

NATIONAL CURRICULUM REFORMS AND THEIR SIGNIFICANCE FOR FOUNDATIONAL LEARNING IN ECCE

Kumari Radhika

Research scholar, Department of education, MDU, Rohtak

Abstract

The National Curriculum Framework for Foundational Stage 2022 (NCF-FS) serves as a vital guide for Early Childhood Care and Education (ECCE) in India, focusing on the all-encompassing development of children aged 3 to 8 years. This research investigates the framework's significance in promoting effective ECCE practices, emphasizing its commitment to play-based learning and holistic development. A survey involving 150 ECCE educators is conducted to assess their perceptions of NCF-FS 2022, exploring its implementation challenges and overall impact on foundational learning. Results indicate a strong understanding of the framework among educators, although challenges in implementation persist. The study underscores the need for continuous professional development and resource allocation to maximize the framework's potential in enhancing educational outcomes.

Keywords: National Curriculum Framework, Early Childhood Education, Holistic Development, Play-Based Learning, Educator Perspectives

Introduction

The foundational stage of education is critical as it lays the groundwork for future learning and development. The NCF-FS 2022 was developed in response to the growing recognition of the importance of quality early childhood education in India. The framework aims to create an inclusive, engaging, and nurturing environment for young learners, prioritizing their emotional, social, cognitive, and physical development. By incorporating principles of play-based learning and child-centered approaches, the NCF-FS encourages educators to facilitate learning experiences that are relevant to children's lives and interests.

Based on neuroscience research, a child's brain undergoes rapid development in the early years, with 85% of brain growth occurring by the age of six. According to Newman, the developmental phase up to five years is crucial for both physical and cognitive growth. Early Childhood Care and Education (ECCE) in India encompasses the care and education of young children. The Kothari Commission Report (1965-66) laid the groundwork for early education, a focus that has remained consistent over the years. Additionally, the Right to Education Act (2009) advocates for foundational education for children aged 3 to 6. The current National Education Policy (NEP) adopts a bottom-up approach, integrating early childhood education for children aged 3 to 8, with pre-primary education covering ages 3 to 6, and classes 1 and 2 for ages 6 to 8. NEP 2020 emphasizes a broad perspective on elementary education, prioritizing early development and learning, and outlines a clear framework for the government's initiatives in this area.

The National Curriculum Framework (NCF) is integral to curriculum development and aims to instigate necessary changes in education to equip children with fundamental experiences that foster strong, capable citizens. The NCF for Foundational Stage 2022 has been developed with a focus on the comprehensive growth of children during this pivotal stage. A nation's progress hinges on education, making the NCF a transformative initiative for the country. By aligning with the

objectives, principles, and approaches of NEP 2020, the formation of the ECCE NCF serves as a backbone for advancing education and addressing contemporary societal demands. This initiative embodies the vision of “One India, Best India,” and will contribute to establishing the foundation of a self-reliant nation (Panchal et.al, 2023). Rehman (2023) explored ECCE and trace the advancements made in this field in India, particularly in relation to the National Curriculum Framework for Foundational Stage. The NCF provides essential guidelines and standards for early childhood education across the country. This study will detail the concept of ECCE, its evolution, and its current framework, which includes practices, curriculum design, teacher training, and overall outcomes for child development.

Early childhood refers to the initial six years of life, which are crucial for brain development. Early Childhood Care and Education (ECCE) encompasses programs and services aimed at fostering healthy development and learning for young children, typically from birth to age six. In India, several initiatives, such as ECCE, Integrated Child Development Services (ICDS), and Rashtriya Bal Swasthya Karyakram (RBSK), support early childhood education for children aged 0 to 6 years. The National Education Policy (NEP) 2020 places a strong emphasis on ECCE, recognizing the vital role of these early years in a child’s growth and outlining key recommendations that focus on ensuring universal access to high-quality early childhood education.

Through a qualitative analysis of existing literature, policy documents, guidelines, curriculum frameworks, and reports, this research aims to provide a comprehensive understanding of the National Curriculum Framework for Foundational Stage (NCF-FS) and its implications for Early Childhood Care and Education (ECCE) in India. The findings will enrich the ongoing discourse surrounding ECCE policies and practices, delivering valuable insights to policymakers, educators, and researchers focused on improving the quality and effectiveness of early childhood education programs in the country.

This study explores the relevance of the NCF-FS 2022 to ECCE by examining educators' insights and experiences, providing a comprehensive understanding of its impact on early childhood education practices.

Methodology

This study adopted a mixed-methods approach to examine the relevance and importance of the National Curriculum Framework for the Foundational Stage in the context of Early Childhood Care and Education (ECCE). The research was conducted in the Begusarai district, Bihar, focusing on various stakeholders involved in ECCE, including anganwadi workers, parents, and preschool teachers (Patton, 2014).

Research Design:

The study utilized both qualitative and quantitative methods to gather comprehensive data. Qualitative methods included structured interviews and focus group discussions, while quantitative data were collected through a structured questionnaire. This mixed-methods approach allowed for triangulation, ensuring a more reliable and comprehensive analysis of ECCE practices and the implementation of the National Curriculum Framework (Yin, 2018).

Data Collection Techniques:

1. **Questionnaires:** Structured questionnaires were administered to anganwadi workers and parents, capturing their experiences, perspectives, and insights regarding ECCE practices.

These questionnaires gathered quantitative data related to ECCE implementation (Babbie, 2020).

2. **Interviews and Focus Groups:** Qualitative data were collected through interviews and discussions with key stakeholders, such as preschool teachers and anganwadi workers. These methods captured nuanced perceptions about the curriculum's relevance and impact on foundational education (Denzin et al., 2017).

Sampling Procedure:

- **Stratified Random Sampling:** The Begusarai district was divided into urban and rural strata, with anganwadi centers randomly selected from each stratum.
- **Purposive Sampling:** Specific stakeholders were targeted based on their roles in ECCE, such as anganwadi workers and parents of children aged 3–6 years, to gather focused and insightful data.

Data Analysis:

- Statistical software was used to analyze the questionnaire responses. Descriptive statistics, such as means, frequencies, and standard deviations, summarized participant demographics and ECCE variables (Creswell, et al., 2017).
- **Qualitative Data:** Thematic analysis identified recurring themes in interviews and focus groups, providing deeper insights into stakeholders' perceptions of the National Curriculum Framework for ECCE (Braun & Clarke, 2006).
- **Ethical Considerations:** Confidentiality and anonymity were ensured for all participants. Informed consent was obtained before data collection, and participants retained the right to withdraw from the study at any time (Teddlie and Tashakkori, 2009).

Results and Discussion:

This study focused on analyzing the importance and relevance of the National Curriculum Framework (NCF) for the Foundational Stage within the context of Early Childhood Care and Education (ECCE). The results were drawn from the responses of key stakeholders, including anganwadi workers, parents, and children from various anganwadi centers in the Begusarai district of Bihar.

Anganwadi Workers:

Anganwadi workers provided insights into their roles in implementing ECCE programs as outlined in the NCF 2022. They reported receiving mixed levels of support for training and resources. While some were trained in nutrition and child development, others had no access to such resources. There was also inconsistency in the materials provided, with varying types of dietary, financial, or material support across centers. Workers expressed concerns over the repetitive nature of the meals served and emphasized the importance of a balanced diet, reflecting a need for further support in the provision of nutritious meals.

Stakeholders' Perception:

1. Relevance of the NCF 2022 Curriculum

The NCF 2022 emphasizes play-based, experiential, and holistic approaches to foundational education. Stakeholder feedback highlighted its potential to enhance early literacy, numeracy, social skills, and creativity.

Table 1: Stakeholders’ Perception of Curriculum Relevance

Stakeholder Group	Perceived Relevance	Percentage (%)
Anganwadi Workers	Found curriculum goals to align with children’s developmental needs	80%
Parents	Felt the curriculum supports cognitive and social development	75%
Children	Reported enjoying learning through play-based activities	85%

Anganwadi workers found the NCF 2022 curriculum practical and aligned with children’s developmental needs but highlighted challenges in its implementation due to resource constraints and training gaps. This finding aligns with previous research by Sharma and Gupta (2018), which emphasizes the critical need for professional development in ECCE programs. In our study, 50% of workers reported lacking training in curriculum pedagogy, reflecting similar barriers identified in Kumar et al. (2020). Additionally, inconsistent access to materials and financial resources was a significant hurdle, as only 30% of centers received both types of support. Such constraints undermine the uniform application of play-based and experiential learning activities, which are central to the NCF 2022 vision.

Parents appreciated the curriculum’s focus on foundational skills like literacy and numeracy, which are crucial for early learning, as supported by Kaul et al. (2017). However, 16% of parents expressed concerns about the lack of personalized attention, echoing findings from Pandey et al. (2021) that highlight caregiver-to-child ratios as a persistent challenge. Children, on the other hand, displayed enthusiasm for interactive activities such as storytelling, crafts, and group play, consistent with global evidence on the benefits of play-based learning (UNICEF, 2018). While these findings affirm the curriculum’s relevance and potential, they also underscore the need for increased training, resource allocation, and individualized approaches to ensure holistic and equitable learning experiences across all centers.

2. Implementation of Curriculum-Based Activities

The study evaluated the extent to which NCF 2022 activities were implemented in anganwadi centers. These activities include foundational literacy, numeracy, creative engagement, and health and hygiene education.

Table 2: Curriculum Activities Implemented Across Centers

Curriculum Activity	No. of Centers Implementing (out of 20)	Percentage (%)
Storytelling and Reading	16	80%
Basic Numeracy	18	90%
Singing and Rhymes	15	75%
Creative Play (e.g., drawing, crafts)	12	60%
Health and Hygiene Education	17	85%

The findings from the current study align with broader research on early childhood education in India, particularly in the domains of numeracy and hygiene education. In the studied anganwadi centers, numeracy activities were well-implemented, with structured routines that allowed children

to practice basic counting and pattern recognition. Hygiene education, such as handwashing and toilet training, also showed high implementation rates. These practices resonate with the National Curriculum Framework's (NCF) emphasis on fostering foundational skills essential for school readiness.

Comparatively, studies like the **India Early Childhood Education Impact Study** reveal that structured early learning, especially in numeracy, has a profound effect on later school readiness and educational outcomes. However, the quality of materials and teacher preparedness in many programs remains inconsistent, affecting overall impact. Similarly, UNICEF findings emphasize the critical role of quality hygiene education in improving health outcomes, though the availability of adequate resources remains a challenge across anganwadis. Creative play, an essential component of the NCF, was less consistently implemented in this study due to material shortages, echoing national studies that highlight disparities in resource allocation as a barrier to holistic child development

These insights underline the need for improved resource distribution and enhanced training for anganwadi workers to bridge these gaps and align implementation more closely with NCF objectives.

3. Evaluation of Curriculum-Based Outcomes

The outcomes of the curriculum implementation were assessed through stakeholder feedback, focusing on children's cognitive, social, and creative development.

Table 3: Stakeholders' Perception of Curriculum Outcomes

Outcome	No. of Positive Responses (out of 50)	Percentage (%)
Improved Literacy Skills	40	80%
Enhanced Numeracy Skills	42	84%
Increased Social Interaction	38	76%
Growth in Creativity	35	70%

The implementation of the curriculum showed strong success in developing foundational literacy and numeracy skills, as evidenced by improvements in children's ability to recognize letters, numbers, and basic patterns. This is consistent with findings from the **India Early Childhood Education Impact Study**, which highlights the positive impact of structured literacy and numeracy activities on school readiness. Studies suggest that regular preschool attendance, with an emphasis on foundational skills, significantly enhances early grade learning outcomes, particularly in language and mathematics. However, while foundational skills saw positive results, the curriculum's impact on social and creative skills was more limited. Activities like group play and creative tasks, such as drawing, were included, but their effectiveness was restricted by insufficient training and resources. This finding mirrors broader research, including UNICEF reports, which indicate that socio-emotional and creative development is often sidelined in favor of academic goals. To fully realize the National Curriculum Framework's aim for holistic development, there is a clear need for more play-based, interactive learning approaches, as well as improved teacher training and resource allocation to support balanced development across cognitive, social, and creative domains

4. Challenges in Curriculum Implementation

Despite the curriculum's potential, several challenges hindered its uniform application across centers. First, inconsistent access to training meant that many anganwadi workers lacked the skills

to implement interactive and play-based learning methods effectively. Second, material shortages, including learning aids and creative tools, limited the scope of hands-on activities critical for holistic development. Third, financial constraints in many centers prevented the adoption of advanced pedagogical practices. Fourth, disparities in resource distribution led to significant variability in curriculum delivery. Finally, limited parental engagement and feedback mechanisms reduced opportunities for refining curriculum implementation to address local needs. Addressing these challenges is essential for achieving the National Curriculum Framework's goals of equity and quality in early childhood education.

Table 4: Challenges in Curriculum Implementation

Challenge	No. of Responses (out of 50)	Percentage (%)
Lack of Training in Pedagogy	25	50%
Inadequate Educational Materials	20	40%
Limited Time for Personalized Attention	18	36%
Inconsistent Monitoring of Curriculum	15	30%

A lack of training in pedagogical methods emerged as a key challenge in implementing the curriculum effectively, significantly affecting the quality and consistency of activities. Many anganwadi workers lacked exposure to modern teaching approaches, such as play-based and experiential learning, limiting their ability to engage children meaningfully. This issue is consistent with broader research, which emphasizes the need for robust professional development to enhance learning outcomes in Early Childhood Care and Education (ECCE) programs. Without sufficient training, workers often relied on outdated methods, which failed to align with the developmental goals outlined in the National Curriculum Framework (NCF).

Resource shortages, particularly educational materials like books, toys, and creative supplies, were another significant hurdle, affecting 40% of the centers. This scarcity hindered the delivery of interactive and creative learning experiences essential for holistic child development. Similar challenges have been reported in other studies, indicating a widespread issue in resource allocation across ECCE programs. The lack of materials not only restricts activity diversity but also disproportionately impacts underprivileged regions, creating disparities in educational quality. Overcoming these challenges requires targeted investments in both teacher training and material provisions to ensure the curriculum's successful implementation.

Discussion:

The relevance of the curriculum in the context of Early Childhood Care and Education (ECCE) is critical, as it sets the foundation for children's future learning and development. The National Curriculum Framework (NCF) 2022 aims to provide a comprehensive and inclusive approach, focusing not just on literacy and numeracy, but on the holistic development of young children. The curriculum's emphasis on early foundational skills helps to ensure that children are prepared for future academic success while also fostering social, emotional, and creative growth. Research shows that early childhood education (ECE) programs focusing on these areas significantly improve outcomes in primary education and beyond, helping children develop cognitive, language, and social skills (UNICEF, 2020).

Moreover, the NCF's approach aligns with international frameworks for early childhood education, which stress the importance of creating an engaging, play-based learning environment. The relevance of this curriculum is reflected in its ability to support individualized learning, foster curiosity, and enhance life skills such as problem-solving and cooperation. Studies like those by

The Brookings Institution and **The World Bank** emphasize the importance of early intervention and curriculum that adapts to children's developmental stages. In India, the integration of these global insights into local curriculum standards has proven effective in improving educational outcomes (ASER, 2022).

Ultimately, the relevance of the NCF 2022 curriculum lies in its balanced focus on academic skills, creative activities, and emotional development. It recognizes the diverse needs of children from varying backgrounds and aims to provide a more equitable educational experience across India. This approach addresses not only cognitive growth but also ensures that children are nurtured as well-rounded individuals who are prepared for the challenges of school and society.

5. Recommendations

Based on the findings, the following steps are recommended to enhance curriculum implementation:

- **Comprehensive Training:** Regular workshops for anganwadi workers focusing on NCF-based pedagogy and activity design.
- **Resource Allocation:** Increased provision of materials like storybooks, art supplies, and learning tools.
- **Personalized Learning:** Structured schedules allowing for one-on-one interactions to address individual learning needs.
- **Monitoring and Feedback:** Regular evaluations of curriculum implementation to identify gaps and incorporate stakeholder feedback.

Conclusion

The National Curriculum Framework (NCF) 2022 for Early Childhood Care and Education (ECCE) offers significant benefits by laying a strong foundation for holistic child development. By focusing on core areas like literacy, numeracy, and emotional and social development, the curriculum ensures that children are prepared not just academically but also socially and emotionally. Studies consistently show that early childhood education focused on these fundamental areas leads to improved long-term outcomes, including higher academic achievement, better health, and stronger social skills (UNICEF, 2020; ASER, 2022). Moreover, the curriculum's emphasis on play-based learning and creative activities helps in developing critical thinking, problem-solving, and teamwork skills—abilities that are essential in the modern world (Brookings, 2021).

The curriculum's relevance lies in its adaptability to diverse learning needs, making it suitable for children from different socio-economic backgrounds. By fostering an inclusive environment, it supports equitable educational opportunities for all children, which is essential for achieving national educational goals. As research by the World Bank highlights, early educational interventions have long-lasting benefits, particularly when they address not only academic skills but also social and emotional well-being (World Bank, 2022). Thus, the NCF 2022 provides a comprehensive framework that ensures children are not only prepared for academic success but also for life's challenges, making it a critical tool in shaping the future of India's young learners.

Reference:

1. ASER Centre. (2022). *Annual Status of Education Report*. Retrieved from <https://www.asercentre.org/>
2. Bowling, A. (2009). *Research methods in health: Investigating health and health services* (3rd ed.). Open University Press.
3. **Braun, V., & Clarke, V. (2006)**. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
4. Brookings Institution. (2021). *Early Childhood Education: The Key to Success*. Retrieved from <https://www.brookings.edu/research/early-childhood-education/>
5. Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
6. Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
7. Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22(140), 1-55.
8. Panchal, T. P., Pandya, N., & Deshmukh, S. (2023). *NCF for early child care and education: Challenges and directions*. *IJCRT*, 11(12).
9. Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). SAGE Publications.
10. UNICEF. (2020). *The Importance of Early Childhood Education*. Retrieved from <https://www.unicef.org/education>
11. World Bank. (2022). *Investing in Early Childhood Development*. Retrieved from <https://www.worldbank.org/en/topic/early-childhood-development>