



**EARLY CHILDHOOD CARE AND
EDUCATION, FOUNDATIONAL
LITERACY AND NUMERACY
&
COLLABORATIVE STORYTELLING**



**State Council of Educational
Research & Training, West Bengal
School Education Department,
Government of West Bengal**



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Teachers' Training Module
on
Early Childhood Care and Education,
Foundational Literacy and Numeracy &
Collaborative Storytelling

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Foreword

Imagine a classroom alive with children's voices weaving tales together: characters born from their imaginations, numbers counted in rhythmic adventures, and letters danced into words through collective joy. This is how the learning should take place in the tender years of early childhood when the seeds of lifelong learning take root—not through rote memorisation, but through the magic of shared stories, playful activities, and community. Early childhood represents a decisive phase in human development, during which cognitive, linguistic, socio-emotional, and physical foundations are firmly established.

This Teachers' Training Module on Early Childhood Care and Education (ECCE), with a focus on Foundational Literacy and Numeracy (FLN) and Collaborative Storytelling, equips us, the dedicated educators, with transformative tools to nurture the young minds and promote holistic, joyful, and inclusive learning experiences. Emphasis has been laid on developmentally appropriate pedagogy, play- and activity-based learning, multilingual contexts, and formative assessment practices that support every child's learning trajectory.

This module guides us step-by-step, from understanding child psychology and ECCE principles to designing inclusive storytelling sessions that build foundational skills and assessing progress using joy-centred metrics. Whether we are in a bustling urban preschool or a vibrant rural anganwadi, these strategies are adaptable, evidence-based, and ready to ignite curiosity.

As we embark on this journey, we must remember: every story we co-create plants a foundation stronger than stone. Empower these young learners today, and watch them shape tomorrow's world.

I am confident that this module will serve as a valuable resource for teachers, teacher educators, and academic functionaries, enabling them to translate policy vision into effective classroom practices. I appreciate the efforts of all contributors involved in the development of this booklet.

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1.1 Introduction

Children, the future citizens, are the best gift that a country or a family could have. They constitute the most vital and dynamic segment of India's population. As a nation with one of the world's largest child populations, India bears a significant responsibility in shaping the early years of its youngest citizens. In the Indian socio-cultural context, childhood is seen not merely as a biological stage but as a formative period heavily influenced by family structures, community life, traditional customs, socio-economic conditions, and regional diversity. These early years—spanning from birth to six years—lay the foundation for future learning, health, behaviour, and overall well-being. Acknowledging the critical importance of this phase, India has gradually increased its focus on Early Childhood Care and Education (ECCE) within national policies, development programmes, and educational reforms.

In the Indian scenario, ECCE is not limited to academic readiness; it encompasses the child's physical growth, emotional security, cognitive development, language enrichment, cultural identity, and socialisation. The influence of the extended family, traditional caregiving practices, multilingual environments, festivals, stories, and community interactions all contribute to a rich tapestry of early learning experiences. However, challenges such as uneven quality of early childhood centres, inadequate training of ECCE educators, socio-economic disparities, and lack of awareness among caregivers highlight the need for continued policy attention and community participation.

This unit provides an in-depth understanding of early childhood development within India's socio-cultural, economic, and policy landscape. It examines the developmental needs of children aged 0–6 years, explores the influence of contextual factors on growth and learning, and analyses the role of ECCE programmes in addressing these needs. Emphasis is placed on holistic development, developmentally appropriate practices, play-based pedagogy, family engagement, and inclusive education.

1.2 Learning Outcomes

By the end of this unit, trainees will be able to:

- I. **Describe** the developmental characteristics and needs of children aged 0–6 years, early childhood, and ECCE.

- II. **Explain** the significance of early childhood as a critical period for lifelong learning, behaviour, and well-being.
- III. **Analyse** the influence of Indian socio-cultural, economic, familial, and environmental factors on early childhood development.
- IV. **Identify** major national policies and programmes related to ECCE in India, including ICDS, Anganwadi services, ECCE Policy (2013), NEP 2020, and NCF-FS 2022.
- V. **Evaluate** the extent to which ECCE programmes address the diverse needs of children, especially those from disadvantaged and marginalised contexts.
- VI. **Apply** principles of ECCE to plan or adapt early learning environments for children with varied linguistic, developmental, and socio-cultural backgrounds.
- VII. **Reflect** on the ethical and professional responsibilities of ECCE practitioners in promoting holistic development, equity, and child rights.
- VIII. **Collaborate** with peers to design contextually relevant activities or learning environments that integrate cultural resources and community strengths.

1.3 History of ECCE: Global and Indian Context

1.3.1 Global Context

The concept of ECCE is not new. The history of ECCE worldwide reflects a continuous shift—from charity-based care to philosophical pedagogy, then scientific research, rights-based advocacy, and finally global policy integration. Today, ECCE is recognised globally as a critical foundation for lifelong learning and a key contributor to equity and human development.

The earliest ideas about childhood and learning emerged from European philosophers and educators who challenged traditional views of children as miniature adults. John Amos Comenius, often considered the “Father of Modern Education”, advocated for sensory learning and age-appropriate instruction. He emphasised that early years are critical for shaping future development. In later years, Jean-Jacques Rousseau, Johann Heinrich Pestalozzi advocated learning through activity, affection, and the environment. In Germany, Friedrich Froebel started the pre-school movement in the 1800s. He founded the *kindergarten schools* and believed that play is the highest form of learning. Maria Montessori developed the *Montessori Method* based on scientific observation and emphasised independence, sensory learning, and self-correcting materials. The early 20th century saw growth in psychology and neuroscience. Contributions from Dewey, Piaget, Vygotsky, and Erikson deeply shaped modern ECCE practices.

In the late 20th Century, ECCE turned into a Rights-Based Approach. The **United Nations Convention on the Rights of the Child (UNCRC, 1989)** shifted global focus to children’s rights to survival, development, protection, and participation. ECCE was established as a fundamental right. In 1990, at the **World Declaration on Education for All** (Jomtien Conference, Thailand), ECCE was formally included in the global Education for All (EFA) agenda. It emphasised that ‘learning begins at birth’ and promoted early care and education as a necessity, involving families and communities. In addition, the World Education Forum held in Dakar, Senegal, in April 2000, emphasised expanding and improving comprehensive ECCE, especially for disadvantaged children. Countries worldwide increased investment in preschool and early learning.

Recently, the World Education Forum held in 2015, Incheon, Republic of Korea, set the goal of sustainable development, recognising the important role of education as a main driver of progress by 2030. The Sustainable Development Goal (SDG) 4.2 (2015-2030) targets that, “by 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education, so that they are ready for primary education”. It frames ECCE as essential to human development and lifelong learning.

In line with these global commitments, India is striving to ensure access to quality ECCE for all children in the country.

1.3.2 Indian Context

In India, ECCE has evolved through a confluence of international influences, social reform movements, governmental advancements, and traditional practices. It reflects India's changing sociocultural fabric, commitment to inclusive education, and understanding of children's developmental needs.

The Gurukul system, which emphasised holistic learning through daily activities, moral education, and community life, was one of India's rich traditions that fostered children's early learning and social development long before current ECCE systems existed. There were family and community-based caregiving, storytelling (katha, folk tales, Panchatantra), music, and rhymes that formed early literacy and moral education. Play, outdoor activities, and cultural rituals promoted cognitive and socio-emotional skills. Though informal, these practices aligned with the characteristics of ECCE, including play-based learning, bonding, and social development.

In India, the early pioneers of early childhood education include Gijubhai Badheka, Tarabai Modak, and Maria Montessori. Gijubhai Badheka believed that quality education is essential for the healthy development of children. To promote this, he founded 'Bal Mandir', a preschool in Bhavnagar, Gujarat, in 1920. Tarabai Modak also played a key role in advancing preschool education in India. In 1926, she established the Nutan Bal Shikshan Sangh in the former Bombay, now Mumbai. In this environment, children from diverse backgrounds gained knowledge through engaging activities and practical experiences. The Montessori Method, developed by Maria Montessori, is a preschool education framework that has profoundly influenced children worldwide. It aims to support children's natural growth within a carefully structured environment. The contributions of renowned Indian educational philosophers such as Mahatma Gandhi, Rabindranath Tagore, and Zakir Hussain have emphasised the importance of nurturing and educating children in their early developmental years. They advocated that children should receive education in their native language and that it should be closely connected to their socio-cultural surroundings and the community where they and their families live.

After independence, India focused on nation-building, literacy, and school education. ECCE gradually gained attention as social welfare policies expanded. In **1953**, the **Central Social Welfare Board** was established, which supported balwadis, creches, and child welfare centres. Findings from Western child development studies (Piaget, Montessori, Dewey) entered Indian teacher training, shaping early preschool curriculum frameworks during this period. The launch of ICDS in 1975 marked the most significant milestone in Indian ECCE history.

1.4 Understanding Early Childhood Development, ECE, and ECCE

Think and Reflect:

Ask all the participants to close their eyes. Tell them to think of their childhood days. Ask them to recollect various people, events, places, and memories associated with their childhood. Specifically ask participants to discuss how their childhood is different from what they see among the children today. Do they articulate differences in how and where they spent their childhood—home or anganwadi centre, preschool or school, play or read and write, and so on. The idea here is for all participants to begin thinking about young children and their lives in the current context.

Early Childhood refers to the period from birth to approximately 8 years of age. This stage is characterised by rapid physical, cognitive, emotional, social, and language development. It includes programmes for parents and caregivers, community-based services for infants and young children, and health, nutrition, education, water, and environmental sanitation—all aspects that impact the overall learning and development of children up to age eight (State of the World’s Children, 2001). It promotes and protects the rights of children from birth to the age of eight for survival, growth, and development.

ECE or Early Childhood Education refers specifically to educational experiences provided to children aged 3 to 6 (sometimes up to 8) years, typically in preschools, kindergartens, Balvatikas, or nursery schools. Generally, ECE/preschool programmes are holistic in nature and aim to provide health and nutrition services and address the learning and socio-emotional needs of 3–6-year-olds through an activity-based methodology in an informal, flexible set-up.

The term **ECCE** encompasses three essential words: ‘Early Childhood’, ‘Care’, and ‘Education’. According to the National Policy on ECCE, 2013, this stage is divided into three sub-stages, each with its own developmental priorities based on age. These sub-stages are: (a) conception to birth, (b) birth to three years, and (c) three to six years. This is a crucial period marked by rapid growth and development. By ‘**Care**’, we mean providing love, affection, and ensuring a healthy, hygienic, protective, and stimulating environment for all children. ‘**Education**’ involves the process of gaining knowledge, skills, attitudes, and values through exploration, experimentation, observation, participation, and interaction. All these experiences help children understand more about themselves and the world around them.

In India, the ECCE spectrum spans from birth to age eight and includes early stimulation (0-3 years), pre-primary education (3-6 years) through programs like Anganwadis, and early primary education (6-8 years). NEP 2020 has expanded this, incorporating the 3–6-year age group into the formal school system with a focus on holistic development through play-based, inquiry-based, and multi-faceted learning. The **NCF-FS 2022** provides the guiding framework for implementing high-quality ECCE, and initiatives like **NISHTHA ECCE** are training teachers for this purpose.

Now, let us understand where the Foundation Stage of NEP 2020 is in the ECCE spectrum.

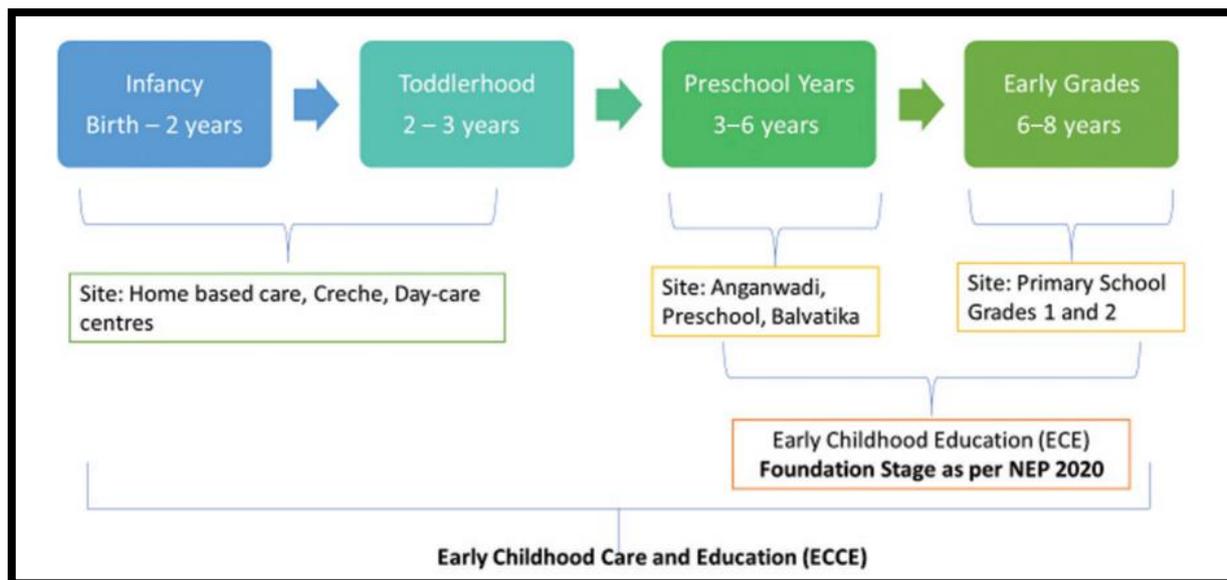


Figure 1.1: The ECCE spectrum in India as per the National Education Policy 2020

1.5 Aims and Objectives of ECCE

The goal of ECCE is to offer quality care and learning experiences to every child in their early years for their comprehensive growth. The ECCE Curriculum Framework (2013) has established the goals of ECCE. Considering this document, we should recognise the main aims and objectives in India.

1.5.1 Aims

The aims of ECCE in India are as follows:

- I. To promote inclusive, equitable and contextualised opportunities for promoting optimal development and active learning capacity of all children below 6 years of age.
- II. To promote holistic and integrated development.
- III. To ensure an enabling environment that integrates care, nutrition, health, hygiene, and early learning, especially for children from disadvantaged backgrounds.
- IV. To prepare children for the foundational stage of schooling, uphold children's rights and dignity.
- V. To support families and communities in child-rearing practices and reduce developmental vulnerabilities.

1.5.2 Objectives

Aligned with national frameworks, the key objectives of ECCE in India include:

- I. Physical (ensuring adequate nutrition, immunisation, and health monitoring) and Motor Development (developing gross and fine motor skills through play, movement, and physical exploration).
- II. Cognitive and Language Development (by promoting problem-solving, reasoning, creativity and FLN understanding).
- III. Early Learning and School Readiness (by strengthening foundational capacities needed for formal schooling and developing appropriate, play-based, experiential learning opportunities).
- IV. Inclusive and Equitable Access (by prioritising children from vulnerable, rural, tribal, socio-economically disadvantaged, and marginalised backgrounds).
- V. Professional Training and Quality Improvement (by developing skilled ECCE educators through training, supervision, and continuous capacity-building).

1.6 ECCE: Policies, Programmes, and Initiatives

In 1974, the **National Policy for Children**, the first formal commitment to child rights and well-being, recognised children's rights to survival, protection, and development. **National Policy on Education (1986)** and **PoA (1992)** highlighted ECCE as a significant part of basic education and emphasised child-centred, play-based preschool experiences. **National Nutrition Policy (1993)** addressed malnutrition affecting early development. It linked nutrition with early childhood health and education. **The Sarva Shiksha Abhiyan, 2001**, focused on universal primary education, indirectly reinforcing the importance of school readiness and ECCE. **National Curriculum Framework (NCF 2005)** strengthened child-centred pedagogy, emphasising play, exploration, activity-based learning, and inclusive practices. The **National ECCE Policy (2013)** recognised 0–6 years as a critical period for holistic development and released a **National Curriculum Framework for ECCE (NCF-ECCE, 2013)**, and strengthened Anganwadi quality standards and ECCE training. The **National Education Policy (NEP) 2020** introduced the Foundational Stage (3–8 years), integrating preschool and early primary and emphasised a play-based, flexible, and culturally rooted curriculum. The **National Curriculum Framework for Foundational Stage**

(NCF-FS 2022) provides curriculum, pedagogy, and assessment guidelines for Anganwadis, Preschools, and Early primary grades (Classes 1–2). Presently, emphasis is growing on ECCE teacher training through Digital platforms for capacity building (**DIKSHA, NIPUN Bharat**). Organisations such as Mobile Creches, SEWA, Pratham, CECED, and Aga Khan Foundation became influential in improving preschool quality, community engagement, and teacher training.

Integrated Child Development Services (ICDS) is India’s flagship programme for early childhood development. It was launched on 2 October 1975 under the Ministry of Women and Child Development (MWCD). It is one of the world’s largest and most comprehensive early childhood care programmes offering a holistic package of supplementary nutrition, immunisation, health check-ups and referral services, non-formal preschool education, growth monitoring, and health and nutrition education for mothers. Delivered through Anganwadi centres (Approximately 13.96 lakh centres as per data from Poshan Tracker, December 2024), ICDS remains central to Indian ECCE. The **ICDS Strengthening and Restructuring (2012-13)** programme aimed at improving training, monitoring, and infrastructure. It introduced quality standards and revised the ECCE curriculum. The **Rajiv Gandhi National Crèche Scheme** was introduced for day care for children of working mothers (0–6 years). **Vidya Pravesh (2021)** is a 3-month play-based School Readiness Programme for Class 1 children, primarily focusing on socio-emotional, physical, and early literacy and numeracy preparedness.

POSHAN Abhiyaan (National Nutrition Mission) – 2018 (aimed to reduce stunting, underweight, and anaemia), Mission Saksham Anganwadi & POSHAN 2.0 (2021), Samagra Shiksha - 2018 onwards (holistic school education programme), and training of Anganwadi workers and pre-primary teachers through National Initiative for School Heads and Teachers’ Holistic Advancement (NISHTHA FS) are some of the major initiatives that have been taken for the sake of ECCE in India.

The Current Trends signify increased focus on inclusive ECCE for children with disabilities, Community-based early learning initiatives, strengthening of home-based programmes for 0–3 years, Integration of local culture, language, and indigenous games in early learning, Partnerships between governments, NGOs, and the private sector, and sustainability and universal access as national priorities.

1.7 ECCE and 21st Century Skills

ECCE is not just preparation for formal schooling—it is preparation for life. In the context of 21st-century demands, a strong ECCE programme nurtures the full range of human abilities: cognitive, social, emotional, linguistic, creative, and digital. Through holistic, play-based, and child-centred approaches, ECCE ensures children grow into confident, capable, empathetic, and innovative individuals equipped to succeed in a rapidly changing global landscape. 21st-century learning emphasises the 4Cs (critical thinking, creativity, communication, and collaboration), problem-solving, socio-emotional, and technological skills. ECCE environments offer rich opportunities for exploratory play, inquiry-based activities, and hands-on experiences. These activities foster curiosity, flexible thinking, and the ability to make connections—skills essential for innovation and lifelong learning. Children develop empathy, cooperation, self-regulation, and resilience—competencies widely recognised as predictors of future academic and professional success. ECCE strengthens early language and literacy, listening and speaking skills. These build the foundation for advanced literacy, social confidence, and collaborative learning later in life. Though young children do not require intensive digital exposure, age-appropriate experiences help them understand basic digital concepts and develop their logical thinking. This early familiarity

with technology supports smooth transitions into digital learning environments without compromising developmental needs.

1.8 Challenges of ECCE

Early Childhood Care and Education (ECCE) in India faces multiple challenges, including infrastructure, teacher capacity, pedagogy, equity, coordination, and financing, compounded by socio-economic inequalities and health and nutrition gaps. While national policies are strong, on-ground implementation and quality assurance remain key areas requiring urgent attention.

The following are the major challenges:

- I. Inadequate Infrastructure and Learning Environment:** Many Anganwadi Centres (AWCs) lack safe buildings, toilets, water supply, sufficient and good-quality teaching-learning materials (TLMs), and electricity. They have limited spaces for play, exploration, or group activities.
- II. Shortage of Trained and Qualified ECCE Workforce:** Anganwadi Workers (AWWs) often have limited formal training in early childhood pedagogy and high dependency on short-term or minimal training modules. There have been limited opportunities for professional development and supervision.
- III. Coordination Issues:** ECCE involves multiple ministries (MWCD, MoE, Health) that lead to overlap and weak convergence. Health, nutrition, and early learning often function in silos rather than as an integrated package. There is usually a lack of coordination between Anganwadi centres and primary schools, and it affects continuity.
- IV. Curricular and Pedagogical Gaps:** Many preschools place excessive emphasis on rote learning, worksheets, and formal teaching. There is a limited use of play-based, experiential, and developmentally appropriate practices (DAP).
- V. Quality Variations Across Public and Private ECCE:** Private preschools range from high-end centres to low-cost, unregulated institutions. There are no uniform quality standards or mandatory accreditation.
- VI. Inequitable Access and Regional Disparities:** Access to ECCE varies significantly across rural vs. urban areas, tribal and remote regions, and socio-economically marginalised communities. Children from deprived backgrounds are most likely to miss high-quality early childhood services.
- VII. Low Public Investment in the Early Childhood Sector:** ECCE receives a small proportion of education and welfare budgets. There is inadequate funding for infrastructure improvement, TLMs, and teacher training.
- VIII. Limited Parental Awareness and Engagement:** Many parents see preschool as a place for coaching or early academic push, not play-based learning and have little awareness of nutrition, stimulation, and responsive caregiving. Poor home environments and limited resources often affect early learning.

1.9 Summary

The Indian context is uniquely complex. Children grow up in diverse environments—urban centres, rural villages, tribal areas, coastal zones, and mountainous regions—each offering different levels of access to healthcare, nutrition, early learning opportunities, and emotional support. Many children face vulnerabilities such as poverty, malnutrition, limited preschool exposure, and socio-cultural obstacles, while others benefit from enriching home environments and quality educational settings. This broad range of experiences highlights the need for a holistic, inclusive, and contextually appropriate approach to ECCE.

Thus, children in India stand at the intersection of tradition and modernity, opportunity, and inequality. Strengthening ECCE is essential not only for individual child development but also for national progress, social equity, and the creation of a healthy, capable, and compassionate future generation. A robust, inclusive, and culturally sensitive ECCE framework is therefore indispensable for enabling every Indian child to realise their full potential.

2.1 Introduction**2.2 Learning Outcomes****2.3 Understanding Children: Myths & Realities****2.4 Physical Development****2.5 Socio – Emotional & Ethical Development****2.6 Cognitive Development****2.7 Language & Literacy Development****2.8 Creative & Aesthetic Development****2.9 Positive Learning Habits****2.10 Panchkosha****2.11 Summary**

2.1. Introduction

A child is the most valuable resource of a family and of society. Therefore, special attention must be given to the proper upbringing, care, protection, and development of every child. According to the Indian Constitution, a person below the age of eighteen is considered a child. However, according to psychologists, childhood is a long period which is reflected through a child's thinking, feelings, and behaviour.

Child development is mainly divided into five areas — physical, socio-emotional, language and literacy, cognitive, creative and aesthetic development. These areas are closely interrelated. For example, any delay or problem in physical development can negatively affect a child's creative and moral development.

Childhood is the foundation of future life — including outlook, habits, values, and the skills for living in harmony with others. Therefore, it is extremely important to understand children properly. If parents and teachers remain aware of a child's abilities, interests, mental state, and desires, they can guide the child in the right direction.

The early stage of child development is more important than the later stage. Any positive or negative experiences during childhood have a long-lasting impact on a person's growth and development in later life. Therefore, it is the responsibility of society as a whole to provide every child with a healthy, beautiful, safe, and nurturing environment for overall development.

□ Important Points to Remember

- I. Observe the child and listen carefully to what the child says.
- II. Maintain regular communication with the child.
- III. Create a suitable environment for proper care and upbringing.
- IV. Avoid comparing the child with other children.
- V. Be sensitive to the child's needs and guide them in the right direction.
- VI. Spend quality time with the child.

2.2 Learning Outcomes

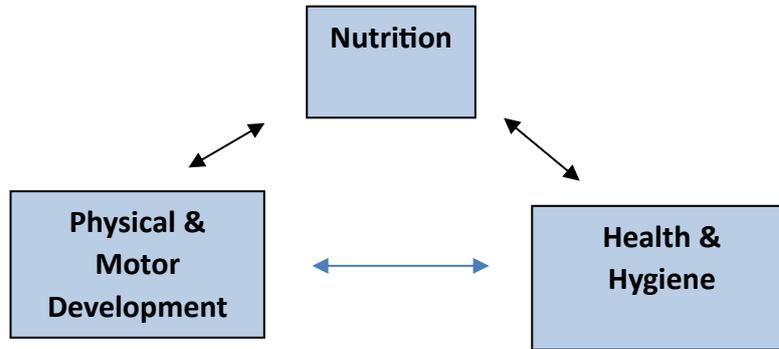
By the end of this unit, trainees will be able:

- I. To develop a positive attitude towards all teachers at foundational level
- II. To be able to explain the concept of child & childhood
- III. To be able to list up the characteristics of child's growth & development up to the age of eight
- IV. To be able to design the proper teaching plan according to the developmental stages of child

2.3. Myths & Realities about Children

Myth	Reality
Children's mind is a blank slate. They will learn when they grow up.	85% of the brain development is completed by the time a child reaches 6 years of age.
A child is only the mother's responsibility	It needs an entire society to raise a child
Being harsh with children will make them well-behaved.	Being too strict can damage a child's self esteem & ability to make decisions
Screen-based learning is essential for children.	The foundation for learning is built through sensory & play based experiences.
Expensive toys & presents ensure a happy childhood.	Happiness comes from meaningful corrections & bonding with parents. (eg. Bedtime stories, quality time with parents, play etc.)
ECE is just babysitting	ECE programmes are structured with age-appropriate methods to foster cognitive, social, emotional & physical development.
Children must be left alone to learn independence.	It is always better to encourage gradual independence with support to build their confidence.
Parental disagreements should be hidden from kids.	Arguing in front of kids can be harmful but resolving conflicts more healthily teaches valuable lessons.

2.4. Physical development – (Annamaya Kosha & Pranamaya Kosha)



Curricular Goal	Role of Caregivers
1. Develop habits for keeping themselves healthy and safe.	<ul style="list-style-type: none"> • Teach self-care and hygiene practices • Choose nutritious food and avoid food wastage • Maintain regular mealtimes • Understand safe and unsafe situations • Use play materials safely
2. Enhance sensory perception	<ul style="list-style-type: none"> • Compare objects by size, shape, colour, and shades • Identify near/far sounds and differences in loudness • Distinguish objects through touch • Identify objects by taste and smell • Develop observation skills using symbols • Improve body balance through games and physical activities
3. Promote a healthy and flexible body	<ul style="list-style-type: none"> • Develop gross motor skills (jumping, running, throwing/catching, cycling, rhythmic activities) • Develop fine motor skills (tearing paper, buttoning shirts, tying laces, bead-stringing, etc.)



Figure 2.1: Gross Motor Skill Development through Movements

Activities for Participating Teachers

Participating teachers can be divided into pairs. Each pair can be given a small ball. Participants have to throw a catch with each other. After the activity, the following questions are to be answered.

- Which body parts & muscles are being used while playing the game?
- Will this game be beneficial for children? Why?

2.5. Socio – Emotional & Ethical development (Monomaya Kosha)

Curricular Goal	Role of Caregivers
1. Help children understand and manage their emotions and respond with positive social norms.	<ul style="list-style-type: none"> • Make children aware of themselves and the importance of safety and trust • Distinguish between known and unknown persons • Understand peers' emotional needs
2. Encourage helpful and productive behaviour (helping elders, assisting differently-abled peers, feeding pets, etc.).	<ul style="list-style-type: none"> • Develop responsibility toward plants and animals • Encourage cooperation, generosity, and • Develop a helping attitude toward others
3. Develop respect and a positive attitude toward the environment (watering plants, organising toys after play).	<ul style="list-style-type: none"> • Promote care for the environment

Activities for Participating Teachers

- Recall and share any of your childhood incidents that are memorable till now. Why is it memorable to you?

2.6. Cognitive Development (Vigyanmoy Kosha)

Curricular Goal	Role of Caregivers
1. Children make sense of the true world around them through observation & logical thinking	<ul style="list-style-type: none"> • Identify similarities and differences through observation • Develop the ability to make predictions • Familiarise children with everyday experiences

<p>2. Children develop mathematical understanding & abilities to recognise the world through quantities, shapes & measures.</p>	<ul style="list-style-type: none"> • Recognise basic geometric shapes • Classify objects based on features • Strengthen cognitive skills: observation, matching, differentiating, sequencing, puzzles, pattern creation, etc. • Introduce basic addition and support two-digit addition • Teach mathematical concepts: quantity, size, space, measurement
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Activities for Participating Teachers

- Think and devise a plan to motivate the children in sequential thinking?

2.7 Language & Literacy Development (Vigyanmaya Kosha)

Curricular Goal	Role of Caregivers
<p>1. Develop effective communication skills for daily interactions.</p>	<ul style="list-style-type: none"> • Listen attentively and maintain regular conversation • Encourage emergent reading • Identify and describe characters in stories • Follow verbal instructions
<p>2. Develop reading and writing ability in the first language (L1).</p>	<ul style="list-style-type: none"> • Recognise alphabet (L1) and read/write • Comprehend stories and poems • Express ideas in short written forms • Show interest in choosing and reading books
<p>3. Begin reading and writing in the second language (L2).</p>	<ul style="list-style-type: none"> • Recognise most letters in L2 and read/write words.

Activities for Participating Teachers

- Discuss in small groups how many languages are commonly spoken in your classrooms?
- How can you make spaces for children to use their home language in your class?

2.8 Creative & Aesthetic Development (Anandomaya Kosha)

Curricular Goal	Role of Caregivers
1. Develop sensitivity and skills in the visual and performing arts and express emotions meaningfully and joyfully	<ul style="list-style-type: none"> • Encourage dance, music, crafts, role-play, and rhythmic activities • Draw attention to nature's colours and beauty • Encourage making toys, masks, cars, etc. and group activities • Appreciate and motivate children's artwork

Activities for Participating Teachers

Match & Pair

Sequential Thinking	Physical Development
Birthday Celebration	Language Development
Role Play	Socio Emotional Development
Tearing Papers	Creative & Aesthetic Development
Conversation	Cognitive Development

2.9 Developing Positive Learning Habits

Curricular Goal	Role of Caregivers
1. Build the ability to participate actively in formal learning environments by developing learning habits.	<ul style="list-style-type: none"> • Encourage punctuality, participation in assembly, classroom rules, greeting habits, completing tasks on time, and organising materials • Develop self-control, listening skills, turn-taking, and leadership qualities

2.10 Panchkosha

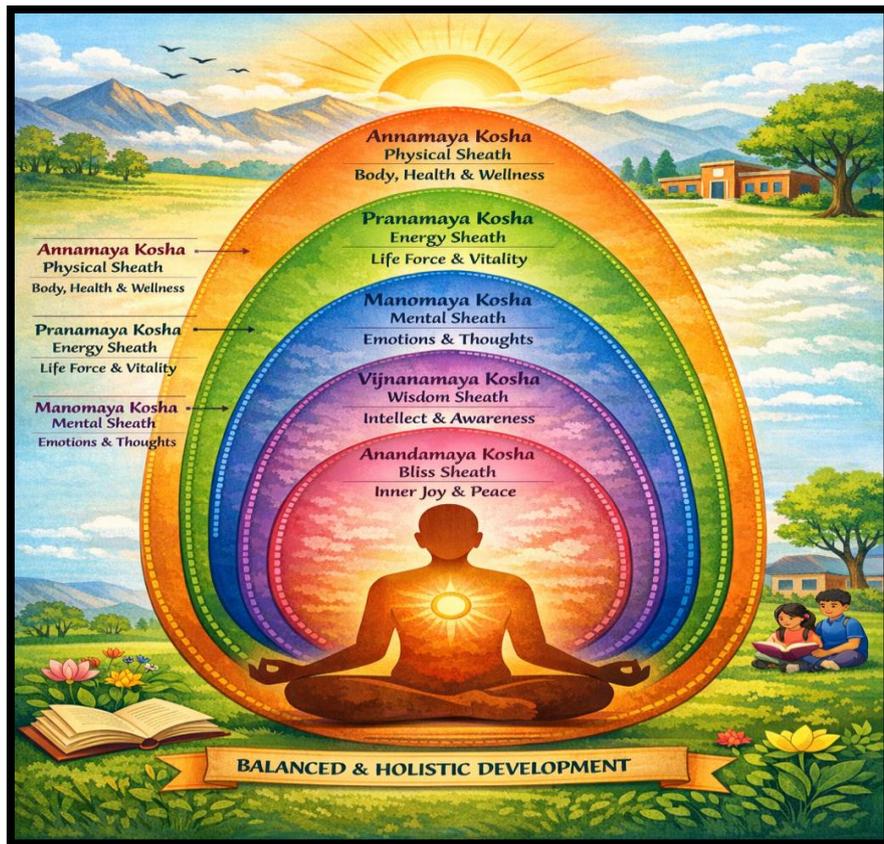


Figure 2.2: Illustration of Panchkosha

2.11. Summary

Early Childhood Care and Education (ECCE) plays a crucial role in child development. Pedagogy at this level is based on holistic development. Teachers must create an environment where children can connect, explore, experiment freely, and express themselves independently.

Activities must be developmentally appropriate, and play materials must be local, affordable, and safe. In short, both teachers and parents play a significant role in a child's overall development.

3.1 Introduction**3.2 Learning Outcomes****3.3 Student-Teacher Relationship****3.4 Various Strategies of Pedagogy in ECCE****3.5 ECCE Classroom Management****3.6 Connecting with the Environment****3.7 Summary**

3.1 Introduction

Early childhood (roughly ages 3 to 8) is a critical period when children build the foundations of lifelong learning. Research shows that more than 85% of brain development happens by age three, so positive early experiences profoundly shape cognitive, language, motor, social and emotional growth. Learning at this stage must be holistic and joyful, integrating play, exploration and care. Children learn best through hands-on activities and supportive relationships rather than through formal drills. Establishing a love of learning and self-confidence early on sets the stage for school readiness and later success.

The National Education Policy (NEP) 2020 highlights ECCE as the **Foundational Stage** of education. It officially integrates preschool (ages 3–6) into the school system with a play-based, child-centred curriculum.

3.2 Learning Outcomes

By the end of this unit, trainees will be able to:

- I. Explain the importance of play-based and child-centred learning in ECCE, and identify how play supports children’s holistic development.
- II. Describe effective classroom management strategies in ECCE, such as learning stations, visual routines, helper roles, and the use of inclusive materials.
- III. Apply strategies for building warm, trusting teacher–child relationships, including sensitive communication and responsive participation.
- IV. Plan ways to integrate nature and local culture into learning, such as nature walks, gardening, local stories/songs, and traditional play materials.

3.3 Student-Teacher Relationship

A warm, trusting relationship between teachers and children is at the heart of ECCE. Young children learn best when they feel emotionally secure, valued, and understood. A caring teacher listens attentively, smiles often, and shows genuine interest in each child’s ideas and feelings. For example, a teacher who kneels to make eye contact or offers comfort with a gentle touch sends the message, “You are safe and important here.”

Understanding each child as an individual is also critical. Teachers should observe what interests each child and join in their activities, using those moments to introduce new words or

concepts. Learning about a child's family, cultural background, and favourite games lets the teacher connect lessons to the child's world. For instance, if a child loves toy cars, the teacher might incorporate counting cars into a math game. Consistent routines and gentle cues (like a special welcome song or handshake each day) also help children feel secure and ready to learn. In this way, every child feels valued and supported in their growth. We may try the following ways:

- i. **Morning Greeting Circle:** Start the day by greeting each child individually by name as they arrive (perhaps with a handshake, high-five or special song). Then hold a quick circle time where each child can share how they feel or something fun they did.
- ii. **Feelings Discussion:** Use emotion picture cards or a feelings puppet during circle time to help children identify and express their emotions. For example, show a puppet with a happy or sad face and ask, "When do you feel happy or sad?" Encourage each child to respond.
- iii. **One-on-One Chats:** Take a few minutes each week to talk individually with each child about their favourite activities, stories or family. The teacher can ask open-ended questions while playing together (e.g. "Tell me about your drawing," or "What game do you like most?") and listen actively.
- iv. **"All About Me" Project:** Help each child create a small poster or booklet about themselves (with drawings or photos of their family, favourite toys, foods, etc.). Then let each child share their poster with the teacher or class. This activity helps teachers learn about each child's life outside of school and makes each child feel seen and special.
- v. **Responsive Participation:** If a child is building with blocks, the teacher may sit nearby and ask questions like, "How many blocks are you using? What will you build next?" By talking and playing along, the teacher shows genuine interest, which strengthens the child's confidence and deepens the bond between them.

3.4 Various Strategies of Pedagogy in ECCE

- i. **Puppet Storytelling:** Use hand or finger puppets to tell a simple story about sharing, friendship or daily life. After the teacher's puppet show, invite children to make their own puppets (with paper bags, socks or craft materials). Then let them take turns using the puppets to retell the story or invent new ones. This encourages expressive language, listening skills and creativity.
- ii. **Collaborative Story Creation:** Begin a story on chart paper or a whiteboard (for example, "Once upon a time there was a little turtle..."). Ask each child to add the next sentence or idea, drawing pictures as they go. For instance, one child might say, "The turtle wanted to find a new friend," and the teacher draws a turtle on the board. This reinforces narrative structure, vocabulary and teamwork.
- iii. **Toy-Based Counting and Sorting:** Provide manipulatives like blocks, beads, shells or buttons. Give tasks such as counting a set of toy animals, sorting shapes by colour or size, or creating simple patterns (red-blue-red-blue). For example, have children count how many blue blocks they have or sort leaves by size. These playful activities strengthen early math concepts, classification skills and fine motor coordination.
- iv. **Story Dramatisation:** After reading a picture book or telling a tale, assign roles to a few children and let them act out the story while others watch. For example, in an animal story, some children might pretend to be animals and others the narrator. Alternatively, the teacher can narrate while all children use gestures and movement (e.g. walking like a caterpillar or flying like a butterfly). This dramatisation reinforces comprehension, event sequencing and physical expression of ideas.
- v. **Family Engagement Playday:** Invite parents and children to a special classroom session where teachers guide families through simple play-based activities (like building with

blocks, singing songs or telling a group story). This hands-on demonstration helps parents see how everyday play supports learning goals and builds a strong home–school partnership around ECCE practices.

- vi. **Growth Milestones Chart:** Create a colourful wall chart of early development milestones (for example, first words, first steps, and naming colours). Encourage children to add a sticker or drawing when they reach a new milestone. Discuss these milestones during circle time to show that every small experience (playing games, talking, drawing) contributes to their overall growth.

Activity for the Participants

Read the story and discuss.

The Rule of Fun

5-year old Diya watched the children playing from her window; her small heart was full of sadness. Her mother’s rule was strict: ‘Play is a waste of time. One afternoon, Diya went outside while her mother slept. The moment her feet touched the grass, she became excited. She played Kabadi with a few friends. But when she returned home, her mother was angry. Her shoes and dress were muddy. Mother shouted, “I told you never to waste time!” and Diya cried.

The next day, her mother met the teacher to complain. “Teacher, Diya is disobeying me to play! You must tell her to focus on her studies.” But the teacher smiled. He said, “Play is not a waste of time, Madam. It is the child’s most important work. It builds a strong body and a happy heart.”

Diya felt the thrilling freedom of permission and the hope of joining the game again.

Interactive questions for the participants

You are a teacher in a community where many parents, like Diya’s mother, prioritise academic performance over play, believing it to be “a waste of time.” Now, let us discuss how you will explain the values of the game with your own experience or evidence.

3.5 ECCE Classroom Management

An ECCE classroom should be nurturing, inclusive and well-organised. The physical space should be arranged thoughtfully so that children feel safe and independent. For example, separate learning corners (reading, art, blocks, music) with clear labels let children choose activities and explore different interests. Displaying children’s artwork and charts at their eye level makes the room welcoming and reinforces learning. A calm daily routine, such as a morning gathering with a welcome song, play sessions, story time, snack and rest, gives children a secure structure to their day.

Simple class rules (for example: “we listen when others speak”) can be created with the children and illustrated with pictures. When children follow routines or help tidy up, positive reinforcement (like praise, stickers or a group cheer) encourages them to repeat good behaviour. The teacher should stay gentle yet firm, giving clear cues and guidance so that children understand

expectations without fear. Modelling the expected behaviour (for instance, saying “please” and “thank you”) also teaches children by example. When conflicts arise, the teacher intervenes calmly to guide children in resolving the situation (for example, saying “I see you both want the car. How can we share it?”). Let us go through the following:

- i. **Visual Daily Schedule:** Create a large chart or board with pictures showing each part of the day (circle time, playtime, snack, nap, etc.).
- ii. **Learning Stations:** Arrange the classroom into distinct corners or stations (an art table, a block-building area, etc.). Allow children to move freely between stations and choose activities that interest them. Refresh materials periodically (for example, add new puzzle pieces or art supplies each week) to keep the environment fresh and engaging.
- iii. **Class Helper Roles:** Assign simple helper jobs to different children each day (such as “Line Leader,” or “Garden Waterer”). Rotate these roles so every child has a turn. This builds a sense of responsibility and belonging, and children learn cooperative routines by assisting the teacher with small tasks.
- iv. **Inclusive Materials:** Provide books, toys and dolls that reflect the diversity of the class (different cultures, languages, abilities and family types). For instance, keep picture books in children’s home languages or celebrate festivals from each child’s culture.

3.6 Connecting with the Environment

Teachers know that the world around children is a rich classroom. By using natural settings and familiar cultural items, they make learning real and meaningful. Outdoor spaces, local objects, and home traditions become tools for discovery. When children water plants, observe animals, celebrate festivals, or play with household objects, they connect everyday experiences to concepts.

3.6.1 Exploring Natural Surroundings

Incorporating nature into daily routines encourages curiosity and observation. For example, teachers can take children on a **nature walk** to a nearby park or garden. During the walk, encourage children to notice and describe what they see—trees, flowers, insects or clouds. Back in class, set up a **discovery corner** with nature items (leaves, shells, pebbles) and simple tools (a magnifying glass). Let us go through the following:

- i. **Nature Walks:** Plan a safe, short route. Invite children to collect leaves or flowers and share their findings. Ask open questions (e.g., “*What shapes do you see on this leaf?*”) to promote thinking.
- ii. **Gardening:** Give each child a small pot or patch. Plant seeds or easy seedlings (beans, marigolds). Involve children in watering and caring for the plants. Over days, measure and draw the growing plants, learning how they change.
- iii. **Nature Art:** Use natural materials in art projects. Make leaf rubbings with crayons and paper. Paint or decorate collected stones.
- iv. **Discovery Corner:** Maintain a shelf with natural treasures and books. Rotate items each week (a pine cone, a local shell, or a feather). Provide a magnifying glass so children can examine things closely and share what they discover.

3.6.2 Using Local Culture and Everyday Objects

Teachers should invite family experiences into the classroom. A simple **show-and-tell** with objects from home (a clay pot, a family photo, a piece of fabric) helps children explain their world. Inviting a grandparent to share a folktale or teach a traditional song connects language and culture. Let us consider the following:

- i. **Local Stories and Music:** Use folk stories and songs from the community. Read or tell a simple local story, then have children act it out or draw it.
- ii. **Household Play Areas:** Set up a pretend kitchen or market with familiar items (plastic utensils, toy fruits, play money).
- iii. **Festival Crafts:** Celebrate local festivals with hands-on crafts. For example, make paper lanterns for Diwali or decorate flower garlands for a harvest festival.
- iv. **Traditional Toys:** Use or create toys from local materials like cloth dolls. Let children decorate kites and fly them, linking play to local traditions.

Let Us Reflect

- *How do I currently use the natural and social environment in my classroom, and what simple changes can I make to help children explore more actively through real-life experiences?*

3.7 Summary

Early childhood education is a sensitive stage where the foundation for a child's holistic development is created. During this period, learning happens naturally—through play, exploration, curiosity, and real-life experiences. Therefore, play-based, experience-oriented, and child-centred pedagogies are essential in ECCE. When a caring, responsive, and sensitive teacher builds a relationship of trust with children, they feel safe, valued, and confident—fostering a stronger interest in learning.

At the same time, a well-organised and engaging classroom, appropriate learning corners, inclusive materials, and clear routines encourage children to participate freely in play, exploration, and collaboration. Integrating nature, local culture, and family experiences into learning makes education more meaningful, realistic, and joyful for young children.

Overall, effective ECCE pedagogy and environment strengthen all domains of development—social, linguistic, emotional, physical, and cognitive—and create a strong foundation for the child's future learning journey.

4.1 Introduction**4.2 Learning Outcomes****4.3 History and Development****4.4 Identification of Diversity in Children****4.5 Learning Disabilities and Giftedness****4.6 Strategies and Solutions****4.7 Summary**

4.1 Introduction

Diversity being a part of our lives is a well-known factor, whereas inclusion is an act which requires consistent effort from teachers, educational professionals and other stakeholders. A widely understood and acceptable notion about India is its rich diversity, not only in terms of States and Union Territories but also in culture, religion, language, food habits, clothing and living conditions. We all live with this diversity on a day-to-day basis. The challenge is in responding to this diversity in a curriculum and in a classroom.

As we grow, we notice diversity among various living beings on this earth. However, young children try to mingle with everyone and accept them as they are without looking for any differences. Truly speaking, an early year is the age when our education systems inculcate and develop the true meaning of inclusion. ECCE is the opportune time for developing the right attitude towards society. A preliminary understanding of inclusion is an act of bringing diverse people together, understanding, accepting, respecting, and celebrating their backgrounds. This brings us to the next question, ‘Who is included?’ Can you think about it in the Indian context?

4.2 Learning Outcomes

By the end of this unit, the trainees will be able to:

- I. Know the history and evolution of inclusive education.
- II. Identify diversity among children.
- III. Support for children with learning disabilities and gifted children.
- IV. Different strategies for teaching children with different abilities and solving different problems.

4.3 History and Development

Inclusive Education (IE) is a new approach towards educating children with and without disabilities under the same roof. It requires taking care of the learning needs of all children with a specific focus on those who are vulnerable to marginalisation and exclusion. It helps all learners to learn together through access to a common educational set-up (pre-school, schools and community education) with proper support services. The flexible education system, which takes care of various types of learners and their needs, can fulfil these requirements. In conclusion, value is the main

point to be taken care of rather than the experiment. All the children (disabled or non-disabled) are the future citizens of the country, so they have an equal right to education.

If the process of inclusive education is to be implemented properly, it is important to know the historical roots and the evolution of inclusive education, both at the international and national levels. The international movement towards inclusive education has its roots in the disability movement. The following table is a summary of some key declarations and conventions that recognise the right to education for all and, as such, form key milestones in the journey towards inclusive education. (Dreyer. Lorna M., 2017)

□ Key International Milestones towards Inclusive Education

1948	The Universal Declaration of Human Rights (Article 26)
1966	The International Covenant on Economic, Social and Cultural Rights
1982	The World Programme of Action Concerning Disabled Persons
1989	The Convention on the Rights of the Child
1990	The Jomtien World Conference on Education for All (EFA)
1993	Standard Rules on the Equalisation of Opportunities for Persons with Disabilities
1994	The Salamanca Statement and Framework for Action on Special Needs Education
2000	The World Education Forum, Dakar
2006	The UN Convention on the Rights of Persons with Disabilities

4.4 Identification of Diversity in Children

Identifying diversity in inclusive education involves recognising the wide range of students' differences, including abilities and disabilities, cultural and linguistic backgrounds, socio-economic status, gender and gender expression, and learning styles. This identification is the first step toward creating a learning environment that values each student's unique strengths and experiences by addressing barriers and adapting to individual needs. Let us understand the following categories of diversity:

- i. **Ability and Disability:** This includes students with physical, intellectual, or sensory impairments, learning disabilities, and gifted or talented learners.
- ii. **Cultural and Linguistic Background:** This encompasses students from different ethnic, racial, and religious backgrounds, as well as those who speak different languages or come from different geographic locations.
- iii. **Socio-Economic Status:** This involves recognising differences in income, class, and family background.
- iv. **Gender and Sexual Orientation:** This includes students of all genders, gender expressions, and sexual orientations.
- v. **Learning and Personality:** Students have diverse learning styles, personalities, and ways of processing information.

- vi. **Other Factors:** Diversity can also include differences in age, marital or parental status, work experiences, and political or other beliefs.

☐ **How to Identify and Use this Information**

- i. **Observe and listen:** Pay attention to how students interact and learn, and have open, non-judgmental conversations with them about their experiences and interests.
- ii. **Use assessments and feedback:** Employ formal and informal assessments to understand individual needs, abilities, and potential barriers, and consider using tools like the Universal Design for Learning (UDL) framework.
- iii. **Review curriculum and materials:** Ensure learning materials reflect a wide range of backgrounds and perspectives to act as both "mirrors" for students to see themselves and "windows" to learn about others.
- iv. **Create an inclusive environment:** Foster a classroom where students feel safe to express themselves, where their cultures and families are represented, and where collective identity is built.
- v. **Engage with families:** Communicate with families to understand their children's backgrounds and involve them in the educational process.

4.5 Learning Disabilities and Giftedness

“The term ‘atypical’ or ‘exceptional’ is applied to a trait or to a person possessing the trait up to the extent of deviation from normal, possession of the trait is so great that because it the individual warrants or receives special attention from his fellows and his behaviour responses and activities are there by affected” (Crow & Crow,1973).

“The term exceptional children refers to those children who deviate from the norm in physical, mental, emotional or social characteristics to such a degree that they require special social and educational services to develop their maximum capacity” (Telford & Swarey,1977).

☐ **Typical Features of Disabilities and Giftedness of Exceptional Children**

Exceptional children are deviant, distinct and different from the children of their age group, including those considered as normal children. Their differences from normal youngsters are so clear that they can readily be identified and separated. This deviation of the exceptional children from the average children may fall on either side, positive or negative, of their exceptionality. As a result of such vast deviations on both sides of their exceptionality, they either outperform the norm in one or more parts of their personality.

The term exceptional children is thus a broad term that encompasses children who excel or fail in practically every element of their growth and development-physical, mental, social, emotional, moral, and behavioural. These children require special care and education as they may have rare problems adjusting to themselves and their environment because of their exceptionality.

☐ **Classification of Exceptional Children**

a. Mentally or Intellectually Exceptional Children

1. Mentally retarded
2. Gifted
3. Creative

b. Sensory Exceptional Children

1. Visually impaired or handicapped
2. Hearing impaired

c. Non-sensory Physically Exceptional Children

1. Orthopedically impaired

d. Communicationally Exceptional Children

1. Children with a communication disorder

e. Learning or Academically Exceptional Children

1. Learning disabled
2. Slow learners

f. Socially and Emotionally Exceptional Children

1. Emotionally disturbed
2. Socially handicapped
3. Socially disadvantaged

g. Multiple Disabled and Severely Affected Exceptional Children

1. Children with cerebral palsy
2. Children with autism
3. Children with multiple disabilities

a. Mentally or Intellectually Exceptional Children

1. Mentally Retarded Children

Mentally retarded people, as the name implies, have a delay in the normal development, growth, and functioning of their mental capacities. There are various definitions for mental retardation or mental weakness. Mental deficiency is a condition of subnormal mental development, present at birth or early childhood, and characterised mainly by limited intelligence and social inadequacy.

Mental deficiency is a state of incomplete mental development of such a kind and degree that the individual can adapt himself to the normal environment of his fellows in such a way as to keep an existence independently of supervision and external supports.

There are different curriculum approaches for various challenged children. These include:

a. Developmental Skill Acquisition

It aims at the gradual development of sequential skills.

b. Cognitive Strategy Approach

It aims at the cognitive development of MR. Attention training is given to students, and appropriate rehearsal is focused on the development of memory.

c. Academic Basic Skill Approach

It emphasises the three fundamentals, i.e., reading, writing and arithmetic. DISTAR reading and DISTAR writing programs are fine examples.

d. The Functional Survival Approach

Here, the students are given some specific vocational skills along with normal children by taking them in to field. It is done with the help of teachers, parents and the community as well. The purpose is to make them self-depend.

e. Task Analysis

Here task is divided into small parts, and the children learnt according to their speed.

f. Multisensory Approach

The more senses are used in learning, the more learning becomes stable.

2. Gifted Children

“The talented or gifted child shows consistent, remarkable performance in any worthwhile line of endeavour.”

Gifted children learn rapidly and easily. Reason things out, think clearly, recognize relationship, comprehend meanings and possess the ability to make strong judgments and generalisations. They have difficulty conforming to the ideas and thinking of others and demonstrate the ability to perform difficult mental tasks.

Education of the gifted, if planned and carried out properly, may result in the proper nourishment and utilisation of the giftedness or talent of children. The educational provision for gifted children includes the establishment of separate schools, provision of grouping or separate classes, acceleration and enrichment programs

The former two are characterized with getting them separated from other non-gifted peers. The latter two are working to provide education to the gifted in the existing set-up of our school system. Acceleration advocates for children to be given the option of bypassing one or more grades based on their academic skills. Enrichment calls for the enrichment, enlarging or making richer the existing curriculum experiences and their delivery mode for providing the gifted what is required by them for meeting their exceptional needs.

3. Creative Children

A person's ability to develop, discover, or produce a new or innovative concept or thing, including the rearranging or reshaping of what he already knows, is referred to as creativity. Universality, the application of creative thought, purposefulness and appropriateness, flexibility, sensitivity, and intrinsic motivation are some of the distinguishing features of creativity. Creativity may be stimulated through the practices like freedom to respond, opportunity for ego involvement, removal of hesitation and fear, developing healthy habits among children, teaching self-responsibility, teaching children to face and learn from their mistakes, making judicious use of blame and praise, providing appropriate opportunities and atmosphere for creative expression, avoidance of block to creative thinking, proper organization of the curriculum, reform in the evaluation system, making use of creative resources in the society, use of special techniques like brain storming, use of gaming technique, use of creative promotion activities etc.

b. Sensory Exceptional Children

Visually impaired and hearing impaired children come under this category.

The educationally blind are those persons whose vision is so defective that they cannot be educated by print material and can be taught only with Braille. Partially sighted children require the adoption of visual materials and special methods of instruction. A multisensory approach should be used as they learn through touch and hearing. Blind needs Braille script, and partially sighted people should be provided with large printed materials, modified glasses and adjustable furniture. The changes like use of equipment, special skills, daily living skills, and sensory training

Educationally, “hearing impairment is such a disability which obstructs a child in taking education by verbal expression.” The total communication approach is a curriculum approach for the hearing-impaired. It includes child devised gestures, speech, formal sign language, finger spelling, speech reading and writing. Proper hearing devices are provided to the children. Speech training is given to them, and captioned videos and films can also help the children in regular classes. Printed or written presentation should follow the oral presentation.

c. Non – sensory Physically Exceptional Children

Physically handicapped are those who suffer from a defect that is accompanied by one or another type of deformity that inhibits the normal exercise of their muscles, joints or bones. Task Analysis, computer-assisted instruction, communication skills and language, self-care, vocational training, career awareness and work adjustment are sources of the curricular approaches for the orthopedically impaired.

d. Communication with Exceptional Children

Communication disorders come under two wide categories, viz., speech disorders and language disorders. Speech disorders interfere with one’s ability to speak. These are mainly classified as (i) articulation disorder, (ii) fluency disorder, and (iii) voice disorders.

Language disorders refer to the impairment in one’s ability to understand and/or use words in content, both verbally and non-verbally.

Inclusion of speech-impaired individuals provides a good language model through communicative peers. For language teaching in the mainstream classes, the approach SCORE [S – Situation, C – Contrast, O – Order, R – Regulation, E – Encouragement] can be used.

e. Learning or Academically Exceptional Children

Learning or academically exceptional children may be learning disabled or slow learners.

Learning disabled children are those who exhibit disorder in one or more psychological functions involved in understanding and using spoken or written language. The disorders are manifested in language, thinking, reading, writing, spelling and arithmetic. They include conditions which are referred to as conceptual problems. Different approaches for the learning disabled are the multisensory approach, self-instruction training and the process gaining approach.

Slow learners refer to all those children of different abilities, who, for one reason or the other reasons, when compared to the children of their age or grade, suffer from the retardation of backwardness in terms of rate of learning and academic performance. Educational provisions for slow learners include the provision of special curriculum, special coaching, proper individual attention, checking truancy and non-attendance, provision of co-curricular activities, maintenance of proper progress record, and rendering guidance services.

f. Socially and Emotionally Exceptional Children

Emotionally disturbed children are those who, in terms of their emotional makeup and behaviour, depart significantly and persistently from most children of their age and social groups, negatively influencing their adjustment to themselves and their social surroundings.

The emotionally disturbed children require specific provisions for the treatment of behavioural problems. Various approaches or models like the biogenic model, psycho analytic model, ecological model, behavioural model and environment-cum behavioural management model are suggested for helping these children.

g. Multiple Disabled and Seriously Affected Disabled Children

Children with multiple disabilities are those children who suffer from two or more obvious and not-so-obvious disabilities at a time, related to one or more areas of their growth and development.

Children with multiple disabilities need proper education for their adequate adjustment and progress in life. An attempt for the planning and organisation of education for them essentially requires the decisions about their placement, nature of curriculum and mode and methods of teaching. Necessary adaptations in the teachings learning environment and support system should be organized for meeting the individual needs of the disabled children. Special attention should be paid to the learning of essential functional skills, mobility and communication, behaviour management tasks with an eye to make them capable of functioning in the integrated set-up of the school, home and community settings, including the use of sophisticated assistive technology as effectively as possible.

4.6 Strategies and Solutions

The following are some important strategies for inclusion by ECCE teachers:

- i. *Tap into the student's strengths.* Each student with disabilities has their own set of skills, strengths, and learning needs, which need to be documented in the Individualised Education Plan (IEP) or in their personal profile. So, it is a good idea to find out more about the student's strengths and interests. If a child is interested in dinosaurs, painting or water sports, they need the opportunity to exhibit their expertise in that subject. Parents are a great source of this information, and so is the student.
- ii. *Incorporate adaptive educational equipment, whichever is required for a child in your ECCE centre.* There are several types of adaptive equipment. The recent technology may include: speech synthesisers, braille computers, text magnification, talking calculators and spellers, raised line drawing boards and paper. Numerous aids are also available, like braille atlases, raised clock faces, adaptable sports equipment, science kits, and long handwriting kits.
- iii. *Be ready to make modifications.* The right modifications and accommodations in the classroom can help a student with disabilities access the general education curriculum at a grade-appropriate level.
- iv. *Partial participation can make the difference.* Partial participation requires making modifications to the task so that a student with disabilities is not excluded from activities. Even if the student cannot complete a task fully or independently, he or she can still participate and benefit from the learning taking place.
- v. *Learn about Assistive Technology (AT).* Assistive Technology is often the key to inclusion for many students with multiple disabilities. Computers, augmentative/ alternative communication systems, and communication boards are just some examples of helpful AT.
- vi. *Do not give up on a goal.* If your student's disabilities affect his or her intellectual functioning, he or she will be slower to learn new things and will have difficulty applying that learning in new situations. Never assume that a student who is having difficulty cannot achieve a goal. Plan more hands-on opportunities for learning and practice, give feedback immediately and repeat the learning task in different settings.
- vii. *Deal with behaviour issues.* Disabilities often affect a student's behaviour, and a combination of disabilities can be especially disruptive. If the child's behaviour is affecting his or her learning or the learning of others, find effective strategies, learn and apply.

- viii. *Take the help of paraprofessionals.* Some children with multiple disabilities will require the support of an aide or paraprofessional. Learn effective strategies for working with paraprofessionals. Keep phone numbers and contact addresses in your diary to provide them to the parents of children with disabilities.
- ix. *Set the desks in the classroom as rows.* Children with autism need their own space. A child with Attention Deficit Hyperactivity Disorder (ADHD) is easily distracted, so a seat close to the teacher, facing forward, works best. Plan for others in a similar way.
- x. *Post classroom rules in a noticeable place in the classroom and review them regularly.* Ask students to take turns reading the rules aloud as part of the daily routine or at least every alternate day. Make sure all children understand the rules of the classroom and the consequences for not adhering to them. It may be helpful to allow the class to help formulate the classroom rules.
- xi. *Have a predictable schedule.* Children with autism tend to prefer predictable routines. Give a warning if the schedule is going to change. If there is going to be a field trip, a special guest in the classroom or a substitute teacher, try to let the class know in advance. Unexpected changes in the routine can be difficult for some children in your ECCE classroom.
- xii. *Provide opportunities to take a break.* Read a story, play a short game, stand up and stretch or have a casual conversation. Sometimes, an opportunity to get out of his or her seat and walk around the room can be very calming for the child on the autism spectrum. Try to be aware of the signs that your student may need a short break.
- xiii. *Be aware of environmental triggers.* Loud noises, bright lights and hot or cold temperatures can disrupt a child's thinking pattern and cause an unnecessary classroom outburst. Be mindful of children's environmental triggers and eliminate them whenever possible.

□ A 3E framework is mentioned in the Sage Handbook for Special Education. It describes the three main characteristics of an inclusive classroom. The narratives around inclusive education signify the importance as well as urgency to adapt and make necessary changes in the education system. To begin working towards it, a look is required at aspects which can hinder inclusivity in classrooms; some critical points should be kept in mind by the government, policy makers, teachers, and parents.

The 3E Framework for Ensuring Inclusive Classrooms is given below:

Entry	Engagement	Empowerment
<ul style="list-style-type: none"> • Access to a safe learning environment • Respect • Barrier-free 	<ul style="list-style-type: none"> • Relevant and culturally appropriate curriculum • Trained teachers • Locally relevant teaching and learning materials 	<ul style="list-style-type: none"> • Foster agency • Ability to convert resources into usable opportunities • Community belonging

4.7 Summary

These features are interlinked and work together. An inclusive system based on the above framework considers the challenges faced by CwDs and, at the same time, through its appropriate infrastructure and proper compassionate teaching, ECCE children who are mentally, socially, economically, and physically backward can return to the mainstream of society. We must always strive so that such children, like other members of society, can come into the mainstream and participate in the development of the country as ideal citizens.

5.1 Introduction**5.2 Learning Outcomes****5.3 Engagement of School, Parents, Family, Community and Other Stakeholders in ECCE****5.4 Continuous Professional Development (CPD) Programme****5.5 Nutrition and Well-being****5.6 Safety and Security: POCSO, NCPCR-SCPCR and Constitutional Remedies**

5.1 Introduction

Early Childhood Education (ECE) environments greatly influence children's learning experiences as well as their health and overall well-being. The right learning environment is about more than just a physical space. It is, at its best, about creating an environment conducive to learning that ensures children feel safe, make sense of the world, and feel empowered, understood, and free to learn actively and flexibly. The right learning environment allows children to interact with their teachers, peers and environments in a way that helps them to learn and better understand the world. To develop free and non-intimidating learning environments, the role of parents, family, community and stakeholders is also important.

An undisputed finding of educational research is that the active engagement of learners and involvement of families and community enhance learning. Parent and community involvement results in enhanced academic achievement, improved school climate, positive parent-child relationships, and informed communities. Every adult has a stake in the education and welfare of their children. Adults need to build bridges to work together so that the children are healthy and safe. Schools, families, and community members must recognise these common goals and work together for the best interest of children. This module focuses on the best practices of building relationships with families and collaborating with communities.

5.2 Learning Outcomes

By the end of this unit, the trainees will be able to:

- I. Examine the need for collaboration between the school, parents, and the community.
- II. Explain the concept of meaningful partnerships with parents and the community
- III. Build positive and collaborative relationships with families of early learners.
- IV. Understand that nutrition and wellness in early childhood can lay the foundation for the future.
- V. Understand safety and security-related issues and constitutional remedies.

5.3 Engagement of School, Parents, Family, Community and Other Stakeholders in ECCE**5.3.1 Relationship among Home, Community and School**

The relationship established between home and school is an important link in a child's education. While educators direct the more formal aspects of the child's learning, parents are recognised as the child's first and most important teachers. The community also plays an important role in supporting education and the well-being of children throughout their schooling. To provide comprehensive and quality education, schools must partner with families and communities. True

partnerships are based on mutual respect. Teachers respect and value parents' knowledge and insights about their children. Parents respect and value teachers' knowledge and insights about the learning process, and their understanding of children's educational needs. The programme links families with a range of services, based on identified resources, priorities, and concerns. Teachers, parents, programmes, social service and health agencies, and consultants who may have educational responsibility for the child at different times should, with family participation, share developmental information about children as they pass from one level of a programme to another.

5.3.2 Why are Partnerships between the School and Community Important?

A child's social, emotional, cognitive, and academic development is strengthened when educators and families work together. When a child sees a positive relationship developing between educators and the family, the child recognises that the important people in his or her life are working together, and trusting each other, and he or she will do the same. This collaboration also provides a strong foundation for communication about children's learning. To foster family involvement, interactions between educators and families should be positive, purposeful, reciprocal, and consistent. When a broad range of community resources is used for learning, the role of the whole community in the process of educating the local community is acknowledged. Every family member can contribute, and parents, grandparents, siblings, etc., must be encouraged. Young people learn from and with community elders. Our schools become places where learning and living meet.

5.3.3 Ways and Forms of Creating Partnerships

It has been observed that when schools are friendly and welcoming to family members, it is easier to craft successful partnership programmes. Schools can create a family-friendly environment by using the following strategies:

- i. Develop a parent or family centre/corner within the school.
- ii. Make frequent, relevant and user-friendly communication with parents/families.
- iii. Plan some good after-school programmes that involve parents and community organisations.
- iv. Organise social activities for teachers and families.
- v. Provide parent education and family literacy programmes.
- vi. Create resources for the parents/family.

These programmes will be more successful if accompanied by a friendly and respectful attitude that can be communicated in many different ways; smiles, greetings, signs and decorations that recognise different languages and cultures in the community and a clean, bright and inviting environment.

5.4 Continuous Professional Development (CPD) Programme

Teachers are the most important link in the success of any partnership effort. They need to listen to parents in an accepting way and should be skilled in the art of convincing. They can provide guidance for families on setting realistic expectations, motivating, and helping children to follow the school plan and programme. Awareness of the child's family situation is perhaps the most important way a teacher can support the children and their parents. They should be sensitive to the needs of the children and their family situation. That is why Continuous Professional Development (CPD) of teachers is very important. The teachers and schools may share information about the child with the parents in a number of ways. Some of these are as follows:

- i. **Informal Conversations:** Conversations which parents, teachers, and children have on an informal basis are natural and successful ways of sharing information. Such conversations provide opportunities to share current information about the child and upcoming activities, share personal anecdotes and insights, and give reassurance about the child's development and learning. Such

conversations may take place when parents come to drop and pick up their children from the school or when they just happen to meet in the market or some other place.

ii. **Formal and Informal Written Communication:** These can include personal notes, WhatsApp messages, e-mail, letters, etc., about the child's efforts and development. These messages are intended communication and are written with a purpose in mind. For example, if a child is not active in the class for a few days or there is a parent-teacher meeting in the school for which some preparations are to be done by parents, etc.

iii. **Telephone Calls:** Parents and teachers may call one another to stay in touch, share news about the child, plan how to support some aspect of the child's learning, and establish a partnership role. These days, recorded messages can be sent to all parents so that they can get some tips or activities through these recorded messages.

iv. **Parent-Teacher Meetings:** Such meetings provide a platform for the parents and teachers to share information and experiences about a child's development, and interests at home and at school. The schools and their teachers prepare the schedule for individual meetings, and parents can also request a meeting if they feel the need for it.

v. **Newsletters:** These establish ongoing communication with the school and can solicit parents' reaction and input. The newsletters may provide information about the school and classroom activities, upcoming events, student success stories, and other matters related to the school and classrooms.

vi. **Parents' Bulletin Board:** Schools can also put up a bulletin board near the reception area. All important information about the schools and their major activities and other information which may concern parents can be put on this board.

5.5 Nutrition and Well-being for Early Childhood Care & Education (ECCE)

Early childhood (0-8 years) is a critical period for rapid brain and body development. Proper nutrition and overall well-being shape a child's physical health, cognitive development, emotional resilience, and lifelong learning abilities.

5.5.1 Importance of Nutrition in Early Childhood

Early childhood (0–8 years) is a critical period for the rapid growth of the brain and body. Proper nutrition and holistic well-being shape a child's physical health, cognitive development, emotional resilience, and lifelong learning abilities.

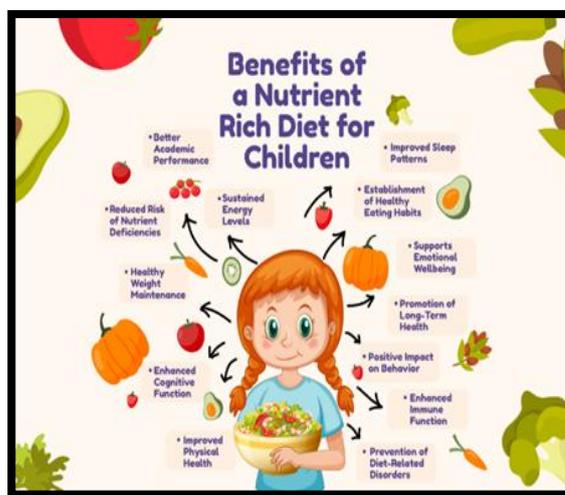


Figure 5.1: Benefits of Nutrition Rich Diet

a. Supports Physical Growth

- Supports bone development, muscle growth, and organ functioning.
- Prevents undernutrition, stunting, and micronutrient deficiencies.
- A balanced diet helps children maintain a healthy weight and provides the energy they need for daily activities.

b. Brain Development

- 85% of brain growth happens before age 6.
- Nutrients like iron, DHA, iodine, and proteins support memory, attention, and learning.

c. Strengthen the Immune System

- A balanced diet strengthens the child's immune system.
- It reduces infections and the chance of diseases.
- It helps to prevent chronic conditions such as obesity, diabetes and heart disease in the future,

d. Boosts Energy Level & Activity

- Children are active explorers; they need adequate calories for play, learning, and motor development.

5.5.2 Key Programs & Policies (India)

- *ICDS: Integrated Child Development Services:* (ICDS) was launched on 2 October 1975 under the Ministry of Women and Child Development (MWCD). It offers a holistic package of supplementary nutrition, immunisation, health check-ups and referral services, non-formal preschool education, growth monitoring, and health and nutrition education for mothers. It is mainly delivered through Anganwadi centres.
- *Poshan 2.0:* An integrated program under Saksham Anganwadi offering nutrition, pre-school education, health, and education for children 0-6 years.
- *National Education Policy (NEP) 2020:* Recognises ECCE as part of the foundational stage, emphasising quality, inclusion, and child-centric learning.

5.5.3 Nutritional Requirements for Young Children

- Protein Sources: eggs, milk, lentils, fish, chicken, soybeans.
 - *Function:* helps in tissue formation, repair, and overall growth.
- Carbohydrate and Healthy Fat Sources: rice, millet, whole grains, nuts, seeds, dairy products.
 - *Function:* provides energy. Healthy fats aid in brain development.

○ Vitamins and Minerals

- Iron Sources: fruits, vegetables
 - *Function:* prevents anaemia; helps improve concentration.
- Calcium and Vitamin D Sources: eggs, milk, fish, vegetables, and fruits.
 - *Function:* helps in maintaining bone health.
- Vitamin A Sources: carrots, fruits, vegetables
 - *Function:* helps in maintaining eyesight and immunity.
- Water: prevents dehydration and aids in digestion

□ Incorporating a Balanced Diet

Offering a variety of foods can help ensure your child is getting all the necessary nutrients. This includes lean proteins (chicken, fish, and beans), whole grains, fruits and vegetables, and healthy fats (avocado, nuts, fish). Moreover, teaching children about the importance of nutrition can inspire them to make healthier food choices as they grow older.

5.5.4. Role of ECCE Centres in Promoting Nutrition

- Balanced and Nutritious Meals:* These are provided following national guidelines (ICDS, POSHAN, etc.), including fruits, vegetables, whole grains, and protein.
- Nutrition Education:* Children are taught about healthy food choices through stories, pictures, and games.



Figure 5.2: The Vitamins and Minerals

- iii. *Hygiene Practices*: Hand washing before meals; maintaining the cleanliness of food preparation areas.
- iv. *Growth Monitoring*: Regular height and weight checks; early identification of malnutrition.
- v. *Holistic Development*: Recognising nutrition as part of holistic development (physical, cognitive, socio-emotional), ECCE integrates nutrition with play-based learning.
- vi. *Early Intervention*: The formative years are ideal for interventions that build lifelong health. ECCE settings are well-suited for early nutrition education, such as teaching children about healthy food choices through the use of stories, pictures, and games.

5.5.5 Overall Well-being in Early Childhood

Well-being includes physical, emotional, social, and cognitive health.

- i. *Physical Well-being*: Adequate sleep, nutrition, hygiene, exercise, and outdoor play.
- ii. *Emotional Well-being*: Ensure secure attachment with caregivers. Create a supportive and affectionate environment. Teach children to express their feelings safely.
- iii. *Social Well-being*: Encourage sharing, cooperation, and empathetic actions. Provide opportunities for group play and communication.
- iv. *Mental/Intellectual Well-being*: Engage in stimulating activities (such as stories, puzzles, creative work, etc.). Provide a safe space for curiosity and problem-solving.

5.5.6 Practices to Promote Well-being in ECCE Settings

- Maintain a safe, child-friendly environment.
- Incorporate daily routines (meals, rest, play).
- Provide inclusive learning experiences.
- Encourage active play and movement.
- Support children with special needs.
- Build strong family–school partnerships.

5.5.7 Collaboration with Parents and Community

- Conduct nutrition awareness workshops.
- Share healthy meal plans and recipes.
- Promote immunisation and regular check-ups.
- Engage community health workers.

5.6 Safety and Security: POCSO, NCPCR-SCPCR

Ensuring children’s safety is a fundamental responsibility of families, schools, and the state. It includes protection from physical, emotional, and sexual abuse, exploitation, neglect, and harmful environments. Legal frameworks in India safeguard children’s rights and promote a safe childhood.

5.6.1 POCSO Act (2012) – Protection of Children from Sexual Offences

- A special law to protect children (below 18 years) from sexual abuse and exploitation.
- The act covers sexual assault, harassment, pornography, and attempted offences.
- It ensures child-friendly reporting, investigation, and trial processes.
- The act encourages mandatory reporting. Any adult aware of abuse must report it.
- The act prescribes strict punishments for offenders.
- The act protects a child's identity; statements should be recorded sensitively.
- ECCE teachers and caregivers must recognise signs of abuse and follow reporting procedures.

5.6.2 NCPCR & SCPCR – National and State Commissions for Protection of Child Rights

❑ NCPCR (National Commission for Protection of Child Rights)

- A statutory body under the Commission for Protection of Child Rights Act, 2005.
- Ensures all laws, policies, and programmes are child-friendly.
- Monitors child rights violations across the country.
- Addresses issues related to education, health, trafficking, abuse, child labour, etc.

❑ SCPCR (State Commissions for Protection of Child Rights)

- Operate at the state level.
- Handles complaints of child rights violations within the state.
- Monitors schools, childcare institutions, and government schemes supporting children.
- Conducts awareness programmes for teachers, parents, and communities.

Let Us Reflect

Case Study

Situation

A 6-year-old child is repeatedly silent, comes to school, but does not speak to anyone. Scratches are visible on his hands. He becomes frightened when someone unfamiliar speaks to him from his right side.

- **What are your responsibilities as a teacher?**
- **How should ECCE teachers talk to children about safe and unsafe touch?**

5.7 Summary

Nutrition and well-being form the foundation of a child's early development and learning. ECCE centres, teachers, and families together play a crucial role in creating a nurturing environment that supports holistic development. POCSO, NCPCR-SCPCR, and constitutional remedies together form a robust framework for protecting children from abuse, ensuring justice, and promoting a safe environment in the home, school, and society.



Figure 5.3: ECCE Trust Circle

6.1. Introduction**6.2. Learning Outcomes****6.3. Advantages of Integrating ICT in ECCE****6.4. ICT Tools in ECCE****6.5. Guiding Principles for Selecting ICT Tools****6.6. Challenges and Best Practices in ICT****6.7. Awareness of Digital Platform****6.8. Summary**

6.1 Introduction

Early Childhood Care and Education (ECCE) make a positive contribution to children's long-term development and learning by facilitating an enabling and stimulating environment in these foundation years of lifelong learning. In India, early childhood care and education start from the birth of a child and continue up to eight years of age. The foundational stage is a crucial stage of a child's brain development and a high opportunity of child's holistic development. ECCE promotes children's social, emotional, physical, and cognitive developments which are important for a strong foundation.

The use of ICT in ECCE has introduced an innovative way of learning early through making the lessons more interactive, engaging, and fun. From visual digital storybooks to easy learning apps, ICT is being established as a very helpful tool for teachers and children equally.

The implementation of ICT in ECCE promotes active engagement and enables children to develop early expertise in foundational literacy and numeracy, problem-solving, creativity, collaboration, etc. Proper use and in moderation with conventional play, the application of ICT in early childhood promotes holistic development as it prepares young minds for a digital world.

6.2 Learning Outcomes

By the end of this unit, the trainees will be able to:

- I. Know different tools of technology used in ECCE.
- II. Generate new ideas to make learning more interesting, engaging and fun.
- III. Understand the barriers and challenges of the usage of ICT in ECCE.
- IV. Integrate ICT in different Play- based teaching and learning activities.

6.3 Advantages of Integrating ICT in ECCE

The use of ICT in early childhood care and education is proving to be a powerful support system in shaping children. ICT tools promote key developmental skills in a fun and engaging way when they are thoughtfully included in early education. The use of ICT in preschool enhances academic readiness as well as social and emotional growth.

Here are the main benefits of using preschool learning:

- **Interactive Engagement**

The use of ICT in preschool makes learning visually rich and interactive. Children enjoy using touchscreens, educational games, and story apps that hold their attention.

- **Creative and Collaborative**

Creative apps and digital drawing tools used in preschool allow children to express themselves freely and build self-esteem through independent learning. Use a smart board for a group activity where children can work together to draw, solve puzzles or build something virtually.



Figure 6.1: Creative and Collaborative activities using ICT

- **Encourages Early Digital Literacy**

In today's world, basic technology skills are essential. The use of ICT in preschool introduces children to safe and guided digital experiences, preparing them for future learning. Use a digital camera or tablet to take a picture of a field trip or show pictures, and then have children narrate the story by adding sound captions later.

- **Problem Solving**

ICT can be used to foster problem-solving by providing interactive tools like coding toys, digital games, and creative software that encourage children to explore, experiment, and think critically. The balanced use of ICT in ECCE supports all-around development in a child-friendly way.



Figure 6.2: Problem-solving activities using ICT

6.4 ICT Tools in ECCE

The use of ICT in ECCE has introduced several simple yet powerful tools that help enhance early learning among children. These tools are selected to match the age and understanding of young children, making lessons both fun and effective.

- **Interactive Whiteboards**

These allow children to draw, match shapes, and play learning games by touching the screen. The implementation of ICT in ECCE through whiteboards keeps kids actively involved during group lessons.

- **Tablets and Learning Apps**

Tablets offer easy access to phonics, counting, and story apps. The use of ICT in preschool with tablets helps build fine motor skills and supports personalised learning.

- **Digital Storybooks**

Bright visuals and audio support language development. Children enjoy reading along, improving their listening and word recognition. The use of technology in the early years of children through storybooks makes early literacy exciting.



Figure 6.3: Digital Story Reading using ICT

- **Projectors and Audio Systems**

These are used to show educational videos, rhymes, and songs. The use of ICT in ECCE through audio-visual tools makes concepts clearer and more engaging. By carefully choosing and balancing screen time, the use of ICT in preschool supports playful learning, helping teachers reach every learner creatively.

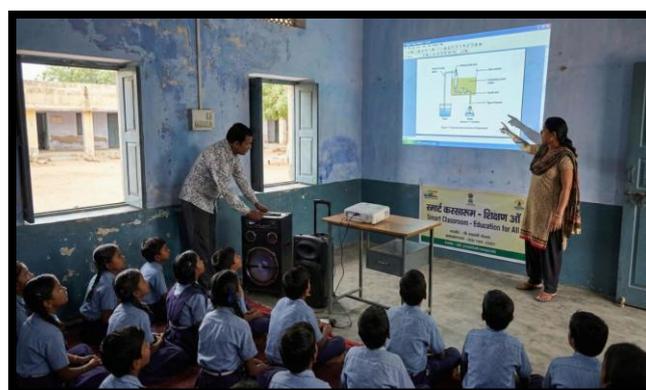


Figure 6.4: Interactive Classroom using ICT

6.5 Guiding Principles for Selecting ICT Tools

Guiding principles for selecting ICT tools in ECCE include choosing developmentally appropriate, educational, and engaging tools that promote active learning and support curriculum goals. Tools should also be safe, secure, and accessible to all children, and they must be used to enhance real-world experiences and interactions. Furthermore, technology selection should prioritise tools that facilitate collaboration, support parent, child, and teacher relationships and align with safety and privacy guidelines.

□ Key Principles for Selecting ICT tools

- **Developmentally Appropriate**

The tools should match the children's age and developmental stage, fostering cognitive, emotional, and social growth. It should be intuitive and easy for young children to use, with clear instructions and a simple interface.

- **Educationally Valuable**

The tools must have a clear learning objective that aligns with the curriculum and reinforces learning concepts. Avoid tools that lack educational value.

- **Engaging and Interactive**

Select tools that stimulate curiosity and encourage active hands-on learning, rather than passive consumption. Tools should promote problem-solving and creativity.

- **Safe and Secure**

Ensure the tool is free from inappropriate content, violence, and stereotypes. Prioritise tools with robust privacy settings and a safe digital environment for children.

- **Inclusive and Accessible**

The technology should be usable by all children, including those with special needs.

- **Promotes Collaboration and Connection**

Choose tools that facilitate co-viewing and interaction among children and adults, and that can be used to strengthen relationships between families and educational institutions.

- **Offers Feedback**

Look for tools that provide feedback to children and teachers about progress and areas for improvement.

6.6 Challenges and Best Practices in ICT

The use of ICT in ECCE brings many benefits, but it also presents certain challenges that teachers must handle with care. Understanding these challenges and following best practices confirms that technology supports, rather than gets in the way of a child's growth.

6.6.1. Common Challenges

- **Screen Time Management**

Excessive screen use can affect attention span and physical activity levels.

- **Limited Resources**

Not all preschools have access to devices or internet connectivity.

- **Lack of Training**

Teachers may face difficulties in using ICT tools effectively without proper guidance.

- **Content Safety**

Ensuring children have access to age-appropriate and secure digital content is important.

- **Cost and Budget Constraints**

Limited funding makes it difficult for institutions to purchase, maintain and upgrade ICT equipment and resources and to provide comprehensive training programs.

6.6.2 BEST PRACTICES:

- **Balanced Approach**

Combine digital tools with hands-on activities to maintain a healthy routine.

- **Teacher Involvement**

Teachers should guide and interact during the use of ICT in ECCE to make learning meaningful.

- **Parent Awareness**

Involve parents in understanding the role and limits of technology, so that they can help their children to access the technology properly.

- **Regular Updates**

Keep digital tools updated and relevant to the learning goals.

By addressing these challenges with thoughtful tactics, the use of ICT in ECCE becomes a tool for creativity and learning. When used wisely, the use of ICT in preschool can build a strong base for young learners.

6.7 Awareness of Digital Platforms

Awareness of digital platforms in Early Childhood Care and Education (ECCE) is growing, and recognition of their potential for enhancing learning, communication, and inclusion for young children. Key aspects include preparing teachers with skills to integrate digital tools, using platforms to support children with special needs, improving parent-teacher collaboration, and addressing concerns about digital devices and responsible use. Digital platforms offer interactive, individualized and creative learning experiences.

Indian digital platforms used in Early Childhood Care and Education (ECCE) include government initiatives like ePathshala for NCERT books and DIKSHA for teacher training and QR code-based learning. The e-Jaadui Pitara (eJP) by NCERT provides resources for preschool educators in multiple languages. The following are some Government digital platforms used for learning:

- **DIKSHA**

DIKSHA stands for *Digital Infrastructure for Knowledge Sharing*, a national platform in India for school education, developed by the Ministry of Education (MoE) and NCERT to provide digital learning resources for teachers, students, and parents, featuring e-content, online courses, and tools like QR codes on textbooks for access. It is a key initiative to enhance digital learning, offering content in many Indian languages for equitable access.



Figure 6.5: DIKSHA Logo

<https://play.google.com/store/apps/details?id=in.gov.diksha.app>

DIKSHA APP

- **ePathshala**

ePathshala is a free digital platform by India's Ministry of Human Resource Development, NCERT, and CIET that provides educational resources like e-textbooks, audio, video, and periodicals for students, teachers, and parents, accessible via web, Android, and iOS, bridging the digital divide with quality e-content in multiple languages

<https://play.google.com/store/apps/details?id=com.bengaltutors.e.pathshala>

ePathsala APP



Figure 6.6: ePathshala Logo

- **e-Jadui Pitara (eJP)**

Jadui Pitara (Magic Box) is a play-based learning-teaching material for children aged 3-8, launched under India's NEP 2020 and the National Curriculum Framework, providing toys, puzzles, storybooks, flashcards, and more in 13 Indian languages to make foundational learning fun, culturally relevant, and engaging for holistic development, with a digital platform (e-Jadui Pitara) also available.



<https://play.google.com/store/apps/details?id=in.gov.myjp.app>

e-Jadui Pitara APP

Figure 6.7: Jadui Pitara Logo

6.8 Summary

ICT in ECCE is a valuable and transformative tool when used thoughtfully and appropriately. Exploring the use of ICT in preschool shows how technology can make early learning more engaging and effective. It has the potential to significantly enhance early childhood care and education.

In essence, while the use of ICT in ECCE presents challenges, primarily related to implementation and access, its capacity to enhance learning is widely recognised. The ultimate success depends on prioritising children's holistic well-being and ensuring that technology is a well-supported, purposeful, and integrated part of their early learning journey.

7.1 Introduction**7.2 Learning Outcomes****7.3 Strategies of Assessment for ECCE****7.4 Documentation of Students' Assessment Record****7.5 Involving Parents in ECCE Assessment****7.6 Summary**

7.1 Introduction

Think of a young child like a tiny seed. You cannot pull it out of the soil every day to measure the roots. Instead, you provide sunlight, water, and good soil, and you observe its growth by noticing the new stem, the first leaves, and its overall health. You are assessing its progress in a way that helps it thrive naturally. Assessment in early childhood is very similar. It is not about a single test or exam. It's a gentle, continuous process of observing, understanding, and documenting a child's unique growth and learning journey to help them flourish in their own way and time.

In our journey through Early Childhood Care and Education (ECCE), we have explored how children grow, learn, and develop across different domains. This module focuses on a critical component of high-quality assessment of early years' education.

7.2 Learning Outcomes

By the end of this unit, the trainees will be able to:

- I. Explain the meaning, purpose, and importance of appropriate assessment in early childhood.
- II. Correctly identify and apply various types of assessment methods—such as observation, anecdotal records, running records, checklists, portfolios, and rubrics.
- III. Analyse each child's individual strengths, interests, progress, and needs, and develop appropriate learning plans accordingly.

7.3 Strategies of Assessment for ECCE

Assessment in ECCE is fundamentally different from traditional paper-and-pencil tests used in higher grades. It is not about passing or failing. Instead, it is a continuous, supportive process of observing, documenting, and analysing children's growth and learning in their natural environments. This practice, known as Developmentally Appropriate Assessment (DAA), helps us understand the "why," "what," and "how" of a child's unique developmental journey. It allows educators to tailor their teaching, support each child's individual needs, and build strong partnerships with families to ensure every child thrives.

7.3.1 Why Do We Need to Assess Young Children?

Forget the idea of "pass" or "fail." In the early years, assessment is all about supporting the child. It is a tool for understanding, not for judging. Its main purposes are to:

- **Identify Strengths and Needs**

What is the child naturally good at or interested in? Where might they need a little extra help or encouragement?

- **Tailor Instruction**

With this knowledge, a teacher can plan activities that match each child's level and learning style. If a child loves stories but struggles with puzzles, the teacher might use storytelling to introduce new concepts.

- **Monitor Development**

It helps us see the amazing progress children make over time, noting when they reach important milestones like saying their first full sentence or learning to hop on one foot confidently.

- **Foster Communication**

It gives teachers and parents a clear, shared picture of the child's journey, encouraging them work together as a team.

□ **Example**

1. *To understand a child's learning level:* You might observe that a child can point to the colour red when asked, but cannot yet say the word "red."
2. *To see what children have learned:* After a fun theme on 'Animals,' your observations might show that most children can name farm animals but are still learning about wild animals, helping you plan the next set of activities.

Activity

The "Why" Brainstorm

1. **Think:** On your own, remember learning a new skill (like riding a bike or baking a cake). What kind of feedback helped you the most?
2. **Discuss:** In a small group, share your stories. How does this relate to assessing a young child? Why is a supportive and continuous assessment better than a one-time test?
3. **Plan:** As a group, create a simple poster titled "Why We Assess," listing the top 3-5 reasons focused on helping the child.

7.3.2 What Should We Assess?

You cannot and should not try to assess everything. Teachers focus on what truly matters for a child's holistic development.

- **Knowledge and Understanding**

What has the child learned from their experiences? (e.g., Knowing that a seed grows into a plant).

- **Skills**

Their practical abilities include problem-solving, holding a pencil, and taking turns.

- **Progress Over Time**

How is the child changing and developing across different areas?

- **Unique Patterns**

Every child is different. Assessment helps us understand their personal interests, how they learn best, and their unique personality.

□ **Example**

1. *Language & Communication:* Can the child speak in simple sentences? Can they answer "what" and "where" questions?
2. *Motor skills:* Can they hold a pencil, stack blocks, run without falling, or button their shirt?

3. *Social & Emotional Development*: Do they share toys? Can they express frustration with words instead of hitting? Do they comfort a friend who is crying?

7.3.3 When Should We Assess?

Assessment should not be a scary event. The assessment process must be spread throughout the school year.

- **Before School Starts**

Planning how and when to assess is done in advance, so teachers are prepared.

- **Daily**

The teacher will always observe and make quick notes. For example, during outdoor play, the teacher might note who can play with children's slides confidently and who can invite others to play.

- **Periodically**

Set a time interval (e.g., every 2-3 months) to look at all the daily notes and see the "big picture" of a child's growth and development. This will show the amazing journey from "then" to "now".

- **For Specific Moments**

Before and after a special project to see what was learned, or when a teacher is concerned about a specific behaviour.

□ Activity for Teacher Participants: The Assessment Calendar

1. *Divide into small groups*: Each group gets a different focus area (e.g., "making friends," "using new words").
2. *Plan*: Create a simple assessment calendar for an imaginary class for one term.
3. *Decide*:
 - How will you assess this daily? (e.g., observation during snack time)
 - When will you do a periodic review? (e.g., at the end of the month)
4. *Share*: Each group presents their calendar and explains its plan.

7.3.4 How to Assess in a "Developmentally Appropriate" Way?

Young children show what they know through play and various class activities. Developmentally Appropriate Assessment is:

- *Natural*: It happens while children are busy playing and exploring.
- *Individual*: It respects that each child learns at their own pace.
- *Focused on the Process*: It values how a child solves a problem more than just the final answer.

Young children can be assessed through formal and informal methods. A teacher should use multiple methods of assessing children. These methods should reflect various settings such as home, pre-school, inside or outside of the classroom, during group activities, etc. Some of the most valuable methods are:

- Observation
- Anecdotal records
- Portfolios
- Rubrics

7.4 Documentation of Students' Assessment Record

Documentation is the systematic collection, organisation, and maintenance of assessment information. Proper documentation helps track growth, identify needs, and create a holistic profile of the child.

7.4.1 Observation Record

Observation is the most important tool. Systematic Observation is watching with a specific goal, like "observing how Ranjita uses language during play with friends."

Example:

Memory Game
Activity: Show the group a tray with 5-7 common objects (a spoon, a ball, a key, etc.) for 30 seconds. Cover it up.
Observe and Record: Ask participants to write down all the objects they remember. As they do this, the facilitator should observe the participants—Who was strategic? Who was guessing? Who was calm? Who was stressed?
Reflect: Discuss the experience. How did it feel to be "assessed"? Reflect and discuss how young children might feel during traditional testing, and why observation during natural play is a fairer and more effective method.

OBSERVATION TABLE	
Observation Setting	What You Can Observe
Daily routine activities	How children eat, clean up, move, talk, follow instructions, and interact with adults and other children.
Outdoor play	Children's social behaviour, sharing, problem-solving, physical movement, and language use while playing outside.
Large group activities	Children's ability to join group tasks, cooperate, listen, take turns, and follow group instructions. Individual activity
Classroom	Children's work in literacy, numeracy, puzzles, art, and other activities is set in different learning corners.

7.4.2 Anecdotal Records

A short, factual story about a child when a teacher notes when a teacher observes him/her and takes short notes. Example: "10:15 AM, Play area inside the school. Rohan carefully built a tall tower with building blocks. When it fell, he sighed and said, 'Oh no! I'll build a stronger one.' Then he started again."

Exemplar of an Anecdotal Record: Socio-Emotional Development

Observer: Ms Saheli Ghosh (Teacher)

Date: March 18, 2024

Child: Dola (3.8 years)

Time: 11:15 AM

Setting: School Playground

Observation:

During outdoor play, Dola noticed that Rohan was sitting alone on the bench, looking sad. Dola went to the sandbox, filled a bucket with sand, and carried it to Rohan. She said, "Do you want to build a castle with me? We can make the biggest castle ever!" When Rohan did not respond, Dola sat beside him quietly for a moment, then said, "Sometimes I feel sad too. My mom says hugs help."

Interpretation:

Dola shows remarkable empathy and social awareness for her age. She recognises emotions in others and attempts to comfort her peer. Her verbal expression of understanding and offer of comfort demonstrates advanced emotional intelligence.

Next Steps:

- Acknowledge and validate Dola's empathetic behaviour
- Share this observation with parents to reinforce at home
- Use Dola as a positive example during group discussions about feelings

7.4.3 Portfolio

It is a collection of a child's work (drawings, photos of their creations, a recording of them singing) that tells the story of their learning journey.

Exemplar Portfolio:

"Prity's Learning Journey" (Age 4)

<i>Sections of the Portfolio</i>	Contents
<i>Cover Page</i>	Child's name, age, class, teacher name, etc.
<i>Physical Development</i>	Photo series (August → November → March), Fine motor skills development (pencil grip), Teacher's comments
<i>Cognitive Development</i>	<ul style="list-style-type: none"> • Photo: Prity's complex block structure with balanced arches • Math: Number recognition checklist showing progression • Science: Drawings of plant growth observation from seed to sprout • Puzzle completion time chart showing improvement
<i>Language and Literacy</i>	<ul style="list-style-type: none"> • Prity's handwriting samples (August messy → March clear) • Snapshot of an anecdotal record of vocabulary improvement during play.
<i>Social-Emotional Growth</i>	Self-portraits showing emotional expression, etc.

<i>Parent Contributions</i>	Parent-teacher conference notes and action plans.
<i>Portfolio Summary Page</i>	<ul style="list-style-type: none"> • Prity’s fine motor skills have improved significantly • Strong problem-solving abilities, etc.

7.4.4 Rubrics

A simple scale that describes performance for an activity.

Example:

<u>Rubrics for Participating in Yoga Class</u>				
Name- Neha				
Age- 5 years				
1- Inactive	2- Reluctant	3- Sometimes Participates	4- Active	5- Very Active
Does not participate	Avoids participation	Participates partially	Participates regularly	Joins yoga activities joyfully

7.5 Involving Parents in ECCE Assessment

Parents play a vital role in understanding a young child’s development. They observe their children in natural, everyday situations at home—something teachers may not always see. When teachers include parents in the assessment process, they get a fuller and more accurate picture of the child’s behaviour, strengths, challenges, and emotional needs.

Children sometimes behave differently in school for reasons that originate at home — changes in routine, stress, or family situations. When teachers discuss with parents, they can jointly identify the cause and plan how to support the child better.

Thus, parental involvement helps:

- Provide authentic, first-hand information about the child
- Understand behaviour seen only in school
- Plan strategies at home and school together
- Strengthen collaboration between teachers and families

7.6 Summary

Assessment in early childhood is a continuous process that gathers information from a child’s natural play and daily experiences. Appropriate assessment helps identify the child’s interests, strengths, and needs, and supports teachers in improving their planning and teaching strategies. Through methods such as observation, anecdotal records, portfolios, and rubrics, a child’s holistic development can be documented. Early childhood assessment methods do not place any pressure on the child; rather, they provide opportunities to understand the child’s learning process and natural behaviour. The combined efforts of children, parents, and teachers form the foundation of sensitive and effective assessment in ECCE.

8.1 Introduction

8.2 Learning Outcomes

8.3 FLN

8.4 Foundational Language and Literacy

8.5 Foundational Numeracy

8.6 Summary

“Education is not just about acquiring knowledge; it’s about nurturing curiosity, critical thinking, and compassion.” – Prof. Rahul Gupta, Education Philosopher.

8.1 Introduction

The early years of a child are very important for building a strong base for future learning and development. Recent Educational Policy also emphasises Foundational Literacy and Numeracy (FLN), which refers to basic skills in reading, writing, and mathematics. Foundational literacy encompasses the ability to understand written texts, express thoughts coherently in writing, and critically analyse information. Foundational numeracy involves proficiency in numerical concepts, mathematical operations, and the capability to apply them to real-life situations.

In India, the challenge of ensuring that all children achieve foundational literacy and numeracy by the end of Grade 3 has been addressed through comprehensive initiatives like the NIPUN Bharat Mission. This mission aims to provide universal access to quality early childhood education and ensure that foundational skills are firmly established.

8.2 Learning Outcomes

By the end of this unit, the trainees will be able to:

- I. Understand framing ideas for teaching and learning language and literacy in preschool settings.
- II. Describe different components of a preschool language and literacy curriculum.
- III. Plan activities for enhancing, extending, and enriching a child’s language and literacy experiences.
- IV. Describe the need and importance of foundational numeracy across the ECCE programme.
- V. Understand the principles, processes, and practices in foundational numeracy.
- VI. Discuss and communicate how to create a numeracy-rich environment.
- VII. Methods of Assessing children in daily classroom practice.

8.3 FLN

8.3.1 FLN Development Goals

The FLN development goals are designed to establish a strong foundation for further learning and personal development. It provides guiding principles for teachers, curriculum designers, and policymakers to ensure students receive the necessary support and instruction to achieve these fundamental milestones. Common FLN development goals include:

- **Reading Comprehension**

Developing the ability to understand written texts, including comprehension of main ideas, vocabulary, details, and context.

- **Writing Skills**

Acquiring skills to logically express thoughts and ideas in writing, covering grammar, punctuation, spelling, and organisation.

- **Phonics and Phonemic Awareness**

Understanding the relationship between letters and sounds, developing the capacity to decode words, and recognising phonetic patterns.

- **Vocabulary Expansion**

Building an extensive and varied vocabulary to improve reading comprehension and communication skills.

- **Critical Thinking and Analysis**

Developing the ability to analyse texts, assess information, and think critically to form reasoned opinions.

8.3.2 Why It Matters?

Addressing the Learning Crisis

The NEP 2020 underscores India's learning crisis, where approximately 50 million children lack basic literacy and numeracy skills. Prioritising FLN is essential to addressing this crisis and ensuring that educational reforms are impactful, enabling students to benefit fully from the comprehensive curriculum.

8.3.3 Importance of FLN

Foundational Literacy and Numeracy (FLN) is essential for every child's educational journey and overall development. Here's why FLN holds such critical importance:

- **Building a Strong Educational Foundation**

FLN forms the foundation for lifelong learning, particularly during the critical early years (0-8), which shape a child's future development and educational success, strongly influencing their long-term personal and economic well-being.

- **Promoting Cognitive and Socio-Emotional Development**

FLN enhances cognitive development, critical thinking, and problem-solving by building strong foundational skills in reading, writing, arithmetic, and numerical understanding. These skills also boost socio-emotional development, improving communication, empathy, and self-confidence.

- **Ensuring Lifelong Learning and Economic Empowerment**

Strong FLN skills are essential for lifelong learning, economic empowerment, academic success, and personal growth, crucial for navigating modern life, accessing information, making informed decisions, and improving job opportunities, income, and quality of life.

- **Empowering Teachers and Communities**

Efforts to enhance FLN include equipping teachers with necessary skills and resources, such as professional development programs, quality teaching materials, and continuous support. Engaging parents and communities further enriches the educational environment, fostering a holistic approach to children’s learning.

We can describe FLN into two separate portions: i) Foundational Language and Literacy, and ii) Foundational Numeracy

8.4 Foundational Language and Literacy

The development of foundational literacy and language is the backbone of any school’s learning and ensures the development of children. Through language, children can make meaning of various aspects of the world around them. Language is also essential for understanding and developing literacy, numeracy, and socio-emotional skills. This chapter focuses on teaching Foundational Language and Literacy to young children as well as the various facets of language learning and teaching.

8.4.1 Framing Ideas for Teaching and Learning Language and Literacy

Language development is a critical part of a child’s overall development. It supports the child’s ability to communicate, express and understand feelings, think and solve problems, and develop and maintain relationships. Learning to understand, use and enjoy oral language is the first step in literacy, and the basis for learning to read and write.

Children whose parents read to them, tell them stories, and sing songs with them tend to develop larger vocabularies, become better readers, and perform better in school. This is because young children are often unable to read or write conventionally. As they explore language, investigate books and try their hand at drawing and writing, they are moving along a continuum of emergent literacy behaviours, attitudes, and skills towards conventional literacy.

The teaching of language and literacy is framed and guided by several broad ideas from the domain of Early Childhood Care and Education (ECCE), from the Emergent Literacy Framework, the Balanced Literacy Approach, Multilingual Education, and Differentiated and Inclusive Education.

Two activities can be given to the participants to discuss each of the ideas in detail. Three activities are suggested below, depending on the time and prior knowledge of the participants; all these activities can be done.

❑ Activity 1

In a group of four, discuss and write down your experience of learning to read and write during your childhood days. Do you observe any pattern in the way children are learning to read and write today? Also, reflect on whether you faced any pressure or stigma while you were learning to read and write.

❑ Activity 2

Discuss in small groups how many languages are commonly spoken in your classroom. How can you make spaces for children’s home languages in your class?

8.4.2 Developmental Milestones of Language Acquisition

Language development is one of the major domains of early childhood development. ‘Language development’ takes place while listening to and interacting with parents and other people. The ability to read and write is known as ‘literacy development,’ which also develops when a child is communicating with others.

Stages	Language Development Milestones
<i>Before birth</i>	Experience and process sensory stimuli that promote neurological development in the brain
<i>After birth</i>	Crying, burping, and other reflexive responses
<i>Around 2 months</i>	Cooing
<i>6 months</i>	Babbling
<i>12 months</i>	Authentic speech—utter first word
<i>12 to 24 months</i>	Two-word combinations known as ‘telegraphic speech’ to describe objects and actions like “daddy go”
<i>2 to 5 years old</i>	‘Language explosion’, begins to speak in whole sentences and phrases, can negate sentences, and ask questions. If in multilingual environments, speaks little of other languages.

8.4.3 Emergent Literacy

The emergent literacy perspective explains how young children develop as readers and writers, if given a print-rich environment, adult modelling and guidance, and opportunities to experiment with reading and writing. When young children are provided with a fear-free, supportive environment to experiment with the world of drawing and writing, their reading and writing go through various noticeable phases. Not all children go through all the phases described in this section in this sequence, but teachers are likely to notice many of these kinds of emergent reading and writing in the 3 to 6-year age group that they teach.

8.4.4 Emergent Reading

Young children ‘pretend-reading’ storybooks and go through five categories of observable behaviours:

- *Labelling and commenting*: The child focuses on pictures, labels, and comments on, and/or follows the action in the pictures. No story is formed.
- *Oral and written language*: The child focuses on pictures. The child’s narration sounds in part like telling an oral story, and in part, it sounds like reading a story.
- *Written-language-like-reading*: The child focuses on pictures still. But the child’s narration sounds like reading a story.
- *Aspectual reading*: Now, the child starts focusing on the print (and not just the pictures). But the child can only read certain ‘aspects’ of the print. For example, the child may read

known words, or track print with a finger and reconstruct the story from memory (but not read the words) or try to ‘sound out’ the words.

8.4.5 Emergent Writing

- *Irregular (disordered) scribbling*: A one- or two-year-old may ‘write’ by randomly marking a paper at any point on a page. The child may make large random strokes which have no meaning.
- *Controlled scribbling*: Around age 2–3 years, children start scribbling with purpose. They make squiggles, dots, straight lines, and wavy lines running from left to right on the page. Their motions shift from gross motor (large muscle) to fine motor (small muscle, pincer grasp).
- *Named scribbling*: When children say, “See what I have drawn”, or tell a story based on their scribbles, they start to scribble to convey a message. For example, a child may draw a box and say, “This is my house.”
- *Representational drawing*: Around four to six years, children start drawing things such as people, characters they like, or other things from their environment. Children often tell stories based on these drawings.

8.4.6 Components of Early Reading and Writing

Teaching young children to read and write is a complex process and involves several components. These components are integrally connected and develop simultaneously, not sequentially. These are followings;

□ Oral Language

A few principles for working on children’s oral languages in the early years are:

- Respect the home languages and dialects of each child in the classroom.
- Believe that the child can understand more than they can say.
- When the child tries to communicate, assume they have something important to say:
 - Allow the child to say the whole thing
 - Be interested
 - Use the child’s speech as the basis for your response
- Provide ample opportunities for free conversation, talking about pictures, experiences, and enacting familiar stories.
- In multilingual environments, encourage children to use their most familiar language as a bridge to other and newer languages.

Activity 3

Describe an experience you had in school where you understood one thing from a student's story, but you saw something different.

□ Concepts about Print

Concepts about ‘print’ are an awareness about how print works, that print conveys meaning, that it is used for different purposes, and that it has various features, forms, and conventions. Children need to understand that print is meaningfully modelled in their lives. Teachers should create a print-rich environment where children can see how print works and functions.

□ Phonological Awareness

Young children may not be aware that oral language is made up of smaller units of sound, that the stream of oral speech is made up of words and words are made up of syllables, and so on. Phonological awareness skills include:

- *Concept of word*: Ask children to clap or tap out words in sentences or phrases to help develop the concept of word.
- *Rhyming (similar word endings)*: Help children hear, identify, and match similar word patterns, such as rhymes. For example, cat-bat-rat, Doi-Moi-Khoi.
- *Alliteration (similar word beginnings)*: Let children recognise that some words start with the same sounds like ‘maa’ and ‘mama.’ ‘Kola,’ ‘Kolom,’ ‘Kobita.’ Tongue twisters can be used to develop alliteration skills, for example, “Pakhi Paka Pepe Khay,” and so on.
- *Syllable Segmentation and Blending*: 4–5-year-old children can understand (with modelling and support) that words can be subdivided into smaller subunits called syllables. It is important to learn to read and write. They begin to understand that ‘Medinipur’ (Me-di-ni-pur) has more syllables than ‘Kolkata’ (Kol-Kata). Ask them to break up their own names into syllables.

8.4.7 Emergent Reading

Even before they can read conventionally, children engage in a variety of reading behaviours when they look at books. They turn the pages, look at the pictures, orally narrate stories that may or may not correspond with what is written in the book, discuss and build on each other's ideas, and so on.

This motivates children to learn to narrate stories by looking at and browsing through the pictures, and making connections between what is happening in the pictures and something in their own lives.

8.4.8 Emergent Writing

Encourage and allow children to integrate writing with talking, drawing, reading and play. For young children, reading, writing, speaking, playing, and drawing are all interrelated categories of experience. For example, let children talk and discuss ideas with peers during writing time, and allow them to mix writing with drawing.

8.4.9 Assessment Tools & Techniques

- **Observational Checklists**
Daily/weekly checklists for oral language, reading and writing behaviours.
- **Anecdotal Records**
Quick notes on child progress, strengths, errors, and strategies used.
- **Portfolio Assessment**
Collect drawings, writing samples, worksheets, projects, and show progress over time.
- **One-on-One Assessments**
Short individual interactions for reading fluency, phonics, or comprehension checks.
- **Activity-Based Assessments**
Child plays literacy games → teacher observes skills.
- **Rubrics / Rating Scales**
Use 3- or 4-level scales: Emerging, Developing, Proficient, Advanced

8.5 Foundational Numeracy

The ability to read and write, and perform basic operations with numbers, is a necessary foundation and an indispensable prerequisite for all future schooling and lifelong learning. Interest in the early years and more specifically in early mathematical education is constantly increasing. Opportunities to learn mathematical concepts in the early years facilitate and lay the foundations for formal mathematical knowledge in the later years. This chapter focuses on developing teachers' understanding to provide a context, create opportunities to understand mathematical concepts, skills and dispositions, make available a range of appropriate resources and challenging activities, and scaffold their learning in the early childhood setting.

8.5.1 What is Foundational Numeracy? Why is it important?

Children begin to learn mathematics well before they enter preschool. From infancy to the preschool period, they develop a strong base of skills, concepts, and dispositions for mathematical thinking. Pre-schoolers' mathematical thinking is a combination of conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition. Early mathematical thinking developed during preschool appears to be one of the most powerful predictors of later formal learning, including reading and more complex mathematical abilities.

Children are familiar with numbers because they are exposed to these numbers in situations, such as telephones, mobile phones, TV remotes, fan regulators, playing cards, dice, addresses, speedometers, clocks, and calendars etc. Even before they join a school, most children develop an understanding of numbers with addition and subtraction calculations through everyday interactions.

The goal of foundational numeracy is to help children to think logically. This can be done by helping them to progress from their perception-bound ideas to more concept-based understanding. Mathematical thinking and reasoning are important sub-domains of cognitive development.

8.5.2 Learning Path and Strategies in Foundational Numeracy

When you support children's mathematical learning, you need to be clear about what you are trying to achieve, how the opportunities are given, and how children learning and then deliberately reflect on the actions you could take to help the child achieve the intended outcome. Teachers often strike a balance by organising deliberate teaching with spontaneous learning of children. Mathematical proficiency is developed through engagement with the processes encompassed in the overarching concept of mathematisation. It is important to consider that all the processes are strongly interconnected and contribute to the learning of mathematical concepts.

□ Math Processes and Skills

The processes of observing, communicating, generalising, representing, sorting, sequencing, problem-solving, reasoning, comparing, counting and connecting are described in the table given below:

- **Skill: 1. Observation and Generalisation**

Activity Title: Number Patterns

1. 2, 5, 8, 11, 14, __ (+3)
2. 1, 2, 4, 8, 16, __ (double the digit)

Teachers may make more sets like this.

- **Skill: 2. Visualisation, Communication and Representation**

Activity Title: My Local Market – See, Talk & Show Numbers

Visualisation: Seeing and identifying quantities

Communication: Talking about numbers, shapes, sizes, comparisons

Representation: Showing numbers using objects, drawings, gestures, or symbols

Teachers may create a situation following the activity title and provide real exposure to the students. You may use false currency, measuring tapes, a weight machine, etc. and make the learning a conceptual one.

- **Skill: 3. Estimating, Predicting and Guessing**

Activity Title: “Guess... How Many?”

A steel/glass bowl filled with small objects (e.g. Marbles)

Take a Guess! ... Predict. Write the Number.

Actual counting. Write the Number.

Were the predicted number and the actual number the same, more or less?

Teachers may devise and implement this kind of game in their schools.

- **Skill: 4. Geometry and Spatial Relationships**

Activity Title: Build a Shape Using Sticks or Straws

Ask children to build shapes (triangle, square, and pentagon) using Ice-cream sticks, straws, and pipe cleaners.

- **Skill: 5. Problem-Solving**

Activity Title: Story Problems

“There are **3** ducks in the pond. **2** more come. How many ducks are there now?”

Teachers may create their own problem-solving stories and help students develop basic numeracy concepts.

8.5.3 Setting Learning Environment for Foundational Numeracy

A few strategies for the implementation of mathematics readiness activities and experiences are as follows:

- Create a mathematics and manipulative area and a number wall or math word wall near the circle time area. This will attract children’s attention, and using it daily for chanting numbers, touching, and counting would be fun for them.
- Add a number calendar, a clock, display number rhymes, and stories. Singing number rhymes during transition times and nutrition time is still another strategy for a numeracy-rich classroom. Talking about mathematics and pointing out numbers when children play during snack time, while exploring outside, and using mathematics vocabulary during daily routines.
- Use age and developmentally appropriate play-learning material and activity-based pedagogical practices, such as exploring print and numbers in the environment, sound and

- number stories, rhymes, dramatisation, promoting mathematics in activity areas, etc., in-built assessment techniques for identifying developmental delays (if any);
- Involve parents in literacy and numeracy workshops to guide them on how they can support their children's numeracy skills at home, etc.;
 - Instructions in the mother tongue will help children learn better, improve early learning outcomes, and strengthen the retention of concepts and skills learned.

8.6 Summary

Foundational literacy and numeracy are areas of thought through which we can help shape a better future for our children. As teachers, we can guide our students in the right direction through the right knowledge, willingness, and application of the right methods. Therefore, emphasis has been placed on Foundational Literacy and Numeracy (FLN), which refers to the basic skills of reading, writing and mathematics. Basic literacy is the ability to understand written texts, think coherently through writing and analyse information meticulously. Children's mathematical thinking is a combination of conceptual understanding, procedural fluency, strategic skills, adaptive reasoning, and productive disposition.

- 9.1 Introduction**
 - 9.2 Learning outcomes**
 - 9.3 Concept and Rationale**
 - 9.4 Important issues in Foundational Literacy**
 - 9.5 Core Pedagogical Principles in Foundational Literacy**
 - 9.6 Pedagogical Strategies in FL and Examples of Classroom Activities**
 - 9.7 Integrating Numeracy with Literacy and Life Skills**
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9.1 Introduction

Foundational literacy refers to the essential reading, writing, speaking, and comprehension skills that children must acquire in the early years of schooling. It includes phonological awareness, letter–sound knowledge, vocabulary development, decoding, expressive and receptive language, and the ability to make meaning from text. These skills form the base upon which all later academic learning, communication, and cognitive developments are built. Without foundational literacy, children struggle to participate fully in learning across subjects.

Foundational literacy is critical because it enables children to access all learning. Early literacy strengthens brain development, supports thinking, attention, and memory, and allows children to communicate effectively. When children learn to read with understanding and express ideas clearly by Grade 3, they become confident, motivated learners. Research shows that gaps in early literacy widen over time, making later remediation difficult and costly. Investing in foundational literacy ensures equity, reduces dropouts, supports multilingual classrooms, and aligns with national and state-level educational priorities.

India has made FLN (Foundational Literacy & Numeracy) a top priority, but large learning gaps persist — especially in early-grade reading and basic arithmetic. Recent national surveys show that only a minority of Grade 3 children can read a Grade 2-level text or perform simple subtraction, underscoring the need for recovery and scale-up. West Bengal historically ranks among the stronger large states on composite FLN indices with state-level initiatives (e.g., Shishu Aloy, state education policy inputs) and performs above many peers on several access and system indicators. However, gaps remain at the classroom learning–outcome level, especially across districts and rural/urban divides, despite high enrolment. Districts like Birbhum, Purulia, Bankura, Malda, Uttar Dinajpur, and Cooch Behar should be considered high-priority for FLN interventions.

To improve FL levels in West Bengal, one must invest in grade-appropriate reading materials, in-service training and the use of daily structured instruction aligned to FLN outcomes. Scale up low-cost Reading in local languages, strengthening pre-primary to Grade-1 transition through programmes like Shishu Aloy will ensure continuity of early language exposure and school readiness. In addition, parent reading campaigns and volunteer reading programmes will lead to the amplification of FL skills.

9.2 Expected Learning Outcomes of Foundational Literacy

Foundational literacy milestones include developing strong oral language—listening, speaking, vocabulary, and expression. Children recognise print concepts, identify letters, and understand sound–letter relationships. They progress to decoding simple words, reading short sentences, and demonstrating basic fluency. Comprehension grows through predicting, retelling, and answering questions. Early writing emerges through drawing, scribbling, letter formation, and writing familiar words or short sentences. Children also learn to follow instructions, engage in conversations, and develop confidence, motivation, and curiosity toward reading and writing.

By the end of this chapter, the trainees will be able to:

- I. *Understand the developmental continuum of foundational literacy* and its significance in the Foundational Stage.
- II. *Plan age-appropriate, play-based literacy activities* to develop listening, speaking, reading, and early writing skills among young learners.
- III. *Facilitate oral language development* through conversations, storytelling, rhymes, songs, and structured talk in multilingual classroom settings.
- IV. *Teach print awareness and concepts of print* by creating and using print-rich classroom environments.
- V. *Develop phonological and phonemic awareness* using sound-based games, rhymes, and activities aligned with children’s cognitive levels.
- VI. *Support letter–sound correspondence and early decoding skills* through systematic, joyful, and multisensory instructional strategies.
- VII. *Encourage emergent reading behaviours* such as picture reading, predicting, and shared reading using age-appropriate texts.
- VIII. *Promote emergent writing skills* through drawing, scribbling, letter formation, and meaningful mark-making activities.
- IX. *Integrate foundational literacy with other learning areas*, including numeracy, art, movement, and socio-emotional development.
- X. *Use formative and observation-based assessment strategies* to monitor children’s progress in foundational literacy.
- XI. *Adapt literacy instruction for diverse learners* by addressing varied linguistic backgrounds, abilities, and learning needs.
- XII. *Reflect on and improve classroom practices* by using feedback, peer learning, and self-evaluation for continuous professional development.

□ Learning Milestones of Foundational Literacy

MILESTONE		LEARNING OUTCOME
1.	<i>Oral Language Development (Listening & Speaking)</i>	<ul style="list-style-type: none"> • Understands simple instructions, greetings, and classroom language • Listens to short stories, rhymes, poems • Speaks in short sentences; describes familiar objects/events

		<ul style="list-style-type: none"> • Expands vocabulary through conversations and read-aloud
2.	<i>Phonological & Phonemic Awareness</i>	<ul style="list-style-type: none"> • Recognises rhyme, alliteration • Identifies syllables • Identifies beginning, medial, and ending sounds • Can blend and segment simple phonemes
3.	<i>Print Awareness & Concepts of Print</i>	<ul style="list-style-type: none"> • Holds book correctly, follows left-to-right & top-to-bottom direction • Understands letters, words, spaces, punctuation • Recognises environmental print
4.	<i>Alphabet/Akshara Knowledge</i>	<ul style="list-style-type: none"> • Recognises upper- and lowercase letters • Connects letters to sounds • Writes letters with correct formation
5.	<i>Decoding & Word Reading</i>	<ul style="list-style-type: none"> • Reads simple CVC words (cat, dog, pen) • Reads common sight words • Blends phonemes to read new words
6.	<i>Vocabulary Development</i>	<ul style="list-style-type: none"> • Learns words for everyday objects, actions, categories • Expands expressive and academic vocabulary through stories • Understands synonyms, opposites, categories (animals, colours)
7.	<i>Reading Fluency</i>	<ul style="list-style-type: none"> • Reads with correct pace, accuracy, expression • Reads short sentences, then short paragraphs
8.	<i>Reading Comprehension</i>	<ul style="list-style-type: none"> • Answers simple questions: who, what, where • Predicts, retells, sequences events • Makes connections to own life (“I have seen...”)
9.	<i>Emergent & Early Writing</i>	<ul style="list-style-type: none"> • Draws, scribbles, labels pictures • Writes letters and simple words • Writes simple sentences with support
10.	<i>Independent Reading & Writing (End of Foundational Stage)</i>	<ul style="list-style-type: none"> • Reads grade-level texts with fluency • Writes 4–5 sentence meaningful paragraphs • Uses punctuation, basic spelling rules

9.3 Concept and Rationale

CONCEPT		RATIONALE
1.	<p>Print Awareness and Concepts of Print</p> <p>Understanding that print carries meaning, how books work, directionality, and basic text structures.</p>	<p>Foundation for All Future Learning</p> <p>Literacy is the gateway to every subject, without which, academic progress becomes severely limited. Children who read with comprehension by Grade 3 can engage well in science, mathematics, social studies, and digital learning.</p>

2.	<p>Phonological and Phonemic Awareness</p> <p>The ability to hear, identify, and manipulate sounds in spoken language—an essential precursor to decoding</p>	<p>Critical Window of Brain Development</p> <p>Early childhood is a period of rapid neural growth. Exposure to rich language, stories, and print during these years shapes cognitive, linguistic, and socio-emotional development. Skills learned later are harder to internalise.</p>
3.	<p>Letter–Sound Knowledge & Decoding Skills</p> <p>Recognising letters, connecting them to sounds, and blending them to read words accurately.</p>	<p>Prevention of Learning Gaps and Dropouts</p> <p>Students who fail to master early literacy are more likely to fall behind, lose motivation, and eventually disengage from school. Early mastery ensures better retention and long-term academic success.</p>
4.	<p>Vocabulary & Oral Language Development</p> <p>A rich oral language base that supports comprehension, communication, and concept-building.</p>	<p>Equity and Inclusion</p> <p>Strong foundational literacy levels the playing field for children from diverse linguistic, socio-economic, and cultural backgrounds. It provides disadvantaged learners with the tools they need to succeed.</p>
5.	<p>Reading Fluency</p> <p>The ability to read with speed, accuracy, and appropriate expression—enabling comprehension.</p>	<p>Importance of Multilingual Classrooms</p> <p>In India, where children speak one language at home & learn in another, systematic FL instruction supports smooth transition, bilingual skills, and confidence.</p>
6.	<p>Comprehension Skills</p> <p>Understanding, interpreting, and responding to text through questioning, predicting, summarising, and inferring.</p>	<p>National and Global Policy Priorities</p> <p>The State and National Government considers FLN as a “national mission.” Global frameworks (UNESCO, SDG 4.1) highlight literacy as the starting point for quality education.</p>
7.	<p>Early Writing Skills</p> <p>Form an integrated, mutually reinforcing system. FL is not just decoding—it is the child’s ability to read with understanding and express ideas clearly, forming the base for all later learning.</p>	<p>Long-Term Social and Economic Benefits</p> <p>A literate child becomes an empowered adult—capable of informed decision-making, higher employability, and active participation in society. Early literacy investment yields high returns for communities and nations.</p>

9.4 Important Issues in Foundational Literacy

Theory	Focus	Practical
<i>Language develops in meaningful contexts</i>	Children learn language when it is <i>connected to real-life experiences</i> , and not worksheets	<ul style="list-style-type: none"> • <i>Speak with the child</i> • <i>Encourage conversations</i> • <i>Use stories, songs, talk-time, and routines</i>
<i>Listening & Speaking come before Reading & Writing</i>	Do not rush to the textbook	<i>Foundation order:</i> <i>Listen → Speak → Read → Write</i>
<i>Vocabulary comes from what children see around them</i>	Objects, home words, mother tongue — then expand gradually	
<i>Print-Exposure Matters</i>	Children learn that print carries meaning <i>before</i> they learn letters	<i>The classroom should have Labels and Charts, Story books, “Print-rich corners” in local languages</i>
<i>Phonological Awareness</i>	Phonological awareness is not the same as phonics drill	<i>Do not force letter-sound memorisation. Instead, focus on rhyming words, syllable claps, sound games</i>
<i>Children learn literacy through play, stories, dialogue, & guided discovery</i>	Not rote repetition	

9.5 Core Pedagogical Principles in Foundational Literacy

Core pedagogical principles in foundational literacy emphasise joyful, language-rich experiences; systematic exposure to print; strong oral language foundations; explicit teaching of phonological awareness and decoding; continuous formative assessment; differentiated support; and inclusive, culturally responsive practices that connect learning to children’s everyday contexts.

PRINCIPLES	WHY THEY MATTER
<i>Oral Language as the Foundation</i>	Listening and speaking build vocabulary, comprehension, and conceptual understanding, and strengthen cognitive and linguistic readiness for reading and writing.
<i>Print-Rich, Literacy-Enabling Environments</i>	Children learn best when surrounded by meaningful print—labels, charts, books, big books, word walls, and visual cues.
<i>Systematic and Explicit Instruction</i>	FL requires structured teaching of phonological awareness, letter–sound relationships, decoding, vocabulary, and comprehension from simple to complex guided practice.

<i>Meaning-Making at the Centre</i>	Children must understand, interpret, connect, question and enjoy what they read. Predicting, retelling, questioning, and linking text to experience are essential.
<i>Release of Responsibility (I Do → We Do → You Do)</i>	Teachers first demonstrate a skill, then guide students through practice, and finally allow independent application. This ensures confidence and mastery.
<i>Multisensory and Play-Based Learning</i>	Movement, songs, rhymes, tactile letters, and storytelling activate multiple senses. In early grades, play-based learning supports engagement & deeper conceptual understanding.
<i>Culturally and Linguistically Responsive Teaching</i>	Children’s home language and cultural contexts must be honoured. Using familiar vocabulary and local stories helps children transition smoothly to school language.
<i>Continuous, Low-Stakes Assessment</i>	Frequent, simple checks (through observation, oral tasks, quick reading) guide instruction. Assessment should inform teaching, not frighten learners.
<i>Differentiated Instruction</i>	Students learn at different paces. Grouping learners by readiness, offering varied tasks, and adjusting materials ensures that children progress toward grade-level competencies.
<i>Strong Pre-Primary to Grade-1 Transition</i>	FL builds on early childhood experiences. Storytelling, emergent writing, and phonological play—ensure smooth progression and reduce learning gaps.
<i>Teacher–Child Interaction and Warm Relationships</i>	Positive emotional climate improves language use, confidence, motivation, and willingness to attempt reading or writing tasks.
<i>Consistency and Daily Practice</i>	Small, regular doses like daily reading aloud, phonics practice, vocabulary building, and writing exercises are far more effective than sporadic instruction.

9.6 Pedagogical Strategies in FL and Examples of Classroom Activities

1. Print-Rich & Language-Rich Environment	
<ul style="list-style-type: none"> • Label classroom objects; Daily picture-talk; Morning circle discussion. • Encourage conversations, questioning, storytelling, and daily reading. 	
<i>Activity 1</i> <i>Label Classroom Objects</i>	Teacher Instruction: Point to a label, say the word clearly, ask children to repeat and touch the object.

<i>Activity 2</i> <i>Daily Picture-Talk</i>	Teacher Instruction: Ask open-ended questions (“What do you see?”, “Why do you think this is happening?”).
<i>Activity 3</i> <i>Morning Circle Discussion</i>	Teacher Instruction: Encourage turn-taking; model complete sentences.
2. Systematic and Explicit Phonics Instruction	
<ul style="list-style-type: none"> • Teach letter–sound relationships in a clear sequence. • Provide blending, segmenting, and decoding practice. 	
<i>Activity 1</i> <i>Sound-Hop Game</i>	Teacher Instruction: Say a sound; children jump if their card matches.
<i>Activity 2</i> <i>Letter–Sound Matching Cards</i>	Teacher Instruction: Show a card, ask, “What sound?” → Children say sound.
<i>Activity 3</i> <i>Blending with Counters</i>	Push counters together slowly as you blend /c/–/a/–/t/.
3. Vocabulary Development	
<ul style="list-style-type: none"> • Introduce new words through stories, pictures, and real objects. • Use word games and meaningful oral activities. 	
<i>Activity 1</i> <i>3 New Words from a Story</i>	Teacher Instruction: Show picture, say word, use it in a sentence, ask children to repeat.
<i>Activity 2</i> <i>Word of the Day Wall</i>	Teacher Instruction: Introduce one word daily; ask children to draw or act it.
<i>Activity 3</i> <i>Object Basket Exploration</i>	Teacher Instruction: Let children touch objects and describe them (“soft, round”).
4. Comprehension Strategies	
<ul style="list-style-type: none"> • Teach predicting, connecting, questioning, and summarising. • Sequence picture cards. Use “read-aloud” and guided reading. 	
<i>Activity 1</i> <i>Predict the Ending</i>	Teacher Instruction: Stop reading midway; ask, “What might happen next?”

<i>Activity 2</i> <i>Who–What–Where</i> <i>Questions</i>	Teacher Instruction: Ask simple factual questions after reading.
<i>Activity 3</i> <i>Sequence Card Activity</i>	Teacher Instruction: Give 3–4 pictures; children arrange in order; ask them to tell the story.
5. Writing Readiness & Early Writing	
<ul style="list-style-type: none"> • Strengthen fine-motor skills through tracing, drawing, and patterns. • Encourage daily short writing: lists, labels, simple sentences. 	
<i>Activity 1</i> <i>Sand Tray Tracing</i>	Teacher Instruction: Demonstrate one letter; children trace using two fingers.
<i>Activity 2</i> <i>Pattern Worksheets</i>	Teacher Instruction: Model patterns (zigzag, curves), then let children copy.
<i>Activity 3</i> <i>Draw-and-Label</i>	Teacher Instruction: Ask children to draw an item and write its name/first sound.
6. Multisensory Learning	
<ul style="list-style-type: none"> • Use touch, sound, movement, and visual cues. • Activities: sand tracing, letter tiles, puppets, songs. 	
<i>Activity 1</i> <i>Clay Letters</i>	Teacher Instruction: Show the shape of the letter; children mould it with clay
<i>Activity 2</i> <i>Action Songs</i>	Teacher Instruction: Sing slowly, add gestures; encourage children to join.
<i>Activity 3</i> <i>Texture-based Letter</i> <i>Setting</i>	Teacher Instruction: Provide sandpaper letters; children trace with index finger.
7. Play-Based & Experiential Learning	
<ul style="list-style-type: none"> • Use role play, storytelling circles, puzzles, and pretend shops. • Integrate literacy into daily routines and classroom play. 	
<i>Activity 1</i> <i>Role Play Shop</i>	Teacher Instruction: Give pretend items; children “buy/sell” using simple words.

<i>Activity 2</i> <i>Storytelling Puppets</i>	Teacher Instruction: Model puppet use; children retell stories using puppets.
<i>Activity 3</i> <i>Literacy Treasure Hunt</i>	Teacher Instruction: Hide letter cards. Children find and name them
8. Differentiated Instruction	
<ul style="list-style-type: none"> • Adjust tasks according to readiness level. • Provide extra support through small-group or peer activities. 	
<i>Activity 1</i> <i>Tiered Reading Cards</i>	Teacher Instruction: Give easy–medium–hard cards; children choose level.
<i>Activity 2</i> <i>Level-based Worksheets</i>	Teacher Instruction: Provide different difficulty worksheets to different groups.
<i>Activity 3</i> <i>Peer Buddy Reading</i>	Teacher Instruction: Pair a strong reader with a developing reader
9. Continuous and Child-Friendly Assessment	
<ul style="list-style-type: none"> • Use checklists, anecdotal notes, oral tasks, and samples of student work. • Assess through games, conversations, and observations. 	
<i>Activity 1</i> <i>Observation Checklist</i>	Teacher Instruction: Observe during activities; quietly mark skills.
<i>Activity 2</i> <i>Show and Tell</i>	Teacher Instruction: Ask each child to show an object and describe it.
<i>Activity 3</i> <i>Oral Story Retelling</i>	Teacher Instruction: Read a short text; ask children to retell the main idea.
10. Strong Home–School Literacy Partnership	
<ul style="list-style-type: none"> • Guide parents on storytelling, picture-talk, and reading aloud. • Create take-home literacy kits. 	
<i>Activity 1</i> <i>Take-Home Story Bag</i>	Teacher Instruction: Send 1 book + simple activity; tell parents to read aloud.

<i>Activity 2</i> <i>Reading Log</i>	Teacher Instruction: Ask parents to record date + story read.
<i>Activity 3</i> <i>Family Word Games</i>	Teacher Instruction: Provide simple “rhyme match” or “name things” games.

9.7 Integrating Numeracy with Literacy and Life Skills

Integrating numeracy with Literacy and Life Skills, these domains ensure that children learn skills in context, understanding how they apply to real-world situations. This approach strengthens comprehension, problem-solving, communication, and decision-making—core goals of Foundational Literacy and Numeracy (FLN).

Integration matters because it builds meaningful learning with children learning how numbers, words, and daily tasks connect. This enhances contextual, real-life learning retention, strengthens transfer of skills, and supports holistic development. The outcomes of the Integrated Approach are clearly visible in children, including improved comprehension of math problems, stronger vocabulary for quantitative reasoning, greater confidence in decision-making, better problem-solving, critical thinking, and increased readiness for real-life situations.

□ How Numeracy, Literacy & Life Skills Connect

<i>Literacy</i> + <i>Numeracy</i>	<ul style="list-style-type: none"> • Reading instructions, labels, charts, timetables • Writing number-related information (shopping list, timetable) • Word problems that blend comprehension and calculation • Story-based math activities
<i>Numeracy</i> + <i>Life Skills</i>	<ul style="list-style-type: none"> • Budgeting small amounts • Measuring (height, length, ingredients, time) • Understanding time (routine, schedule) • Sorting, categorising, pattern recognition • Comparing quantities (more/less, heavier/lighter)
<i>Literacy</i> + <i>Life Skills</i>	<ul style="list-style-type: none"> • Following verbal and written instructions • Expressing ideas, asking questions • Storytelling for social-emotional development • Vocabulary for emotions, relationships, safety

□ Classroom Strategies for Integration

<i>Story-Based Numeracy</i>	<p>Use stories that embed mathematical tasks. Example: “A girl has 5 mangoes. She gives 2 to her friend. How many are left?” → Builds reading comprehension + subtraction + social sharing.</p>
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<i>Math-Talk in Daily Routines</i>	Encourage children to talk about numbers during: <ul style="list-style-type: none"> • Lining up (“We are 12 today, who is missing?”) • distributing materials • Counting steps while walking → Numeracy inside language interactions.
<i>Embedded Life-Skills Tasks</i>	Use purposeful activities such as: <ul style="list-style-type: none"> • Classroom shopping corner → money sense + language + negotiation • Cooking day → measure ingredients + follow instructions • Gardening → count plants, measure growth, record observations
<i>Integrated Worksheets & Journals</i>	<ul style="list-style-type: none"> • Daily routine chart (time, sequencing, reading) • Weather chart (vocabulary + data handling) • Class birthday graph (numeracy + writing names)

□ Sample Activities

<i>Activity 1: My Mini Shop</i>	Skills: Counting money, reading labels, polite communication Task: Children “buy” items using play money, read tags, and compare prices.
<i>Activity 2: Today’s Weather Report</i>	Skills: Vocabulary, categorising, graphing Task: Child draws weather, writes one sentence, updates class chart.
<i>Activity 3: Story Dice</i>	Skills: Creativity, sequencing, vocabulary, counting Task: Roll dice with numbers + pictures. Create a story with both.
<i>Activity 4: Class Routine Clock</i>	Skills: Time awareness, scheduling, comprehension Task: Match pictures of activities with times; write labels.

9.8 Teachers’ Role in Class and Training Focus on Foundational Literacy

Teachers create a literacy-rich, warm, and engaging environment where children feel confident to listen, speak, read, and write. They model language, conduct storytelling and phonics activities, guide reading and writing tasks, and differentiate instruction for diverse learners. Through continuous observation and assessment, teachers provide timely support, encourage curiosity, and build strong foundations for lifelong literacy.

Teachers’ Role

Skill	Teacher Strategy	Why It Matters
<i>Listening</i>	Storytelling, audio play, puppet talk	Builds comprehension naturally

<i>Speaking</i>	“Pair Share”, Show-and-Tell, Daily conversation routines	Encourages confidence & expression
<i>Reading Readiness</i>	Picture walks, print walk, sound games	Helps understanding before decoding
<i>Early Writing</i>	Scribbling, tracing in sand/soil, pattern play	Strengthens motor & confidence

Teacher training should build a strong understanding of early literacy development, including oral language, phonics, decoding, comprehension, and writing. Teachers need effective strategies such as storytelling, read-aloud, play-based learning, and differentiated instruction. Training must also strengthen assessment skills, classroom management, the creation of literacy-rich environments, inclusive practices, and the use of simple teaching–learning materials to support all learners.

Teacher Training Focus

<i>Understanding Early Literacy Development</i>	How children acquire oral language, phonological awareness, print concepts, decoding, comprehension, and writing.
<i>Pedagogical Strategies</i>	Play-based learning, storytelling, read-aloud, shared reading, phonics, vocabulary-building techniques, guided writing, and emergent writing.
<i>Assessment Skills</i>	Use observation, checklists, anecdotal notes, conduct simple reading & writing assessments, analyse errors to guide instruction, and plan remedial support.
<i>Classroom Practices</i>	Create literacy-rich environments, use multilingual & inclusive strategies, manage group work, facilitate discussions and conversations
<i>Differentiated Instruction</i>	Addressing diverse learning needs, supporting slow learners and advanced learners, and planning targeted small-group teaching
<i>Use of Teaching–Learning Materials</i>	Designing and using flashcards, picture cards, big books, alphabet charts, manipulatives, and incorporating low-cost, local materials
<i>Building Socio-Emotional Skills</i>	Encouraging confidence, motivation, participation, using positive reinforcement, and creating a safe, engaging, supportive classroom climate
<i>Continuous Professional Development</i>	Reflective practice, peer observation, participation in workshops and demonstrations

9.9 Examples of Classroom Activities in FL by teachers

Teachers use interactive, play-based activities to build literacy skills. These include storytelling, read-aloud, picture talk, rhyming games, and sound–letter matching. Children engage in shared reading, guided writing, drawing-to-write tasks, name writing, and vocabulary activities.

Learning centres, word walls, puppets, and role-play corners promote communication, comprehension, and early writing, making literacy a joyful and meaningful one.

Training Activity	Message	How?
<i>Learning by experiencing</i> (10 minutes)	Language grows by observing and talking, not giving the “right answer.”	Materials: One big picture (market, festival, playground) The teacher asks only open-ended questions: <ul style="list-style-type: none"> • “What do you notice?” • “What might be happening here?” • “What are you feeling?”
<i>Sound Train Game</i> (8 minutes)	Phonological awareness comes through play, not drilling letters	The group stands in a circle. The trainer says a sound (e.g., ma). Each teacher adds a word starting with that sound. Ma... mango, mat, mayur, mata, makhar, and it goes on
<i>Story Re-Tell with Gestures</i> (8 minutes)	Literacy becomes joyful, not stressful	Teacher reads a short story → Then must retell with actions + voice expression. Improves comprehension, expression, memory, and enjoyment
<i>Print Walk in the Classroom</i> (10 minutes)	Teachers learn to create a print-rich environment, even with zero budget	Teachers walk around the room and identify visible and invisible print sources. They list where labels, charts, and books could be added.

9.10 Assessment Strategies in Foundational Learning

Foundational literacy assessment uses continuous, child-friendly methods to track reading, writing, and language development. Teachers observe, interact, and use simple tasks—oral responses, picture-based activities, decoding checks, and writing samples. Play-based and activity-based assessments offer rich insights. The goal is to guide instruction, identify support needs, and ensure steady progress.

Literacy assessment must be continuous, child-friendly, and stress-free, focusing on observing real learning in authentic contexts. It should be holistic, covering listening, speaking, reading, and writing. Assessments must respect children’s linguistic backgrounds, use multiple tools, provide timely feedback, and guide instruction. The goal is understanding progress, not judging performance.

Foundational literacy assessment strategies include informal daily observations, play-based tasks, structured activity-based assessments, and short teacher-made tests. Storytelling, picture sequencing, reading aloud, and writing samples reveal learning progress. Standardised tools provide occasional benchmarking. Using varied, child-friendly methods ensures a comprehensive understanding of literacy skills and supports timely instructional planning.

Some examples of assessment for foundational literacy are given in the following table

Assessment Type	Principle	Example
<i>Play-Based Assessment</i>	Learning through play provides rich evidence of children’s literacy growth.	<ul style="list-style-type: none"> • Role play (shop, doctor, kitchen) → reading signs, writing lists • Storytelling with puppets → oral fluency, sequencing • Picture cards → vocabulary, comprehension • Matching games → sound-letter association
<i>Task-Based / Activity-Based Assessment</i>	Structured activities measure specific skills.	<ul style="list-style-type: none"> • Sorting letters/words • Identifying beginning/ending sounds • Reading simple sentences • Writing labels, names, or short words • Sequencing picture stories
<i>Formal Teacher-Made Assessment</i>	Short assessments align with learning outcomes.	<ul style="list-style-type: none"> • Read-aloud tasks • Dictation of sounds/words • Writing prompts • Comprehension questions on a short text
<i>Standardised Tools (School or State Level)</i>	Used to benchmark progress	<ul style="list-style-type: none"> • FLN Baseline assessments • School Readiness Instruments • letter identification, word reading, simple comprehension

9.11 Summary

Foundational Literacy in West Bengal stands at a crucial stage where consistent effort, committed teachers, and supportive systems are driving meaningful progress. With diverse linguistic backgrounds and large classroom variations, teachers play a transformative role in ensuring that every child acquires strong reading, writing, and language skills in the early years. West Bengal’s focus on activity-based learning, multilingual classrooms, and continuous assessment provides a solid platform for strengthening FLN outcomes. However, the real impact depends on how effectively teachers create literacy-rich environments, use play-based strategies, and offer personalised support to learners who struggle. When teachers integrate storytelling, phonics, vocabulary-building, and comprehension tasks into daily routines, children develop confidence, curiosity, and a lifelong love for reading. As the state continues to prioritise foundational learning, empowering teachers with training, resources, and professional support remains essential. Strong teacher-led classrooms will ensure that every child in West Bengal moves toward improved literacy and brighter educational futures.

10.1	Introduction
10.2	Learning Outcomes of Foundational Numeracy
10.3	Why is Foundational Numeracy so important?
10.4	Myths and realities about Foundational Numeracy
10.5	Pedagogical Strategies for Foundational Numeracy: Training Module
10.6	Activities for Foundational Numeracy
10.7	Core Components of Number Sense
10.8	Concept of Patterns & Classification in FN
10.9	Concept of Addition & Subtraction
10.10	Measurement and Classification in Foundational Numeracy
10.11	Assessment of Foundational Numeracy
10.12	Summary

10.1 Introduction

Foundational Numeracy (FN) refers to *the ability to reason and apply basic mathematical concepts in daily life* and is essential for progress in school and life, involving understanding two-digit numbers, performing the four basic operations, and applying concepts in real-life situations.

National studies and NEP 2020 show that many children, even at the elementary level, have not achieved foundational numeracy, contributing to the fear of mathematics and grade-level dropout. Post-pandemic classroom realities reveal that students were promoted without mastering the competencies of previous grades. This led to significant loss of learning (e.g., Class V students struggling with writing numbers, regrouping, or division as well as behavioural challenges such as reduced attention and difficulty sitting through lessons).

Both West Bengal and India saw post-pandemic recovery in basic numeracy between 2022 and 2024. With many states improving on simple arithmetic and number recognition, the biggest gains were in government schools. However, a clear, persistent government vs private school learning gap exists in West Bengal as in most states. This gap can be decreased by investing in in-service teacher coaching, simple TLMs for numeracy, and regular use of short in-class assessments. In addition, community engagement — parental numeracy games, local volunteers, and low-cost home materials can reinforce foundational numeracy.

□ Foundational Numeracy includes:

- Number sense and counting
- Basic operations (addition, subtraction, etc.)
- Measurement, shapes, and patterns
- Logical reasoning and problem-solving

□ Challenges faced by Indian students in foundational numeracy mainly stem from:

- Learning poverty: ~70% of 10-year-olds in low- and middle-income cannot do basic math.
- Inequity: Large disparities by gender, region, and socio-economic status.
- Curricular overload: Focus on procedural rather than conceptual understanding.
- Teacher preparedness: Weak pre-service and in-service training in early math pedagogy.

10.2 Learning Outcomes

By the end of this chapter, the trainees will be able to:

- I. Explain the core principles of Foundational Numeracy.
- II. Design and facilitate activity-based, play-oriented numeracy experiences that build conceptual understanding in early learners.
- III. Use manipulatives, TLMs, and real-life materials to strengthen number sense, pre-number concepts, and basic operations.
- IV. Assess learners' numeracy progress using FLN-aligned learning indicators and competency-based assessment tools.
- V. Adapt teaching strategies to support diverse learning needs, ensuring that every child attains grade-level FLN proficiency.

□ Learning Milestones of Foundational Numeracy

<i>Milestone</i>	Learning Outcomes
<i>Early Number Sense (Pre-primary)</i>	<ul style="list-style-type: none"> • Recognises numbers 1–10. • Counts objects using one-to-one correspondence. • Understands “more–less–same.” • Identifies simple shapes and basic patterns. • Sorts objects by colour, size, and shape.
<i>Number Recognition & Counting (Grade 1)</i>	<ul style="list-style-type: none"> • Recognises numbers up to 99. • Counts forward and backwards. • Reads and writes numbers up to 50. • Compares numbers (greater/smaller). • Continues patterns and sequences.
<i>Basic Operations Readiness (Grade 1–2)</i>	<ul style="list-style-type: none"> • Understands addition as “putting together”, subtraction as “taking away.” • Adds/subtracts single digits using concrete objects. • Understands zero and place value (ones–tens concept).
<i>Fluency in Basic Operations (Grade 2)</i>	<ul style="list-style-type: none"> • Adds and subtracts 2-digit numbers (with and without regrouping). • Solves simple word problems with everyday contexts. • Understands simple multiplication as repeated addition. • Reads and writes numbers up to 200.
<i>Understanding Space, Measurement & Data (Grades 1–3)</i>	<ul style="list-style-type: none"> • Reads simple calendars and clocks (hour, half-hour). • Measures length with non-standard units; compares lengths/weights. • Identifies 2D/3D shapes and their attributes. • Interprets simple pictographs or tally marks.
<i>Grade-level Mastery Expectations (Grade 3)</i>	<ul style="list-style-type: none"> • Reads and writes numbers up to 999. • Understands place value (ones–tens–hundreds). • Adds and subtracts 3-digit numbers. • Understands multiplication facts (2, 3, 5, 10). • Performs simple division as equal sharing.

10.3 Why is Foundational Numeracy so important?

- **Base of All Future Mathematics:** Foundational Numeracy is the alphabet of mathematics, without which children struggle with concepts like fractions, algebra, measurement, etc.
- **Builds Logical Thinking and Reasoning:** Cognitive skills across all subjects strengthen children through recognising patterns, comparing quantities, and classifying objects.
- **Supports Daily Life Skills:** Children use numeracy in everyday tasks such as sharing food, handling money, telling time, and estimating distances. Numeracy makes them confident.
- **Reduces Math Anxiety Early:** Positive experiences with maths through play, stories, and concrete materials help children enjoy numbers and prevent long-term fear and avoidance of Maths.
- **Predicts Later Academic Achievement:** Numeracy skills better predict overall school achievement than early literacy. Children behind in numeracy often remain behind.
- **Supports Indian Education Goals:** The government calls it an urgent national priority.
- **Connects Learning with Real Life:** Numeracy helps children understand the world like patterns in nature, quantities in markets, time, weather, shapes, directions

10.4 Myths and Realities about Foundational Numeracy

Many myths hinder foundational numeracy because they create low expectations, limit effective teaching and discourage children from exploring math confidently. Misconceptions about ability, age readiness, and what is “real math” prevent educators and parents from using engaging, developmentally appropriate methods that build strong early skills.

MYTH	REALITY
<i>Numeracy means only doing sums or calculations.</i>	Numeracy includes patterns, classification, comparison, reasoning, estimation, measurement, and spatial sense—not just sums.
<i>Only ‘bright’ or ‘talented’ children are good at maths.</i>	All children can learn numeracy when it is taught through simple, meaningful, and hands-on experiences.
<i>Young children (ages 3–6) are too small to understand maths.</i>	Children naturally use mathematical thinking from early childhood; educators only need to support it.
<i>Numeracy can be learnt only through textbooks and written practice.</i>	Play-based learning, stories, and real-life experiences build numeracy better than worksheets alone.
<i>Mistakes in maths mean the child does not understand the topic.</i>	Mistakes are part of learning; they show how children are thinking, not that they are weak.
<i>Numeracy is separate from daily life activities.</i>	Numeracy is everywhere—cooking, playing, sorting objects, sharing, building, and making decisions.

10.5 Pedagogical Strategies for Foundational Numeracy: Teacher Training

Module

Children develop stronger skills when teaching is interactive, language-rich, developmentally appropriate, and focused on reasoning, problem-solving, and meaningful engagement with numbers. Key principles of early numeracy, therefore, include learning through play, using concrete materials, connecting maths to real-life contexts, exploration, and understanding concepts before procedures.

	Principle	What Children Must Do	Message
1	<i>From Concrete → Pictorial → Abstract (CPA Progression)</i>	<ul style="list-style-type: none"> • Touch and manipulate objects (blocks, beads, leaves) • Move to pictures and representations • Only then do symbols (1, 2, +, −) 	Ensures deep conceptual understanding rather than rote learning.
2	<i>Build Strong Number Sense First</i>	<ul style="list-style-type: none"> • Understand quantity • Compare (more/less) • Subitise (instantly recognise 1–5 things) • Count with one-to-one correspondence 	Number sense is the foundation of all arithmetic.
3	<i>Use Everyday Contexts & Meaningful Situations</i>	Share food, Count children in class, Sort blocks, Measure water, or time	Children learn faster when math is useful and visible.
4	<i>Encourage Exploration, Play & Discovery</i>	Engage in free play, in pattern-making, block building, games and puzzles	Children understand by doing experiments & testing ideas.
5	<i>Develop Mathematical Language Early</i>	Practice speaking in terms of: “more–less,” “bigger–smaller,” “equal,” “next,” “before,” “add,” “take away.”	Strong maths vocabulary = strong maths thinking.
6	<i>Move from Simple → Complex (Developmental Sequence)</i>	Logical progression of Matching → Sorting → Ordering → Counting → Comparing → Combining & separating (add/subtract) → Patterns → Measurement & shapes	Skipping steps leads to confusion. Children need logical progression
7	<i>Visuals & Representations Are Essential</i>	Make children practice on Number lines, Dots, Bundling sticks, Tally marks	Helps children “see” the math and reduce errors.

8	<i>Encourage Reasoning, Not Just Answers</i>	Encourage students to answer questions like “How did you know?” or “Can you show it another way?”	Builds flexible thinking and avoids rote memorisation.
9	<i>Promote a Positive Math Identity</i>	Children must feel, “Math is fun.” “I can do it.” “Mistakes help me	Encourages positive mindsets, persistence, and confidence
10	<i>Frequent, Short, Hands-On Practice</i>	Engage children in numeracy routines, repeated practice, and plenty of opportunities to apply concepts	Repetition builds mastery.
11	<i>Integrate Numeracy Across the Day</i>	Children should be engaged in using numeracy through attendance, snack time, storytelling, and outdoor play	Integration increases exposure without overloading children.
12	<i>Assess Through Observation, Not Only Worksheets</i>	Children must be observed on how they count, explain, solve problems and whether they use math words	Assessment should be natural, continuous, and child-friendly.

10.6 Activities for Foundational Numeracy

The philosophy behind activities for foundational numeracy is that children learn best by doing, exploring, and making meaning from real experiences. Hands-on tasks—using objects, games, stories, and movement—help children internalise mathematical ideas naturally. The focus is on understanding rather than rote memorisation, encouraging curiosity, reasoning, and communication. Joyful, inclusive, and developmentally appropriate activities allow children to build confidence while connecting math to daily life and nurturing lasting numeracy skills and positive attitudes.

	Activity	Core Thought	Purpose	Process
1	<i>Number Walk – Math in the Environment</i>	Where can children see math every day?	Connect math to real life.	<ul style="list-style-type: none"> • Take a short walk (school/nearby area). • Identify shapes, numbers, and patterns in nature. • Share photos or sketches on chart paper.
2	<i>Story Math – Counting</i>	Stories make math emotional and memorable	Link literacy and numeracy	<ul style="list-style-type: none"> • Materials: Story cards, pictures • Read a simple story . • Find math within the story (counting, sequence). • Rewrite the story, adding number/pattern details.

3	<i>Concrete– Pictorial– Abstract Ladder (CPA)</i>	Concrete experience comes before symbols	Deepen conceptual understanding	<ul style="list-style-type: none"> • Materials: Beads, bottle caps, paper. • Use beads/sticks to show $4 + 3$ (Concrete). • Draw it (Pictorial). • Write $4 + 3 = 7$ (Abstract).
4	<i>Math Corners – Learning by Exploration</i>	Math corners help learning independently	Encourage hands-on engagement	<ul style="list-style-type: none"> • Materials: Cardboard boxes, recycled items. • Design a small math corner with local materials • Include games (counting, sorting, puzzles)
5	<i>Misconception Clinic</i>	Mistakes reveal a child’s thought process	Identify & correct common math errors.	<ul style="list-style-type: none"> • Materials: Sample worksheets. • Show student work with typical errors. • Diagnose misconceptions • Clarify through probing questions
6	<i>Math Through Play</i>	Play strengthen number sense and joy	Traditional games to teach math	<ul style="list-style-type: none"> • Materials: Local games, chalk, dice • Play Hopscotch or Snakes & Ladders • Highlight counting, sequencing, and turn-taking. • Modify games for addition/subtraction
7	<i>Data Around Us</i>	Real-life data that children can collect	Reasoning using familiar data.	<ul style="list-style-type: none"> • Materials: Chart paper, stickers. • Collect simple data (e.g., favourite fruits) • Create pictographs or tally charts. • Interpret: Which fruit is most popular?
8	<i>Pattern Hunt</i>	Patterns build logical & algebraic thinking	Recognise and create patterns.	<ul style="list-style-type: none"> • Materials: Leaves, buttons, beads. • Collect natural or classroom objects. • Create repeating or growing patterns. • Extend others’ patterns.
9	<i>Math in body movement</i>	Movement is powerful for early numeracy	Connecting rhythm, movement & counting	<ul style="list-style-type: none"> • Do movement-based counting (clap, jump) • Add, subtract, or skip-count with each move

10.7 Core Components of Number Sense

Core components of number sense include understanding quantities, recognising numerals, comparing numbers, and knowing how numbers relate to each other. Children learn to count meaningfully, estimate, identify patterns in numbers, understanding part–whole relationships and basic operations. These skills help children think flexibly about numbers, solve problems confidently, and build a strong foundation for later mathematical learning.

	Core Components	Sub - components
1	Counting Skills	<ul style="list-style-type: none"> • One-to-one correspondence • Stable order (1...10) • Cardinality (last number = total) • Skip counting (later years)
2	Quantity Awareness	<ul style="list-style-type: none"> • Understanding “how many” • Recognising amounts without counting (subitising)
3	Comparing & classifying	<ul style="list-style-type: none"> • More/less, bigger/smaller, equal/not equal, Sorting/grouping
4	Part-Whole Understanding	<ul style="list-style-type: none"> • Knowing that numbers can be broken apart and recombined Example: $6 = 4+2 = 3+3$ • A key foundation for addition/subtraction
5	Number Relationships	<ul style="list-style-type: none"> • Before/after, next number / previous number Number neighbours, Understanding the number line
6	Estimation Skills	<ul style="list-style-type: none"> • Approximating quantities • Making sensible guesses

10.8 Concept of Patterns & Classification in FN

Patterns and classification in foundational numeracy help children recognise order, structure, and relationships. By identifying repeating sequences, children develop prediction and reasoning skills. Classification (sorting attribute-based objects) fosters analytical thinking and observation. Together, these skills strengthen cognitive development, support early problem-solving, and lay the groundwork for future understanding of number systems, operations & mathematical relationships.

Activities for Patterns & Classification in FN

Topic	Facilitator Says	Process Explanation
Introduction	<p>“Now we will look at two key building blocks in early numeracy—patterns and classification. These skills appear simple, but they lay the foundation for reasoning, prediction, and later algebra.”</p> <p>Patterns help children recognise order and predict what comes next. They start with simple repeating patterns such as AB—red, blue, red, blue—then move to more complex ones like AAB or ABC. Patterns can be in colours, shapes, sounds, movements, or objects.”</p>	<p>Ask participants: “Can you create a quick AB pattern on your table using anything you have—pens, papers, notebooks?”</p> <p>(Allow 20–30 seconds)</p> <p>“This simple task shows how patterns help children observe, compare, and anticipate. These skills</p>

		support early logical thinking and are the base for algebra.”
<i>Introducing Classification</i>	<p>“Classification means sorting objects based on a shared attribute—colour, size, shape, texture, or purpose.”</p> <p>Children first sort by one attribute, and later by multiple attributes.</p> <p>“Builds logical thinking, attention to detail, and early data-handling skills. Sorting is also the foundation for counting and comparing.”</p>	<p>Tell Students:</p> <p>“Please sort the items on your table into two groups based on any rule you choose.” Don’t tell the rule, let others guess!</p> <p>(Allow 30 seconds)</p>
<i>Why These Skills Matter</i>	<p>“Patterns and sorting strengthen a child’s ability to organise information, find relationships, and make predictions. These are essential for addition, subtraction, measurement, and later algebra.”</p>	
<i>Classroom Integration</i>		<p>Include patterns and sorting in daily routines like outdoor pattern walks, sorting leaves or beads, clapping patterns, completing pattern cards, and arranging materials by size /colour”</p>
<i>Closing comments</i>	<p>“When we bring patterns and classification into everyday activities, children develop strong logical and numerical foundations—without stress, and through joyful learning.”</p>	

10.9 Concept of Addition & Subtraction

The concepts of addition and subtraction in foundational numeracy help children understand how quantities combine and separate. Through concrete experiences—like joining groups of objects or taking some away—children learn how numbers change. These operations build number sense, support reasoning, prepare learners for more complex problem-solving and connect math with real-life situations, such as sharing, grouping, and comparing quantities.

Activities on Addition & Subtraction

Topic	Facilitator Says	Process explanation
<i>Introduction</i>	Now we will explore how children in the early years understand addition and subtraction . The goal is not memorising sums, but understanding what these operations <i>mean</i> in real-life situations.”	
<i>Addition: Building the Concept</i>	<p>“Addition begins when children combine groups. E.g., 3 blocks + 2 blocks become 5 blocks. (Earliest idea of putting together.)</p> <p>“Children then understand addition as <i>increasing</i>—something is added to an existing amount. They also learn part-whole ideas: 7 can be made in different ways, like 5+2 or 3+4.”</p>	<p>“Take any small objects near you—pens, clips, paper pieces. Make two small groups. Combine them.</p> <p>Now describe the addition story in one sentence, such as: ‘<i>I had 4 clips, added 2 more, and now I have 6.</i>’ (Exactly how children experience addition.”</p>
<i>Subtraction: Building the Concept</i>	<p>“Subtraction starts with <i>taking away</i>. For example, a child has 5 crayons, loses 2, and now has 3 left. They physically see the decrease.”</p> <p>“There’s also subtraction as <i>finding the difference</i>. If Rohan has 6 marbles and Sita has 4, the question is ‘How many more does Rohan have?’—that’s also subtraction.”</p>	<p>“Using the same objects, start with a group and remove some.</p> <p>Say your subtraction story aloud: ‘<i>I had 6 clips, I gave away 2, now I have 4.</i>’ Children learn subtraction this way—through concrete experience.”</p>
<i>How Children Move from Objects to Symbols</i>	<p>“We always follow the CPA approach:</p> <ul style="list-style-type: none"> • Concrete: real objects • Pictorial: drawings or pictures • Abstract: equations like 4+3 or 6–2 	When we rush straight to symbols, children memorise but do not understand. When they experience operations concretely, symbols start to make sense.”
<i>Why These Concepts Matter</i>	“When children deeply understand addition and subtraction, they develop flexibility—counting on, counting back, using number lines, and breaking numbers into parts, preparing them for more advanced math in later grades.”	
<i>Closing comments</i>	“Remember: operations must be meaningful, visual, and connected to real life. Children learn best through stories, objects, and play—not worksheets alone.”	

10.10 Measurement and Classification in Foundational Numeracy

Measurement and comparison matter because they help children make sense of the world. By measuring, children learn to quantify objects, spaces, and events. Comparison builds reasoning—identifying more/less, bigger/smaller, heavier/lighter. Together, these skills support problem-solving, estimation, and logical thinking. They also form the foundation for everyday decisions and later mathematical learning, from geometry to data interpretation.

MEASUREMENT	CLASSIFICATION
Understand measurable attributes like length, weight, capacity, and time	Identify similarities and differences between objects
Use non-standard units first (hand spans, blocks, footsteps, cups)	Count two or more items based on one attribute: Length: longer/shorter, Weight: heavier/lighter Capacity: more/less, Size: bigger/smaller
Compare using everyday language tall/short, heavy/light, full/empty)	Ordering objects (shortest → longest, lightest → heaviest)
Estimate before measuring (“Which is longer? How many blocks long?”)	Use appropriate vocabulary to describe comparisons
Use tools gradually (rulers, measuring cups, balances)	Encourage children to justify their choices (“How do you know?”)
Link measurement to real-life contexts (water play, cooking, classroom objects)	Build early reasoning and classification skills
Develop an idea that measurement is quantifying	

Activities on Measurement & Comparison

Activity	How to Conduct	Skills
<i>Longer–Shorter Hunt</i>	<p>Materials: String, ribbon, sticks, crayons:</p> <ul style="list-style-type: none"> • Give children two items and ask: “Which is longer? Which is shorter?” • Let them find objects in the classroom that are <i>longer than their pencil</i> or <i>shorter than their finger</i>. • Variation: Teacher practices creating 5 pairs of classroom objects of different lengths. 	Length comparison
<i>Human Height Line-Up</i>	<ul style="list-style-type: none"> • Ask children to stand in a line from shortest to tallest. • Encourage them to self-arrange and talk about height. • Add terms like taller than, shorter than, and in-between. 	Height comparison, ordering

<i>Weight Wonder Bags</i>	<p>Materials: 3–4 small cloth bags filled with items of different weights (sand, cotton, stones).</p> <ul style="list-style-type: none"> • Let children lift two bags and decide which is heavier or lighter. • Encourage reasoning: “<i>How did you know?</i>” • Mix bags to discover non-obvious weight differences. 	Weight comparison
<i>Water Pouring Challenge</i>	<p>Materials: Cups, mugs, bottles, bowls</p> <ul style="list-style-type: none"> • Children pour water into containers to see which holds more/ less. • Ask prediction questions: “Do you think the bowl holds more than this cup?” Then the teacher practices “guess then check.” 	Volume comparison
<i>Footstep Measuring Trail</i>	<ul style="list-style-type: none"> • Children measure classroom objects using their footsteps, hand spans, palm lengths, etc. • Ask: “<i>How many hand spans is the mat?</i>” • Compare: “<i>Whose footsteps are longer?</i>” and relate to measurements. 	Non-standard measurement
<i>Ordering Everyday Items</i>	<p>Materials: Pencils, spoons, containers, sticks Give a set of 4–5 mixed objects.</p> <p>Ask children to arrange them from shortest to longest, lightest to heaviest, or least to most capacity.</p>	Length, size, and capacity ordering
<i>Mystery Compare Bags</i>	<p>Materials: Cloth bags with hidden items</p> <ul style="list-style-type: none"> • Children touch/feel the bag and describe: “<i>bigger/smaller,</i>” “<i>heavy/light.</i>” • Reveal the items after guesses. • Teacher discusses using sensory vocabulary 	Sensory comparison
<i>How Many Fit?</i>	<p>Materials: Small cups + large bowl</p> <ul style="list-style-type: none"> • Children count: “<i>How many cups fill the bowl?</i>” • Repeat with different containers. • Compare the efficiency of containers. 	Practical capacity measurement
<i>Shadow Measuring</i>	<ul style="list-style-type: none"> • Children compare their shadows: “<i>Whose shadow is longer?</i>” • Discuss how shadows change through the day. • Teachers document as photo evidence 	Height-length comparison

10.11 Assessment of Foundational Numeracy

The purpose of the foundational numeracy assessment is to understand children’s number sense, operations, and problem-solving abilities in Grades 1–3. This will help in guiding instruction, identifying learning gaps early, and supporting targeted remediation.

The core assessment domains include:

a. Number Sense & Counting

- Number recognition (up to 3-digit numbers by Grade 3)
- Counting (forward, backward)
- One-to-one correspondence
- Comparing quantities (more/less, bigger/smaller)

b. Place Value

- Understanding ones, tens, hundreds
- Expanding numbers
- Reading/writing numbers correctly

c. Operations (Addition, Subtraction, Intro to Multiplication & Division)

- Single- and double-digit addition/subtraction (with & without regrouping)
- Word problems in real-life contexts
- Multiplication as repeated addition
- Division as equal sharing (Grade 3)

d. Measurement & Geometry

- Identifying shapes
- Comparing lengths/weights
- Reading clocks (hour/half hour)
- Using non-standard and standard units

e. Data Handling

- Reading simple pictographs, tally marks, and bar graphs

Assessment principles in foundational numeracy ask us to do the following.

- Use low-pressure, joyful methods
- Start from concrete → pictorial → symbolic
- Keep tasks short and frequent
- Ensure inclusivity: multilingual instructions, visual supports
- Focus on understanding, not memorisation
- Provide immediate feedback

10.12 Summary

Foundational numeracy in India is at a critical juncture, offering both challenges and opportunities. While many children struggle with basic math skills due to socio-economic gaps, language barriers, limited resources, and COVID-related learning loss, there is a growing national commitment to strengthening early learning. The emphasis on play-based instruction, teacher capacity building, and community involvement is reshaping classroom practices. With sustained support, culturally relevant materials, and continuous assessment, India can ensure that every child develops strong number sense and problem-solving skills. Strengthening foundational numeracy is essential for lifelong learning, future employability, and equitable educational outcomes across the country.

- 11.1 Introduction**
 - 11.2 Learning Objectives**
 - 11.3 Concept and Rationale of Collaborative Storytelling**
 - 11.4 Myths and realities about Collaborative Storytelling**
 - 11.5 Role of the Teacher in Collaborative Storytelling**
 - 11.6 Story-Based FLN Activities**
 - 11.7 Story-Based Assessment Approaches**
 - 11.8 Summary**
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11.1 Introduction

Collaborative Storytelling is a pedagogical tool where children and teachers co-create stories to develop foundational skills. For Early Childhood Care and Education (ECCE) and Foundational Literacy and Numeracy (FLN), this involves children actively participating in narrative creation, which boosts language, social-emotional skills, and critical thinking. By working together, children build empathy, learn grammar implicitly, and engage with stories in a way that connects to cultural contexts and fosters a sense of belonging.

In a world shaped by technology and rapid change, storytelling remains a timeless and powerful means to share knowledge. Long before textbooks, people used stories to pass on culture, values, and wisdom. Today, storytelling has become an effective pedagogical tool, especially in primary education. It strengthens communication and helps children connect emotionally with content. Research shows that stories enhance retention by activating multiple parts of the brain, making learning more memorable. In the classroom, storytelling brings concepts to life, sparks curiosity, fosters empathy, and nurtures imagination—key elements of foundational learning and a joyful, meaningful teaching–learning process.

11.2 Learning Outcomes

Collaborative storytelling helps children build language, creativity, and confidence by jointly creating and extending stories. It strengthens listening, sequencing, prediction, and expression. As children negotiate ideas and take turns, they develop social skills. Story-based discussions also support early literacy and numeracy by connecting sounds, words, and simple math concepts to meaningful contexts. By the end of this unit, the trainees will be able to:

- I. *Plan and facilitate collaborative storytelling sessions* that encourage children to recall, listen, and respond to shared narratives.
- II. *Use age-appropriate questioning and prompts* to help children understand story sequences, meanings, and key ideas.
- III. *Support children’s oral language development* by modelling correct vocabulary, simple sentence structures, and expressive storytelling techniques.
- IV. *Guide children to identify story elements* such as characters, setting, and beginning–middle–end through interactive discussions.
- V. *Encourage children to express opinions and choices* by discussing characters’ actions and exploring alternative story endings.

- VI. *Design opportunities for creative expression* by enabling children to co-create original stories using pictures, objects, gestures, or role play.
- VII. *Integrate foundational numeracy concepts* such as sequencing, order, comparison, and patterns naturally within storytelling activities.
- VIII. *Foster socio-emotional skills* by promoting turn-taking, cooperation, empathy, and respect for diverse ideas during group storytelling.
- IX. *Adapt collaborative storytelling for inclusive classrooms* by accommodating diverse linguistic backgrounds, abilities, and learning needs.
- X. *Observe and document children's learning* in language, numeracy, and social development using simple, developmentally appropriate indicators.

11.3 Concept and Rationale of Collaborative Storytelling

Collaborative storytelling is an interactive, child-centred approach in which children and teachers co-create stories through dialogue, imagination, and shared participation. Instead of listening passively, children contribute characters, events, ideas, and actions, making the story a jointly constructed learning experience. Because storytelling is multisensory, joyful, and inclusive, it connects naturally with how young children learn, making it a powerful method to build both early literacy and numeracy foundations. The rationale behind Collaborative storytelling is to support ECCE and FLN by making learning joyful, interactive, and meaningful and promoting holistic development in children, along with enhancing foundational literacy and numeracy skills. Let us follow the points:

- 1. Builds Strong Foundational Literacy Skills by:**
 - enhancing vocabulary, sentence formation, and expressive language.
 - strengthening listening, comprehension, sequencing, and prediction
 - encouraging phonological awareness through rhyme, rhythm, and repetition.
 - facilitating early writing through illustrations, captions, or classroom storybooks.
- 2. Supports Foundational Numeracy Development by:**
 - counting, comparing, measuring, identifying patterns in stories
 - learning maths concepts through stories in a meaningful and non-threatening way
 - encourages mathematical reasoning and solving problems through story events
- 3. Aligned with ECCE Principles such as:**
 - Play-based, joyful, exploratory, and developmentally appropriate.
 - Helps creativity, imagination, and curiosity
 - Uses multisensory modalities (movement, music, props, puppets)
- 4. Strengthens Socio-Emotional Skills by**
 - building confidence, self-expression, and self-identity
 - promoting collaboration, turn-taking, empathy, and idea-sharing.
 - helping shy, anxious, or struggling learners participate comfortably.
- 5. Supports Multilingual and Inclusive Classrooms**
 - Children can contribute in their home language
 - Diverse learners can respond verbally, by using visuals, or by gestures.
 - Connects school learning with children's cultural stories and lived experiences.
- 6. Low-Cost, Contextual, and Scalable**
 - Requires minimal resources; can be implemented in government school settings.
 - Uses familiar contexts to make learning relevant.
 - Easily adaptable across grades, teacher capacities, and classroom conditions.
- 7. Enhances Post-COVID Learning Recovery**
 - Rebuilds attention span, participation habits, and learning readiness.
 - Provides a safe, engaging environment for reintroducing structured learning.

- Helps restore confidence among children who experienced learning loss.

Collaborative storytelling is thus a powerful instructional approach where children and teachers co-create stories through dialogue, imagination, role-play, pictures, or manipulatives. Instead of passively listening, children actively contribute characters, events, and ideas. This shared creation process builds linguistic, cognitive, social, and numeracy foundations by transforming learning into an interactive, play-based experience. In ECCE and FLN classrooms, collaborative storytelling allows children to explore concepts, express thoughts freely, negotiate meanings, and make sense of the world through narrative structures.

11.4 Myths and Realities about Collaborative Storytelling

MYTH	REALITY
<i>It takes too much time</i>	Collaborative storytelling can be integrated into routine lessons without requiring extra periods.
<i>Children will get noisy or distracted</i>	Structured prompts, visual aids, and turn-taking rules help maintain focus while still allowing creativity and participation.
<i>How will I assess learning?</i>	Teachers can observe vocabulary use, sequencing ability, counting in story problems, turn-taking, and emotional expression—these provide natural assessment data.
<i>It will not support numeracy</i>	Stories easily embed counting, comparison, patterns, estimation, directions, and problem-solving in meaningful contexts.
<i>Distraction from syllabus completion</i>	When stories are tied to learning outcomes, they become a powerful way to deliver the syllabus rather than detract from it.
<i>What if I am not a good storyteller?</i>	You do not need to be dramatic or a professional storyteller—you just need to be authentic and connect with your learners.
<i>Storytelling is not suitable for all learners</i>	Storytelling is inclusive. Visual learners benefit from imagery, auditory learners from narration, and kinaesthetic learners from role-play. You can also adapt it for children with learning difficulties using simpler language and visual aids.

11.5 Role of the Teacher in Collaborative Storytelling

The teacher in collaborative storytelling is not just a storyteller but a facilitator, guide, assessor, and co-learner. By blending creativity with purposeful learning, the teacher transforms storytelling into a powerful tool for developing foundational literacy, numeracy, and social-emotional skills. In collaborative storytelling, a primary expert shifts to a facilitator and guide, who designs the activity, supports the process, and ensures all students contribute to a shared narrative. The following roles of teachers are of paramount interest to children while using collaborative storytelling.

Role of the Teacher	What They Do
<i>To facilitate imagination and creativity</i>	<ul style="list-style-type: none"> • Create a safe, open environment where children feel confident • Provide prompts, pictures, objects, or situations that spark imagination and help children initiate story creation.
<i>To enrich language</i>	<ul style="list-style-type: none"> • Demonstrates rich vocabulary, clear sentence structures, and expressive storytelling. • Introduces new words naturally within stories and encourages children to use them in their own contributions.
<i>To guide numeracy and concept development</i>	<ul style="list-style-type: none"> • Embeds early numeracy elements (counting, comparing, sequencing, measurement, patterns) within stories. • Helps children use mathematical language and reasoning as part of the narrative.
<i>To scaffold for Participation by all</i>	<ul style="list-style-type: none"> • Ensures every child gets a voice, especially quiet or hesitant learners. • Uses questioning, turn-taking strategies, and gentle prompts to support children at different developmental levels.
<i>To connect culture and context</i>	<ul style="list-style-type: none"> • Integrates local stories, familiar characters, environmental elements, and home language • Helps children relate storytelling to their own lives, making learning relevant & meaningful
<i>To observe and assess</i>	<ul style="list-style-type: none"> • Listens to children’s contributions to gauge literacy, numeracy and social skills. • Uses story-based assessment (retelling, drawing, sequencing) for further teaching.
<i>To co-create joyful learning</i>	<ul style="list-style-type: none"> • Actively participates in story-building while letting children lead. • Keeps process playful, dynamic, and responsive to children’s interests & curiosity.
<i>To promote social–emotional learning</i>	<ul style="list-style-type: none"> • Encourages cooperation, empathy, and respect for peer ideas during storytelling. • Reinforces positive behaviours like sharing, turn-taking, and problem-solving.
<i>To design inclusive experiences</i>	<ul style="list-style-type: none"> • Adapts stories for learners, with different abilities linguistic backgrounds, learning needs. • Uses multisensory aids—puppets, pictures, gestures, props—for diverse participation.

□ Tips for Effective Storytelling in Teaching

- **Know Your Audience:** Use age-appropriate language and themes. Use voice and body effectively: modulate tone, pace, volume, facial expressions, gestures, & movement to animate the story.
- **Keep It Interactive:** Pause to ask questions, encourage predictions, or let children finish familiar lines. Interaction keeps attention alive.
- **Make It Relatable:** Connect the story to children’s everyday life, environment, or emotions. Familiar contexts make learning more meaningful
- **Use Props and Visuals:** Simple props, drawings, or puppets can enrich the storytelling experience.
- **Practice and Improvise:** While spontaneity is valuable, a well-practised story has better flow. Do not be afraid to improvise based on student reactions.

11.6 Story-Based FLN Activities

Activity 1: Misti’r Golpo: Counting Rasgullas		
Context	Activity	Skills
<i>Children love local sweets.</i>	Tell a short story: “Rita bought 5 rasgullas from the shop in Katwa” Children act out the story using counters (white balls/cotton). Prompt: “She gave 2 to her Dida. How many are left?”	Addition, subtraction, counting in context, and oral storytelling.
Activity 2: Ganga Nodir Jahaj Yatra” (Boat Journey on the Ganga)		
<i>Children love to know about new places.</i>	Create a story where children board a boat at Princep Ghat. Story scenes include counting birds, comparing boat sizes, and sequencing stops—Babughat, Howrah Bridge, Botanical Garden.	sequencing, comparison, measurement, local geography; listening comprehension.
Activity 3: Haat-er Din (Village Market Story Role-Play)		
<i>Weekly haat is common.</i>	Tell a story of Rinku visiting the <i>haat</i> in Nadia/Birbhum. Children role-play buying vegetables, using play money, and solving small number problems.	Number recognition, simple transactions, vocabulary, and social interaction.
Activity 4: Maa Durga’s Preparation Story: Pattern and Sequence		
<i>Idols fascinate children</i>	Using the Durga Puja theme, create a story of artisans preparing the idol step by step—straw frame, clay layer, paint, sari, ornaments. Ask children to arrange picture cards in the correct order and identify patterns in decorations.	Sequencing, patterns, descriptive vocabulary, and cultural connection.
Activity 5: Sundarbaner Bagher Golpo (Tiger Adventure Story)		
<i>Children love animals</i>	Tell a simple story of two friends visiting the Sundarbans. Include counting mangrove roots, comparing animal footprints, and solving small story-based problems.	Comparison, counting, estimation, and environmental learning.

Activity 6: Macher Bajar Story Problem		
<i>Fish markets are iconic of Bengal.</i>	In a story, a family buys 3 hilsa, 2 rohu, and 4 prawns. Children sort pictures, count, and create their own market stories.	Sorting, categorising, addition; language development.
Activity 7: Boi Mela'r Golpo (Book Fair Adventure)		
<i>Children love to visit fairs</i>	Use a story of visiting the Kolkata Book Fair. Children identify signs, directions, numbers on stalls, and solve tasks: "Find Stall 23," "How many books did Tara buy?"	Number identification, direction words, and literacy awareness.
Activity 8: Pukur Par'er Story Map (Pond-Side Story Map)		
<i>Ponds are common in Bengal</i>	Tell a story of children playing near a <i>pukur</i> . They draw a story map showing trees, ducks, fish, and steps to reach each point.	Spatial reasoning, drawing, counting, and contextual vocabulary
Activity 9: Jatra'r Raat (Folk Theatre Story)		
<i>Jatra is common in rural Bengal.</i>	Use a <i>jatra</i> performance as the story setting. Children listen, retell, and add math tasks (counting characters, estimating crowd size, comparing props).	Listening, retelling, number sense, and cultural literacy.

11.7 Story-Based Assessment Approaches

Story-based assessment approaches utilise narratives to evaluate individuals' knowledge, skills, dispositions, and experiences in a holistic, authentic, and often participatory manner. These methods differ from traditional standardised tests by focusing on individual experiences and context, making complex learning and change processes visible and understandable. It uses narratives, pictures, and child-created stories as tools to understand learning in early literacy and numeracy.

Assessment Checklist for Story-Based FLN Activities

A. Literacy Skills Checklist			
1. Listening and Comprehension Skill	Yes	Maybe	No
<i>Understands the main idea of the story</i>			
<i>Recalls key events in order</i>			
<i>Follows instructions within the story</i>			
<i>Responds meaningfully to questions</i>			
2. Oral Language and Expression Skills			
<i>Speaks clearly and confidently</i>			
<i>Uses age-appropriate vocabulary</i>			
<i>Can describe characters, events, and actions</i>			

<i>Takes turns during collaborative storytelling</i>			
3. Narrative Skill			
<i>Creates simple sentences to continue a story</i>			
<i>Uses sequencing words (first, then, finally)</i>			
<i>Maintains logical flow in story</i>			
<i>Can retell a story with beginning, middle, and end</i>			
B. Numeracy Skills Checklist			
1. Number Sense Skill	Yes	Maybe	No
<i>Counts objects in the story accurately</i>			
<i>Recognises and uses numerals in context</i>			
<i>Solves simple addition/subtraction embedded in the story</i>			
<i>Compares quantities (more/less) in story situations</i>			
2. Measurement & Spatial Concept Skills			
<i>Understands size, length, and weight terms</i>			
<i>Uses positional vocabulary (in front, behind)</i>			
<i>Follows directional steps in story maps</i>			
<i>Estimates distances/quantities in the story</i>			
3. Patterning & Logical Thinking Skills			
<i>Identifies simple patterns in a story</i>			
<i>Predicts what comes next</i>			
<i>Classifies/sorts objects from story categories</i>			
<i>Notices inconsistencies in “mixed-up stories”</i>			
C. Social–Emotional Skills Checklist			
<i>Participates willingly in group story activities</i>			
<i>Shows confidence while speaking</i>			
<i>Respects peers’ ideas during collaborative tasks</i>			
<i>Expresses emotions through storytelling or role-play</i>			
D. Creativity & Imagination Checklist			
<i>Adds original ideas to the story</i>			
<i>Uses drawings/props expressively in the story</i>			
<i>Creates alternative endings or new characters</i>			
<i>Demonstrates flexible thinking during story tasks</i>			

11.8 Summary

In an age where education is constantly evolving with digital tools, flipped classrooms, and AI, the ancient practice of storytelling remains refreshingly relevant. It is a bridge between tradition and innovation, emotion and intellect, imagination, and information. For young learners, stories are not just tales—they are doorways to understanding, empathy, and growth. By integrating storytelling into pedagogy, educators do not just teach—they inspire, connect, and empower. As educators, if we want to truly light the spark of learning in a child, let us remember: before children learn to read or write, they learn to listen. And what better way to captivate those little ears and hearts than through the magic of a well-told story?