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Foundational Literacy and Numeracy (ECCE & FLN)

1. Research Abstract

1. Theme/Subject:	Foundational Literacy and Numeracy (ECCE & FLN)
2. Stage of Education:	Foundational Stage
3. Topic of Research:	A Study on Integration of socio-cultural practices in curriculum during the foundational stage of schooling to augment literacy development
4. Name and Address of the Investigator(s) with email:	Prof. Laxmidhar Behera behera17@yahoo.co.in
5. Name of the Institution where the Research was conducted	Regional Institute of Education, Bhubaneswar
6. Category: (Research study/ Action research/Other)	Research Study
7. Language of Research Report:	English
8. Year of Completion:	2025
9. Published/Unpublished:	Unpublished
10. Introduction:	<p>Foundational literacy- the bedrock of childhood education, lays the cornerstone for a child's cognitive, social, and academic development. It serves as an essential component empowering children with essential skills such as oral language, decoding, reading fluency, reading comprehension, and writing. Across diverse global contexts, foundational literacy is recognized as a fundamental right and a key driver of socioeconomic advancement. In the context of India, where linguistic and cultural diversity shapes the educational landscape, foundational literacy takes on added significance. With over 1.4 billion people and 22 official languages, initiatives like the National Education Policy (NEP) 2020 and programs such as "Nipun Bharat" aim to ensure that every child achieves basic literacy and numeracy by Grade 3, addressing challenges like rural-urban disparities, multilingual classrooms, and access to quality education. Yet, the role of socio-cultural practices in foundational stage literacy instruction remains an overlooked aspect that needs greater focus to ensure effectiveness along with inclusivity and equity as emphasized by NEP 2020. The National Education Policy 2020 in India recognizes the importance of investing in the early years which is the most important indicator of productive and efficient human capital a country must ensure. The policy thus, obligates strong investment in foundational learning with</p>

a special focus on the attainment of foundational literacy and numeracy skills among children in their early years. For this, policy lays a roadmap for academic and systemic reforms in mission mode for better planning, designing, and implementation of interventions for foundational learning. Accordingly, the NIPUN Bharat Mission was launched in 2021 with targets to be achieved in five years, i.e. by 2026-27.

11. Objectives:

This study aims to achieve the following objectives:

- To study the existing literacy development activities in the foundational stage.
- To identify the possible integration of socio-cultural practices into classroom transaction in the foundational stage to support children develop literacy skills
- To design and use the literacy development activities for foundational stage using the socio-cultural context of children
- To study the effectiveness of the activities on literacy development of children in the foundational stage.

12. Methodology:

The present study employed a mixed methods research design, incorporating both qualitative and quantitative approaches. The study was intervention-based utilizing pre and post intervention tests to assess the literacy development; interview and focus group discussion (FGD) to capture perception of community members and teachers of Anganwadi centres. The study was conducted in Mayurbhanj district, Odisha renowned for rich tribal heritage and cultural diversity. Within Mayurbhanj, Rairangpur block was selected as the specific study area characterized by demographical diversity and socio-economical uniqueness. To ensure analytical depth and empirical validity, the study employed a suite of statistical techniques tailored to the nature of the data and the research objectives. These included exploratory data analysis to identify structural patterns, followed by inferential procedures to test theoretical propositions. Techniques such as variance, distributional analysis, and suitable cartograms were applied to interrogate the data across spatial, temporal, and socio-economic dimensions.

13. Findings:

The short intervention period (2 months) limited the depth of engagement. Additionally, teachers required more extensive training and access to culturally specific learning materials to sustain the approach. The case studies reveal that

despite similar socio-economic backgrounds, differences in language exposure, home support, and social engagement significantly influenced student performance. Key factors include structured study routines, parental involvement, language transition support, and nutrition. While notable progress was achieved, advanced fluency levels remained an area for further development, necessitating longer-term interventions and continuous guided practice.

- The study confirmed that integrating socio-cultural practices into foundational literacy education fosters deeper student engagement, improves comprehension, and strengthens cultural identity.
- The use of storytelling, traditional music, and indigenous knowledge created a more immersive and meaningful learning environment for children.
- To ensure long-term sustainability, continuous teacher training, structured curriculum design, and community participation are essential.
- Scaling this model across various communities can contribute to a more inclusive, culturally responsive, and effective early childhood education system that respects and builds upon the rich heritage of indigenous traditions.

14. Implications:

The integration of socio-cultural practices into foundational stage curricula represents a paradigm shift in literacy education, one that challenges the dominant, decontextualized models of early learning. This study contributes to the growing body of literature that positions literacy not merely as a technical skill but as a socially situated practice, deeply embedded in the cultural, linguistic, and epistemic contexts of learners. By foregrounding indigenous narratives, oral traditions, and community knowledge systems, the research advances a culturally sustaining pedagogy that aligns with Vygotskian and sociocultural theories of learning, wherein meaning is co-constructed through interaction within one's cultural milieu.

The findings underscore the need for curricular frameworks that move beyond standardized content to embrace local knowledge ecologies, especially in regions with high tribal and minority populations. This has implications for curriculum theorists, educational planners, and teacher educators, urging a reconceptualization of foundational literacy as a pluralistic and inclusive construct. Furthermore, the study reinforces the NEP 2020's emphasis on mother tongue instruction and experiential learning, offering empirical grounding for policy implementation in diverse settings. It also calls for methodological innovation in assessment practices, advocating for tools that capture narrative competence, oral fluency, and culturally mediated comprehension.

In sum, the study enriches academic discourse by bridging sociolinguistic theory, curriculum studies, and educational policy, and by proposing a transformative model of literacy development that is both locally rooted and globally informed.

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16. **Keywords:** Socio-cultural, Curriculum, Foundational stage, NEP 2020, Transformative model.

2. Research Abstract

1. Theme/Subject:	Foundational Literacy and Numeracy (ECCE & FLN)
2. Stage of Education:	Foundational Stage (Class 1 and Class II)
3. Topic of Research:	Foundational Learning of Students in Single-Teacher Schools of Aspirational Districts of Jharkhand: An Analysis
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5. Name of the Institution where the Research was conducted	Regional Institute of Education, Bhubaneswar
6. Category: (Research study/ Action research/ Other)	Research Study
7. Language of Research Report:	English
8. Year of Completion:	2024
9. Published/Unpublished:	Unpublished
<p>10. Introduction:</p> <p>This study focuses on Early Childhood Care and Education (ECCE), which caters to children from birth to eight years, forming the foundation for lifelong learning and development. ECCE emphasizes physical, emotional, social, and cognitive growth through play-based and age-appropriate activities, including pre-reading and pre-writing skills. It also highlights the importance of parental involvement, proper nutrition, healthcare, and a safe learning environment. Investment in quality ECCE programs leads to improved school readiness, academic achievement, social competence, and long-term benefits in health and employment. Moreover, ECCE plays a vital role in reducing inequalities by supporting children from disadvantaged backgrounds.</p>	
<p>11. Objectives:</p> <ul style="list-style-type: none"> ● To assess the learning outcomes in Literacy and Numeracy of students in single teacher schools of aspirational districts of Jharkhand. ● To study the innovative practices used in single teacher schools of aspirational districts of Jharkhand for enhancing the learning outcomes in literacy and numeracy. ● To find out the challenges faced by students and teachers in single teacher schools of aspirational districts of Jharkhand in enhancing foundational literacy and numeracy. 	

12. Methodology:

The present study was conducted on Foundational Learning of Students in Single Teacher Schools of Aspirational Districts of Jharkhand: An Analysis. The aim of this study is to assess the learning outcomes in Literacy and Numeracy of students, the innovative practices used by the teachers and to find out the challenges faced by both the students and teachers in single teacher schools of aspirational districts of Jharkhand in enhancing foundational literacy and numeracy. The investigator used both qualitative and quantitative research approach and descriptive survey method to assess the learning outcomes of students, innovative practices used by the teacher, and to find out the challenges faced by both the teacher and students of class 3 for enhancing foundational literacy and numeracy. The sample for the present study, consists of 20 single teachers, concerned officials; DEOs, BEOs, BRPs and CRPs and all the students who enrolled in class 3 of the 20 single teacher schools of east Singbhum and Deoghar (10 schools from each) from Jharkhand. Sample for the study has been selected by using a multistage sampling method. Initially, 2 aspirational districts were selected from 19 aspirational districts of Jharkhand by using a random sampling method. Further one block was selected from each district and 10 schools were selected from each district.

13. Findings:

The study on single teacher schools in aspirational districts of Jharkhand reveals mixed learning outcomes in foundational literacy and numeracy, with minor gender-based variations across districts. While male students generally perform better in numeracy, female students outperform males in literacy in several contexts, especially in Deoghar. Teachers and officials emphasize innovative teaching strategies such as activity-based learning, use of FLN kits, toy-based pedagogy, and multimedia tools, although major challenges persist such as overcrowded classrooms, multi-grade teaching difficulties, inadequate resources, and limited teacher training. Both teachers and students face hurdles including lack of engagement, language barriers, insufficient teaching-learning materials, and difficulty in grasping basic concepts, particularly in numeracy. Despite innovative efforts by teachers—like peer reading, parent engagement, and frequent assessments systemic issues continue to impede optimal learning outcomes.

14. Implications:

Enhancing foundational literacy and numeracy in single teacher schools holds significant socio-economic and developmental benefits. Foundational literacy supports lifelong learning, civic engagement, cultural continuity, and economic participation by equipping individuals with communication, comprehension, and critical thinking skills. Similarly, foundational numeracy underpins logical reasoning, problem-solving, and life skills essential for daily functioning and workforce readiness. Strengthening these foundational competencies can break cycles of educational disadvantage and drive holistic development by empowering individuals to make informed decisions, improve their livelihoods, and contribute meaningfully to society. Addressing existing challenges through systemic reforms, resource allocation, and pedagogical innovation is crucial for fostering equitable learning environments in these underserved regions.

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16. Keywords: Foundational Learning, Single Teacher Schools, Aspirational Districts, Optimal learning

3. Research Abstract

1. Theme/Subject:	Foundational Literacy and Numeracy (ECCE & FLN)
2. Stage of Education:	Pre-Primary
3. Topic of Research:	Study of Pre-Primary Education in Southern States of India
4. Name and Address of the Investigators(s) with email:	Prof. Kalpana Venugopal kalpanavp@rediffmail.com
5. Name of the Institution where the Research was conducted	Regional Institute of Education, Mysuru
6. Category: (Research study/ Action research/Other)	Research Study
7. Language of Research Report:	English
8. Year of Completion:	2016-17
9. Published/Unpublished:	Published
10. Introduction:	<p>Pre-primary education forms the foundation of lifelong learning and overall child development. This study aimed to investigate the status of pre-primary education in the southern Indian states of Kerala and Karnataka, focusing on prevalent practices, infrastructure, curriculum, teacher preparedness, and their alignment with developmentally appropriate early childhood education principles. The research acknowledges the fundamental role of the early years in shaping cognitive, social, emotional, and physical growth. It also addresses the divergence between policy recommendations centred on play-based, child-centric learning and the reality of formal, academic-oriented practices found in many schools. Rural-urban disparities, varied management systems, and parental expectations contribute to this complexity. The study highlights gaps in teacher qualifications, ongoing professional development, infrastructure adequacy, and inclusion of children with special needs. Findings are expected to inform policy formulation and improve implementation strategies to create equitable, holistic, and nurturing pre-primary educational environments tailored to the needs of young children in Kerala and Karnataka.</p>
11. Objectives:	<ul style="list-style-type: none"> ● To document existing pre-primary education practices in Kerala and Karnataka. ● To assess infrastructure, curriculum, and teacher preparedness in these states.

- To evaluate the alignment between current practices and developmentally appropriate early childhood education.
- To provide evidence-based recommendations for policy and practice improvements at state and national levels.

12. Methodology:

The study adopted a mixed methods survey approach covering 81 pre-primary schools—49 in Kerala and 32 in Karnataka—selected through stratified random and multi-stage sampling across rural and urban districts. Schools from government and private sectors participated. Data collection instruments included structured questionnaires, checklists, observation schedules, and focus group discussions involving teachers, heads of schools, parents, school committees, faculty from SCERT and DIET, and education officials at state and district levels. Tools were developed through expert consultations, pilot-tested, translated into Malayalam and Kannada, and refined for contextual relevance. Fieldwork spanned three months, with teams conducting rigorous classroom observations to assess pedagogical practices, teacher qualifications, training, and deployment. Infrastructure audits examined safety, availability of learning materials, play areas, and inclusion facilities for children with special needs. Multiple data sources were triangulated to ensure accuracy and comprehensiveness. Ethical considerations included informed consent and confidentiality agreements with all respondents.

13. Findings:

The study revealed significant diversity in the pre-primary education landscape between Kerala and Karnataka, marked by varied management, instructional practices, and resource availability. Kerala's sector was heterogeneous, with different school management types, whereas Karnataka mandated school registration, aiming for standardization but with resource disparities persisting. All pre-primary teachers were women, mostly holding pre-service qualifications but with limited ongoing professional development opportunities. Salaries were lower than those of primary teachers despite similar responsibilities. Teacher-child ratios varied, with some schools exceeding recommended norms, impacting individual attention. Infrastructure was generally safe and adequate for basic needs but lacked sufficient play materials, learning corners, and inclusive facilities for children with special needs. Pedagogical approaches frequently leaned towards formal academic instruction, contrary to policy advocacy for play-centred learning. Parental expectations often emphasized early literacy and numeracy, creating tension with developmental pedagogies. However, attendance was high, dropout rates were minimal, and community involvement was evident. These

findings highlight critical gaps in policy implementation and practice concerning quality, equity, and inclusion in pre-primary education.

14. Implications:

The findings emphasize an urgent need to strengthen pre-primary education through improvements in infrastructure, provision of developmentally appropriate teaching-learning materials, and sustained professional development for teachers focusing on play-based and inclusive pedagogies. Policy dissemination and monitoring mechanisms must be enhanced to ensure greater alignment between state educational policies and grassroots implementation. Parental and community engagement strategies are essential to balance academic expectations with child-centered development, promoting holistic learning environments. Emphasizing inclusivity for children with special needs requires dedicated resources and training, aligning with national educational mandates. Given the inter-state and intra-sectoral diversity, a one-size-fits-all approach is inadequate; instead, state-specific, contextualized strategies should guide future reforms. Increased government investment and policy focus on early childhood education can contribute significantly to laying a strong educational foundation, ensuring equitable access and quality learning experiences for all young children in southern India.

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