



Early Childhood Care and Education Frameworks in the Post – Digital Age

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Abstract

Early Childhood Care and Education (ECCE) is being reshaped by a social environment in which digital technologies are increasingly interwoven with children's everyday lives. Smartphones, tablets, digital media, online communication, assistive technologies and artificial intelligence can influence how young children communicate, explore, play, learn and participate. This development creates opportunities for accessibility, multilingual resources, family engagement, creative expression and professional support, but it also raises concerns regarding inappropriate content, privacy, commercialisation, unequal access, reduced opportunities for physical activity and the displacement of direct social interaction. The post-digital age is therefore better understood not as a period after technology, but as a context in which digital and non-digital experiences coexist and need to be designed around children's developmental rights and well-being.

This chapter presents a conceptual and analytical examination of ECCE frameworks in the post-digital age. It synthesises principles from Indian foundational-stage policy, international guidance on early childhood and digital environments, developmentally appropriate practice, inclusion, child

protection and physical well-being. The chapter identifies a gap between traditional ECCE approaches that emphasise play, relationships and holistic development and technology-oriented approaches that may place disproportionate attention on devices, platforms and digital skills. To address this gap, the chapter proposes a Human–Relationship–Technology–Environment (HRTE) Model. The model places human development at the centre, treats relationships as the principal medium of early learning, positions technology as a purposeful and accountable resource, and recognises the physical, cultural, linguistic, social and ecological environment as essential to children's participation.

The role of educators as designers, mediators, observers and ethical decision-makers; the importance of family and community partnerships; accessible and assistive technologies for children with disabilities; responsible use of artificial intelligence; digital well-being; privacy and child protection; and the multidimensional nature of the digital divide. It argues that successful post-digital ECCE should be child-centred, play-based, relationship-rich, inclusive, culturally responsive, developmentally appropriate, equitable and ethically governed. Technology should extend children's opportunities for communication, exploration, creativity and participation without replacing outdoor play, movement, sensory experiences, conversation, caregiving and peer relationships. The chapter concludes that technology should remain accountable to childhood and should be evaluated by its contribution to children's participation, development, agency and well-being rather than by device use or digital engagement alone.

Keywords: Early Childhood Care and Education; ECCE; post-digital age; play-based learning; digital inclusion; disability; assistive technology; artificial intelligence; teacher education; family engagement; digital well-being



1. Introduction

The early years of life are characterised by rapid and interconnected development. Children develop physical abilities, language, cognition, social understanding, emotional regulation, creativity and emerging independence through relationships and participation in everyday experiences. Early Childhood Care and Education therefore extends beyond preparation for school. It includes care, health, nutrition, protection, communication, play, exploration and opportunities for children to participate meaningfully in family and community life. International and national policy frameworks increasingly recognise early childhood as a foundational period for lifelong learning and well-being. In India, the National Curriculum Framework for the Foundational Stage (NCF-FS) treats the Foundational Stage as a distinct curricular and pedagogical phase for children from three to eight years and places play, activity, inquiry, language, numeracy, movement, art and social interaction at the centre of learning [1].

At the same time, the environment in which young children grow has changed. Digital devices and media are now common in many homes, schools and communities. Children may encounter video calls, digital stories, electronic toys, educational applications, online videos, smartphones, tablets, assistive technologies and algorithmically selected content from an early age. Digital resources can broaden access to information, communication and creative experiences. For children with disabilities, accessible digital systems can also provide alternative ways to communicate, access content and participate. However, digitalisation can introduce new risks and inequalities. Children may encounter commercial content, inappropriate material, privacy threats, misinformation and excessive sedentary activity. Families also differ substantially in access to devices, connectivity, digital skills, language resources and adult support [2, 3].

The concept of the post-digital age provides a useful way of understanding this context. The term does not mean that society has moved beyond technology. Instead, it describes a situation in which digital technologies have become sufficiently embedded in everyday life that a strict division between digital and non-digital experiences is no longer adequate. A child may listen to a digital story, discuss it with an educator, recreate it through dramatic play, draw a related picture and share the work with a family member through a digital platform. These experiences form one connected learning ecology.

The central issue for contemporary ECCE is therefore not simply whether technology is good or bad. More useful questions are: What developmental purpose does a digital activity serve? Does it strengthen interaction? Does it provide active participation? Is it accessible? Is the content culturally and linguistically meaningful? Are privacy and safety protected? Does technology complement rather than displace play, movement, conversation and exploration? This chapter addresses these questions through a child-centred and inclusion-oriented framework.

2. Research Gap and Rationale

Existing ECCE frameworks provide strong guidance on holistic development, responsive relationships, play-based learning, inclusion, health and family participation. At the same time, literature and policy concerning digital education increasingly addresses digital media, online learning, assistive technologies, artificial intelligence, privacy and digital safety. A conceptual gap remains between these areas.

Traditional ECCE frameworks may discuss technology as an additional resource, while technology-oriented approaches can emphasise access to devices, applications and digital skills. A device-centred approach risks overlooking the developmental importance of relationships, movement, sensory exploration, cultural participation and free play. Conversely, a complete rejection of digital resources can overlook genuine opportunities for communication, accessibility and participation.

The gap is especially important for children with disabilities. Assistive and accessible technologies can remove barriers, but inaccessible platforms can create new ones. Similarly, artificial intelligence may support educators with planning and accessibility, yet its use raises questions about privacy, bias, inaccurate outputs and the limits of automated judgement. A framework is therefore needed that connects holistic child development, relationships, play, technology, inclusion, family engagement, digital well-being, child protection and equity.

The present chapter responds to this need by proposing the Human–Relationship–Technology–Environment (HRTE) Model. The model is not a technology programme or a prescription for a particular device. It is a decision-making framework for determining whether, why and how technology should be incorporated into ECCE.



3. Conceptual and Analytical Approach

This chapter adopts a conceptual and analytical approach. It synthesises principles from Indian foundational-stage policy, international guidance on technology and young children, public-health recommendations concerning physical activity and sedentary behaviour, inclusive education, child protection and professional practice. The analysis is organised around the developmental needs of young children, play, human relationships, digital environments, accessibility, family participation, teacher competence, artificial intelligence, privacy, equity and institutional governance [1–9].

The purpose is not to evaluate a single application or device. Instead, the chapter develops criteria that educators and institutions can use across different contexts. The proposed model is intended to be adaptable to anganwadi centres, pre-primary schools, inclusive classrooms, community programmes, home-based settings and other ECCE environments.

4. Core Principles of Post-Digital ECCE

4.1 Human relationships before technology:- Young children learn through responsive relationships, shared attention, communication, imitation, emotional responsiveness, caregiving and peer interaction. Technology should therefore strengthen rather than weaken these relationships. A digital story, for example, becomes more educationally meaningful when an educator pauses to ask questions, invites children to predict events, discusses emotions and encourages children to enact the story. The digital resource is a shared cultural and learning tool rather than an isolated activity [4, 5].

4.2 Play as a foundation of learning :- Play provides opportunities for children to explore, imagine, negotiate, solve problems, develop language and express emotions. Technology can be integrated into play through digital storytelling, photographing children's constructions, recording songs, creating simple digital books and using images as prompts for dramatic play. The essential principle is that technology should often lead children back to physical, social and creative activity. It should extend play rather than replace it [1, 4].

4.3 Developmental appropriateness :- A digital resource should be evaluated in relation to children's developmental level, communication abilities, language, culture, interests, sensory characteristics and individual support needs. Useful questions include whether the resource has a clear purpose, encourages active participation, supports communication, allows choice, avoids unnecessary commercial influence, protects data and connects with children's real-world experiences. Context also matters: a short shared activity with adult mediation is different from prolonged solitary use.

4.4 Balance and well-being. Early childhood requires a balanced daily ecology that includes movement, sleep, outdoor activity, social interaction, sensory exploration and rest. WHO guidance for children under five emphasises the importance of physical activity, reduced sedentary time and adequate sleep [6]. Consequently, digital activities should be planned within the whole daily routine rather than treated as an isolated educational target.

5. Inclusion and Accessibility

Inclusive ECCE requires accessibility to be considered from the beginning of programme design. The NCF-FS recognises the potential of technology to provide content in diverse forms and to support children with disabilities [1]. Digital and assistive technologies may offer alternative pathways for communication, sensory access and participation.

Examples include screen readers and audio description for children with visual impairments; captions and visual information for children with hearing impairments; picture symbols and augmentative and alternative communication (AAC) for children with speech and language difficulties; visual schedules and predictable interfaces for children who benefit from structured routines; and alternative input or switch access for children with motor difficulties. The specific support should be based on the individual child's needs rather than on a disability label alone.

Accessibility, however, cannot be reduced to digital content. Physical spaces, printed resources, toys, playgrounds, classroom routines and communication practices must also facilitate participation. Assistive technology should be evaluated according to whether it increases communication, agency, independence and social participation, not simply whether the child can operate the device.



A useful inclusion principle is therefore: technology should remove barriers to participation rather than create a separate digital pathway for children who are already at risk of exclusion.

6. Family and Community Partnership

Families are children's first and continuing learning partners. They understand children's routines, interests, communication styles, strengths, cultural contexts and support needs. A post-digital ECCE framework should therefore avoid blaming families for children's technology use. Instead, educators should offer practical guidance and involve caregivers in decisions.

Educators can explain the purpose of digital activities, demonstrate co-viewing and co-playing strategies, provide non-digital alternatives, use familiar languages, discuss privacy and safety, and ask families about children's interests and difficulties. Children's digital work should be shared only through appropriate consent procedures.

Community resources are equally important. Anganwadi centres, schools, libraries, health and rehabilitation professionals, community organisations and cultural groups can contribute to a rich learning ecology. In low-resource settings, offline content, community radio, shared devices, printed materials and locally produced audio resources may be more sustainable than continuous internet-dependent platforms [2, 3].

7. Human–Relationship–Technology–Environment (HRTE) Model

The central conceptual contribution of this chapter is the Human–Relationship–Technology–Environment (HRTE) Model. It is based on the proposition that technology should not be treated as an independent component of ECCE. Its value depends on the developmental purpose, relationships surrounding it, accessibility, cultural context and physical environment.

7.1 Human development. The first dimension concerns physical, cognitive, communication, language, social, emotional, creative and adaptive development. Every activity should begin with a developmental intention. Technology should not be introduced merely because it is available. If the objective is fine-motor development, for example, children may benefit from clay, blocks, beads, paper, drawing tools and everyday objects. A digital demonstration can introduce a process, but real manipulation remains important.

7.2 Relationships. The second dimension includes relationships among children and educators, children and peers, children and families, and families and professionals. The quality of interaction surrounding technology is central. Shared digital experiences can support language and social development when children talk, negotiate, imitate, explain and collaborate [4, 5].

7.3 Technology. The third dimension concerns the purposeful selection and use of digital tools. Technology should be developmentally appropriate, accessible, inclusive, interactive, culturally relevant, secure, affordable and sustainable. Institutions should examine commercial interests, advertising, data collection and platform terms before adoption. Free does not necessarily mean risk-free.

7.4 Environment. The fourth dimension includes the physical, social, linguistic, cultural and ecological context. A high-quality post-digital classroom should contain books, open-ended materials, art supplies, natural and recycled objects, outdoor spaces, digital resources, assistive technologies and opportunities for quiet and social activity. A technologically advanced setting with weak relationships is not high-quality ECCE; similarly, a warm setting that excludes children with disabilities is incomplete.

The four dimensions are interdependent. Human development establishes the purpose; relationships provide the primary medium of learning; technology offers selected supports; and the environment determines whether participation is possible. The expected outcomes are participation, learning, agency, well-being and belonging.

8. Role of Educators in the Post-Digital Age

Technology changes the teacher's role but does not reduce its importance. Educators increasingly act as designers, facilitators, observers, mediators, mentors, ethical decision-makers and partners to families. Professional competence involves both technical knowledge and pedagogical judgement [8].

Teacher education should prepare ECCE professionals to select developmentally appropriate resources, integrate technology with play, identify commercial or misleading content, support communication during digital activities,



adapt resources for children with disabilities, protect children's information and communicate safely with families. Digital competence should not be defined simply as operating a device.

Educators also serve as mediators. Young children may need help connecting digital representations with physical experiences. A short video about birds can be followed by outdoor observation, drawing, movement, discussion and construction. In this way, digital content becomes one part of a broader learning sequence.

Digital documentation can support formative assessment, but children should not be continuously recorded. Observation should focus on communication, play, social participation, problem-solving, motor development, interests and emerging independence. Application scores should not be treated as a complete measure of development.

9. Artificial Intelligence and ECCE

Artificial intelligence is increasingly entering educational planning, translation, content creation, communication and accessibility. In ECCE, however, AI requires especially careful governance because young children are a vulnerable population and because developmental decisions involve contextual information that automated systems may not understand [13, 14].

Potential uses include generating activity ideas, adapting language, translating family communication, suggesting accessibility options, preparing visual or audio prompts and supporting administrative work. Any AI-generated content should be reviewed by an educator for developmental appropriateness, factual accuracy, cultural relevance and potential bias.

Key risks include privacy, bias, inaccurate output, excessive data collection, commercial exploitation and over-reliance on automated recommendations. AI should not independently diagnose disability, determine school readiness, make placement decisions or predict a child's educational future. Professional judgement and family knowledge remain essential [14].

The guiding principle is that AI may support adults in designing better environments, but it should not replace the human relationships through which young children learn.

10. Digital Well-Being and Child Protection

Digital participation must be accompanied by child-protection measures. Institutions should establish procedures concerning collection of information, photographs, recordings, storage, sharing, passwords, platform selection, advertisements, inappropriate content and reporting mechanisms. Only information that is genuinely necessary for educational or safeguarding purposes should be collected [7].

Digital well-being also requires attention to the full daily routine. Children need sleep, physical movement, outdoor play, conversation, books, creativity, sensory experiences and peer interaction. WHO recommendations emphasise reducing sedentary time and ensuring adequate physical activity and sleep for young children [6, 9]. Digital guidance should therefore support balanced routines rather than create fear around technology.

Child protection should include privacy-by-design principles, clear consent processes, restricted access to records, staff training and periodic review of digital platforms. Families should be informed about what data are collected, why they are collected, who can access them and how long they are retained.

11. Digital Equity and the Digital Divide

The digital divide is multidimensional. Differences occur not only in device ownership but also in connectivity, electricity, affordability, digital literacy, language, accessibility, adult support, content quality, maintenance and privacy. Consequently, a programme may appear digitally inclusive while still excluding children who cannot participate meaningfully [3].

A multiple-pathway approach is therefore required. Digital activities should be complemented by printed books, storytelling, community sessions, audio resources, radio, activity cards, shared devices and offline content. This is particularly important in diverse Indian contexts where ECCE services operate across different socioeconomic, linguistic and infrastructural settings [1, 3].



Equity strategies should include offline-capable resources, regional-language content, accessible formats, low-cost and shared-device models, local educator training, community technology resources and monitoring of which children remain excluded. Digital inclusion should ultimately be measured through participation and opportunity rather than the number of devices distributed.

12. Policy and Institutional Framework

A sustainable post-digital ECCE system requires coordination among curriculum, teacher education, inclusion, child protection, health, family engagement and technology governance.

Curriculum guidance should specify appropriate purposes for digital tools and clarify when hands-on experiences are preferable. Teacher education should address digital pedagogy, media literacy, AI literacy, assistive technology, accessibility, privacy, child protection and ethical decision-making. Professional development should be continuous and practice-oriented [1, 8].

Institutions should evaluate infrastructure, electricity, internet or offline access, device accessibility, maintenance, technical support, non-digital materials and safe physical spaces. They should also establish written procedures for consent, data protection, photography, recording, platform selection, AI use, data retention and safeguarding.

Monitoring should focus on child participation, developmental outcomes, inclusion, family experience, teacher workload, equity, privacy, safety, physical activity and interaction quality. Device use, application log-ins or screen time alone are inadequate indicators of ECCE quality.

13. Practical Application of the HRTE Model

The HRTE Model can be translated into an eight-question decision process for educators and institutions:

1. Developmental purpose: What should the child learn, communicate or experience?
2. Participation: Is the child an active participant rather than a passive recipient?
3. Relationship: Does the activity strengthen interaction with adults or peers?
4. Inclusion: Can children with different abilities and communication needs participate?
5. Culture: Does the content reflect children's languages, families and communities?
6. Safety: Are privacy, data protection and child safeguarding maintained?
7. Balance: Is technology combined with play, movement, hands-on work and outdoor experience?
8. Reflection: What evidence shows that children benefited from the activity?

This framework is deliberately technology-neutral. It does not prescribe a particular brand, device, application or platform. Instead, it helps educators determine whether technology adds value in a specific context. The same technology may be appropriate for one developmental purpose and unnecessary for another.

14. Implications for Children with Disabilities

The post-digital environment can create important opportunities for children with disabilities, especially in communication, participation, sensory access and independence. Yet technology should not become a mechanism for isolating children from peers or reducing participation to individual device use.

Inclusive practice should begin with strengths and participation goals. Families and relevant professionals should be involved when specialised supports are required. Universal design should be used wherever possible, with individual adaptations added when necessary. Children may require additional processing time, alternative communication modes, accessible interfaces or peer support.

For example, a child with limited spoken communication may use picture symbols or a voice-output system to choose a character during a story activity. The educational goal is not merely correct device operation. The larger purpose is communication, choice-making, participation in shared play and agency.

Evaluation of assistive technology should therefore consider whether it expands the child's opportunities to communicate and belong. A technically successful tool that isolates a child from meaningful interaction should not automatically be considered successful inclusion.



15. Challenges in Implementing Post-Digital ECCE

Commercialisation is one challenge. Products may enter early childhood settings because they are attractive or heavily marketed rather than because their developmental value is established. Institutions need transparent selection criteria.

Teacher preparedness is another challenge. Educators may be expected to use technology without adequate training, time, infrastructure or technical support. Technology integration should therefore be accompanied by professional learning and realistic workload expectations.

Family diversity also matters. Families differ in resources, languages, beliefs, work patterns and digital skills. Uniform recommendations may therefore be unrealistic. Guidance should be flexible and supportive rather than punitive.

Cultural representation remains a further concern. Digital content may not adequately represent local languages, communities, occupations, family structures and children's everyday experiences. Local content development and community participation can improve relevance.

Finally, increasing digital documentation may contribute to the datafication of childhood. Institutions should resist collecting information simply because technology makes collection possible. Technology should never become a substitute for investment in qualified educators, books, play materials, nutrition, health, rehabilitation and accessible environments.

16. Recommendations

1. Design ECCE frameworks around relationships, play, care, participation and children's rights rather than around devices.
2. Treat technology as one resource among many and require a clear developmental rationale for its use.
3. Develop institutional criteria for selecting developmentally appropriate, accessible, culturally relevant and secure digital resources.
4. Integrate digital pedagogy, AI literacy, media literacy, assistive technology, privacy and child protection into teacher education.
5. Involve families in decisions about digital activities and communicate in locally understood languages.
6. Provide offline, low-cost and non-digital alternatives so that lack of connectivity does not become a barrier to participation.
7. Minimise collection, storage and circulation of children's personal information and establish clear consent procedures.
8. Use AI cautiously, with professional review and human oversight. AI should not replace assessment, diagnosis or educational judgement.
9. Evaluate technology according to participation, development, inclusion, agency and well-being rather than usage statistics.
10. Support local production of stories, songs, games and learning resources that reflect community life and linguistic diversity.
11. Maintain balance among digital experiences, outdoor play, sensory exploration, conversation, books, art, movement, sleep and peer interaction.
12. Build partnerships among ECCE educators, families, health professionals, rehabilitation professionals and community organisations.

17. Conclusion

The post-digital age requires ECCE systems to reconsider how technology is integrated into the lives of young children. Digital technologies can widen access, facilitate communication, support children with disabilities, enrich creative learning and strengthen family-school connections. At the same time, poorly designed or excessive digital experiences can contribute to inequality, privacy risks, commercialisation, sedentary behaviour, distraction and reduced opportunities for social interaction.



The central issue is therefore not whether technology belongs in early childhood. The issue is whether its use supports the developmental purposes of ECCE. The HRTE Model proposed in this chapter places human development and relationships at the centre, treats technology as a purposeful and accountable resource, and recognises the physical, social, cultural, linguistic and ecological environment as essential to participation.

For children with disabilities, this approach is particularly important. Accessible and assistive technologies can strengthen communication, choice-making and independence, but they should be embedded within inclusive settings rather than used as replacements for teachers, peers, families or shared experiences. Similarly, artificial intelligence should be used cautiously and remain subject to professional judgement, privacy safeguards and human oversight.

A successful post-digital ECCE framework should therefore be child-centred, play-based, relationship-rich, inclusive, culturally responsive, developmentally appropriate, equitable and ethically governed. Technology should coexist with books, nature, movement, art, music, conversation, sensory exploration, caregiving and friendship. Ultimately, the measure of technological success in ECCE should not be how much technology children use, but whether technology helps children participate, communicate, learn, create, develop and belong.

Figure 1. Human–Relationship–Technology–Environment (HRTE) Model

HUMAN DEVELOPMENT Physical • Cognitive • Language • Social • Emotional • Creative • Adaptive
↓ RESPONSIVE RELATIONSHIPS Child–educator • Child–peer • Child–family
↓ PURPOSEFUL & ACCESSIBLE TECHNOLOGY Interactive • Inclusive • Secure • Culturally relevant
↓ INCLUSIVE ENVIRONMENT Physical • Social • Cultural • Linguistic • Ecological • Digital
↓ OUTCOMES Participation • Learning • Agency • Well-being • Belonging

References

1. National Council of Educational Research and Training. (2022). National Curriculum Framework for Foundational Stage. New Delhi: NCERT. [\[Source\]](#)
2. National Council of Educational Research and Training. (2023). National Curriculum Framework for School Education. New Delhi: NCERT. [\[Source\]](#)
3. UNICEF. (2021). Digital Learning for Every Child: Closing the Gaps for an Inclusive and Prosperous Future. New York: UNICEF. [\[Source\]](#)
4. National Association for the Education of Young Children & Fred Rogers Center. (2012). Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8. Washington, DC: NAEYC. [\[Source\]](#)
5. National Association for the Education of Young Children. (2017). Technology and Interactive Media in Early Childhood Programs: What We've Learned from Five Years of Research, Policy, and Practice. Young Children, 72(4). [\[Source\]](#)
6. World Health Organization. (2019). Guidelines on Physical Activity, Sedentary Behaviour and Sleep for Children under 5 Years of Age. Geneva: WHO. [\[Source\]](#)
7. UNICEF. (2023). Child Protection in Digital Education. New York: UNICEF. [\[Source\]](#)
8. National Association for the Education of Young Children. (2020). Professional Standards and Competencies for Early Childhood Educators. Washington, DC: NAEYC. [\[Source\]](#)



9. World Health Organization. (2021). Standards for Healthy Eating, Physical Activity, Sedentary Behaviour and Sleep in Early Childhood Education and Care Settings: A Toolkit. Geneva: WHO. [\[Source\]](#)
10. UNICEF Office of Research–Innocenti. (2025). Childhood in a Digital World. Florence: UNICEF Office of Research–Innocenti. [\[Source\]](#)
11. UNICEF. (2024). Global Report on Early Childhood Care and Education. New York: UNICEF. [\[Source\]](#)
12. UNESCO. (2023). Global Education Monitoring Report 2023: Technology in Education—A Tool on Whose Terms? Paris: UNESCO. [\[Source\]](#)
13. UNESCO. (2021). AI and Education: Guidance for Policy-makers. Paris: UNESCO. [\[Source\]](#)
14. UNICEF. (2021). Policy Guidance on AI for Children. New York: UNICEF. [\[Source\]](#)
15. United Nations. (1989). Convention on the Rights of the Child. New York: United Nations. [\[Source\]](#)

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- ☐ Main chapter is below the 10,000-word maximum.
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- ☐ Impact Statement is below 150 words.
- ☐ No footnotes or endnotes are used.
- ☐ In-text numbered citations are hyperlinked to the numbered reference list.
- ☐ References are serialized 1, 2, 3... as requested.
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