposure to school language including the development of listening to comprehension skills, development of emergent reading and writing skills, development of print and phonological awareness. Also, pre-number concepts, skills like comparing, seriation, classification

and pattern recognition, which form the foundation for early primary mathematics learning. These experiences can only be provided using suitable pedagogy, a range of learning resources, and a conducive and joyful learning environment.

Context of the Study

Under the NIPUN Bharat Mission, the state of Jharkhand took initiatives towards achieving the goals of Foundational Literacy and Numeracy such as development of FLN curriculum, syllabus for Preschool, Grades I, II, III, preparation of FLN workbook for students, FLN handbook for teachers, etc. Teacher training was being conducted in alignment with the objectives of the FLN Mission. A dedicated assessment tool was also prepared by the Jharkhand Education Project Council to monitor the progress of children. A monitoring team was formed to track and report district-wise the FLN achievements in Jharkhand. The present study attempts to explore pedagogical practices adopted in the Early Childhood Care and Education (ECCE) centres of Dhanbad district in Jharkhand towards achieving FLN goals.

Objectives of the Study

1. To explore pedagogical experiences of students in terms of development of FLN with respect to:
   (i) Curricular content
   (ii) Pedagogical strategies
   (iii) Learning resources
   (iv) Classroom management
   (v) Assessment
2. To find out the challenges faced by the teachers in developing FLN among students

Research Questions

1. What are the pedagogical experiences of students in terms of development of FLN with respect to curricular content, pedagogical strategies, learning resources, classroom management, and assessment?
2. What are the challenges faced by the ECCE teachers in the development of FLN?

Methodology

The exploratory research method was adopted to study the pedagogical experiences and challenges faced by the teachers in the ECCE centres of Dhanbad district in Jharkhand. Stratified random sampling technique was adopted. Among the 10 blocks in Dhanbad, two blocks were selected randomly, and five ECCE centres were selected from each block. All the students and the teachers in each ECCE centre were participants in the study. So, a total of 247 students and 10 teachers of 10 ECCE centres were taken as sample for the study.

Tools and Techniques

In order to collect relevant data for the present study, the following tools/techniques were developed and used:

1. Classroom observation
2. Interview with ECCE teachers

Data Analysis

Thematic analysis method was employed to analyse the obtained qualitative data.

Major Findings from General Observation of the ECCE Centres in Jharkhand

The ECCE centres run by the Government of Jharkhand are known as Anganwadis. Out of the 10 Anganwadis taken as sample, four are located in the urban areas and six are situated in the rural areas. Seven Anganwadis operate in own buildings, whereas three Anganwadis function in rented spaces.

The NIPUN Bharat guidelines recommend structuring of the ECCE centres in distinct levels (I, II, III) based on age-specific developmental stages. However, it is observed that the Anganwadis followed a multi-grade classroom model, accommodating all the children between the ages of 3–6 years in a single classroom. There is a need of separate curricular content for children belonging to different age-groups— 3–4 years, 4–5 years and 5–6 years.

The Jharkhand Government issues a suggestive timetable for the ECCE centres, with distinct school hours for summers (7 am to 11 am) and winters (9 am to 1 pm). An analysis of the scheduled timetable revealed that it is designed considering holistic development of children with inclusion of diverse activities targeting the physical, cognitive, creative, and emotional development of children in an integrated manner. Some suggested activities are listed as routine for development of language skills and pre-number concepts. Additionally, teachers can independently plan activities to actively engage children in the classroom.

The day formally starts with a morning prayer followed by some physical exercises. Afterwards, breakfast is provided to children, accompanied by lessons on personal hygiene, such as washing hands before meals, cutting nails regularly and combing hair daily. Teachers reported that many parents have a casual approach towards their children's participation in the Anganwadi, contributing to irregularity and unpreparedness among children.

Health and well-being is one of the important aspects for the physical development of the young learners. To ensure good health, children were provided two nutritious meals— breakfast (*sooji halwa* or *gud badam*), and lunch (*rice-dal-sabzi* or *khichdi*). Physical exercise and maintenance of personal hygiene were also an integral part of the daily routine. One of the teachers said:

"Most of these children learn to brush their teeth, after coming to the ECCE centre. We teach them the importance of personal hygiene and help develop healthy habits. We also encourage their parents to take care of the hygiene of their children, like washing the face, dressing properly,

combing hair. But these are labour-class people; some are daily wagers and they leave their homes early in the morning dropping off their child at the ECCE centre. They hardly give attention to these things. They feel they can safely leave their child here. They also understand the importance of study and want their child to learn, but give little attention to the things we suggest."

Various aspects of pedagogical experiences of the children were examined. The details are as follows:

Curricular Content

Teachers were observed to be focused on suggested activities listed in the timetable, targeting the development of cognitive, creative, and physical domain in children. Notably, no worksheets were provided to the children; instruction primarily relied on learning charts, and slates for practising reading and writing skills. At some ECCE centres, even the charts were not available. A common instructional sequence was followed across all the Anganwadis, which included teaching the English and Hindi alphabets; writing 2–3 letter words; naming objects, colours, fruits, vegetables, animals; number recognition and number names. Teachers taught children as per their own understanding without following any structured curriculum. Saturdays were reserved for drawing and singing every week. Art and craft activities were limited to annual events on special occasions like 'Poshan Diwas', indicating occasional creative engagement. The activities conducted are stated below:

- Some local rhymes like *Neeche jhatke*, *upar patke*; *Ek tamaatar laal laal*, etc., known to the teacher were usually sung.
- Recognising letters and corresponding sounds, forming recognisable letters, and reading and writing of numerals was practised in the classroom.
- Prior to letter formation, children were given opportunities for pencil control exercise, including scribbling practice and proper grip.
- Picture reading and reading simple words of two or three letters was also done.

It was observed that activities related to pre-number concepts, such as classification, seriation, pairing of the objects, use of comparative vocabulary like longer—longest, short—shortest with contextual objects around them were not part of classroom practices.

Pedagogical Strategies

It was found that the conventional methods of teaching were more prevalent. The focus was on reciting and memorising letters and numbers. In most of the centres, alphabets and numbers were taught in isolation without using concrete materials to support their meaning. For example, the teacher wrote the letters A, B, C, क, ख, ग, घ and the numbers 1, 2, 3, etc., on the blackboard, read them aloud, and instructed the students

to repeat after her. Foundational literacy components such as decoding (letter-sound relationship) and phonological awareness were hardly practised.

For oral language development, children were engaged in reciting rhymes and poems. Recitation was done in groups as well as individually, but the recitation was rarely accompanied by actions. It is also observed that preference was given to children who were active. Shy and introverted children showed little participation. Methods like learning by doing, play-way, co-operative learning were rarely used in any of the ECCE centres. In most cases, the teachers resort to formal teacher-centric methodology of teaching (ASER, 2017).

Writing practice of alphabets was done by children on the slates provided. The teacher supported the children by holding their hand and guiding them in writing the alphabets. Children were involved in either copying from the board or doing some classwork (language or number work) on their slates or in notebooks (ASER, 2017). Reading and writing of numerals was the only practice adopted for the development of numeracy skills. Teacher-centric approaches were more prevalent in the classrooms, limiting exploration, experimentation, and problem-solving like use of puzzles and games. Storytelling sessions were not conducted in the ECCE centres.

However, some of the teachers told us that they do narrate stories to the children. One of the teachers said that she used unstructured conversations for language development. She said, "I talk to them regarding their daily routine. For instance, I ask them questions like 'What did you eat yesterday?' or 'Which colour shirt are you wearing?' They love to discuss such things and everyone wants to answer. They love talking, so I involve them in such activities. They enjoy such conversations."

Learning through play is the most effective pedagogy for young children because it fills the children with joy and fun (Opare-Kumi, 2023). However, the use of play-based pedagogy was missing in most of the centres. No playground was available outside the classroom in any of the ECCE centres. Playing games was considered a separate activity rather than using it as a pedagogic medium.

Planning of Teaching

Proper planning is the first and foremost part of effective teaching. However, it was found that no prior lesson planning was done by the teachers. Most of the teachers believed that the timetable provided by the state government was enough to carry out the daily activities. However, in practice, the complete timetable was not followed.

Medium of Instruction

Instruction was provided in the language of the learner. The children spoke Khortha, Bengali, and Hindi. All the teachers were familiar with

these languages and communicated with the children in their mother tongue or used some familiar sentences in their communication to support understanding and engagement.

Experiential learning methods like learning through play, art, stories, toys, and games were least practised. Most of the teachers were unaware of effective and innovative teaching strategies. However, two teachers shared that they received training on NEP 2020, during which they learned about activity-based and play-way methods. They believed that the training was insightful and gave them several ideas to make teaching more engaging, which they claimed to have incorporated in their teaching.

Learning Resources

Eighty per cent of the Anganwadis studied have considerable resource constraints. Toys, manipulatives, worksheets, flash cards, puzzles, colours, art, and play materials were not available in most of the ECCE centres. Slate and chalk served as a primary learning resource for the children, that too with inconsistent availability. At some centres children scribbled on the floor, while some sat idle due to unavailability of slates. Teachers believed that they are unable to engage children in activities due to unavailability of learning resources.

At another Anganwadi centre, a teacher used paint and wrote rhymes, poems, and alphabets on the wall due to unavailability of charts and learning materials. She said, "There were no materials (alphabet charts, etc.,) displayed on the wall. One day I brought paint and brush and wrote these basic things on the walls that I can regularly teach to the children. Now these children are so familiar with these texts that they can find out which rhyme is written on which part of the wall even without being able to read properly."

Teachers utilised the locally available learning materials like leaves, clay, sticks, stones, vegetables, and grains for various activities like creating objects, counting, teaching objects' names, and separation. However, such activities were practised occasionally once or twice a year. According to the FLN Mission, such activities need to be planned on a regular basis.

Classroom Management

Most of the teachers faced difficulty in managing the classroom. The difficulty was due to various reasons like the absence of a *sahaika* (Assistant), absence of classroom norms and inability to engage students. The attendance of the students was marked by the teacher on her own without calling out names and making them a part of the process. It was observed that positive enforcement of classroom norms, like raising one's hand before speaking in a group, or working collaboratively with others, were not found in most of the ECCE centres. In four out of the 10 centres, teachers used sticks to control disruptive children, or scolded them for shouting or not following instructions.

At three out of 10 ECCE centres, the person responsible for cooking meals for the children and cleaning the centre was absent during the visit. So, teachers were engaged in cooking, serving meals, and washing the utensils. Hence, teachers struggled to manage the class and engage children in constructive activities. Detailed activities for FLN development were not observed. Teachers at all the ECCE centres were unable to give individual attention to the students. Teachers seemed tired from managing children while also having to cook.

Dealing with Developmental Delays and Signs of Stress

Teachers informed that when young learners join the ECCE centre, they usually cry and are unable to adjust. Through love and care, and engaging them in free-play, allowing children to attend for shorter durations helps them overcome stress. Teachers informed that they received a training module titled *'Padhai bhi, poshan bhi'* to specifically focus on nutrition, physical, and mental well-being of children. The training also emphasised on the identification of children with special needs and importance of play-based activities in early childhood development.

Physical Environment of the Classroom

Most of the ECCE classrooms lacked a print-rich environment. There were no art corners or reading corners. Only learning charts and teacher-written alphabets and rhymes were available as printed material. Moreover, the



Figure 1: Child identifying alphabets from the wall writings



Figure 2: Constraints of space

prints were not displayed at the eye level of children. A few centres had constraints of space too.

Assessment

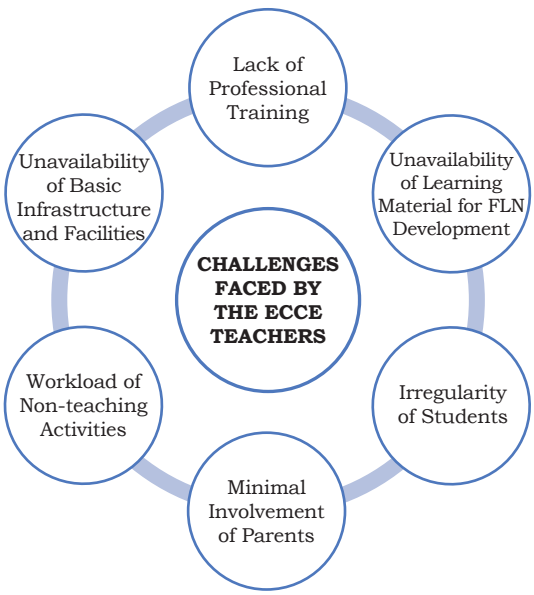
A continuous and comprehensive assessment is considered vital to track a child's progress. It can help to identify the learning gaps, strengths, needs and interest of the children (Spink et al., 2022). The FLN Mission lays stress on School-based Assessment (SBA) by the teacher for assessment of each child's progress. The FLN Mission emphasises day-to-day observation and documentation of children's progress in terms of health and nutrition, participation and involvement in learning experiences, artwork, games, and exercises, etc. Systematic assessment using tools and techniques like anecdotal records, checklist, portfolio, artefacts like photographs of completed work, and worksheets are suggested in the FLN Mission Document. Continuous interaction with parents to monitor the child's progress is equally important.

The ECCE centres of Jharkhand primarily utilise observation as a tool for assessment. However, this assessment is informal and general in nature. Teachers solely rely on observation to track the children's learning progress to identify their strengths and weaknesses. No documentation or communication of the assessment is done. No records were being maintained to support the holistic development of a child's personality. If a child is unable to learn a particular concept, the concept is repeated in a conventional manner until the child grasps it.

Monthly meetings conducted with the mothers primarily focus on the health and vaccination of children. There is no age-specific separate grouping of children in ECCE centres—all children from age group 3–6 years sit together, following the multi-grade model, and a child is promoted to the Primary school on attainment of 6 years of age. No importance is given to the holistic assessment of children.

Challenges Faced by the Teachers of ECCE Centres in Developing FLN Among Children

There were various challenges that ECCE teachers faced in the development of FLN, and these are listed as follows:



Lack of Professional Skills

One of the biggest concerns was the lack of professional qualification or training. The ECCE teachers were recruited through an election by the people of the local area they belong and as per their qualification. However, these teachers have not received any training beyond 10 days of training after joining as ECCE teachers.

Most of these teachers were unaware about the innovative pedagogical strategies and methods of teaching. There was lack of awareness about the NEP 2020, the new pedagogical structure (5+3+3+4) and the FLN Mission. Most of them had not participated in any workshop or seminar related to it. These teachers were trying their best, as per the extent of their knowledge and skills. The study conducted by Soni (2020) that intended to raise teachers' capacity in preschool education also supported these findings.

The ECCE teachers shared that the challenges they face on a regular basis are as follows:

1. *Workload:* Teachers were responsible for various tasks other than teaching, such as medicine distribution, voter ID card registration, collecting rations and fuel for the preparation of the mid-day meal, maintaining health and vaccination registers of pregnant women and children, and distributing food packets to pregnant women.
2. *Unavailability of basic infrastructure and facilities:* For lack of better options, damaged buildings were used as centres for conducting classes. Some of them had inadequate space. Only a few centres were newly built. In most of the centres there was

unavailability of washrooms, safe drinking water, fans, lights, and electricity. Furniture like desks and benches were also not available at most of the centres.

3. *Unavailability of learning materials:* All the ECCE teachers believed that some basic learning material like toys, colours, art material, blocks, worksheets, charts should be provided to children at regular intervals as it helps to retain the interest and attention of young learners by providing them with a stimulating environment. However, engaging learning materials were not available in most of the ECCE centres.
4. *Irregularity of attendance:* This was a challenge as children lose track of what is taught. At some of the centres, it was observed that children's irregular attendance was due to the unavailability of a *sahaika* (help or assistant). The *sahaika* is responsible for safely escorting children to and from the ECCE centres.
5. *Minimal involvement of the parents:* Although parents recognise the benefits of sending their children to school, they are unaware about their role in supporting their child. They hardly follow the academic progress of their children, and do not participate in parent-teacher meetings. Also, they lack awareness regarding the importance of school attendance and basic hygiene. It was commonly observed that children arrive at school with unwashed faces, uncombed hair, and untidy clothes. Research suggests that a strong partnership between teachers and parents lays a strong basis for continuous learning and success of children (Kamal et al., 2022). Therefore, strengthening parental engagement is crucial for the long-term success of the young learner).

Conclusion

The findings suggest that systematic and conscious efforts are required for developing FLN skills among children at the ECCE centres. The training process needs to be accelerated to reform existing pedagogical practices in the ECCE centres. The teaching–learning practices need a shift from the conventional methods to the play-based pedagogy and from rote memorisation to experiential learning strategies at the ECCE centres. Teachers should encourage child-centric, activity-based approaches to create a joyful and engaging learning environment. Government should further plan for structural changes in Anganwadis to accommodate children of different age-groups at different levels with a separate curricular content for them. Besides this, awareness programmes related to FLN can also be organised to enhance the participation of parents and community in the development of FLN skills.

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