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Early Learning Redefined: Analyzing the Pedagogical Shifts in Pre-Primary Education in NEP 2020

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Abstract

The National Education Policy (NEP) 2020 marks a significant turning point in India's early childhood education landscape. Recognizing the critical importance of the formative years (ages 3–8), the policy proposes a holistic, integrated, and developmentally appropriate pedagogical approach that moves away from rote memorization and narrow academic focus. Instead, NEP 2020 emphasizes foundational literacy and numeracy, play-based and experiential learning, and child-centered teaching strategies. This review article critically examines the pedagogical shifts introduced by NEP 2020, drawing on contemporary theories of early learning and best practices from global education systems. It explores the policy's implications for curriculum design, teacher training, parental engagement, and equity in access. The article also analyzes potential challenges and opportunities in implementing these reforms and how they aim to enhance children's school readiness, cognitive development, and lifelong learning capacities.

Keywords: NEP 2020, ECCE, Pre-primary, Pedagogical Shifts, Foundational Literacy, Play-based Learning, Experiential Education

Introduction

The National Education Policy (NEP) 2020 represents a transformative vision for India's education system, with a pronounced emphasis on foundational learning and holistic child development. Recognizing that over 85% of a child's brain development occurs before the age of six (UNICEF, 2019), the policy brings Early Childhood Care and Education (ECCE) to the forefront of national educational reform. For the first time, pre-primary education has been formally integrated into the schooling structure through the 5+3+3+4 curricular model, which includes children aged 3 to 8 within the "Foundational Stage" (Ministry of Education, 2020).

ECCE is widely acknowledged as a critical phase in a child's life, laying the foundation for lifelong learning, behavior, and health (Shonkoff & Phillips, 2000). It encompasses cognitive development and emotional, social, and physical growth. Before NEP 2020, early childhood education in India was largely fragmented and inconsistent, especially in curriculum, pedagogy, and educator training (Kaul et al., 2017).

This review analyzes the pedagogical shifts and innovations introduced for pre-primary education under NEP 2020. It examines how the policy reimagines early learning through developmentally appropriate practices, play-based methodologies, and child-centric approaches. The paper also explores the theoretical underpinnings of these reforms, their practical implications for educators and policymakers, and the challenges in achieving equitable and quality early education across diverse Indian contexts.

Literature Review

Several studies have emphasized the importance of early childhood development in shaping lifelong learning outcomes. Research underscores that developmentally appropriate practices, multilingual exposure, and joyful learning can significantly enhance cognitive, emotional, and social development. The literature also reflects a growing consensus on the need for restructuring traditional rote-based teaching methods in favor of experiential learning approaches.

Play-based learning is widely recognized as a fundamental component of early childhood development. According to Vygotsky (1978), the role of play in fostering symbolic thinking and cognitive flexibility positions it as central to young children's social and intellectual development. Through imaginative play, children engage with their surroundings and internalize social rules and language, thereby constructing meaning and developing higher-order thinking. Reflecting this, the National Education Policy (Ministry of Education, 2020) advocates a shift toward play and discovery-based pedagogy in foundational education, reinforcing the idea that learning through play enhances curiosity, creativity, and problem-solving skills.

Early exposure to multiple languages has also yielded significant cognitive and social benefits. As Bialystok (2001) highlights, multilingual environments improve children's executive functioning, including attention control, working memory, and cognitive flexibility. In the Indian context, where linguistic diversity is a norm, the National Curriculum Framework for the Foundational Stage (NCERT, 2022) emphasizes the importance of home-language instruction during early years. Multilingual education supports conceptual clarity and promotes inclusivity and cultural identity among learners.

Experiential and joyful learning is another key pillar of effective ECCE. According to Kolb (1984), children learn best through active involvement in real-life experiences, where learning becomes a cycle of doing, reflecting, and applying. Early childhood learning is achieved through storytelling, music, movement, and exploration. These methods increase motivation, enhance memory retention, and develop fine motor and socio-emotional skills. The

NEP (Ministry of Education, 2020) reinforces the need for joyful, engaging classroom environments that spark children's natural desire to learn.

Introducing the 5+3+3+4 curricular structure represents a paradigm shift in how early education is organized in India. Heckman (2006) noted that investments in early years yield the highest returns due to the rapid brain development that occurs before age six. Recognizing this, the NEP (Ministry of Education, 2020) restructures the schooling system to include three years of pre-primary education within the formal framework, followed by two years of foundational primary schooling. The NCF-FS (NCERT, 2022) supports this model by providing developmentally appropriate learning outcomes, curriculum, and pedagogy tailored to young children's needs.

However, the successful implementation of this vision depends largely on teacher preparedness. Kaul et al. (2017) found a substantial gap in the training and pedagogical understanding of ECCE educators in India, particularly in rural and underserved areas. Many teachers continue to rely on rote learning due to inadequate exposure to child-centered practices. The NEP (Ministry of Education, 2020) calls for rigorous teacher training and continuous professional development. Platforms like DIKSHA offer accessible, multilingual training resources (World Bank, 2021), while institutions like CECED (2018) stress the importance of mentorship and reflective practice to ensure the practical application of theoretical training.

Research Method

This qualitative study uses a policy review, secondary data sources, and content analysis of relevant educational documents. Sources include:

- The official NEP 2020 policy document.
- Reports from NCERT, UNESCO, and UNICEF on ECCE practices.
- Peer-reviewed articles and expert commentaries on NEP's pedagogical reforms.

Data was categorized and thematically analyzed under core areas of reform identified in NEP 2020.

Result and Discussion

Policy Background and Educational Pillars

The landscape of pre-primary education in India prior to the formulation of NEP 2020 was marked by considerable diversity, fragmentation, and disparities in access and quality. Early Childhood Care and Education (ECCE) was primarily delivered through two main channels: government-led initiatives such as the Integrated Child Development Services (ICDS) scheme, which operated over 1.37 million Anganwadi centres (MoWCD, 2018), and a rapidly expanding but largely unregulated private pre-school sector. The ICDS programme, while pivotal in addressing nutrition and basic health care, often offered minimal structured learning

opportunities (World Bank, 2015). In contrast, many private pre-schools employed formal academic instruction, worksheets, and assessments inappropriate for the developmental stage of young learners (Sriprakash, 2009).

Previous policy documents such as the National Policy on Education (1986) and the Programme of Action (1992) acknowledged the significance of ECCE but did not create enforceable structures or funding mechanisms (Tilak, 2007). Similarly, the Right to Education (RTE) Act, 2009, a milestone in guaranteeing free and compulsory education for children aged 6–14, excluded children under six, thereby leaving the pre-school years outside the purview of state obligation (Bhattacharjea et al., 2011). The absence of a legal mandate resulted in inconsistent curricular approaches, poor regulation of educator qualifications, and little accountability across ECCE centres.

Several challenges plagued the pre-NEP ECCE landscape:

a. Lack of curriculum and quality standards across states (NCERT, 2014).
b. Poor infrastructure and limited access to age-appropriate teaching-learning materials, especially in tribal and backward regions (CECED, 2017).
c. Predominant reliance on rote memorization over exploration or play-based learning (Kaul & Sankar, 2009).
d. Low parental awareness of early learning goals and weak institutional monitoring mechanisms (UNESCO, 2021).

The National Education Policy 2020 emerged as a strategic and systemic response to these deep-rooted challenges. It repositioned ECCE as the "Foundational Stage" in the 5+3+3+4 framework, encompassing children aged 3 to 8, and formally integrating pre-school education with early primary schooling (Ministry of Education, 2020). It also envisioned a comprehensive transformation of ECCE to address developmental, linguistic, socio-emotional, and physical needs.

Importantly, NEP 2020 aligns India's educational commitments with Sustainable Development Goal 4 (SDG-4), calling for inclusive, equitable, quality education and lifelong learning for all (UN, 2015). Specific policy priorities include:

a. A developmentally appropriate, play-based curriculum, anchored in the National Curriculum Framework for the Foundational Stage (NCF-FS, 2022).
b. Multilingual exposure, especially in the child's home language or mother tongue, to support cognitive and cultural development (NCERT, 2022).
c. Deployment of qualified ECCE educators, with specialized training in child development, inclusive education, and foundational pedagogy (UNESCO, 2019).
d. Focus on achieving Foundational Literacy and Numeracy (FLN) outcomes for all learners by Grade 3, with monitoring through the NIPUN Bharat Mission (MoE, 2021).

This re-envisioning of early childhood education is not only structural but deeply pedagogical. It reflects a paradigm shift from formal academic instruction to a child-centric,

inquiry-based approach that values curiosity, creativity, and joyful learning—essential for laying a strong educational foundation and achieving lifelong learning.

Play-Based and Discovery-Oriented Learning

a. Emphasis on Exploration, Curiosity, and Storytelling:

Developmentally appropriate classrooms prioritize nurturing a child's innate curiosity and drive to explore the world. Young children are naturally inquisitive, and learning environments that value exploration create opportunities for cognitive growth and active engagement. This approach's core strategies are open-ended questions, exploratory tasks, and self-directed learning activities. Such methods align with constructivist theories of education, particularly those of Piaget and Vygotsky, who emphasized learning as an active, social, and contextual process (Berk & Winsler, 1995).

Storytelling is a powerful pedagogical tool in this context. It promotes language acquisition and literacy development and enhances emotional intelligence and cultural awareness. Children who engage in listening to, retelling, and creating stories learn to structure thoughts, articulate feelings, and build empathy. The use of folktales, puppetry, and dramatic storytelling also introduces values and social norms in age-appropriate ways (Paley, 1990). Educators foster deeper connections between imagination, expression, and learning by integrating storytelling into daily routines.

b. Role of Indoor and Outdoor Play, Art, Music, and Movement:

A high-quality ECCE environment balances indoor and outdoor play and integrates various forms of artistic expression. Outdoor play supports gross motor development, spatial awareness, and cooperative interaction. It also provides children with opportunities to engage with nature, which has been shown to reduce stress and enhance focus and creativity (Fjørtoft, 2004). Indoor play, on the other hand, often nurtures symbolic play, puzzle-solving, and collaborative construction, contributing to language and cognitive development.

Incorporating art, music, and movement is essential to fostering creativity, sensory integration, and emotional regulation. Art activities like drawing and sculpting help children express inner thoughts and refine fine motor skills. Music—whether through singing, instrument play, or rhythmic movement—supports auditory discrimination, memory, and mood regulation. Movement activities, such as dance and yoga, enhance body awareness and support the development of executive functions (Perry, 2006). These experiences collectively foster holistic development, laying the groundwork for lifelong learning.

c. Shift from Worksheet-Based to Hands-On Learning:

In alignment with NEP 2020, there is an increasing shift away from rote-based, worksheet-heavy instruction in early childhood settings. Traditional methods, which prioritize copying, repetition, and assessment-oriented activities, often do not align with the developmental needs of young learners. Instead, hands-on, experiential learning is being

embraced as a more effective approach. This involves children actively engaging with materials, manipulating objects, and working collaboratively on real-life problems—strategies rooted in experiential learning theories (Kolb, 1984).

Examples include building structures with blocks to understand spatial concepts, sorting natural materials for classification, or exploring volume and texture through sand and water play. These methods foster critical thinking, curiosity, communication, and collaboration—skills that are vital for 21st-century learners. Moreover, experiential learning allows for differentiation, catering to varied learning styles and paces, and is more inclusive and engaging for diverse learner populations.

Multilingual Exposure

a. Introduction of Mother Tongue/Local Language as the Medium of Instruction:

The National Education Policy (NEP) 2020 strongly advocates for the use of the mother tongue or local language as the medium of instruction, especially in the Foundational Stage (ages 3–8). Research shows that children learn best when taught in a language they understand (UNESCO, 2008). When early education is delivered in the child's home language, it enhances comprehension, emotional security, and classroom participation. It also enables children to grasp foundational concepts more deeply and reduces cognitive overload that might arise from trying to learn both language and subject matter simultaneously.

Using a familiar language helps bridge the gap between the home and school environment, creating a seamless and culturally relevant learning experience. It honors the child's identity and linguistic heritage, which is especially important in India's multilingual society. According to NEP 2020, this approach supports literacy and numeracy development and ensures equity and inclusion, particularly for children from marginalized linguistic backgrounds.

b. Cognitive Advantages of Early Multilingualism:

Introducing multiple languages early in life can lead to various cognitive and social advantages. Developmental psychology and neuroscience studies suggest that children exposed to more than one language from a young age tend to have better executive functioning, including enhanced memory, attention control, and cognitive flexibility (Bialystok, 2001; Cummins, 2000). These skills support language acquisition, broader academic achievement, and problem-solving capabilities.

Multilingual children are often better at switching between tasks, understanding multiple perspectives, and showing empathy—traits that are increasingly valued in a globalized world. Early multilingualism also fosters metalinguistic awareness, helping children understand how language works, which can improve their learning of additional languages later in life.

c. Importantly, NEP 2020's vision aligns with global best practices by promoting multilingual exposure through oral language development in local languages, while

gradually introducing additional languages (such as English or Hindi) through informal exposure. This approach respects linguistic diversity and leverages it to develop well-rounded, cognitively agile learners.

Experiential and Joyful Learning

a. Integration of Real-Life Contexts and Sensory Learning:

A hallmark of high-quality early childhood education is its ability to root learning in real-life experiences and sensory-rich environments. Children naturally learn best when they can relate new information to their everyday world. Activities such as role-playing a market visit, helping in cooking, or observing plants during a nature walk provide concrete experiences that help abstract concepts come to life. These familiar settings foster contextual understanding and make learning more meaningful and memorable.

Sensory learning—engaging the five senses of sight, sound, smell, touch, and taste—plays a crucial role in cognitive and emotional development (Gascoyne, 2016). Sensory-rich activities like exploring textures in sand play, listening to birds, or planting seeds enhance memory retention, focus, and the child's ability to absorb complex ideas. According to neuroscientific studies, multisensory experiences activate multiple brain regions, strengthening neural pathways involved in learning (Sousa, 2016). This approach also supports diverse learning styles, accommodating children with varying sensory needs and developmental profiles.

b. Replacing Rote Learning with Experiential Engagement:

The transition from traditional, rote-based instruction to experiential and inquiry-driven learning is central to NEP 2020's vision for early education. While easy to assess, Rote memorization often fails to promote deep understanding or critical thinking. In contrast, experiential learning emphasizes active involvement, reflection, and application. Children learn by doing, observing, experimenting, and interacting—processes that help them internalize concepts and develop lifelong learning skills (Kolb, 1984).

Classroom strategies now prioritize activities like science explorations, storytelling, collaborative games, and hands-on problem-solving. These methods foster questioning, decision-making, and teamwork, cultivating academic and social-emotional competencies. This shift is particularly crucial in the foundational years when curiosity is at its peak and the brain is highly receptive to learning through interaction and play.

Replacing rote learning with experiential engagement transforms classrooms into dynamic environments where children are not passive recipients of information but active participants in constructing knowledge—a goal at the heart of developmentally appropriate education.

Curricular and Pedagogical Structure

a. The Foundational Stage (Ages 3–8): A Unified Learning Phase:

The "Foundational Stage," conceptualized in the National Education Policy (NEP) 2020, refers to the integrated and developmentally sensitive learning phase spanning ages 3 to 8. This reconfiguration merges three years of pre-school (or early childhood care and education) with Grades 1 and 2 of primary school under a 5+3+3+4 curricular structure. The rationale lies in the recognition that early childhood is a critical period marked by rapid cognitive, linguistic, emotional, and physical growth (UNESCO, 2016). By unifying this phase, NEP 2020 aims to eliminate the traditional disconnect between pre-school and formal schooling, fostering continuity and stability in early learning experiences.

b. Continuity in Curriculum, Pedagogy, and Learning Outcomes:

A core tenet of the Foundational Stage is ensuring pedagogical continuity. Abrupt shifts in curriculum, instruction style, and classroom expectations between ECCE and Grade 1 have historically led to learning setbacks and disengagement. NEP 2020 addresses this by promoting a play-based, activity-driven, and experiential pedagogy throughout the stage (MoE, 2020). The approach respects the developmental rhythms of young children, emphasizing joyful learning, exploration, and discovery rather than rote instruction or early academic pressure.

This seamless progression enables educators to gradually introduce foundational literacy, numeracy, and life skills in developmentally appropriate and engaging ways. It also ensures that socio-emotional learning—critical at this age—is embedded within everyday classroom interactions and routines.

c. Role of NCF for Foundational Stage (NCF-FS 2022) and the Learning Outcomes Framework:

The National Curriculum Framework for the Foundational Stage (NCF-FS 2022) is a landmark document that translates the NEP's vision into actionable curriculum and pedagogical guidance. It centers on five domains of development: physical development, socio-emotional development, cognitive development, language and literacy, and aesthetic and cultural expression (NCERT, 2022). It also strongly advocates for the use of the home language or mother tongue as the medium of instruction to improve comprehension and emotional security in early learners.

Complementing this is the Learning Outcomes Framework, which specifies grade-wise expectations in key learning areas. These outcomes serve as formative benchmarks for educators to monitor progress and tailor instruction, ensuring all learners—regardless of background—develop essential competencies by the end of the Foundational Stage.

The NCF-FS and Learning Outcomes Framework represent a comprehensive, equity-driven roadmap for transforming ECCE and early primary education. They provide both macro-level vision and micro-level classroom tools to ensure quality, inclusivity, and developmental appropriateness across India's diverse educational settings.

Teacher Training and Capacity Building Programmes

a. Importance of Specialized ECCE Training for Anganwadi and Pre-school Educators:

Early Childhood Care and Education (ECCE) forms the bedrock of a child's cognitive, emotional, and social development. In this context, Anganwadi workers and pre-primary educators serve as pivotal agents in shaping early learning experiences. With approximately 1.4 million Anganwadi centres functioning under the Integrated Child Development Services (ICDS) across India, these frontline workers are often a child's first formal point of contact with structured education (Ministry of Women and Child Development, 2021). However, disparities in training, educational qualifications, and pedagogical competence remain significant barriers to delivering high-quality ECCE.

The National Education Policy (NEP) 2020 strongly advocates for professionalizing the ECCE workforce, emphasizing the need for standardized, accredited training programs (MoE, 2020). Recognizing that effective ECCE requires more than informal caregiving, NEP 2020 envisions a workforce equipped with a deep understanding of developmental psychology, age-appropriate pedagogy, and inclusive practices.

b. Emphasis on Play-Based Pedagogical Content Knowledge (PCK):

Central to the vision of NEP 2020 is a play-based approach to early learning, moving away from rote memorization and formal academic instruction. Implementing this vision requires that educators possess Pedagogical Content Knowledge (PCK) tailored specifically to early childhood contexts—where *how* something is taught is as important as *what* is taught (Shulman, 1986). This includes integrating play, storytelling, movement, and exploration into foundational literacy, numeracy, and life skill instruction.

However, research highlights a gap between policy intentions and classroom realities. According to Kaul et al. (2017), many pre-school teachers lack clarity on implementing play-based methods effectively, largely due to inadequate pre-service and in-service training. Strengthening educators' PCK ensures that learning is enjoyable, deeply meaningful, and developmentally sound.

Technology Integration in Early Learning

a. Importance of Specialized ECCE Training for Anganwadi and Pre-school Educators:

Early Childhood Care and Education (ECCE) lays the foundation for holistic development and lifelong learning. Anganwadi workers and pre-school teachers are often the first point of contact in a child's educational journey, making their role pivotal in shaping early learning outcomes. Their understanding of child development, play-based pedagogy, and nurturing care significantly influences children's cognitive, emotional, and social development (UNESCO, 2019).

India has over 1.4 million Anganwadi centers operating under the Integrated Child Development Services (ICDS) scheme. Despite the scale, there are wide disparities in training quality and access across states. The National Education Policy (NEP) 2020 has recognized this gap and proposes professionalizing ECCE educators through structured training, minimum qualifications, and certification pathways by 2030 (MoE, 2020).

b. Emphasis on Play-Based Pedagogical Content Knowledge (PCK):

Play is not merely a leisure activity but a central vehicle for learning in early childhood. Educators require strong Pedagogical Content Knowledge (PCK)—a fusion of subject knowledge and child-centered teaching methods—that supports play-based learning. PCK in ECCE involves knowing *what* to teach (e.g., literacy, numeracy, life skills) and *how* to teach it in developmentally appropriate, experiential ways (Shulman, 1987; Siraj-Blatchford et al., 2002).

However, research shows that while play-based learning is promoted in theory, actual classroom implementation is often limited. A large-scale study by Kaul et al. (2017) found that many ECCE practitioners in India rely on rote methods due to insufficient training and a lack of clarity on integrating play into lesson planning. Strengthening educators' PCK through pre-service and in-service training ensures better alignment with learning goals and pedagogical approaches.

c. Continuous Professional Development (CPD), Digital Tools, and Mentoring Support:

Early educators must have access to continuous professional development (CPD) to ensure sustained improvement in teaching quality. CPD includes refresher trainings, peer learning circles, observation-based feedback, and exposure to contemporary child development theories. Organizations such as UNICEF (2021) and NCERT emphasize that CPD should be context-sensitive, practical, and ongoing rather than a one-time intervention.

Digital platforms are proving to be valuable tools for large-scale CPD. Mobile-based learning, interactive video content, and WhatsApp-based microlearning modules are increasingly used to support ECCE educators, particularly in rural and low-resource settings. Mentorship models, where experienced trainers guide new or undertrained workers through regular observation and feedback, have shown positive effects on teaching quality (CECED, 2019).

d. Role of DIKSHA, E-Content, and Interactive Apps for Foundational Learning:

DIKSHA (Digital Infrastructure for Knowledge Sharing) is a government platform that provides access to teacher training resources, lesson plans, e-textbooks, and activity ideas. For ECCE educators, DIKSHA now includes modules aligned with the NCF-FS (2022) and Foundational Literacy and Numeracy (FLN) goals under the NIPUN Bharat Mission.

Interactive apps, animated storytelling videos, and audio-visual learning aids also help enhance child engagement and support educators in multilingual contexts. For example, apps such as Bala, Kutuki, and Google Read Along offer curriculum-aligned content that fosters vocabulary building, numeracy skills, and cultural relevance (NIPUN Bharat, 2021).

e. Blended Learning: Challenges and Opportunities in ECCE:

Blended learning—which combines face-to-face interaction with digital and multimedia learning—is an emerging model in ECCE. It allows for personalized learning experiences, caters to diverse learning styles, and increases access to quality content. Blended learning can enrich a child’s sensory and cognitive development when integrated with play-based methods.

However, its success hinges on factors such as digital infrastructure, educator competence, and parental involvement. In many regions, especially tribal or rural areas, lack of internet connectivity, smartphones, and technical support poses significant barriers (ASER, 2020). Additionally, early educators require targeted training to effectively integrate digital tools without compromising on child-led, play-rich learning environments.

Despite these challenges, blended learning offers a promising pathway for achieving equitable and quality ECCE, particularly when implemented with a localized, inclusive, and teacher-supported approach.

Challenges and Concerns

a. Challenges in Implementing ECCE Across India:

The implementation of Early Childhood Care and Education (ECCE) continues to face multiple challenges, particularly the disparity between urban and rural areas. Urban regions often benefit from better infrastructure, trained educators, and access to digital resources, while rural areas struggle with limited facilities, fewer trained personnel, and inconsistent support systems. Additionally, infrastructural gaps and the digital divide pose significant obstacles. Many rural and underserved regions lack reliable electricity, internet connectivity, and digital devices, limiting teaching and learning opportunities.

Furthermore, there is resistance to pedagogical change stemming from traditional schooling models that prioritize rote learning over play-based and experiential methods. This resistance often comes from educators, parents, and administrators who are unfamiliar with or skeptical of modern ECCE approaches. Lastly, there is a pressing need for monitoring, standardization, and quality assurance across all ECCE programs. Without clear benchmarks and regular assessments, the quality of education remains uneven, underscoring the necessity of a unified, well-regulated approach to foundational learning.

b. 4.9 Way Forward and Recommendations

Strengthening ECCE in India: Specialized Training, Play-Based Pedagogy, and Systemic Support.

c. Specialized Training for Anganwadi and Pre-school Educators
Early Childhood Care and Education (ECCE) lays the foundation for lifelong learning and well-being. Anganwadi workers and pre-school educators are often a child's first formal teachers, making their training in child development and pedagogy essential (UNESCO, 2021). However, India's 1.4 million Anganwadi centres under ICDS face inconsistent training standards across states. The NEP 2020 seeks to professionalize this workforce through standardized training programs to improve quality and equity in early learning (Ministry of Education, 2020).

d. Play-Based Pedagogical Content Knowledge (PCK)
Play is at the heart of how young children learn. To make learning meaningful, educators must possess strong Pedagogical Content Knowledge (PCK)—the skill to blend subject content with age-appropriate, engaging strategies (Shulman, 1986). Yet many educators

continue to rely on rote learning due to limited exposure to play-based methods (Kaul et al., 2017). Strengthening PCK is key to promoting literacy, numeracy, and life skills through stories, movement, and play.

e. Continuous Professional Development (CPD), Digital Tools, and Mentorship
High-quality ECCE depends on continuous professional development. Regular training, reflection, and exposure to updated practices ensure educators stay current with the science of child development (UNICEF, 2020). Mobile and digital platforms have expanded CPD access in remote areas (World Bank, 2021). Initiatives like DIKSHA offer flexible, multilingual content, while mentorship and on-site support help educators confidently apply new strategies in classrooms (CECED, 2018).

f. DIKSHA, E-Content, and Interactive Apps
DIKSHA (Digital Infrastructure for Knowledge Sharing) is a key government platform offering teacher training modules and learning content aligned with NCF-FS 2022 and NIPUN Bharat goals (Ministry of Education, 2022). Digital tools, including educational apps and animated stories, help children understand abstract ideas in engaging, multilingual formats (NCERT, 2022).

g. Blended Learning: Potential and Challenges
Blended learning combines digital and in-person instruction, making learning more accessible and interactive (OECD, 2020). It can enhance curriculum delivery through multimedia, storytelling, and experiential learning when effectively implemented. However, challenges such as poor digital infrastructure, limited teacher preparedness, and low parental involvement—especially in rural and tribal areas—can hinder its success (ASER, 2021).

h. Key Implementation Challenges in ECCE

(1) Despite positive policy strides, practical barriers remain:

(2) Urban-rural gaps in training and infrastructure.

(3) Digital divide in under-resourced areas (NITI Aayog, 2021).

(4) Resistance to shift from rote-based systems to play-based pedagogy.

(5) Inconsistent curriculum implementation across states. To address these, robust monitoring systems, standardized training audits, and child-friendly assessment tools are necessary (NEP, 2020).

i. Holistic Curriculum Design Aligned with NCF-FS
A strong ECCE program needs a well-rounded curriculum supporting all aspects of a child's cognitive, physical, emotional, and creative development. The NCF-FS (2022) promotes learning through play, exploration, and multilingual communication alongside health, hygiene, and environmental awareness (NCERT, 2022).

j. **I**nvestment in Workforce and Infrastructure
Improved ECCE outcomes require investment in both educators and learning environments. A well-trained, fairly compensated ECCE workforce is essential for quality

delivery (UNESCO, 2015). Equally important is safe infrastructure—classrooms, toilets, teaching materials, and inclusive play areas—all shaping children's early experiences (World Bank, 2021).

k. ·Contextual and Culturally Relevant Pedagogy
ECCE should reflect the child's socio-cultural background. Integrating local stories, art, festivals, and languages promotes inclusion and strengthens identity and belonging (UNICEF India, 2020). This approach bridges home and school, making learning more relatable and rooted in the child's world.

l. Evidence-Based Assessment and Feedback
High-quality ECCE requires continuous, formative assessments rather than exams. Tools like observation records, checklists, and child portfolios help track progress in a developmentally appropriate manner (Kaul & Sankar, 2009). These assessments also support individualized teaching and better family involvement.

Conclusion

The National Education Policy (NEP) 2020 presents a transformative vision for early childhood education in India, recognizing ages 3 to 8 as a critical period for holistic development. It advocates for play-based, developmentally appropriate, and inclusive learning rooted in child psychology and local languages while integrating Early Childhood Care and Education (ECCE) with formal schooling to ensure continuity. Emphasizing the importance of health, nutrition, and well-being alongside learning, the policy shifts away from rote methods toward experiential practices. Effective implementation, however, hinges on sustained investment in educator training, infrastructure, community engagement, and robust monitoring systems to ensure equity, quality, and meaningful learning outcomes for every child.

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