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National Curriculum Framework for Foundational Stage

2022

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National Steering Committee for National Curriculum Frameworks

Foreword

It is with a great sense of pride and satisfaction that I submit this National Curriculum Framework for the Foundational Stage (NCF), on behalf of the National Steering Committee for National Curriculum Frameworks to Shri Dharmendra Pradhan, Hon'ble Minister of Education, Government of India.

The National Education Policy (NEP) 2020 is a transformative initiative to usher India to prepare itself to meet the challenging demands of a 21st century knowledge society. The NCF is one of the key components of NEP 2020, that enables and energizes this transformation, informed by the aims, principles, and approach of NEP 2020. Its objective is to realise the highest quality education for all our children, consistent with realising an equitable, inclusive, and plural society as envisaged by our Constitution.

This is the first ever integrated Curriculum Framework for children between ages 3-8 in India. It is a direct outcome of the 5+3+3+4 'curricular and pedagogical' structure that NEP 2020 has come out with for School Education.

The Foundational Stage envisions an integrated approach to Early Childhood Care and Education; for children between ages 3-8. The transformative nature of this phase of education is expected to qualitatively improve the contents and outcomes of education, thereby, impacting the lives of our children towards a better future. All studies and research related to the early period of development of a child, unambiguously leads to the conclusion that high-quality care and education during this period has a lifetime of positive consequences for all individuals and thus, the nation.

This NCF is based on cutting-edge research from across the world in multiple disciplines which includes among other things better understanding in the fields of neurosciences, brain study, and cognitive sciences. Further, the accumulated insights from the practice of Early Childhood Care and Education, and the wisdom and knowledge from diverse Indian traditions are also important considerations. As articulated in NEP 2020, it uses 'play,' at the core of the conceptual, operational, and transactional approaches to curriculum organization, pedagogy, time and content organization, and the overall experience of the child. It also lays a clear path for the goal of achieving foundational literacy and numeracy as articulated in NEP 2020, with age-appropriate strategies.

To ensure that this NCF is responsive to the needs and aspirations of our people, and the nation, and is also informed by the very best experience and knowledge, we have conducted widespread consultations across the country. This process has benefited from the engagement of over 10 lakh interested citizens including students and parents, and over 1.3 lakh teachers and educationists from across the country, over 1550 district level consultations from 32 States and Union Territories, and 35 groups of institutions. These consultations are in addition to over 500 papers on 25 specifically relevant themes written by groups constituted by the States and Union Territories which all together had over 4000 experts, and 25 papers on these themes developed by expert groups with over 175 members, constituted by the National Council for Educational Research and Training.

While this NCF is informed by this collective knowledge and wisdom, the real challenge came when we had to analyse these inputs and develop a cogent, pragmatic, and effective synthesis that will enable changes in practices on the ground. This, in turn, called for the NCF to be presented in a language, structure, and with a variety of illustrations, such that practitioners, including most importantly Teachers, should be able to relate it to their current realities. I emphasise this aspect of the work of this Committee, primarily, to highlight the several challenges arising from the needs of developing innovative methods and approaches.

This curriculum framework will be an integral part of the of the overall National Curriculum Framework for School Education, which is under development, and will address the remaining three stages of the 5+3+3+4 structure, covering education for children up to the age of 18. So, while this NCF is complete in itself, its connections and implications to the other Stages, will be settled in the overall National Curriculum Framework for School Education. Further, this Foundational Stage framework will also guide the preparation of the Teachers for this Stage of education.

We believe that any such framework must be improved with feedback from implementation on the ground, and that we shall do, after a reasonable experience of its implementation.

We are grateful for the opportunity to contribute to Indian education and through that to the country.

K. Kasturirangan
Chairperson
National Steering Committee for National Curriculum Frameworks

October 20, 2022
Bengaluru

Acronyms

Acronym	Full Form
BEO	Block Education Officer
BITE	Block Institutes of Teachers Education
BRC	Block Resource Centres
CBSE	Central Board of Secondary Education
CG	Curricular Goals
CRC	Cluster Resource Centres
DEO	District Educational Officer
DIET	District Institute for Education and Training
DIKSHA	Digital Infrastructure for Knowledge Sharing.
DISE	District Information System for Education
ECCE	Early Childhood Care and Education
ECE	Early Childhood Education
FLN	Foundational Literacy and Numeracy
NCF-FS	National Curricular Framework for the Foundational Stage
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GOI	Government of India
GRR	Gradual Release of Responsibility
ICDS	Integrated Child Development Scheme
IECEI	India Early Childhood Education Impact
ITEP	Integrated Teacher Education Programme
MWCD	Ministry of Women and Child Development
NAS	National Achievement Survey
NCERT	National Council of Educational Research and Training
NCF	National Curriculum Framework
NCPFECCE	National Curricular and Pedagogical Framework for Early Childhood Care and Education
NCTE	National Council for Teacher Education
NDEAR	National Digital Education Architecture
NEP	National Education Policy
NER	Net Enrolment Ratio
NFHS	National Family Health Survey
NGO	Non-Governmental Organization
NIOS	National Institute of Open Schooling
NIPCCD	National Institute of Public Cooperation and Child Development

NIPUN	National Initiative for Proficiency in Reading with Understanding and Numeracy Bharat Programme
PEEO	Panchayat Elementary Education Officers
POSHAN	Prime Minister's Overarching Scheme for Holistic Nutrition
PTR	Pupil–Teacher Ratio
QR	Quick Response Code
ROI	Return on investment
RtE	Right to Education
SARTHAQ	Students' and Teachers' Holistic Advancement through Quality Education
SCERT	State Council of Educational Research and Training
SEDG	Socio-Economically Disadvantaged Groups
SLAS	State Level Achievement Survey
SMC	School Management Committee
TET	Teacher Eligibility Test
TLM	Teaching Learning Materials
UDISE	Unified District Information System for Education
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UT	Union Territory

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About the National Curriculum Framework

The National Curriculum Framework (NCF) for the Foundational Stage is developed based on the vision of the National Education Policy (NEP) 2020, and to enable its implementation.

The Foundational Stage refers to children in the age group of 3 to 8 years, across the entire range of diverse institutions in India. This is the first Stage in the 5+3+3+4 Curricular and Pedagogical restructuring of School Education as envisioned in NEP 2020.

Curriculum

Curriculum refers to the entirety of the organised experience of students in any institutional setting towards educational aims and objectives.

The elements that constitute and bring to life a Curriculum are numerous, and include goals and objectives, syllabi, content to be taught and learnt, pedagogical practices and assessment, teaching-learning materials, school and classroom practices, learning environment and culture of the institution, and more.

There are other matters that directly affect a Curriculum and its practice or are integrally related while not being within the Curriculum. These include the Teachers and their capacities, the involvement of parents and communities, issues of access to institutions, resources available, administrative and support structures, and more.

Curriculum Framework

The Curricula across our country must be informed by and be fully responsive to the glorious unity and diversity of India. The imagination of NEP 2020, where institutions and educators are highly empowered - including to develop Curricula - is energized by this diversity and the nurturing of it. States have the Constitutional mandate to provide high-quality education to all children, and their own unique State contexts inform their own approaches to Curricula.

A Curriculum Framework must support exactly that - it is a framework to help develop all the diverse Curricula in the country, while enabling consonances and harmony across the country and providing a basis for quality and equity.

Thus, a Curriculum Framework provides the guiding principles, goals, structure, and elements for the development of Curricula, informed by which the syllabi, teaching-learning-materials including play materials, workbooks, textbooks, and assessment methods will be developed by the relevant functionaries including Teachers in the States, Boards, and schools.

Objectives of this NCF

The overarching objective of this NCF is to help in positively transforming the school education system of India as envisioned in NEP 2020, through corresponding positive changes in the curriculum including pedagogy.

In particular, the NCF aims to help change practices in education and not just ideas; indeed, since the word 'curriculum' encapsulates the overall experiences that a student has in school, 'practic-

es' do not just refer to curricular content and pedagogy, but also include school environment and culture. It is this holistic overall transformation of the curriculum that will enable us to positively transform overall learning experiences for students.

Characteristics of this NCF to enable its Objectives

While based on the latest research in early childhood care and education, this NCF aims to be understandable and relatable to, and usable by, practitioners of education, including Teachers and other educators, school leaders, and functionaries of the education system such as project officers, cluster and block resource persons, block education officers, teacher educators, examination boards, and curriculum/syllabus/textbook development teams.

The NCF also aims to provide the interested reader a reasonable understanding of what education should look like in our new vision for schools, and why, and what role individuals could play as parents, community members, and citizens of India, who all have a large stake in Indian education.

Nevertheless, this NCF is designed with the Teacher as the primary focus - the reason being that the Teacher is at the heart of the practice of education. It is the Teacher who is ultimately the torchbearer for the changes we seek. As such, it is the perspective of the Teacher that must be carried by all, including syllabus and content developers, textbook writers, administrators, and others.

This NCF thus aims to adopt a presentation style and structure that enables the above objectives of readability, accessibility, and relevance to the Teacher. While it aims to articulate the underlying philosophy and principles, it does not simply leave it at the level of abstraction but also brings it to practice.

To enable this, and to communicate ideas with greater clarity, this NCF contains different levels of detail and specificity at the level of practice, with clear real-life illustrations in a variety of contexts. The Teacher or curriculum developers are not bound by these illustrations, but it is envisaged that this level of detail will help to make this NCF graspable, relatable, and useable.

This NCF also aims to account for the reality of the current typical institution and Teacher, while being entirely in harmony with the imagination of the best-resourced institutions. Thus, this NCF aims to be deeply rooted in the reality of our context, yet aspirational.

Chapter 1

Preamble and Introduction

This Chapter sets the basis for the NCF for the Foundational Stage.

It outlines the criticality of Early Childhood Care and Education, it's rootedness in Indian traditions, contemporary research that underlines its importance to life, the centrality of 'play' in these years, and the crucial role played by families, and communities at this time.

This Chapter also lays out the vision and core principles that guide this NCF.

Section 1.1
Introduction

1.1.1 Early Childhood Care and Education

The first eight years of a child's life are truly critical and lay the foundation for lifelong well-being, and overall growth and development across all dimensions - physical, cognitive, and socio-emotional.

Indeed, the pace of brain development in these years is more rapid than at any other stage of a person's life. Research from neuroscience informs us that over 85% of an individual's brain development occurs by the age of 6, indicating the critical importance of appropriate care and stimulation in a child's early years to promote sustained and healthy brain development and growth.

The most current research also demonstrates that children under the age of 8 tend not to follow linear, age-based educational trajectories. It is only at about the age of 8 that children begin to converge in their learning trajectories. Even after the age of 8, non-linearity and varied pace continue to be inherent characteristics of learning and development; however, up to the age of 8, the differences are so varied that it is effective to view the age of 8, on average, as a transition point from one stage of learning to another. In particular, it is only at about the age of 8 that children begin to adapt to more structured learning.

Early Childhood Care and Education (ECCE) is thus generally defined as the care and education of children from birth to eight years.

1.1.2 Foundational Stage

a. Primarily at home: Ages 0-3

Up to 3 years of age, the environment in which most children grow up is in the home with families, while some children do go to creches. After the age of 3, a large proportion of children spend significant time in institutional settings such as Anganwadis and preschools. Providing high quality preschool education in an organised setting for children above 3 years of age is one of the key priorities of NEP 2020.

Up to age 3, the home environment is (and should remain) almost the sole provider of adequate nutrition, good health practices, responsive care, safety and protection, and stimulation for early childhood learning i.e., everything that constitutes and forms the basis for ECCE. After the age of 3, these components of nutrition, health, care, safety, and stimulation must continue at home, and must also be ensured in an appropriate and complementary manner in institutional settings such as Anganwadis and preschools.

Appropriate ECCE at home for children under the age of 3 includes not only health, safety, and nutrition, but also crucially includes cognitive and emotional care and stimulation of the infant through talking, playing, moving, listening to music and sounds, and stimulating all the

other senses particularly sight and touch so that at the end of three years, optimal developmental outcomes are attained, in various development domains, including physical and motor, socio-emotional, cognitive, communication, early language, and emergent literacy and numeracy. It must be noted that these domains are overlapping and indeed deeply interdependent.

The guidelines and/or suggested practices to enable high-quality ECCE at home for the age-group of 0-3 would be developed and disseminated by the Ministry of Woman and Child Development (MWCD).

b. In institutional settings: Ages 3-8

During the ages of 3 to 8, appropriate and high-quality ECCE provided in institutional environments must be available to all children. In India, where available, this is typically carried out as follows:

i. **3-6 years:** Early childhood education programmes in Anganwadis, Balvatikas, or pre schools.

ii. **6-8 years:** Early primary education programmes in school (Grades 1 and 2).

From 3 to 8 years of age, ECCE includes continued attention to health, safety, care, and nutrition; but also, crucially, self-help skills, motor skills, hygiene, the handling of separation anxiety, physical development through movement and exercise, expressing and communicating thoughts and feelings to parents and others, being comfortable around one's peers, sitting for longer periods of time in order to work on and complete a task, ethical development, and forming all-round good habits.

Supervised play-based education, in groups and individually, is particularly important during this age range to nurture and develop the child's innate abilities and capacities of curiosity, creativity, critical thinking, cooperation, teamwork, social interaction, empathy, compassion, inclusiveness, communication, cultural appreciation, playfulness, awareness of the immediate environment, as well as the ability to successfully and respectfully interact with teachers, fellow students, and others.

c. Importance of literacy and numeracy

ECCE during these years also entails the development of early literacy and numeracy, including learning about the alphabet, languages, numbers, counting, colours, shapes, drawing/painting, indoor and outdoor play, puzzles and logical thinking, art, craft, music, and movement. The aim is to build on the developmental outcomes in the domains mentioned above, combined with a focus on early literacy, numeracy, and awareness of one's environment. This becomes particularly important during the age range of 6-8, forming the basis for achievement of Foundational Literacy and Numeracy (FLN). The importance of FLN to overall education is well-understood, and fully emphasized in NEP 2020.

d. National Curriculum Framework for the Foundational Stage (NCF)

Considering all of the above, NEP 2020 has articulated the age range of 3-8 as the Foundational Stage, in the new 5+3+3+4 system.

This National Curriculum Framework aims to address the Foundational Stage in institutional settings, within the overall context of ECCE.

While this NCF has an institutional focus, the importance of the home environment cannot be overemphasized - including family, extended family, neighbours, and others in the close community - all of whom have a very significant impact on the child, particularly in this age range. Hence, this NCF will deal with the role of parents and communities in enabling and enhancing the developmental outcomes that are sought during this stage; it will not, however, deal in detail with aspects of ECCE for ages prior to 3 years, which is entirely outside institutional settings.

e. NEP 2020 goal

Due to the critical importance of the Foundational Stage for the development of an individual, and for the long-term benefit to society as a whole, NEP 2020 articulates a clear goal - that every child in the age range of 3–8 years must have access to free, safe, high quality, developmentally-appropriate ECCE by the year 2025.

Regardless of the circumstances of birth or background, quality ECCE enables children to participate and flourish in the educational system throughout their lives. ECCE is thus perhaps one of the greatest and most powerful equalisers. High-quality ECCE in the Foundational Stage gives the best chance for all children to grow into good, ethical, thoughtful, creative, empathetic, and productive human beings.

For the overall well-being and prosperity of our country, all members of our society - from Teachers to school functionaries to parents and community members to policy makers and administrators - must come together to ensure that every child is provided this all-important physical, cognitive, and socio-emotional stimulation, along with appropriate and adequate nutrition, in these earliest and most critical years of life.

The compelling rationale for investing in ECCE is further detailed in the next section.

1.1.3 Rationale for Early Childhood Care and Education

Research from across the world on education, neuroscience, and economics demonstrates clearly that ensuring free, accessible, high quality ECCE is perhaps the very best investment that any country can make for its future.

As mentioned earlier, brain development is most rapid in the first eight years of a child's life, indicating the critical importance of cognitive and socio-emotional stimulation in the early years.

Children naturally take to play-based activity in the early years. Children exposed to age-appropriate, physical, educational, and social activities through play-based methods learn better and grow better.

When the quality of stimulation, support and nurture is lacking, there can be detrimental effects on overall development.

The period of early childhood lays the foundation for life-long learning and development and is a key determinant of the quality of adult life.

Learning delays can be greatly reduced with the help of intervention in the early years.

Efforts to improve early child development are thus an investment, not a cost. Investing in quality early education helps to promote long-term economic growth of the nation while also helping to target the development of the health, cognitive skills, and character necessary for the future success of the individual.

Please see Annexure 4 for details

In conclusion: For all these reasons - from brain development to school-preparedness, improved learning outcomes, equality and justice, employability, and the prosperity and economic growth of the country - India must invest in accessible and quality ECCE for all children, with proper oversight and light regulation to ensure high quality developmentally appropriate stimulation for all children.

Section 1.2
The Development of Early Childhood Care and Education in India and the World

1.2.1 Enlightened Indian Perspectives

The importance of ECCE for supporting children's all-round development has been integral to Indian traditions throughout our long history. The early years of a child's life have been deeply valued across the diverse cultural landscape of India.

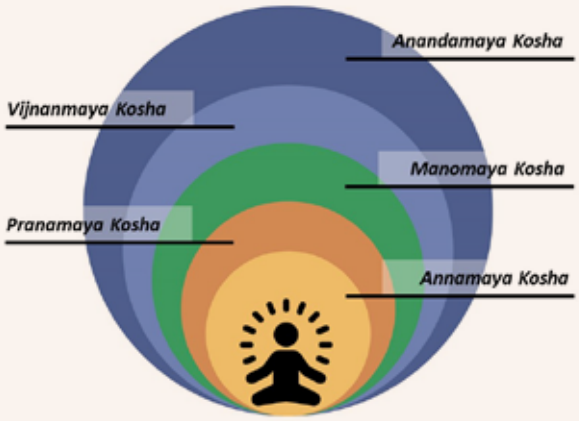
India possesses a rich range of traditions and practices for stimulating all-round development, including developing values and social capacities in young children. Such traditional childcare took place within joint families and the community - children were surrounded by caring adults and peers.

The Indian vision of education has been broad and deep, including the idea that education must foster both inner and external development. Learning about the external world should be in consonance with learning about one's inner reality and self. This is also an eminently practical perspective – developing good health and socio-emotional skills and developing the ability to think and make good and rational choices and decisions in the world, must occur in an integrated and holistic manner. Learning is not merely gathering information but is the development of self, of our relationships with others, being able to discriminate between different forms of knowledge, and being able to fruitfully apply what is learnt for the benefit of the individual and of society.

Box 1.2A

Panchakosha Vikas (Five-fold Development) - A keystone in Indian tradition

The child is a whole being with panchakoshas or five sheaths. The layers are annamaya kosha (physical layer), pranamaya kosha (life force energy layer), manomaya kosha (mind layer), vijnanamaya kosha (intellectual layer) and anandamaya kosha (inner self). Each layer exhibits certain distinct characteristics. The holistic development of a child takes into account the nurturing and nourishment of these five layers.



Panchakosha Vikas

Icon Source: thenounproject.com

Specific types of practices are designed to enable the development of each of these koshas. However, the practices are designed keeping in mind that the koshas are interconnected and so activities that focus primarily on one would also contribute to the development of the others.

For example, the physical dimensions are developed through a focus on a balanced diet, traditional games, and adequate exercise, as well as yoga asanas (at the appropriate ages), which build both gross and fine motor skills. Learning to breathe in a way that provides necessary oxygen for the entire body is important; it, trains the voice, and provides direction for increased self-awareness. A wide variety of stories, songs, lullabies, poems, prayer, enable children to not only develop a love for their cultural context but also provide value-based insights. This contributes to language development beginning with listening or shravana as well as the ability to focus and concentrate. The senses, indriyas, are to be sharpened to be able to experience the world around in all its beauty and wonder. Seva integrated into everyday life enables the experience of joy of relationships along with being a part of and doing good for one's community.

The Panchakosha concept and imagination also maps into the different domains of development envisaged in ECCE which are the basis of the Curricular Goals as discussed in the next Chapter.

- *Physical Development (Sharirik Vikas): Age-specific balanced physical development, physical fitness, flexibility, strength, and endurance; development of senses; nutrition, hygiene, personal health, expansion of physical abilities; building body and habits keeping in mind one hundred years of healthy living in a human being.*
- *Development of Life Energy (Pranik Vikas): Balance and retention of energy, positive energy and enthusiasm, smooth functioning of all major systems (digestive, respiratory, circulatory, and nervous systems) by activation of the sympathetic and parasympathetic nervous system.*
- *Emotional/Mental Development (Manasik Vikas): Concentration, peace, will and will power, courage, handling negative emotions, developing virtues (maulyavardhan), the will to attach and detach from work, people and situations, happiness, visual and performing arts, culture, and literature.*
- *Intellectual Development (Bauddhik Vikas): Observation, experimentation, analytical ability, abstract and divergent thinking, synthesis, logical reasoning, linguistic skills, imagination, creativity, power of discrimination, generalization, and abstraction.*
- *Spiritual Development (Chaitsik Vikas): Happiness, love and compassion, spontaneity, freedom, aesthetic sense, the journey of 'turning the awareness inwards.'*

Panchakosha is an ancient explication of the importance of the body-mind complex in human experience and understanding. This non-dichotomous approach to human development gives clear pathways and direction towards a more holistic education.

Range of insights: The Gurukul system of education, one of the oldest in the world, not only fostered holistic development, but also emphasized the importance of interrelationships between teacher and student, and in learning and growth. The ideal environment of learning is that which enables the desire to learn and provides opportunities to apply this knowledge. It is learning that provides the opportunity for exploration and examination of the inner self.

Box 1.2B

The ancient Indian emphasis on **Smriti (memory)** is critical to the overall development of a human being. It has often been misunderstood as an emphasis on rote learning, which in principle and when practised with fidelity, it was not.

Current cognitive science research indicates that **Smriti** - both working memory and long-term memory - plays an important role in cognition and comprehension. Insufficient emphasis on memory often results in inadequate outcomes in the classroom.

Using memory for learning in the classroom encompass a variety of activities - deliberate and regular practice, deep processing, generating cues, making connections, and forming associations. This is reflected in the goals and pedagogical approaches of this NCF.

This is relevant across all the years of school education, especially in the Preparatory, Middle, and Secondary Stages.

In most Indian traditions, children are rarely seen as blank slates, even as infants. They are considered to possess certain dispositions which influence the child's relationship with the world. The child in these traditions is seen both as a social being and a unique person who is influenced by the context as well as by one's own choices. Learning should help the child prepare for action *(karma)* and its consequences. The development of the personality becomes an important aspect of the way education is understood from a cultural standpoint.

Since the Vedic era, the ancient Indian holistic natural medical system of Ayurveda has also been a guide to early childcare practices, with one of its eight branches dedicated to the care of children. The approach to knowledge and understanding of childcare in Ayurvedic texts was holistic. The biological, psychological, sociological, and cultural approaches were seen as mutually inclusive.

In the contemporary practice of Ayurveda, *Kaumarabhrithya,* the first section of the *Kashyapa Samhita*, is often consulted for the practice of paediatrics, gynaecology, and obstetrics. It is reported to have been written in the 6th century BCE. Ayurvedic texts speak extensively of child development. Illustratively,

a. An environment that is suffused with fresh air, greenery, and ample sunlight promotes the overall well-being of a child.
b. *Vacha,* a rejuvenating herb, bitter in taste, and used in the dried form has positive effects on the nervous system of a child. *Vacha* in Sanskrit means speaking clearly - this herb stimulates intelligence and expression. Taking *Vacha* with honey every day helps improve speech (e.g., memory, diction, tonal quality).

Operationally, the *Vedas* view both mother and child as a symbiotic unit and emphasize *Samskaras*, or rites of passage, along with prescribed developmental approaches and childcare practices. Based on the age of the child, these *Samskaras* sequence the optimal physical and psychological progress in each phase of the life cycle of the child, marked by distinct developmental milestones.

For example, *Annaprashana* (the first feeding of solid food to the baby, usually in the sixth month after birth) and *Vidyarambha* or *Aksharabhyasa* (ceremonially introducing the child to the alphabet) are *Samskaras* related to the development of a child and performed within the first eight years of life. These *Samskaras* are a means for the child to begin to engage in the pursuit of the four *Purusharthas* in the journey of life i.e., the pursuit of *Dharma* (righteousness), *Artha* (wealth), *Kama* (pleasure), and *Moksha* (salvation).

Similar ideas and practices pervade traditions across the country across large cultural regions, e.g., tracing back to the Sangama age and beyond in and around Tamil Nadu, in the Naga and Mizo traditions, and the local traditions in the lower Himalayas.

Evidence of this multicultural lineage of childcare, which was primarily home and family-based and passed on from one generation to the next, is manifested in the rich repertoire of infant and child games and lullabies, children's folk stories, rhymes and riddles, folk toys, and massages for infants, which have been an integral part of childhoods in India.

The close correspondence of the *samskara* stages with modern scientific thought and knowledge regarding childcare and development is remarkable. One example is the *Annaprashana*, or weaning, at six months, which is completely synchronous with the current emphasis on exclusive breastfeeding for the first six months of life.

Traditional folk toys such as spinning tops, flutes, and pouring earthenware vessels were used to demonstrate basic scientific principles to the child in `play mode'. Infant games were largely what we may consider sensorimotor in nature in consonance with the Piagetian developmental stages, and the rhymes, riddles, and stories which children enjoy served to immerse them in a rich language environment. While some of these practices are still visible in extended families, the changes in family structures and the trend towards nuclear families has resulted in these practices getting diluted.

To ensure effectiveness, local relevance, and to keep alive the rich range of India's diverse and vibrant ECCE traditions, developed over millennia, these must also be appropriately incorporated in the curricular and pedagogical framework of ECCE. This would enable a sense of contextual relevance, enjoyment, excitement, local culture, and a sense of identity and community. Moreover, the traditional roles of families in raising, nurturing, and educating children also must be strongly supported and integrated within the curriculum framework for ECCE.

1.2.2 Pioneers and Thinkers

Many illustrious personalities have contributed to educational thought in India. Most of their concerns in education went far beyond the immediate, into questions of ethical living and nation building.

The synopsis below provides a brief perspective of some key thoughts in education. This is by no means an exhaustive list.

a. Savitribai and Jyotiba Phule

Savitribai and Jyotiba Phule were strong proponents of social justice committed to the cause of the marginalized. They established schools for girls and for children from vulnerable communities at a time when this was virtually unheard of.

Jyotiba Phule argued for the expansion and strengthening of primary education with school curriculum designed to meet the requirements of all children, especially the underprivileged. As a pioneer of girls' education in the country, Savitribai Phule ensured that they were taught mathematics and sciences, a markedly different curriculum from what was taught even at many of the schools for boys.

For both of them, the cause of education would always be thought of in the context of a larger social agenda for change in society.

b. Rabindranath Tagore

Rabindranath Tagore's ideas on education emphasized harmony, balance, and total development of the personality. The crux of Tagore's educational philosophy was learning from nature and life. The basic objectives of any worthwhile national education system were, according to Tagore, promoting creativity, freedom, joy, and an awareness of a country's cultural heritage. Tagore's ideas on learning in natural surroundings, an emphasis on field trips and nature walks, and freedom of expression further propagated play and learning of various life skills in early childhood education.

c. Swami Vivekananda

Swami Vivekananda emphasised a holistic preparation of the body, mind, and spirit.

He asks: Is the empirical world all that we need to know? Is this all that we are? Should the improvement of material aspects of human existence all that we need to strive for?

For him, the core of human existence and human possibilities lies in *atman* (the self) and in self-knowledge. There are significant reasons for his emphasis on self-knowledge: one, that self is the essence of what we are and therefore self-knowledge cannot be set aside as unimportant; two, self is what all us humans have and thus both of the subject and object are universal; and three, if self were the essence of human existence, its knowledge would then serve as the condition of human perfectibility.

An ideal of education grounded on this important insight, then, would be nothing less than paving the way for the manifestation of our essence, the seed for our perfection and the foundation for the redefinition of civilizational ideals. Hence, he says that education is the manifestation of the true perfection already latent in human beings.

d. Mahatma Gandhi

Mahatma Gandhi visualized education as a means of awakening the nation's conscience to injustice, violence, and inequality entrenched in the social order. Gandhi recommended the use of the immediate environment, including the mother tongue and work, as a resource for socializing the child into a transformative vision of society. He dreamt of an India in which every individual discovers and realizes their talents and potential by working with others towards restructuring the world, which continues to be characterized by conflicts between na-

tions, within society, and between humanity and nature. He formulated a curriculum called Pre-Basic Education for children less than six years. Learning was based on children's development and interest with a stress on the three Hs - Heart, Hand, and Head. Gandhi's ideas focussed on the community being responsible for its children, education for heart-hand-head, local experiences, and local resource persons as Teachers.

e. Shri Aurobindo

The idea of integral education was central to Shri Aurobindo's teachings. The development of the child is not only the cognitive, but it is also the physical, the vital, the mental, the psychic, and the spiritual.

Education is the integration of traditional and modern ideas. It should be of universal character. According to him, all children have something of the divine in them, something that is unique to them. The Teacher should be able to the see possibilities and guide children in finding themselves and achieving their true potential; he said that the Teacher '.... does not call forth the knowledge that is within; he only shows him where it lies and how it can be habituated to rise to the surface.' Only free and interest-driven learning can nurture the soul of the child.

Aurobindo believed that children's immediate environment, their familiar experiences, and their mother tongue should be the basis of teaching and learning and any new knowledge should be connected to the context that the child is already a part of. According to Aurobindo, the child uses all the five senses and the mind as the sixth sense to learn about the world. It is through these processes that the child begins to develop a sense of consciousness which is related to spiritual and moral development. Only a creative and free learning environment can enable this development.

Sri Aurobindo Ashram's school founded in the 1950s worked on the principle of 'Free Progress,' where many revolutionary concepts of school education were experimented, possibly for the first time in India, including self-paced learning and evaluation, greater emphasis on hands-on education, and absence of textbooks.

f. Jiddu Krishnamurti

Jiddu Krishnamurti often stated that the purpose of education is to bring about freedom, love, 'the flowering of goodness,' and the complete transformation of society.

A constant theme in his writings and lectures was freedom and freedom for Krishnamurti was more inner in character than political. The deeper freedom of the psyche and the spirit, the inner liberation that he felt was both the means and the ends of education. Education was freedom from conditioning, from its vast accumulated knowledge as tradition. Krishnamurti felt that not only was a person's nature and deepest aspects to be uncovered, but each person also had a unique vocation that needed to be discovered; what they really love to do had to be found and pursued, and to do anything else was deprivation of the worst kind, especially if such deprivation was in order to pursue monetary or professional success or other such socio-cultural aspirations.

For Krishnamurti, education was educating the whole person (all parts of the person), educating the person as a whole (not as an assemblage of parts), and educating the person within a whole (as part of society, humanity, nature) from which it is not meaningful to extract that person.

In conclusion: All these ideas have implications for the Foundational Stage, both directly and indirectly. Swami Vivekananda and Shri Aurobindo's focus on holistic education, Rabindranath Tagore's emphasis on nature, Mahatma Gandhi's three Hs, Jiddu Krishnamurti's idea on freedom along with the significance of social justice for Jyotiba and Savitribai - all these ideas speak to the kind of education young children will benefit from.

1.2.3 Evolution of Early Childhood Care and Education in India

ECCE has evolved significantly over the past several decades. While early childhood has always had a special cultural and social place in India, it has gained greater focus in education systems and polices over the years.

Traditionally, early education was family based and focussed on the learning of values and social skills in children. With changes in the socio-cultural and demographic milieu, early childhood education in India has moved from socio-cultural practices which were often informal to a more formalised institution-based setting.

Some of the earliest pioneers of early childhood education in modern India have been Gijubhai Badheka and Tarabai Modak. They were amongst the first Indians in modern education to conceptualise a child-centred approach to the care and education of young children. They were of the view that education must be imparted in the child's mother tongue and should be connected with the child's social and cultural environment and the community should be actively involved in the learning process. Since language is the true vehicle of self-expression, children can freely express their thoughts in the mother tongue or local language. Gijubhai focussed on story-based curricula, especially for socio-emotional and language learning. Contextualizing the views of early education pioneer Maria Montessori, he said, 'early childhood education is the first and foremost step towards building a great nation;' while Tarabai Modak advocated formal organizing for community-based early childhood education programmes.

Although models of kindergarten based on ideas of early education thinker Friedrich Froebel were established in certain towns by the English missionaries in the late 19th century, the first indigenous preschool was set by Gijubhai Badheka in 1916. Tarabai Modak established the Nutan Balshikshan Sangh (New Childhood Education Society) in 1925. The Vikaswadi centre in Kosbad established by Tarabai Modak later became one of the inspiring settings for developing community ECCE programmes in the country.

With Mahatma Gandhi's emerging ideas of Pre-Basic and Basic Education and Montessori's visit to India in 1939, the foundations for organized early childhood education were further strengthened.

1.2.3.1 Early Education in Independent India

Our Constitution provides several fundamental rights and directives that address the welfare and development of children.

The Committee for Early Childhood Education in 1953 emphasized the need for establishing preschools within primary school settings. Under a scheme of the Central Social Welfare Board, several organisations supported the establishment of 'Balwadis' in rural areas to provide services that integrated education, health, and care for families and communities. In 1963-64, several provisions were recommended by the Committee on Child Care to ensure that education in the early years was relevant in the Indian context.

The Kothari Commission (1964) recommended the establishment of preschool centres in the country. With the National Policy on Education and setting up of the National Children's Board, focus on early childhood education as a significant goal that contributes to later schooling was established.

1.2.3.2 Integrated Child Development Scheme

The Integrated Child Development Scheme (ICDS) was launched in 1975 in 33 experimental Blocks in the country. The programme reflected a shift in the focus from welfare-based to development-based services and considering children as a national resource.

For many years now, ICDS is the largest and the most comprehensive programme for ECCE services in the world. The Anganwadis under the ICDS provide health, education, and nutrition services to children less than six years old, mothers, and adolescents in the remotest of areas throughout the country. The six services provided under ICDS are: supplementary nutrition, preschool education, nutrition and health education, immunization, health check-ups, and referral services.

The 1986 National Policy on Education viewed ECCE as significant to human resource development. As per the Policy, it should act as a feeder to primary education and a support system for working women. With greater financial allocation and a focus on integrated and play-based learning for children, the Policy accelerated developments in the early education domain. In order to establish training and support needs of the various functionaries, Government bodies such as the National Council of Educational Research and Training (NCERT) and the National Institute of Public Cooperation and Child Development (NIPCCD) began several research projects across the country to determine the reach and effectiveness of these programmes. Support systems were set up by NIPCCD and the National Council for Teacher Education (NCTE) to provide pre-service and in-service training to Teachers.

Over the years, these efforts have led to significant improvements in ECCE. However, there have also been gaps in implementation and monitoring of the services that have compromised the standards and goals set by these policies and programmes.

1.2.3.3 The Last Two Decades

ECCE came under the purview of the work of the Ministry of Woman and Child Development (MWCD) in 2006. Under MWCD, the National Early Childhood Care and Education Policy (2013) was formulated which became the first policy exclusively for children in the early years. It had a vision to 'promote inclusive, equitable and contextualized opportunities for the optimal development and active learning capacities of all children below 6 years of age.'

This was followed by a National Early Childhood Care and Education Curriculum Framework in 2014 brought out by MWCD that made significant commitments to improving education in the early years. It has further strengthened the country's commitment to providing universal access and quality care and education to young children.

In 2019, the NCERT developed a Preschool Curriculum for three years of preschool education along with Guidelines for Preschool Education.

The most recent has been the transformative NEP 2020 which articulates a very clear goal - every child in the age range of 3 - 8 years must have access to free, safe, high quality, developmentally appropriate early childhood care and education by the year 2025.

1.2.4 Current State

a. Great potential, yet unfulfilled

At the current time, there is a learning crisis in India, where children are enrolled in primary school but are failing to attain basic skills such as foundational literacy and numeracy. A major source of this crisis appears to be occurring well before children even enter Grade 1.

Far too many 6+ year olds are entering Grade 1 with very limited experience of ECCE. Furthermore, far too many children are enrolling in Grade 1 before the age of 6, due to a lack of any suitable preschool options; these are often the children that remain the most behind in the early years school and beyond.

The deficiencies in what our children are experiencing is particularly marked between advantaged and disadvantaged groups. This is because children from more advantaged families have greater access to role models, print materials and awareness, language fluency in the school language, and strong learning environments at home, in addition to better nutrition, healthcare, and, of course, access to preschool education. Providing universal quality ECCE has the potential to give all young children such access, along with all other benefits that arise from high quality ECCE.

b. Diverse institutional settings

At the current time, most early childhood education is delivered in the form of Anganwadis and private preschools, with a very small proportion coming from preschools run by NGOs and other organizations. Where well supported, the Anganwadi system of preschool education, under the aegis of the ICDS, has worked with great success in many parts of India, especially with respect to healthcare for mothers and infants. Anganwadis have truly helped to support parents and build communities; they have served to provide critical nutrition and health awareness, immunization, basic health check-ups, and referrals, and connections to local public health systems, thus setting up crores of children for healthy development and, therefore, far more productive lives.

However, while providing some essential cognitive stimulation, play, and day care, most Anganwadis have remained relatively light on the educational aspects of ECCE. Anganwadis are currently quite deficient in supplies and infrastructure for education; as a result, they tend to

contain more children in the 2-4-year age range and fewer in the educationally critical 4-6-year age range; they also have had few Teachers trained in or specially dedicated to early childhood education.

i. Of the 11.7 lakh government and government-aided schools, 9.3 lakh have primary sections and 1.9 lakh have pre-primary sections. 2.7 lakh schools have a co-located Anganwadi section.[1]

ii. In case of co-located Anganwadis, the children of ages 4-6 years are considered as preschool children; pre-primary sections generally comprise two years of education.

Accurate data for ECCE institutions (play schools/preschools) in the private sector is not available - though anecdotal and observational evidence suggests a proliferation of such institutions - from the very well-resourced to the poorly resourced. Private, and other preschools have largely functioned as downward extensions of school. Though some provide better infrastructure and learning resources for children, most primarily focus on formal teaching and rote memorization, with high pupil-teacher ratios and limited developmentally appropriate play-based and activity-based learning. Most of them have Teachers untrained in early childhood education. They generally are very limited on health and nutrition aspects, and do not usually cater to children below 4 years of age.

A significant proportion of children in India who complete preschool education, public or private, do not have the needed school readiness Competencies when they join school. Thus, in addition to problems of access, quality-related deficiencies such as a developmentally inappropriate curriculum, the lack of qualified and trained Teachers, and less-than-optimal pedagogy have remained major challenges for many, if not most, existing early learning programmes.

Children at ages 6-8 are in school. The challenges during this age - pedagogical, curricular, systemic, and more - remain among the key roots of India's educational challenges. All these matters are addressed frontally in NEP 2020.

c. Unregulated private pre-schools

The National ECCE Policy (2013) clearly states that 'To standardise the quality of ECCE available to children, basic Quality Standards and Specifications will be laid down for ECCE which will be enforced across public, private, and non-governmental service providers. It recommends that a Regulatory Framework for ECCE across all service providers should be developed by the National ECCE Council, to be implemented by 2016.' [2]

However, the private preschool space still remains largely unregulated. A large number of these schools may not have the intent or the means to invest in quality ECCE. At best, they serve as safe places for children to be in for a few hours.

d. Access and Enrolment

Despite the remarkable reach of the ICDS scheme (it is one of the largest such in the world), and availability of other preschools, many challenges remain, most notably, low enrolment and attendance compared to primary school. This issue is also manifest in the phenomenon of 5-year-olds entering Grade 1 in school.

There has been a significant focus on access and enrolment in the past two decades. While access and enrolment in primary school has increased dramatically, enrolment in ECCE programmes still remains low.

i. The overall coverage of the ICDS scheme has been good in terms of access with Anganwadis set up even in remote locations. In 2022, of the 13,99,661 sanctioned Anganwadis, 13,91,004 were reported to be operational.[3]

ii. However, despite widespread availability, enrolment remains low. During 2020-21 of the 19,344,199 students admitted in Grade 1, only 50.9% had preschool experience. Of these, 24.7%, had preschool experience in the same school, 7.9% in another school and 18.3% in an Anganwadi/ECCE centre, respectively.[4]

iii. Enrolment in primary school has been excellent, with GER and NER of 103.3 and 92.7, respectively, reported for 2020-21.[4]

iv. In 2019-20, preschool attendance was reported as being 44% in urban and 39% in rural areas. Overall, 40% of children of ages 2-4 years were reported as attending preschool, with the lowest attendance among children belonging to Socially and Economically Disadvantaged Groups (SEDGs). Among children of ages 6-10 years, 95% attend school. [5]

v. In 21 States in the country, children enter Grade 1 at the age of 5 years. [6]

e. Human resources

While the staffing of the Anganwadis is not complete, it is at high levels. Data for private institutions is not available. The number of institutions offering relevant teacher education programs is low and inadequate.

i. The number of sanctioned posts in Anganwadis is 13,99,696, of which only 5% are vacant. Of the number of sanctioned posts for Anganwadi helpers, 7% are vacant. [7]

ii. The number of teacher education institutions offering programmes preparing Teachers for preschool is extremely low. Only 1% of Teacher education institutions in the private space (which comprise 92% of Teacher education institutions in the country) offer programmes for preschool Teachers. None of the north-eastern States have teacher education programmes for preschool. [8]

f. Nutrition

Good nutrition is an integral part of ECCE. While, over the years, India has made progress on key nutritional indicators of children, significant challenges remain.

i. In India, 36% of children under age five years are stunted (i.e., too short for their age). This is a sign of chronic under-nutrition. 19% of children under age five years are wasted (i.e., too thin for their height), which is a sign of acute under-nutrition, while 32 percent of children under age five years are underweight.[5] This has an impact on the holistic development of children both in the near and long term.

ii. The prevalence of stunting and being under-weight has decreased since 2015-16. Stunting declined from 38 percent in 2015-16 to 36 percent in 2019-21. Over this same time period, the prevalence of wasting has declined from 21 percent in 2015-16 to 19 percent in 2019-21. However, there are wide variations across States and Union Territories with some States having nearly 40% or more children showing stunting.[5]

g. Learning Outcomes

The focus on, and achievement of, educational outcomes across the range of ECCE institutions has been inadequate. These deficits tend to cumulate through later school years.

i. The focus on the education component in Anganwadis has been inadequate for many reasons e.g., time available, capacity of the Teacher. Activities for pre-reading, pre-writing and pre-number concepts are generally very few.

ii. Many children are unable to demonstrate age-appropriate learning levels; this issue persists even as children move through primary school.[9]

iii. NAS 2021 shows declining learning levels at Grade 3, and the accumulation of learning deficit across Grades. Average scores in Primary Grades dipped considerably across language and mathematics as compared to the Upper Primary and Secondary Grades.[9]

h. The way forward

NEP 2020 squarely lays out the challenges of ECCE in India - 'quality ECCE is not available to crores of young children, particularly children from socio-economically disadvantaged backgrounds', and makes a clear commitment to addressing these challenges with strong investment, and thereby providing universal provisioning of quality early childhood development, care, and education 'as soon as possible, and no later than 2030.' (NEP 2020 1.1)

Amongst the multipronged approach of NEP 2020 to transforming the ECCE landscape in the country, this NCF is one of the most important. While investments in infrastructure and other matters may take some time, curricular and pedagogical changes can happen in parallel and often faster. The objective of this NCF is to enable such a transformation in the practice of ECCE across institutions, even as other improvements happen alongside.

1.2.5 Other Ideas that have Shaped Teaching and Learning for this Stage around the World

Across the world, thinkers such as Rousseau, Froebel, Dewey, and Montessori were pioneers in the movement of early childhood education.

Dewey emphasized the wonderful learning opportunities that everyday experiences provided and believed that the child's own instincts, activities, and interests should be the starting point of education. The implication is that the 'here and now' of the child determines what children should be engaged in. Therefore, Teachers must choose topics that are from child's immediate social environment and interest as critical starting points. Froebel believed that action and direct observation were the best ways to educate children. The implication is that an alert (and informed) Teacher, engaged in play and other activities for children, is a critical prerequisite for effective teaching-learning.

In more recent times, scholars in Developmental Psychology and Child Development like Piaget, Bruner, Vygotsky, Urie Bronfenbrenner, and Gardner have further emphasised, based on their research, play and activity as the child's natural modes of learning and that children living and learning in multiple social and cultural contexts influence their learning and development.

Piaget emphasised that children constructed their knowledge by assimilating their experiences and then accommodating them within their own understanding, and that children are adjusting and using new information constantly to make sense of perceptions and experiences.

Vygotsky viewed children as actively engaged in social and cultural experiences, and that there is active interaction between children and more experienced others in the process of learning and development. The implication of this is that multi-level, multi-grade classrooms with small group activities must be encouraged where more informed peers facilitate learning.

Jerome Bruner proposed that children should represent information and knowledge in their memory in three different but interrelated modes, namely, action based, image based, and language/symbol based. He explained how this was possible through the concept of the `spiral curriculum', which involved information being structured so that complex ideas can be taught at a simplified level first where children learn more through concrete experiences, and then revisited at more complex levels later on (hence the spiral analogy). Therefore, topics would be taught at levels of gradually increasing difficulty. The implication of this is that different modes of representation must be used in the class - concrete, picture-based, and language or symbol based. This is the basis of repeating the same theme or topic in early years curricula with the same set of children for a full three-year period, through different experiences.

These ideas helped open the way for sensorial and practical activities forming curricular content. Indian thinkers were also guided by their own observations concerning young children and their interests in activities involving different teaching-learning materials. These insights into the importance of exploration and play, art, rhythm, rhyme, movement, and active participation of the child led to the inclusion of these elements in the classroom.

Section 1.3
Vision of NEP 2020

Box 1.3A

This National Education Policy 2020 envisions an education system rooted in Indian ethos that contributes directly to transforming India, that is Bharat, sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a global knowledge superpower.

The Policy envisages that the curriculum and pedagogy of our institutions must develop among the students a deep sense of respect towards the Fundamental Duties and Constitutional values, bonding with one's country, and a conscious awareness of one's roles and responsibilities in a changing world.

The Vision of the Policy is to instil among the learners a deep-rooted pride in being Indian, not only in thought, but also in spirit, intellect, and deeds, as well as to develop knowledge, skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen.

1.3.1 Overall Guiding Principles in NEP 2020

NEP 2020 states that the purpose of education is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper, and creative imagination, with sound ethical moorings and values. It aims at producing engaged, productive, and contributing citizens for building an equitable, inclusive, and plural society as envisaged by our Constitution.

A good educational institution is one in which every student feels welcomed and cared for, where a safe and stimulating learning environment exists, where a wide range of learning experiences are offered, and where good physical infrastructure and appropriate resources conducive to learning are available to all students. Attaining these qualities must be the goal of every educational institution. However, at the same time, there must also be seamless integration and coordination across institutions and across all Stages of education.

The main guiding principles in NEP 2020 are:

a. Recognizing, identifying, and fostering the unique capabilities of each student, by sensitizing Teachers as well as parents to promote each student's holistic development in both academic and non-academic spheres.

b. According to the highest priority to achieving Foundational Literacy and Numeracy by all students by Grade 3.

c. Flexibility, so that learners have the ability to choose their learning trajectories and programmes, and thereby choose their own paths in life according to their talents and interests.

d. No hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc. in order to eliminate harmful hierarchies among, and silos between different areas of learning.

e. Multidisciplinary and holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge.

f. Emphasis on conceptual understanding rather than rote learning and learning-for-examinations.

g. Conceptual understanding, problem-solving, creativity, and critical thinking to encourage logical decision-making and innovation.

h. Ethics and human and Constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice.

i. Promoting multilingualism and the power of language in teaching and learning.

j. Life skills such as communication, cooperation, teamwork, and resilience.

k. Focus on regular formative assessment for learning rather than the summative assessment that encourages today's 'coaching culture.'

l. Extensive use of technology in teaching and learning, removing language barriers, increasing access for Divyang students, and educational planning and management.

m. Respect for diversity and respect for the local context in all curriculums, pedagogy, and policy, always keeping in mind that education is a concurrent subject.

n. Full equity and inclusion as the cornerstone of all educational decisions to ensure that all students are able to thrive in the education system.

o. Synergy in curriculum across all levels of education from early childhood care and education to school education to higher education.

p. Teachers and faculty as the heart of the learning process - their recruitment, continuous professional development, positive working environments, and service conditions.

q. 'Light but tight' regulatory framework to ensure integrity, transparency, and resource efficiency of the educational system through audit and public disclosure while encouraging innovation and out-of-the-box ideas through autonomy, good governance, and empowerment.

r. Outstanding research as a corequisite for outstanding education and development.

s. Continuous review of progress based on sustained research and regular assessment by educational experts.

t. Rootedness and pride in India, and its rich, diverse, ancient, and modern culture and knowledge systems and traditions.

u. Education is a public service; access to quality education must be considered a basic right of every child.

1.3.2 Paradigm Shifts in NEP 2020 that Guide the NCF

NEP 2020 visualizes three paradigm shifts in School Education which guide the NCF.

a. Transitioning to a more multidisciplinary and holistic education

i. The goal is to develop good human beings, capable of independent rational thought and action, with compassion and humaneness, with courage and creative imagination, based on sound ethical moorings and a rootedness in India.

ii. For the holistic development of the child in all capacities - intellectual, social, physical, ethical, and emotional - there must be strong emphasis in the curriculum on science, social sciences, art, languages, sports, mathematics, and vocational education.

iii. There should be no hard separation between `arts' and `science' streams, or between `academic' and `vocational' streams, or between `curricular' or `extracurricular' activities.

iv. Students will have increased flexibility and choice of subjects to study across the arts, humanities, sciences, sports, and vocational subjects.

v. Necessary knowledge and skills that must be learned by all students include scientific temper, aesthetics and art, oral and written communication, ethical reasoning, sustainable living, Indian knowledge systems, digital literacy and computational thinking, knowledge of the country, current affairs, and critical issues facing the world.

b. Transitioning to an emphasis on critical and analytical thinking rather than rote learning

i. Students must develop the ability to think analytically, participate in discussions, become adept at speaking, writing and other 21st century skills and learn how to learn.

ii. Emphasis must be on learning key concepts, deeper, experiential learning, analysis and reflection, values, and life skills.

iii. The system of assessment in our schooling system must shift from one that primarily tests rote memorization to one that is more formative, promotes learning and development, and tests higher-order skills.

c. Transitioning to a new curricular and pedagogical structure

i. Curriculum and pedagogical approaches should be in line with the developmental stage of the child to be more responsive to the needs of learners at divergent stages of their development and will, therefore, be guided by a 5 + 3 + 3 + 4 design with four Stages:

1) Foundational Stage: Flexible, multilevel, play-based learning

2) Preparatory Stage: Discovery and activity-based learning along with some formal interactive classroom learning in order to lay a solid groundwork in reading, writing, speaking, physical education, art, languages, science, and mathematics

3) Middle Stage: Pedagogical and curricular style of the Preparatory Stage with the introduction of subjects for learning and discussion of more abstract concepts

4) Secondary Stage: Four years of multidisciplinary study with subject depth, focus on analytical thinking, attention to life aspirations and flexibility and choice of subjects for students

1.3.3 NEP 2020 – Specific Goals for Early Childhood Care and Education

a. Achieving universal provisioning of quality early childhood development, care, and education as soon as possible. (NEP 2020, para 1.1)

b. Attainment, by all children of optimal outcomes in the domain of:

   i. Physical and motor development

   ii. Cognitive development

   iii. Socio-emotional-ethical development

   iv. Cultural/artistic development

   v. Development of communication and early language, literacy, and numeracy. (NEP 2020, para 1.2)

c. Institutionalization of flexible, multi-faceted, multi-level, play-based, activity-based, and inquiry-based learning comprising of languages, numbers, counting, colours, shapes, indoor and outdoor play, puzzles and logical thinking, problem-solving, drawing, painting and other visual art, craft, drama and puppetry, music and movement in addition to a focus on developing social capacities, sensitivity, good behaviour, courtesy, ethics, personal and public cleanliness, teamwork, and cooperation. (NEP 2020, para 1.2)

   NEP 2020 states that the Foundational Stage begins at Age 3 and ends at Age 8 i.e., five years of schooling from Preschool to Grade 2. Children should, therefore, begin Grade 1 at the age of 6 years.

1.3.4 Guiding Principles for the Foundational Stage based on NEP 2020

a. Every child is capable of learning regardless of the circumstances of birth or background.

b. Each child is different and grows, learns, and develops at their own pace.

c. Children are natural researchers with great observational skills. They are constructors of their own learning experiences and express feelings and ideas through different representations.

d. Children are social beings; they learn through observation, imitation, and collaboration. Children learn through concrete experiences, using their senses and acting upon the environment.

e. Children's experiences and ways of learning must be acknowledged and included. Children learn best when they are respected, valued, and fully involved in the learning process.

f. Play and activity are the primary ways of learning and development with continuous opportunities for children to experience, explore, and experiment with the environment.

g. Children must engage with material, activities, and environments that are developmentally and culturally appropriate and develop conceptual understanding and problem-solving.

h. Content should be drawn from the experiences of children. The novelty of the content or its challenges should be based on the familiar experiences of children.

i. Content should be suited to the developmental needs of children and should provide several opportunities for fantasy, storytelling, art, music, and play.

j. Equity in issues such as gender, caste, class, and disability should be emphasized in the content.

k. Teachers should facilitate and mediate the learning of the children. Scaffolding should be provided by asking open-ended questions, enabling exploration.

l. Family and community are partners in this process and are involved in multiple ways.

m. Care is central to learning. Children at this age naturally perceive familiar adults as caregivers first. Teachers should be sensitive and responsive to the needs and moods of children. Classroom activities must emphasize the emotional aspect of learning (e.g., through storytelling or art).

Box 1.3B

The Foundational Stage is a single curricular and pedagogical phase which comprises five years of flexible, multilevel, play and activity-based learning for children between 3 and 8 years of age.

NEP 2020 sees these early years as critical to development and learning.

Education in these years must focus on developing foundational capacities and skills. These comprise cognitive, linguistic, and socio-emotional skills for the development of which the early years represent the most sensitive period. They prepare the bedrock for children to learn academic reading and writing and numeracy as they mature as well as provide a foundation for lifelong learning.

1.3.5 Key Recent Initiatives on NEP Priorities

a. NIPUN Bharat

Launched in 2021, NIPUN (National Initiative for Proficiency in Reading with Understanding and Numeracy) Bharat is the National Mission for attaining the goals of Foundational Literacy and Numeracy (FLN) in the country as directed by NEP 2020. NIPUN Bharat aims to achieve FLN by 2026-27 for all children in the country by Grade 3.

The challenges of achieving FLN have become deeper and more widespread because of the learning loss due to school closure during the pandemic. NIPUN Bharat brings a focus on strategic implementation as well as clear indication of the necessary structures, and roles and responsibilities critical for meeting the goals outlined in Chapter 2 of NEP 2020. It has done an excellent job in focussing attention on this critical issue, and work has begun across the country on the same. It must continue full steam on this important task.

The elements of NIPUN Bharat which are curricular in nature (e.g., Curricular Goals, and Competencies) will be aligned to the NCF.

b. Vidya Pravesh

Vidya Pravesh is based on the deep emphasis that NEP 2020 lays on attainment of the goals of FLN for all children. The Policy expresses the concern that since we are yet to attain universal access to ECCE, a large proportion of children already fall behind within the first few weeks of Grade 1. To help overcome this gap in learning, a three-month, play-based school preparation module has been proposed as an interim measure.

Vidya Pravesh has been developed by NCERT for students entering Grade 1. It will be transacted over three months, with four hours a day devoted to familiarizing children with the school environment and to provide experiences for maintaining well-being. Vidya Pravesh will also enable the learning of ethical values and cultural diversity, and interaction with the physical, social and natural environment. In addition to these aspects, Vidya Pravesh will be designed to build the foundations of mathematics, language, and literacy, in alignment with the learning outcomes of NIPUN Bharat.

c. Balvatika

NEP 2020 states that 'prior to the age of 5 every child will move to a "Preparatory Class" or "Balvatika" (that is before Class 1) which has an ECCE-qualified teacher' (NEP 2020 Para 1.6).

The Balvatika programme is envisaged as a one-year programme before Grade 1 which is meant to prepare children with cognitive and linguistic Competencies that are prerequisites for learning to read, write and develop number sense through a play-based approach. NCERT has developed guidelines and processes for three years of preschool including the Balvatika.

In conclusion: This NCF aims to build a curriculum framework for the Foundational Stage that realizes the goals of NEP 2020, taking into account the extensive worldwide research on ECCE, leveraging the rich ECCE traditions of India, and building on the recent initiatives already launched such as NIPUN Bharat and Vidya Pradesh, in order to have an early childhood care and learning eco-system for all of India's children that is second to none in the world.

Section 1.4
How Children Learn at the Foundational Stage

Children are natural learners. They are active, eager to learn, and respond with interest in new things. They have an innate sense of curiosity - they wonder, question, explore, try out, and discover to make sense of the world. By acting on their curiosity, they continue to discover and learn more.

Children learn best through play - through activity and doing. They like to run, jump, crawl, and balance, they enjoy repetition, they respond spontaneously to rhythm, they talk, they ask, and they reason, and answer questions posed to them. They learn by first-hand experiences involving manipulation, exploration, and experimentation.

This playfulness with materials, ideas, thoughts, and feelings helps in developing children's creativity, flexible thinking, and problem-solving abilities, and enhances their concentration, attention, and perseverance. Children improve their thinking, vocabulary, imagination, speaking, and listening skills through play, whether they are reconstructing real situations or creating imaginary worlds.

Learning at this Stage is, therefore, an active and interactive process in which children learn through play and through interaction with other children and more experienced others. Children are actively engaged in their social and cultural experiences, and they constantly adjust and use new information to make sense of their perceptions and their experiences.

Children's playing and playfulness can be nurtured and strengthened through experiences of active participation with others, and with natural, real-world materials that provoke and enhance learning, imagination, creativity, innovation, and problem solving in diverse and unique ways.

It is vital that learning of children at this Stage is anchored by nurturing relationships with those around them. These relationships help children feel safe, become more optimistic, curious, and communicative.

1.4.1 Importance of Play

Play is a child's work. Play by its very nature is something young children like to do and actively engage in. We can say that play and learning are a two-way reciprocal process. Play enables learning by allowing children to remain active, engaged, and involved in social interaction with other adults and children, thus meeting all necessary conditions for learning to occur.

When we observe children engaged in play, we notice the following:

a. There is choice: Children choose and decide their goals when they play (e.g., I would like to complete the puzzle, build the block tower, or make tea in the dollhouse). This choice enables them to be active and engaged.

b. There is wonder: This enables them to think and focus (e.g., the balloon is getting so big, how far into the sky the kite has gone, where did the handkerchief disappear - is that magic?).

c. There is joy: Children are enjoying themselves, are excited about playing, and are loving what they are doing. This enables meaningful social interaction and increases the desire to continue learning.

In this active playing process, children are learning - learning to make sense of the world, learning to solve problems, learning about themselves, learning about others, learning language and mathematics.

Play is thus central to children's learning and development. Learning through play in the classroom provides several opportunities for children, actively catering to all domains of development, all Curricular Goals. Choice, wonder, and joy are key aspects of children's play, and our classrooms would do well to be organized around these three aspects.

While playing, children are active: they organize, plan, imagine, manipulate, negotiate, explore, investigate, and create while making sense of the world. For example, when playing, children:

- Make a plan and follow through*: I want to draw my home and family; what will it look like, and who all should I include in the picture?*
- Learn from trial and error, using imagination and problem-solving skills: *My tower keeps falling; maybe I need to put more blocks at the base?*
- Apply concepts of quantity, science, and movement to real life*: I want to dig a tunnel in the sandpit; maybe I need to wet the sand?*
- Reason in a logical, analytical manner: *While solving picture puzzles, it may be good to start with the pieces on the border first.*
- Communicate with friends, interact with them, and negotiate differences in point of view: *This time I want to play the doctor; maybe next time you could play this role?*
- Derive satisfaction from work or accomplishment: *I completed this sandcastle together with my friend.*
- Be creative: *When I mix red and blue paint, it becomes purple; what will happen when I mix green and blue paint?*

1.4.2 Learning through Play

This NCF emphasises the importance of 'play' at the core of the conceptual, operational, and transactional approaches to curriculum organization, pedagogy, time and content organization, and the overall experience of the child.

The term `play' in the context of ECCE includes all activities that are fun and engaging to the child. This can take the form of physical play, interaction, conversation, question and answer sessions, storytelling, read-alouds and shared reading, riddles, rhymes, or other enjoyable activities involving games, toys, visual art, and music.

Play provides active and stimulating learning opportunities to children, and can be organized in different ways:

a. Free Play

i. Children choose what they would like to play, how they would like to play it and for how long. This is completely child initiated and self-directed, e.g., solving puzzles, role playing with their peers, reading a book.

ii. Teachers play an indirect role in this, e.g., preparing the environment for Free Play, observation of children at play, and helping when asked for support.

iii. Free Play helps children develop social and self-regulation skills, e.g., leading and following, resolving disagreements, being sensitive to others, managing emotions, and sharing material.

iv. However, children cannot learn everything through Free Play. In fact, they often need specific guidance even while they are exploring on their own.

b. Guided Play

i. Children lead the activity, but adults actively facilitate the play activity. For example, if children want to play with clay, the Teacher guides the children on how to use the clay, roll the clay, make a shape. Teachers engage in this exercise with a specific objective, i.e., to help children develop fine motor skills and develop imagination.

ii. Guided Play is considered most effective for enhancing skills related to all domains of development as it opens up opportunities for children and Teachers to learn collaboratively and for the Teacher to engage in discussions and ask questions about children's play. For example, for development of emergent literacy skills, the Teacher introduces a vocabulary activity, like finding rhyming words from a story and talking about it and introduces games for actively using the vocabulary.

iii. Guided Play is considered effective in the early years as it focuses on child-directed learning with gentle but active scaffolding by Teachers to meet specific learning objectives.

c. Structured Play
(also known as Directed Play)

i. These are Teacher-directed, carefully thought-through activities which are fun and playful but with specific rules and guidelines. For example, the Teacher may ask children to create a story by adding a line each to a scenario in a playful manner, and then have them write it, or organize a story card sequence after a read-aloud session.

ii. Structured Play is most useful for focussing on specific Competencies and Learning Outcomes at the Foundational Stage. Teachers provide planned playful learning experiences through games and activities with rules. This could include storytelling, use of rhymes or songs, guided conversations, language and mathematics games, or a guided walk. This form of play has tighter boundaries set by the Teacher especially the learning sequence to be followed, the rules in a game to be followed, and so on.

Play-based learning has been described as a teaching approach involving playful, child-directed elements along with some degree of adult guidance and scaffolded learning objectives.

The Play-based Learning Continuum highlights different levels of teacher involvement in play that can support children's learning in a children-centred and playful environment. The Continuum includes both child-led and Teacher-led activities. Children should get balanced opportunities for play in each year throughout the Foundational Stage including Grade 1 and 2.

Table 1.4A

	Free Play	**Guided Play**	**Structured Play**
Roles	Child-led Child directed	Child-led Teacher supported	Teacher-led Children actively participate
What do Children do?	Children decide all aspects of their play - what to play, how to play it, for how long to play, with whom to play.	Children plan and lead their own play, similarly as they do during free play.	Children actively listen, follow rules, participate in activities and games planned by Teachers.
What do Teachers do?	Teachers organise a stimulating play environment in the classroom, observe children, and help when children ask for support.	Teachers offer support and actively facilitate play. Teachers guide the children in different tasks that they are involved in, ask questions, play with the children to meet specific learning objectives.	Teachers carefully plan activities and games with specific rules to promote Competencies in a learning sequence. Language and mathematics games, nature walks, songs and rhymes are planned on a daily basis.

Some illustrative, but specific, examples of different kinds of play are given below.

Table 1.4B

#	Type of Play	Examples
1	Dramatic Play/ Fantasy Play	Use a small stick for a horse to dramatize a story. Acting like family members, Teachers, Doctors. Dramatizing a favourite character, e.g., *Jhansi ki Rani, Rani Chennamma, Chota Bheem, Shaktimaan.*
2	Exploratory play	*Jodo, Todo, Phir Jodo* - dismantling and assembling objects (e.g., clock, toilet flush, tricycle). Experiments with instruments (e.g., magnets, prism, magnifying glass). Mixing *dals chana, rajma* and sorting. Sand play, Water play.
3	Environment/ Small World play	Using miniature animals, furniture, kitchen set, doctor set to recreate the real world and engage with it. Nature walk identifying trees, plants, insects, birds, animals, sounds, colours.
4	Physical Play	Exploring the body through music, movement, dramatization, outdoor play, balancing, games.
5	Games with Rules	Hopscotch (*Kith Kith, Stapu, Langdi*), Tag, Snakes and Ladders, *Chaupad,* Spinning tops *(Lattu, Buguri*), Marbles *(Goli), Kokla Chapaki, Pitthu, Pallanguzhi.*

1.4.3 Engaging Children for Play

Play - of any kind and organized to be free, guided, or structured - can be enabled and facilitated by various methods (e.g., activities, tools, artefacts) that engage children. Some of the key such methods are mentioned below.

a. Learning through Play - Art, Craft, Music, Movement

Children express themselves, imagine, and create without any inhibition through the arts. The open-endedness and playful qualities of the arts encourage self-expression, intuition, reasoning, imagination, and communication. Children need to be supported with ideas and opportunities to draw, paint, print, create collages, construct structures with blocks. Children also love moving, dancing, exploring, and improvising with their bodies and playing musical instruments.

b. Learning through Play - Conversations, Poems, Stories

Children enjoy learning through conversations, stories, and poems. This helps them build on their natural sense of curiosity, develop deeper thinking skills and values especially when they are encouraged to reflect, predict, question and hypothesize. Asking relevant questions or posing riddles or puzzles also helps scaffold children's learning, challenging them to a new level of understanding.

Listening carefully to what children say, responding meaningfully to their questions, asking them relevant questions to arouse their interest and pushing them to think helps children to learn.

Engaging children through conversations, poems and stories are also a wonderful way to build nurturing relationships with them.

c. Learning through Play - Material, Toys

Playing with toys is something children enjoy and learn from. Toys can be any concrete object that children can manipulate or use to carry out enjoyable and meaningful play activities that are self-directed or facilitated. There is enough experience and evidence to show that children do not need expensive or specialized toys to learn. For younger children, using toys improves motor skills and eye-hand coordination, spatial reasoning, cognitive flexibility, language skills, a capacity for creative, divergent thinking, social competence, and engineering skills.

d. Learning through Play - Using the Immediate Environment

Children are naturally curious and need opportunities to explore, experiment, manipulate, create, and learn about the world around them. Children start exploring their environment through their senses by scanning their environment, touching, holding, and handling whatever they see, listening and responding to sounds, music and rhythm, and getting excited by unusual noises.

Children's thinking evolves as they construct an understanding of people, objects and real-life situations through first-hand experiences. Children bring their own ideas, interests, and beliefs based on their own experiences and contexts as well as their own abilities.

When Teachers and families provide opportunities to children to explore the world around them, experiment and discover, compare, ask questions, make close observations, think and talk about their observations and predictions, they are being helped to satisfy their curiosities and make more discoveries. Sustaining children's natural curiosity to explore the world through first-hand experiences at home and in the school lays the foundation for learning.

e. Learning through Outdoor Play

Children in the early years cannot sit in one place for a long period of time - they need to move around. Playing outside gives them a chance to explore the natural environment, test their physical limits, express themselves and build self-confidence. Most importantly, it helps to build gross motor skills, physical fitness, and balance.

Children enjoy the space, the freedom to run and jump and climb and kick and fall. Playing outside also helps many children to relax and calm down. And it is a lot of fun!

In conclusion: Children at this Stage learn through play which includes a wide range of activities and stimulating experiences. All these activities and experiences need to be organized in a manner that children remain engaged along with being emotionally and mentally motivated to learn.

Within this broad idea of play, it must be noted that children also learn by observing, doing, listening, reading, speaking, writing, thinking, and practicing. They learn new concepts, interpret them, and connect this newly introduced knowledge with their existing knowledge. Explicit and systematic teaching, some practice and application is necessary especially once children begin literacy and mathematics. However, all of this, must adhere to the basic requirement of children's positive engagement with strong elements of fun and play.

Please see Chapter 4 for details on how this would unfold in the classroom

Section 1.5
Context of Schooling at the Foundational Stage

In the learning and education of children, families, peers, communities, other aspects of the environment, and the education system including Teachers, play significant roles.

However, it is important to realize that the characteristics of the role of each of these five and their relative influence change as children grow. For example, the centrality of the role of the mother and the immediate family in infancy is well understood. The influence of peers tends to increase through later childhood and even more in young adults.

The 5+3+3+4 curricular and pedagogical structure of NEP 2020 spanning the ages 3-18, accounts for and is informed by these changes in the relative roles of the five influencers and sources of learning and education. In particular, this NCF for the Foundational Stage accounts for the age-appropriate requirements for ages 3-8, e.g., as care being the basis of education at this Stage.

1.5.1 Significance of Family and Community

Most children in India grow up surrounded by people within and outside the immediate family. While parents play a pivotal role in the child's growing up, bringing up children is often a shared experience with the extended family including grandparents, neighbours, and others in the close community.

The predominant influence during this period are the relationships in the family especially those that ensure adequate nutrition, social engagement, and emotional support. Stable, nurturing, and responsive families contribute to healthy development and positive learning for children. For example, ensuring children eat the right kind of food, talking to children in the mother tongue to improve their vocabulary, narrating traditional stories with good values or local history.

The relationship and engagement between the child and the family during the early years is one of the most powerful predictors of a child's development. Families are children's first teachers - the quality of parent-child relationships and interactions can influence children's learning and development deeply in the early years.

School and classroom processes in the early years must take this critical factor into account. Schools, family, and community are partners in the child's development and learning.

1.5.2 Centrality of the Local and Indian Context

Most children grow up with stories, songs, games, food, rituals, and festivals special to their families and community along with local ways of dressing or working or travelling or living that are an integral part of their everyday lives.

While contemporary ideas of teaching and learning must be part of the curriculum, it is critical that the diverse experiences of children, their families, and their communities find a place in the classroom. Local stories, songs, food, clothes, art, music, and dances should be an integral part of the learning experiences of children in school.

At the Foundational Stage, curriculum must be contextualised and rooted with content and pedagogy derived from children's life experiences that reflect the familiar i.e., the cultural and social context in which the child is growing. This helps build deep connections with children and develop ownership of both Teachers and children of the curriculum.

All curriculum and pedagogy must be strongly rooted in the Indian and local context and ethos - in terms of culture, traditions, heritage, customs, language, philosophy, geography, ancient and contemporary knowledge, societal and scientific needs, indigenous and traditional ways of learning - in order to ensure that education is maximally relatable, relevant, interesting and effective for children. Stories, arts, games, sports, examples, problems should be chosen to be rooted in the Indian and local context. Ideas, abstractions, and creativity will indeed best flourish when learning is thus rooted.

In particular, all languages must be welcomed and celebrated in the classroom, with children encouraged to express themselves, interact, and learn through their home languages during the Foundational Stage. Opportunities to listen and speak in various contexts using the home language and other languages (with the home or familiar language as scaffolding) best help children to learn oral expression. Children must be given sufficient time and opportunity to contemplate and articulate their thoughts and feelings to teachers as well as to parents and peers in order to develop strong language, cognitive, and socio-emotional skills. Stories, poems, rhymes, songs, games, drama, particularly those rooted in the local and Indian context, help make language learning fun, exciting, relevant, effective, as well as culturally fulfilling.

For more detailed rationale and strategies for ensuring proper and continued use of the home language while also developing multilingualism and language proficiency and literacy in the classroom, please see Chapter 3 and Chapter 4, Section 4.5.

1.5.3 Institutional Diversity - Ground Reality

Institutional settings enable a systematic approach to holistic development of children in close partnership with parents, families, and community. They bring together traditional wisdom, research-based knowledge, practical experience, and the local context to design and implement learning opportunities for children to nurture strong roots for lifelong learning.

Children in the Foundational Stage currently learn in a variety of institutional environments.

a. Children from Ages 3 to 6 years could be in an Anganwadi, Balvatika, a stand-alone preschool or as part of a larger school that has Grades 1 and 2.
b. Children from Ages 6 to 8 years (Grades 1 and 2) could be in a school that has classes only from Grade 1 onwards or a school that has classes from preschool onwards.

The infrastructure and learning resources available in each of these environments are different. Teachers in each of these institutional environments are different. They are recruited through different processes; their qualifications are different and their in-service professional development processes are different. In some settings, their range of responsibilities are different.

While the curriculum and pedagogy of the entire Foundational Stage must be constructed in a continuum across all the five years beginning at Age 3 and ending at Age 8, the different institutional structures have been taken into account while thinking through specifics of the curricular design.

Thus, this NCF aims to be applicable for all institutional settings of the Foundational Stage.

Chapter 2

Aims, Curricular Goals, Competencies and Learning Outcomes

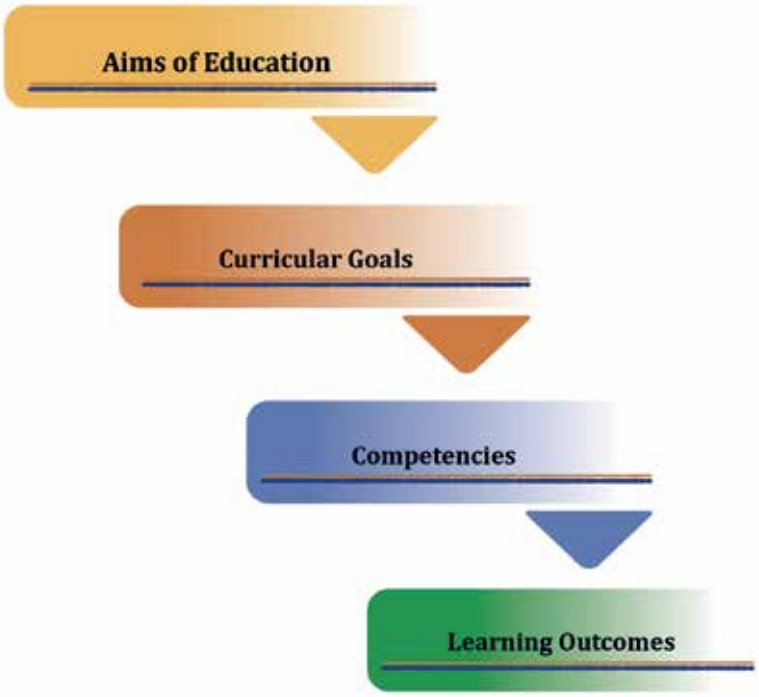
This Chapter describes and discusses the Learning Standards for the Foundational Stage of the NCF. These Learning Standards are derived from the Aims of Education as envisioned by NEP 2020.

Section 2.1 defines the terms Aims, Curricular Goals, Competencies, and Learning Outcomes, together referred to as Learning Standards. Clarity and distinction between goals, competencies and outcomes is important for all stakeholders and this Section attempts to provide that clarity.

Section 2.2 describes the processes of derivation from Aims to Learning Outcomes and the role of different stakeholders in these processes.

Section 2.3 articulates the Curricular Goals, Section 2.4 outlines the Competencies for each Curricular Goal, and Section 2.4 gives a few Illustrative Learning Outcomes for some of these Competencies, across the Foundational Stage.

A more complete set of Illustrative Learning Outcomes for all the Competencies can be found in Annexure 1.



Section 2.1
Definitions

This Section defines some of the key terms used in this Chapter.

a. **Aims of Education**: Aims are educational vision statements that give broad direction to all deliberate efforts of educational systems – curriculum development, institutional arrangements, funding and financing, people's capacities and so on. Aims of Education are usually articulated in education policy documents. For example, NEP 2020 states that *"The purpose of the education system is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper, and creative imagination, with sound ethical moorings and values. It aims at producing engaged, productive, and contributing citizens for building an equitable, inclusive, and plural society as envisaged by our Constitution."*

b. **Curricular Goals**: Curricular Goals are statements that give directions to curriculum development and implementation. They are derived from Aims and are specific to a Stage in education (e.g., the Foundational Stage). National Curriculum Frameworks which guide the development of all curricula state the Curricular Goals. For example, in this NCF *"Children develop effective communication skills for day-to-day interactions in two languages"* is a Curricular Goal for the Foundational Stage.

c. **Competencies:** Competencies are learning achievements that are observable and can be assessed systematically. These Competencies are derived from the Curricular Goals and are expected to be attained by the end of a Stage. Competencies are articulated in Curriculum Frameworks. However, curriculum developers can adapt and modify the competencies to address specific contexts for which the curriculum is being developed. The following are examples of some of the Competencies derived for the above Curricular Goal in this NCF - *"Converses fluently and can hold a meaningful conversation"* and *"Understands oral instructions for a complex task and gives clear oral instructions for the same to others."*

d. **Learning Outcomes:** Competencies are attained over a period of time. Therefore, interim markers of learning achievements are needed so that Teachers can observe and track learning and respond to the needs of learners continually. These interim markers are Learning Outcomes. Thus, Learning Outcomes are granular milestones of learning and usually progress in a sequence leading to attainment of a Competency. Learning Outcomes enable Teachers to plan their content, pedagogy, and assessment towards achieving specific Competencies. Curriculum developers and Teachers should have the autonomy to define Learning Outcomes as appropriate to their classroom contexts, while maintaining the connection to the Competencies.

The following table is an example of Learning Outcomes derived for the Competency *"Converses fluently and can hold a meaningful conversation"* in the Foundational Stage:

Table 2.1A

	A	B	C	D	E
	Competency: Converses fluently and can hold a meaningful conversation				
	Ages 3 - 8				
1	Listens attentively and speaks in short conversations with familiar people around	Initiates conversations in daily life with peers and teachers in a variety of school settings	Engages in conversations based on events, stories, or their needs and asks questions	Engages in conversations, waits for their turn to speak, and allows others to speak	Maintains the thread of the conversation across multiple exchanges
2	Expresses their needs and feelings through short meaningful sentences	Narrates daily experiences in simple sentences and asks simple questions, using what/when/how/whom, etc.	Narrates daily experiences in elaborate descriptions and asks why questions too	Engages with non-fictional content read aloud or discussed in class, is able to link knowledge from their own experiences, and talks about it	Engages in discussion about a topic and raises and responds to questions

Section 2.2
From Aims to Learning Outcomes

This NCF strongly emphasises the importance of the clear flow-down that must be there from Aims of Education to Curricular Goals to Competencies to Learning Outcomes. Each set must emanate from the immediately higher level, while ensuring full coverage of the objectives at the immediately higher level.

This is a process of 'breaking down and converting' relatively abstract and consolidated notions to more concrete components, in order to make them useable in the practice of education. This process, including other considerations that must be accounted for in this 'flow-down,' are described in this Chapter. It is only such coherence, coverage, and connection arising from a rigorous 'flow-down,' from Aims of Education to Learning Outcomes, that can align syllabus, content, pedagogical practices, institutional culture, and more to achieving what we want from education.

This is simply because in the everyday life of the Teacher and institutions, efforts are (or can be) made towards achieving very specific, observable, and short-period learning objectives which are marked as Learning Outcomes; and which when arising from the process of 'flow-down' described, guide the trajectory of educational efforts towards the attainment of Competencies, which in turn accumulate to Curricular Goals, and which taken together would fulfil the relevant Aims of Education.

NEP 2020 has articulated the Aims of Education. This NCF has drawn the Curricular Goals from these Aims, with other relevant considerations. The Competencies then have been drawn from these Curricular Goals and the Learning Outcomes from those Competencies.

It must be noted that the Competencies in Section 2.4 and the Learning Outcomes in Section 2.5 and Annexure 1 are illustrative.

Curriculum developers should carefully consider the set of Competencies in the NCF and use these, after making relevant changes where and if required. Given the relative stability and cross-cutting relevance of Competencies across contexts (and time), there may be fewer requirements for changes in the Competencies articulated in the NCF; however, decisions on this matter should be carefully considered by curriculum developers.

The Learning Outcomes are far more contextual and will, therefore, require close attention and contextualisation, for the curriculum or syllabus being developed. The developers may use the sets articulated in the NCF, but this must be done after due consideration, and there must be no hesitation to use more relevant sets.

Thus, the States and their relevant institutions, and other institutions responsible for curriculum and syllabus development, would need to conduct a rigorous exercise of such a flow-down, to arrive at the full set of Learning Standards for their use.

2.2.1 From Aims to Curricular Goals

The Aims and vision of education as envisaged by NEP 2020, give direction to the intended educational achievements for the Foundational Stage. The three specific sources from NEP 2020 for arriving at the Curricular Goals for the Foundational Stage of the NCF are:

a. Broad Aims of Education as articulated

b. Domains of development as imagined both in Indian traditions of inquiry and modern science

c. Focus on Foundational Literacy and Numeracy

NEP 2020 has quite clearly articulated the purpose of education, and this has been quoted in Section 1.3 of Chapter 1 of this NCF. These Aims of Education are applicable for all Stages of school education and higher education and give direction and focus to the Foundational Stage. They are the first important source for arriving at the Curricular Goals for this Stage.

The Foundational Stage is for children between the ages of 3 to 8 years. There has been a long tradition of inquiry both in India and other cultures on the various domains of development that have been observed in young children that are both natural and desirable.

The Panchakosha description in the *Taittiriya Upanishad* is one of the earliest articulations of the different domains of development of the human being. These descriptions remain relevant along with the more modern understanding that has emerged through Developmental Biology, Psychology and Cognitive Neurosciences.

Physical Development, or *annamaya kosha* and *pranamaya kosha* understood together, includes bodily awareness and embodied learning through active engagement of all sensorial perceptions.

Emotional and spiritual development or the *manomaya kosha* involves becoming aware of and skilfully regulating our emotions. The domain of **Socio-emotional and Ethical Development**, thus emerges as an important domain of development both from the Indian traditions and current research.

The development of the intellect, or *vijnanamaya kosha*, is emphasized to engage meaningfully with the cognitive and conscious aspects of human experience. The domain of **Cognitive Development** captures this aspect of development.

Anandamaya kosha, or experience of transcendence, is best addressed for this age group through arts and culture. Thus, including the domain of **Aesthetic and Cultural Development**, makes the educational experience holistic and complete.

NEP 2020 has emphasised on Foundational Literacy and Numeracy as an 'urgent and necessary prerequisite to learning.' This emphasis has been realised by giving special attention to Foundational Literacy through the domain of **Language and Literacy Development** and Foundational Numeracy through the domain of Cognitive Development.

Finally, the Foundational Stage is also seen as setting the foundations for formal schooling. The development of **Positive Learning Habits** that are more appropriate for formal school environments becomes another important Curricular Goal for this Stage.

Thus, the Curricular Goals for the Foundational Stage have been derived by giving equal consideration to the vision and details of NEP 2020, and the domains of development.

2.2.2 From Curricular Goals to Competencies

The four main sources for arriving at the list of Competencies for the Foundational Stage are:

a. Curricular Goals

b. Current research literature appropriate for the Foundational Stage

c. Experience of various educational efforts in the country

d. Our context, which includes resource availability, time availability, institutional, and Teacher capacities

All stakeholders in school education should have clear visibility of the Competencies that are expected to be achieved. Keeping track of progress in the attainment of these Competencies for every child in the Foundational Stage would allow school systems to ensure that all children receive appropriate learning opportunities towards reaching the Curricular Goals of the NCF.

2.2.3 From Competencies to Learning Outcomes

Learning Outcomes are interim markers of learning achievement towards the attainment of Competencies. They are defined based on the specifics of the socio-cultural contexts, the materials and resources available, and contingencies of the classroom. A set of illustrative Learning Outcomes have been defined in this NCF, based on the broad understanding of the context our education system.

These Learning Outcomes need to be seen as enabling guidelines for Teachers and school leaders and not as constraining demands on them. They have the autonomy to reimagine the Learning Outcomes based on their contexts.

Section 2.3
Curricular Goals

The Curricular Goals for the Foundational stage have been outlined in this Section. **These Curricular Goals can be reviewed periodically, informed by the experience of implementation of the NCF, and development and changes in national aspirations.**

The Curricular Goals have been numbered as CG 1, CG 2 and so on.

Domains	Curricular Goals
Physical Development	**CG-1** Children develop habits that keep them healthy and safe **CG-2** Children develop sharpness in sensorial perceptions **CG-3** Children develop a fit and flexible body
Socio-Emotional and Ethical Development	**CG-4** Children develop emotional intelligence, i.e., the ability to understand and manage their own emotions, and respond positively to social norms **CG-5** Children develop a positive attitude towards productive work and service or 'Seva' **CG-6** Children develop a positive regard for the natural environment around them
Cognitive Development	**CG-7** Children make sense of the world around through observation and logical thinking **CG-8** Children develop mathematical understanding and abilities to recognize the world through quantities, shapes, and measures
Language and Literacy Development	**CG-9** Children develop effective communication skills for day-to-day interactions in two languages **CG-10** Children develop fluency in reading and writing in Language 1 **CG-11** Children begin to read and write in Language 2
Aesthetic and Cultural Development	**CG-12** Children develop abilities and sensibilities in visual and performing arts and express their emotions through art in meaningful and joyful ways
In addition to the above Curricular Goals based on the domains of development, developing Positive Learning Habits is another relevant Goal for the Foundational Stage.	
	CG-13 Children develop habits of learning that allow them to engage actively in formal learning environments like a school classroom

Box 2.3A

Ethics, Values and Dispositions

Introducing an ethics component into the curriculum early on and throughout the years of school is extremely important in helping students to build character, grow up into good human beings, lead productive and happy lives, and contribute positively to society.

Thus, basic ethical reasoning should be included throughout the school curriculum. Students should be encouraged to think at a young age about the importance of 'doing what is right.' and should be given a logical framework for making ethical decisions e.g., 'Will this hurt somebody? Is that a good thing to do?' These are questions children should be encouraged to ask themselves before making decisions as part of the everyday classroom process. In later Stages of education, this framework would then be expanded along broader themes (e.g., tolerance, non-violence, honesty, equality, empathy) with a view to enabling children to embrace ethical values in conducting one's life, formulate a position or argument about an ethical issue from multiple perspectives, and use ethical and moral practices in all daily activities.

Incorporation of ethical and moral awareness and reasoning in the curriculum can be promoted through direct as well as indirect methods. In the direct method, there can be classroom activities, discussions, and readings specifically designed to address ethical and moral awareness and reasoning. In the indirect method, the content of languages and literature can incorporate discussion particularly aimed at addressing ethical and moral principles and values such as patriotism, sacrifice, non-violence, truth, honesty, peace, righteous conduct, forgiveness, tolerance, empathy, helpfulness, courtesy, cleanliness, equality, and fraternity.

As consequences of basic ethical reasoning, traditional Indian values of *seva, ahimsa, swacchata, satya, nishkam karma*, honest hard work, respect for women, respect for elders, respect for all people and their inherent capabilities regardless of background and respect for the environment will be inculcated. Scientifically speaking, these qualities are extremely important for society and for.

The process and the content of education at all levels will also aim to develop in all students Constitutional values, and the capacities for their practice, amongst all students. This goal will inform the curriculum as well as the overall culture and environment of every school. Some of these Constitutional values are: democratic outlook and commitment to liberty and freedom; equality, justice, and fairness; embracing diversity, plurality, and inclusion; humaneness and fraternal spirit; social responsibility and the spirit of service; ethics of integrity and honesty; scientific temper and commitment to rational and public dialogue; peace; social action through constitutional means; unity and integrity of the nation, and a true rootedness and pride in India with a forward-looking spirit to continuously improve as a nation.

Recent research drawing from a large number of scientifically rigorous cross-sectional and longitudinal studies demonstrates that introduction of socio-emotional learning (SEL) in schools can lead to improved cognitive and emotional resilience and promote constructive social engagement. Examples of activities that inculcate socio-emotional learning include carrying out work or tasks in teams or groups, organizing games across different ages, role-playing and conflict resolution, discussing stories of kindness, and reflective writing, speaking, and art. Explicit training in socio-emotional skills ensures

higher levels of attention and emotional and cognitive regulation that are necessary not only for well-being, empathy towards others, and lower stress, but also leads to increased academic success.

Inspiring lessons from the literature and people of India should be incorporated throughout the curriculum as relevant. India has a long history and tradition of people and stories that beautifully teach us about so many of the above-mentioned core values and socio-emotional skills. Children should be given the opportunity to read and learn from the original stories of the *Panchatantra, Jataka, Hitopadesh,* and other fun fables and inspiring tales from the Indian tradition. Discussions on the Indian Constitution and the values of Equality, Liberty, and Fraternity that it espouses must be a part of classroom process. Stories from the lives of great Indian heroes of history are also an excellent way to inspire and introduce core values in children.

In the NCF for the Foundational Stage, the learning expectations of ethics, values and dispositions are embedded as part of classroom processes, in the selection of content, the pedagogical approaches, and the assessment tools. Of course, there are Competencies that lend themselves to values e.g., 'Shows kindness and helpfulness to others (including animals, plants) when they are in need' is a Competency that embodies the value of compassion. Given the developmental Stage that children are in, it is well understood that children learn these ideas and their practices best when it is an integral part of the teaching-learning process.

Section 2.4
Competencies

The Competencies for each of the Curricular Goals have been defined in this Section. These Competencies are to be seen as guidelines for curriculum developers and should not be considered as prescriptive.

The Competencies have been numbered as C-1.1, C-1.2, and so on.

2.4.1 Domain: Physical Development

CG-1 Children develop habits that keep them healthy and safe	C-1.1 Shows a liking for and understanding of nutritious food and does not waste food C-1.2 Practices basic self-care and hygiene C-1.3 Keeps school/classroom hygienic and organised C-1.4 Practices safe use of material and simple tools C-1.5 Shows awareness of safety in movements (walking, running, cycling) and acts appropriately C-1.6 Understands unsafe situations and asks for help
CG-2 Children develop sharpness in sensorial perceptions	C-2.1 Differentiates between shapes, colours, and their shades C-2.2 Develops visual memory for symbols and representations C-2.3 Differentiates sounds and sound patterns by their pitch, volume, and tempo C-2.4 Differentiates multiple smells and tastes C-2.5 Develops discrimination in the sense of touch C-2.6 Begins integrating sensorial perceptions to get a holistic awareness of their experiences
CG-3 Children develop a fit and flexible body	C-3.1 Shows coordination between sensorial perceptions and body movements in various activities C-3.2 Shows balance, coordination, and flexibility in various physical activities C-3.3 Shows precision and control in working with their hands and fingers C-3.4 Shows strength and endurance in carrying, walking, and running

2.4.2 Domain: Socio-Emotional and Ethical Development

CG-4 Children develop emotional intelligence, i.e., the ability to understand and manage their own emotions, and responds positively to social norms	C-4.1 Starts recognising 'self' as an individual belonging to a family and community C-4.2 Recognises different emotions and makes deliberate efforts to regulate them appropriately C-4.3 Interacts comfortably with other children and adults C-4.4 Shows cooperative behaviour with other children C-4.5 Understands and responds positively to social norms in the classroom and school C-4.6 Shows kindness and helpfulness to others (including animals, plants) when they are in need C-4.7 Understands and responds positively to different thoughts, preferences, and emotional needs of other children
CG-5 Children develop a positive attitude towards productive work and service or 'Seva'	C-5.1 Demonstrates willingness and participation in age-appropriate physical work towards helping others
CG-6 Children develop a positive regard for the natural environment around them	C-6.1 Shows care for and joy in engaging with all life forms

2.4.3 Domain: Cognitive Development

CG-7 Children make sense of world around through observation and logical thinking	C-7.1 Observes and understands different categories of objects and relationships between them C-7.2 Observes and understands cause and effect relationships in nature by forming simple hypothesis and uses observations to explain their hypothesis C-7.3 Uses appropriate tools and technology in daily life situations and for learning
CG-8 Children develop mathematical understanding and abilities to recognize the world through quantities, shapes, and measures	C-8.1 Sorts objects into groups and sub-groups based on more than one property C-8.2 Identifies and extends simple patterns in their surroundings, shapes, and numbers C-8.3 Counts up to 99 both forwards and backwards and in groups of 10s and 20s C-8.4 Arranges numbers up to 99 in ascending and descending order C-8.5 Recognises and uses numerals to represent quantities up to 99 with the understanding of decimal place value system C-8.6 Performs addition and subtraction of 2-digit numbers fluently using flexible strategies of composition and decomposition C-8.7 Recognises multiplication as repeated addition and division as equal sharing C-8.8 Recognises basic geometric shapes and their observable properties C-8.9 Performs simple measurements of length, weight and volume of objects in their immediate environment C-8.10 Performs simple measurements of time in minutes, hours, day, weeks, and months C-8.11 Performs simple transactions using money up to INR 100 C-8.12 Develops adequate and appropriate vocabulary for comprehending and expressing concepts and procedures related to quantities, shapes, space, and measurements C-8.13 Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements

2.4.4 Domain: Language and Literacy Development

CG-9 Children develop effective communication skills for day-to-day interactions in two languages [1]	C-9.1 Listens to and appreciates simple songs, rhymes, and poems C-9.2 Creates simple songs and poems on their own C-9.3 Converses fluently and can hold a meaningful conversation C-9.4 Understands oral instructions for a complex task and gives clear oral instructions for the same to others C-9.5 Comprehends narrated/read-out stories and identifies characters, storyline and what the author wants to say C-9.6 Narrates short stories with clear plot and characters C-9.7 Knows and uses enough words to carry out day-to-day interactions effectively and can guess meaning of new words by using existing vocabulary
CG-10 Children develop fluency in reading and writing in Language 1 (L1)[2]	C-10.1 Develops phonological awareness and blends phonemes/ syllables into words and segment words into phonemes/ syllables C-10.2 Understands basic structure/format of a book, idea of words in print and direction in which they are printed, and recognises basic punctuation marks C-10.3 Recognises all the letters of the alphabet (forms of akshara) of the script and uses this knowledge to read and write words C-10.4 Reads stories and passages with accuracy and fluency with appropriate pauses and voice modulation C-10.5 Reads short stories and comprehends its meaning – by identifying characters, storyline and what the author wanted to say – on their own C-10.6 Reads short poems and begins to appreciate the poem for its choice of words and imagination C-10.7 Reads and comprehends meaning of short news items, instructions and recipes, and publicity material C-10.8 Writes a paragraph to express their understanding and experiences C-10.9 Shows interest in picking up and reading a variety of children's books
CG-11 Children begin to read and write in Language 2 (L2)	C-11.1 Develops phonological awareness and are able to blend phonemes/syllables into words and segment words into phonemes/syllables C-11.2 Recognises most frequently occurring letters of the alphabet (forms of akshara) of the script and uses this knowledge to read and write simple words and sentences

1 This should be the goal for most classrooms given the need for multilingualism, but in circumstances where Language 2 is very unfamiliar to the children, many of the Competencies (from C-9.1 to C-9.7) can be in the emergent stage for Language 2 by the end of the Foundational Stage and consolidated in the early Preparatory Stage.

2 L1 is the home language/mother tongue/familiar language and L2 is the less familiar language. The idea of L1 and L2 are explained in more detail in Chapter 3

2.4.5 Domain: Aesthetic and Cultural Development

CG-12 Children develop abilities and sensibilities in visual and performing arts and express their emotions through art in meaningful and joyful ways	C-12.1 Explores and plays with a variety of materials and tools to create two-dimensional and three-dimensional artworks in varying sizes C-12.2 Explores and plays with own voice, body, spaces, and a variety of objects to create music, role-play, dance and movement. C-12.3 Innovates and works imaginatively to express a range of ideas and emotions through the arts C-12.4 Works collaboratively in the arts C-12.5 Communicates and appreciates a variety of responses while creating and experiencing different forms of art, local culture, and heritage

2.4.5.1 Positive Learning Habits

CG-13 Children develop habits of learning that allow them to engage actively in formal learning environments like a school classroom.	C-13.1 Attention and intentional action: Acquires skills to plan, focus attention, and direct activities to achieve specific goals C-13.2 Memory and mental flexibility: Develops adequate working memory, mental flexibility (to sustain or shift attention appropriately), and self-control (to resist impulsive actions or responses) that would assist them in learning in structured environments C-13.3 Observation, wonder, curiosity, and exploration: Observes minute details of objects, wonders, and explores using various senses, tinkers with objects, asks questions C-13.4 Classroom norms: Adopts and follows norms with agency and understanding

Section 2.5
Illustrative Learning Outcomes

In this Section, one Competency from each domain has been elaborated further into Learning Outcomes. This is a sample to guide how Learning Outcomes for the Foundational Stage can be articulated.

a. Domain: Physical Development

i. Curricular Goal (CG-2): Children develop sharpness in sensorial perceptions

1) Competency (C-2.1): Differentiates between shapes, colours, and their shades

Table 2.5A

	A	B	C	D	E
	C-2.1: Differentiates between shapes, colours, and their shades				
	Ages 3 - 8				
1	Differentiates and names the primary colours (red, blue, yellow) and other common colours in their environment (black, white, brown)	Differentiates shades within primary colours and secondary colours (e.g., light blue, dark blue, light green, dark green)	Attempts to predict resulting colour when two colours are mixed (e.g., blue and yellow makes green, or red and white makes pink)	Predicts resulting colour when two colours are mixed	Experiments and use colours in art forms and drawings, decorating, display
2	Groups objects based on their colour (e.g., all red things together)	Groups objects based on dimension - length, breadth, height (e.g., all long things together)	Groups objects based on combinations of visual characteristics of colours and shapes (e.g., all red triangles together, all large green leaves together)	Makes patterns, solves puzzles, plays games using identification and grouping of various shapes, colours and shades	

b. Domain: Socio-Emotional and Ethical Development

i. Curricular Goal (CG-5): Children develop a positive attitude towards productive work and service or 'Seva'

1) Competency (C-5.1): Engages in age-appropriate work at school and/or at home

Table 2.5B

C-5.1: Demonstrates willingness and participation in age-appropriate physical work towards helping others

Ages 3 - 8

	A	B	C	D	E
1	Places materials and toys back in their appropriate locations after use	Assists the teacher and organizes the classroom	• Cleans their own plates or tiffin after eating food • Performs appropriate chores at home and/or at school (e.g., putting away toys, watering plants)	Germinates and takes care of seedlings of local trees	• Assists teachers to create TLM • Helps in the kitchen for cleaning and cutting

c. Domain: Cognitive Development

i. Curricular Goal (CG-8): Children develop mathematical understanding and abilities to recognize the world through quantities, shapes, and measures

1) Competency (C-8.4): Arranges numbers up to 99 in ascending and descending order

Table 2.5C

	A	B	C	D	E
	C-8.4: Arranges numbers up to 99 in ascending and descending order				
	Ages 3 - 8				
1	Arranges familiar incidents/ events/ objects in an order (e.g., daily routine, story, shapes, size - 2 to 3)	Arranges objects in order based on size up to 3 levels and verbalizes their levels (Big – Small – Smaller; Long – Short – Shorter; Tall – Short – Shorter)	Arranges up to 5 objects based on size/length/ weight in increasing or decreasing order	Arranges the same set of objects in different sequences based on different properties of objects (e.g., by size/length/ weight/colour)	Arranges numbers from a given set of numbers in ascending and descending order

d. Domain: Language and Literacy Development

i. Curricular Goal (CG-10): Children develop fluency in reading and writing in Language 1

1) Competency (C-10.5): Reads short stories and comprehends their meaning – by identifying characters, storyline and what the author wants to say – on their own (L1)

Table 2.5D

C-10.5: Reads short stories and comprehends their meaning – by identifying characters, storyline and what the author wanted to say – on their own (L1)

Ages 3 - 8

	A	B	C	D	E
1	Listens to "Read Alouds" and responds to questions posed by the Teacher	Participates in "Shared Reading" along with the Teacher and in the discussions about the reading.	Participates in "Guided Reading" along with the Teacher and in the discussions about the reading.	Begins "Independent Reading" of books of equal textual and visual content	Begins "Independent Reading" of books of more textual content than visual content
2	Reads picture books and identifies objects and actions	Reads picture books and identifies characters and plots and narrates the story in short sequence	Reads books aloud with short simple texts and uses both visual cues and text to infer and retell the story with accurate sequence and elaboration	Begins to read unfamiliar story books and comprehend with guidance from the Teacher Identifies plots, and characters	Reads and identifies characters, plots, sequences, and point of view of the author

e. Domain: Aesthetic and Cultural Development

i. Curricular Goal (CG-12): Children develop abilities and sensibilities in visual and performing arts and express their emotions through art in meaningful and joyful ways

1) Competency (C-12.1): Explores and plays with a variety of materials and tools to create two-dimensional and three-dimensional artworks in varying sizes

Table 2.5E

C-12.1: Explores and plays with a variety of materials and tools to create two-dimensional and three-dimensional artworks in varying sizes

Ages 3 - 8

	A	B	C	D	E
	Grasps relevant art materials, tools, and instruments	Explores a variety of grasps and grips while using art materials, tools, and instruments (e.g., sticks, seeds, pebbles, stones, chalk, thread, pencils, brushes, crayons, powder, scissors)		Able to vary pressure while using tools to create dark and light impressions/ marks/ lines	
1	Explores large and small sizes while creating marks, lines, scribbles, and other 2D and 3D imagery in visual artworks		Creates large scale work (e.g., floor rangolis, wall murals, sculptural forms) in collaboration with peers, facilitators, and local community	Able to scale own work in large and small sizes, based on available space or materials (e.g., creating a small clay doll, or a big paper doll)	
	Creates forms and imprints by mixing materials (e.g., mud and water, sand and water, flour and water, paint and water)	Creates three-dimensional forms by rolling and patting materials like clay or dough	• Creates collages by combining materials of varying consistencies, colours, and textures in one's own arrangement • Creates three-dimensional arrangements/ assemblages by combining a variety of found materials and objects		
2	Creates imprints using blocks, stencils, found objects and natural materials		Creates simple patterns using blocks, stencils, found objects and natural materials	Creates patterns by combining and arranging materials in a variety of shapes, forms, textures, and colours	Creates a variety of textures with one material through its manipulation (e.g., clay, cloth, paper, rubber, wood)

i. Curricular Goal (CG-13): Children develop habits of learning that allow them to engage actively in formal learning environments like a school classroom.

1) Competency (C-13.4): Classroom norms: Adopts and follows norms with agency and understanding

Table 2.5F

C-13.4: Classroom norms: Adopts and follows norms with agency and understanding

Ages 3 - 8

	A	B	C	D	E
1	Observes and imitates adult behaviour for classroom norms	Follows classroom norms with Teacher's cues	• Follows and assists others in following classroom norms • Creates do-it-yourself (DIY) classroom job charts/posters with the support of Teachers and follows it	• Participates in discussing the classroom norms and behaves according to norms • Creates DIY classroom job charts/posters and follows it	• Participates in establishing classroom norms and behaves according • Creates DIY classroom job charts/posters and illustrates them as well; follows it responsibly

A more exhaustive set of Illustrative Learning Outcomes is in Annexure 1.

As mentioned at the beginning of this Chapter in Section 2.2, the Learning Outcomes that are to be finally used must be carefully developed by the relevant curriculum developers and institutions which would include the SCERTs, NCERT and others.

Chapter 3

Approach to Language Education and Literacy

The recommendations of NEP 2020 on language learning were based on the latest research on language acquisition. Following NEP 2020, the overarching aim of the NCF's Approach to Language Education is to ensure that children learn languages in such a way so as to optimize learning (across all domains and areas), communication skills (both oral and written), and socio-emotional skills, during their early years and throughout their lives.

Section 3.1
Principles

The key principles behind the NCF's approach to Language Education, drawing from NEP 2020, are as follows:

a. Children learn spoken language most rapidly between the ages of 0 and 8.

It is well known that children pick up oral language most rapidly during the first eight years of life. There are sensitive periods for language acquisition during these years which must not be lost. Delaying the learning of languages in the early years makes it more difficult for children to acquire new languages later on (not impossible but harder).

b. Multilingualism has both cognitive and societal/cultural benefits.

Research clearly indicates that exposure to multiple languages in oral form provides significant cognitive and socio-emotional stimulation to the child that are beneficial. Furthermore, children are able to pick up multiple oral languages in the early years, and easily keep track of which language is which and which language should be spoken to whom.

Children best attain multilingual skills when a rich and natural environment of meaningful and purposeful use of languages is created around them. Young children are not best equipped to learn a language through formal teaching. This is an important distinction that can help curriculum developers, Teacher educators, and Teachers to design and provide appropriate early language learning experiences for young children in the Foundational Stage.

Multilingualism is pervasive in India and most children are exposed to more than one language from their early years. In our multilingual country and world, becoming multilingual early on also makes it easier to communicate across many communities over one's lifetime.

A key part of the NCF is thus aimed at instilling foundations of excellent multilingual skills orally in children as early as is possible in a manner that is developmentally appropriate.

c. While spoken language comes naturally to young children, written language comes less naturally, and thus the concept of reading and writing must be learned.

As already mentioned, a key aspect of the NCF is to immerse children in multiple oral languages early. However, the concept of reading and writing - including the concepts of phonemes (small units of sound) and graphemes (the smallest units in a writing system), and the correspondence between them - is optimally taught first through a single language, which ideally is the home language whenever possible.

Once the concept of reading and writing and basic literacy skills are developed in a child, further scripts can be introduced over time and are more easily learned. While visual familiarity with more than one script in the early years is considered beneficial, initial learning of the skills of literacy is best carried out first through a single language.

Basic skills of literacy include decoding, i.e., the association of phonemes to corresponding graphemes (consonants, vowels, and their combinations) to sound out unknown words. Reading and writing is best taught first through one familiar language - a language that children understand and speak well. Early literacy skills develop best and most quickly on a foundation of strong oral language skills.

d. Young children learn and grasp nontrivial concepts most quickly and deeply in their home language/mother tongue/familiar language.

Research evidence confirms the importance of teaching children in their mother tongue during the foundational years and beyond, for the following reasons:

i. Children come to a preschool or school after the age of three years, by which time they have already accumulated significant competence in the home language to enable them to listen, comprehend, and empathize with others, speak, and express their feelings and thoughts, and successfully interact with others meaningfully. Over these three years children have, along with 'picking up the language', also simultaneously been able to develop a host of other essential skills, particularly in communication, information processing, and social interaction as well as skills and concepts foundational to creativity, critical thinking, literacy, and numeracy. The children take these foundational skills with them into preschool and school; these serve as essential building blocks that get built upon further, to enhance the child's cognitive and socio-emotional competence, when the child's home language or mother tongue is used to teach other subjects all through the Foundational Stage and beyond. Thus, the home language serves as a facilitator for all learning and enables children to form connections with prior learning and home learning.

ii. On the other hand, if the child is taught with a new or unfamiliar language as the medium of instruction, the 3-4 years of experience that the child comes with gets completely disregarded as a new language is taught from the beginning, at the cost of negating the foundational experiences, skills, and learning that the child has already accumulated, thus reversing the entire learning process. There is indeed overwhelming evidence from across the world, including from India, that shows that children who study through their mother tongue or a home or familiar language perform better in other subjects such as Mathematics and Science compared with their peers who are taught through an unfamiliar language as the medium of instruction.

iii. Research clearly indicates that any skills and concepts gained in the child's home language do not have to be retaught when they learn a new language alongside or subsequently.

iv. The mother tongue or home language is more than just a mode of communication for the child, but also relates closely with the child's personal, social, and cultural identity. Rejecting this rich experience through imposition of a new language as the medium of instruction is neither fair to children nor desirable at the early stage of their education, whendevelopment of self-confidence, positive self-esteem, and sense of autonomy and capability is a vital objective that Teachers need to work towards.

v. Studies show that, for young children, positive and supportive relationships and an emotionally secure environment is crucial for learning, which is fostered through the use of a familiar language as medium of instruction.

vi. Young children learn through listening, talking, and interacting with others. Only a familiar language (a language they understand well and also speak) can provide a natural,communicative environment that is necessary for their holistic development. Hence, the language of interaction should predominantly be the child's mother tongue/ home language/familiar language through the Foundational Stage.

vii. NEP 2020 has identified the paradigm shift to interactive learning, emphasis on creativity and discovery as opposed to rote memorisation. A corollary to this is to discourage the use of an unfamiliar language as the medium of instruction at least through the Foundational Stage.

Hence, another key aspect of this NCF is to respect the child's home language, encourage the child to communicate and learn in their home language, and use the home language as the language for teaching to the extent possible. Bilingual or multilingual approaches in the early years - with the home language as the main language - enable children to do efficient code switching across languages.

e. Language forms a critical aspect of cultural awareness and expression, which is considered among the major competencies important to develop in children.

The competencies of cultural awareness and expression provide children with a sense of identity, belonging, as well as an appreciation of other cultures and identities. International studies over the last decade have demonstrated that cultural awareness/expression and a positive cultural identity in children leads to increased levels of prosocial behaviour, self-esteem, self-development, as well as tolerance and appreciation of other cultures.

It is through the development of a strong sense and knowledge of their own cultural history, languages, arts, and traditions that children can build a positive cultural identity and self-esteem, in addition to developing related competencies such as communication and creativity. Thus, cultural awareness and expression are important contributors to both individual as well as societal well-being.

This is a further reason that home languages, local languages, and other Indian languages, with their oral and written literatures and traditions, form an important aspect of children's educational experiences for their overall holistic development and well-being.

Section 3.2
NCF's Approach to Language Education and Literacy in the Foundational Stage

In order to be in consonance with the principles and goals of language education as outlined in NEP 2020, the NCF's Approach to Language Education in the Foundational Stage is thus as follows.

a. Since children learn concepts most rapidly and deeply in their home language, the primary medium of instruction would optimally be the child's home language/mother tongue/familiar language (also referred to below as L1) in the Foundational Stage.

This should be the approach in both public and private schools.

To ensure that each child has continued proper use of their L1 when they begin at the Foundational Stage, it is essential to have Teachers (e.g., from the local community) who not only understand the language but also the local culture and traditions. More than at any other Stage, Teachers of the Foundational Stage should be proficient in the child's L1.

Parents should also be included as partners in the educational processes of children. This makes the schooling process more enjoyable and more secure for children, and also enables and fosters a closer home-school relationship, which is important for a child's holistic development and learning.

For the age group of 3-8 years, most learning occurs through play, listening, and talking. This should necessarily be conducted in the children's L1.

The inclusion of children's L1 as the primary language of interaction and teaching for the Foundational Stage would require development and publication of good children's literature in these languages, especially in languages where there is a dearth of such literature. This may be taken up as a National Programme for the languages that are already used as mediums of instruction, as well as for additional languages that would be introduced as mediums of instruction or for extensive and formal use for teaching and learning at the Foundational Stage. Several State government and non-government organisations are also working on development and publication of children's materials including storybooks, poem posters, and big books in a large number of home languages.

While L1 is the best option as the language used for teaching, often it is not possible due to various factors, including the availability of Teachers who are proficient in the relevant languages. This is seen in many contexts, including dispersed communities across geographies or in remote areas.

In such scenarios, L1 should be used to support a child's transition to the new language, which is the language used for teaching, without losing out on their previous learning; for this the Teachers would have to be supported and encouraged to develop familiarity with the children's language.

It may also be possible to find supplementary options that can support a child's transition to the new language, which is the medium of instruction, without losing out on their previous learning, by having someone consistently supporting them in helping them make connections.

For example, having a parent come in every day by rotation, engaging community youth as support for Teachers, and panchayats organizing community centres to carry out play-based activities as after-school programmes, are options that can be considered based on what works best for each community. Teachers who come from a really different language background can also aim to pick up some basic vocabulary and communication ability in the children's languages to build bridges and ease transitions.

In all classrooms where Teachers have a satisfactory proficiency of children's languages, the children's L1 should be formally used for teaching and learning.

Whenever children's L1 are not used officially as the language for teaching other subjects, they should still be used formally, at least in the oral domain, and at the initial stages of learning to read and write and serve as a bridge to the language used for teaching other subjects. This ensures that children's L1 are always used in the classroom, both by the Teacher and children for thinking and reasoning, higher order comprehension, expression, and communication.

Finally, a child must NEVER be discouraged from speaking, or made to feel ashamed by, their home language. On the contrary, use of home languages should always be celebrated, appreciated, and encouraged, both in spirit and (to the extent possible) in practice, by Teachers, peers, parents, school functionaries.

As far as possible, Teachers should allow and encourage children to respond and discuss in their L1, read simple storybooks to children in their L1, and explain difficult words or concepts through their L1. Languages need not be taught and learned in watertight compartments at separate times. There can be a mixing of languages and children should get an opportunity to learn new concepts and languages using the foundation of their L1 as scaffolding.

b. Children should be exposed to and immersed in multiple oral languages (also referred to as L2 and L3 below) from an early age. Schools will aim to ensure the presence of Teachers, and parents so that at least two or preferably three languages present with children on a regular basis.

Children in the first 6 to 8 years of life have the ability to readily pick up new languages if exposed to them, particularly as oral communication in meaningful contexts. Thus, adopting bilingual or multilingual approaches within the early grades with L1 as the main language of teaching enables children to do efficient code switching across languages.

Exposure to multiple languages in oral form can also provide significant cognitive stimulation to the child that is beneficial, including the development of creativity and critical-thinking abilities, in addition to socio-emotional skills, as sounds and gestures by Teachers, parents, peers, and others are transformed in a child's mind into words, phrases, and sentences.

The use of children's context and experiences and themes that are close to children's hearts for oral language and literacy development is important when an unfamiliar language is being used or taught formally. Songs, poetry, games, drama, total physical response (TPR), and other creative interactions - such as narration (and discussion) of experiences, places, events, and favourite items/toys - develop aesthetic and creative sensibilities while also making language-learning more fun and also thereby more effective.

Some of the strategies that can be used in the Foundational Stage include: balanced and strategic use of children's L1 and L2/L3 that is aligned to the development of children's language

proficiencies at any point in time; providing a natural setting for conversation and other oral language development activities for L2/L3; acceptance and encouragement to the mixed use of L1 and L2/L3, including children's cultural and contextual knowledge in teaching-learning; and taking help of children's L1 in teaching how to read and write. Efforts must be made to produce high-quality learning materials in children's L1.

For young children to acquire skills of speaking fluently in their L2 or L3 (which could also be English), a natural, communication-focussed approach that also uses scaffolding of their L1 needs to be adopted. Some effective strategies include use of action songs, rhymes, fun games, short conversations in phrases and simple sentences (with the scaffold of real objects or pictures), adopting a multilingual approach where familiar stories are first told/read aloud by the teacher in L1 several times and can then be retold in L2 or L3, using the target words and structures, and using stories and read-alouds with repetitive sentence structures.

Children should develop strong oral language skills (including listening comprehension, adequate vocabulary, and oral expression) in at least two languages by the end of the Foundational Stage. These oral language skills will form a critical aspect of learning to independently read and write in at least one language (and script) by the end of the Foundational Stage.

c. The concept of reading and writing is initially developed through the language R1, which is preferably the home language L1 whenever possible. (We define R1 to be the language in which a child first learns the concept of reading and writing, R2 the second such language, R3 the third such language, and so on.)

The concept of reading and writing (i.e., emergent literacy and emergent reading comprehension and written expression) are developed in a child through the development of oral language; meaning-making (including making sense of and interpreting images and other symbol-systems such as gestures, facial expressions, art, music, dance, drama, games); and exposure to print material.

Therefore, in addition to the emphasis on early development of oral language skills in the Foundational Stage, there must also be exposure to plenty of print material early on, particularly in R1 (which preferably is L1, but may be L2 in certain scenarios as described in point a. above). This print material would start with picture/story books. Letters of the alphabet of R1 or R2, and simple words and phrases in each language, accompanied by pictures, shapes, and numbers, can be displayed on the walls of the school at children's eye level. In some cases, R1 and R2 may have the same letters, but in some cases they would be different.

Because reading and writing does not come naturally the way oral language does, there must be plenty of 'handholding' through meaningful contexts. Children will experience a progression from picture books with word labels (in order to gain visual exposure to written words), to read-aloud books (which are read aloud to the child to develop a sense of correspondence between phonemes and graphemes), to shared reading, to guided reading, and finally to more independent reading of simple and then more complex stories and text (via e.g., graded readers). Picture and story books should be fun, relatable, colourful, and engaging, and rooted in the local and Indian context, traditions, and literature, in order to maximize children's interest.

Teaching phonics/decoding can be made fun through games and conversation (e.g., what other words do you know that use the sound 'b,' what other sounds other than 'b' can you make with your lips, what word is the same backwards and forwards).

The approach to writing should be that it is a form of expression, and not a task. As such, the first step for a child is drawing, then labelling the drawing (which may initially involve 'inventive spelling' which is an important step in meaningful literacy), then realizing that one can be more expressive through multiple words (phrases), and finally moving towards complete sentences. Practice can be conducted through workbooks, games requiring some writing, and other forms of guided writing.

Both meaning-focused and skills-focused activities are required in Grades 1 and 2 when children are learning reading and writing. Teachers need to arrive at a good balance between the teaching of individual skills (e.g., decoding, fluency, spelling, writing correctly etc.) and providing opportunities for the meaningful use of whole language for reading, writing and oral language development activities.

There should be workbooks that give children the opportunity for regular practice of reading and writing. The worksheets in them should also be graded.

d. Once the concept of reading and writing is developed in a child in R1, use of additional scripts can be gradually introduced. The aim is to be an independent reader and writer in R1 by age 8 (Grade 3).

The approach to reading and writing is the same for R2 and R3 - starting with read-alouds, games, and activities to understand the phoneme-grapheme correspondence, to shared reading to guided reading to writing exercises that eventually lead to independent writing, with poems, songs, literature, drama, games, and other creative interaction employed copiously to enhance learning.

Because the concept of reading and writing has already been learned through R1, the process of learning a new script is conceptually much easier for R2 and R3.

Interactive language classes involving R1, R2, and R3 will continue with the support of L1 continuing as above if different than R1–R3. The aim must be to focus on higher-order thinking questions as children progress in their speaking, reading, and writing abilities across all languages in the Foundational Stage and beyond.

Box 3.2A

Summary of Key Ideas related to Language in the Foundational Stage

The medium of instruction will be the home language (L1) in the Foundational Stage to the extent possible. Where not possible, measures will be taken to support the child's formal use of L1 in teaching- learning activities, and to build bridges from L1 to the school languages.

Children will be immersed in multiple oral languages as early as is possible, which will be enhanced through interactive activities (e.g., conversation, TPR, poetry, songs, drama, narration of experiences). The aim will be to achieve oral language proficiency (not necessarily at the same level) in two languages by Grade 3.

The concept of reading and writing is initially developed through R1, which is preferably L1 whenever possible, via early exposure to oral language development, meaning-making activities, and print materials. Understanding of phonemes and graphemes and the correspondence between them (decoding) will be developed through games and interactive exercises.

- *Reading skills will first be developed in R1 through picture and story books, read-aloud books, shared reading, guided reading, and more independent reading through graded readers, with interactive activities involving poetry, songs, literature, drama, games to enhance learning. In cases where R1 is not L1, support with L1 will be arranged to the extent possible.*
- *Writing skills will be developed in R1 through drawing, labelling, inventive spelling, writing workbooks, games requiring writing, and other forms of guided writing, followed by more independent writing of words, phrases, and then complete sentences in meaningful and creative contexts.*

The approach to subsequently developing reading and writing skills in R2 and R3 will be similar. The aim will be to achieve literacy skills in R1 by Grade 3.

Note: In this Chapter, we have conceptually distinguished the language in which the child will learn to read and write in school (R1 and R2) from the languages which the child may be familiar with orally (L1, L2).

However, since L1 and L2 are commonly understand as the language of learning in school, we have used L1 and L2 as synonymous with R1 and R2 in the rest of the document.

Chapter 4

Pedagogy

A safe, secure, comfortable, and happy classroom environment can help children learn better and achieve more at the Foundational Stage. Care and responsiveness with ample opportunities to experience, experiment and explore are the hallmark of pedagogy at this Stage.

Section 4.1 outlines the principles of pedagogy for the Foundational Stage based on which the rest of the Chapter is articulated. Planning is the first step to good teaching as described in Section 4.2. Children blossom when their relationship with their Teacher is a nurturing one - Section 4.3 focusses on how this can be achieved in the classroom. Learning through play is what children of this age do - Section 4.4 details the various ways of learning through play. Section 4.5. focuses on the teaching of literacy and numeracy. The entire pedagogical process is enabled by a positive classroom culture, which is described in Section 4.6. Section 4.7 touches upon the classroom environment that could support such pedagogy.

Section 4.1
Principles of Pedagogy

Principles of pedagogy underly all decisions related to teaching strategies in the classroom appropriate for the Foundational Stage.

The following principles inform classroom planning and instruction:

a. A safe and stimulating environment is fundamental to development and learning at this Stage.

i. Activities are joyful and encourage the use of all the child's senses.

ii. Classrooms provide variety and challenge.

iii. Physical and emotional safety is paramount while making pedagogical choices.

iv. Classrooms are clean, cheerful, well-ventilated, and well-lit learning spaces.

b. Play is central to learning and development at this Stage.

i. Play can be free, guided, or structured.

ii. Conversations, stories, music, music, movement, arts, craft, toys and games are part of play, and of the methods to engage children in play - other methods could be innovated.

iii. Outdoor play is actively encouraged.

c. Nurturing relationships between Teacher and child are the basis of teaching and learning.

i. Listening carefully to children and 'being with them' fully is important.

d. Physical development is very important at this Stage.

i. Classroom activities encourage gross and fine motor skills, and physical movement.

ii. This also helps socio-emotional and cognitive development.

e. Every child learns at their own pace and learning needs are addressed individually.

i. Different children respond to the same situation differently.

ii. The same child may, at different times, respond differently to similar situations.

iii. Opportunities are provided for all children to participate in the classroom in ways that suit each child best.

f. Children at the Foundational Stage are most comfortable and learn best in their home language.

i. The language of instruction and transaction is the child's home language/mother tongue/familiar language.

ii. Use of home languages is celebrated and encouraged in the classroom.

iii. Transition into school languages, when different from home languages, is gentle and always scaffolded by the home language.

iv. Children are encouraged to express themselves as much as possible and never judged or reprimanded for the language that they speak in.

g. Learning experiences in the classroom are deeply connected to children's lives and their contexts.

i. Local stories, rhymes, songs, games, crafts, material are used extensively.

ii. Children's home language is welcome and indeed encouraged in the classroom.

h. Learning experiences are designed to build on children's previous understanding.

i. Planning moves from simple to complex ideas and concepts based on this principle.

ii. Using the home language facilitates this

i. Classroom processes address all domains of development.

i. Balance is maintained between activities pertaining to physical development, socio-emotional and ethical development, cognitive development, aesthetic and cultural development.

Section 4.2
Planning for Teaching

Teaching is a deliberate act carried out with the intention of bringing about learning in children. This deliberate act needs to be well planned. Planning is central to good teaching.

Planning includes construction and organization of classroom tasks as per competencies and outcomes to be achieved, pedagogy to be followed, resources to be used and assessment to be carried out. Planning also includes support activities for children, home assignments, and displays in the class relevant to what is being taught.

Plans are made for the entire academic year, for the term, for the week, for the day, and for a lesson. The State/District/School may have the responsibility for coming up with the annual and term plans. Teachers must, therefore, plan for the week, the day, and the lesson.

4.2.1 Components of a Teaching Plan

Good planning requires understanding of Curricular Goals, Competencies and Learning Outcomes to be achieved along with prior learning of the children for whom the plan is being made, and available teaching learning materials and content to be used.

The major components of a teaching plan are:

a. Competencies, Learning Outcomes and intended lesson objectives.

b. Teacher-directed, Teacher-guided and/or child-led activities to achieve objectives.

c. Duration and sequence of activities.

d. Content and material to be used in the activities.

e. Classroom arrangements e.g., seating, displays, arrangement of material.

f. Specific strategies for children who need extra help.

g. Methods of assessment.

Box 4.2A

The five-step learning process - 'Panchaadi' - is a good guide to formulating the sequence that a Teacher may adopt in planning for instruction:

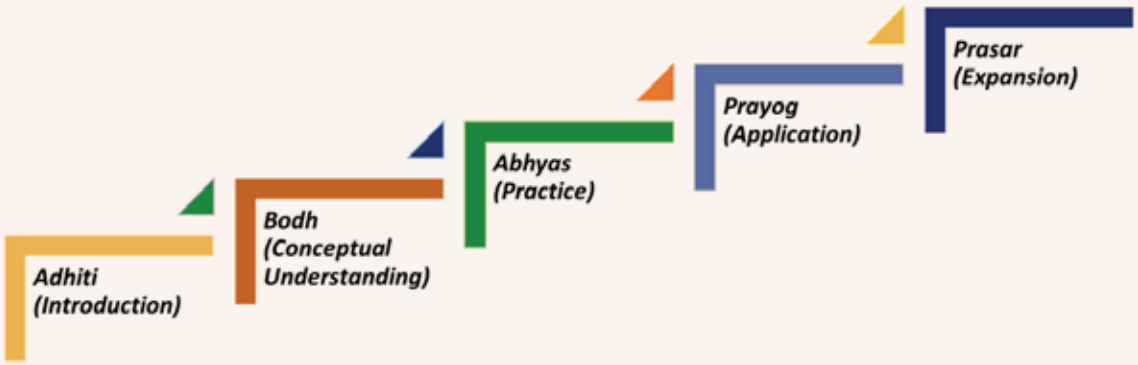


Figure 4.2A: Panchaadi, a five-step learning process

- ***Aditi (Introduction):*** *As a first step, the Teacher introduces a new concept/topic by establishing a connection with the child's prior knowledge. Children gather relevant information regarding the new topic with the help of the Teacher by asking questions, exploring, and experimenting with ideas and material.*
- ***Bodh (Conceptual Understanding):*** *Children try to understand core concepts through play, enquiry, experiments, discussion, or reading in the second step. The Teacher observes the process and guides the children. The teaching plan has the list of concepts to be learnt by the children.*
- ***Abhyas (Practice):*** *The third step is about practice to strengthen understanding and skills through a range of interesting activities. Teachers can organize group work or small projects to reinforce conceptual understanding and attainment of competencies.*
- ***Prayog (Application):*** *The fourth step is about applying the acquired understanding in the child's everyday life. This can be accomplished through various activities and small projects.*
- ***Prasar (Expansion):*** *The fifth step is about spreading the acquired understanding through conversations with friends, telling each other new stories, singing new songs, reading new books together and playing new games with each other. For each and every new topic learnt, a neural pathway is created in our brain. Sharing knowledge strengthens our learning. A neural pathway is incomplete if we don't teach what we have learnt. Teaching makes learning clear and long-lasting.*

4.2.2 Other Important Considerations for Planning

a. Planning for Differentiated Instruction

How can a Teacher plan her class in a way that engages children with varying interests and capabilities meaningfully, and encourages better learning?

One way to think about this is differentiated instruction i.e., tailoring the teaching process according to the individual needs of children. Content, methods of learning, material, and assessment may be different for different children.

It is often difficult to do this for individual children, especially in a large class. In that case, the Teacher could identify small groups of children who have similar needs and address them differently as a group.

Before planning for this, it is important for the Teacher to observe the children carefully and gather as much information as possible about them (e.g., how they interact with each other, why they choose to play a particular game, what kind of conversations they have, how they work with material, how they use oral language and their response to the written word).

Some possibilities for planning:

i. If the Teacher is planning a session on playing with blocks, she could plan for different children doing different things. Some children build towers, and the Teacher can ask them why they are building a tower, how many blocks they have used, what colours they have used, and why. Some children can be asked to identify blocks of the same colour or the same size and compare blocks of different sizes and colours. Other children can be encouraged to use blocks to make something e.g., bed, house, or to use them individually for play e.g., mobile phone or car.

ii. If the Teacher plans to show children plants in the garden or potted plants in the classroom, some children can be prompted to point out differences between plants in terms of size, texture, smell, and colour. Other children can be asked to touch the plants and name their parts. Others can be asked to draw the plant. Children who can read could help other children place labels appropriately once the picture is done.

iii. While planning a session about butterflies, the Teacher could use a storybook on butterflies for one group of children, a small audio-visual clip for another, an interesting butterfly puzzle for a third group and a butterfly model for a fourth.

iv. For children who are at different levels of reading, the Teacher could plan to use different texts or reading material.

v. The Teacher could plan to use worksheets of varying levels, starting with simple worksheets and progress to more complex ones according to what different groups of children in the class are able to do.

b. Scaffolding and Gradual Release of Responsibility

Children can easily learn new knowledge when systematic support from experienced children or adults is provided. Learning new knowledge should be a challenge, but the challenge should be within the reach of children - something that relates to their existing knowledge and can be done with the support of an experienced person.

Hence, to learn, children need systematic scaffolding. Scaffolding refers to providing support, structure, and guidance during instruction. This scaffolding can be provided through a 'Gradual Release of Responsibility' (GRR) where first, Teachers model or explain ideas or skills; after which children and Teachers work together on the same ideas and skills where the Teacher provides guided support; and finally, children practice individually and independently. [10]

Activities can be planned and designed to follow Gradual Release of Responsibility.

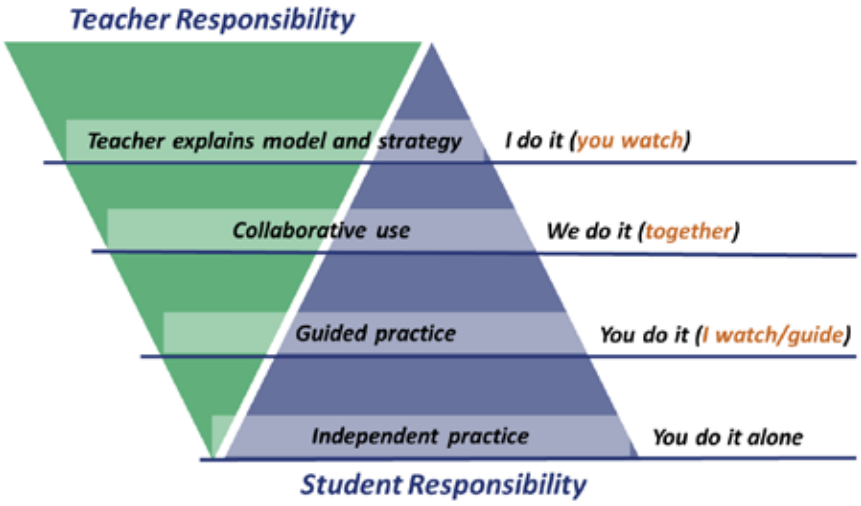


Figure 4.2B: Gradual Release of Responsibility

Process of Gradual Release of Responsibility:

- Step 1: I do - the Teacher demonstrates/explains/models the main ideas or skills.
- Step 2: We do - the Teachers and children work together on the ideas or skills.
- Step 3: You do - the children practice or work on the ideas or skills independently.

This method works well for literacy and numeracy learning but it is important to remember that every skill of literacy or numeracy cannot be learnt in this way. Teachers may use their judgement on what could work best in their classroom and build it into their teaching plan.

c. Homework

When we say the word 'homework,' the immediate picture that comes to mind is a child bent over a book industriously writing page after page for hours.

For children at the Foundational Stage, that is exactly what should **not** happen!

Homework can be fun and provides a different kind of interesting challenge - it can also help to connect school with the child's home. Some examples of what children could do at home are given below.

i. Ask your grandparents their names and the names of their parents - talk about it at school.

ii. Observe the rangoli drawn outside your house or your neighbour's house - try and draw the same in school.

iii. Help your mother or father or aunt or neighbour - talk about it at school.

iv. Look around near your home and see the different colours of flowers - talk about it at school.

v. Borrow a story book from the class library, spend time with it at home, look at the pictures, try to read the words and understand the story.

The Teacher may plan for this only after children are well settled in school and have got into a comfortable routine. While doing this, the Teacher must also ensure that children can do these tasks on their own and they do not require parents or others to do anything on their behalf.

Please see Annexure 2 for illustrations on Planning

Section 4.3
Building a Positive Relationship between Teachers and Children

When we walk into our classrooms, what do we see? Who are these wide-eyed children?

They are bright, quick to observe and interested in everything around them. They constantly ask questions. Sometimes they can quietly observe something for a long time. At other times, they lose interest in a matter of minutes. Sometimes they need to jump and move around. At other times, they enjoy a quiet story. Sometimes they cry and clamour to go home. At the same time, they like to be comforted and cajoled, and are willing to be convinced to stay back! They can be curious and considerate, delightful, and determined, affectionate, and adventurous, funny, and fearless.

At this Stage, for many children, it could also be their first experience of spending several hours away from their homes. Children require tenderness, nurturing and love. Working with them, being with them, caring for them means enjoying all the very different personalities that they are!

Teachers need to be warm and genuine, patient and calm, understanding and empathetic - we need to give our children unhurried time and attention.

Children must feel that they belong, they can trust, they must feel free to try out and explore and, therefore, learn better.

4.3.1 How can Teachers Build a Positive Relationship with Children

It is our job as Teachers to ensure that children settle and enjoy their time at school. A safe, positive relationship between Teacher and child is enriching both for emotional and cognitive development.

Some important ways to build such a positive relationship are:

a. **Getting to know each child individually -** their homes, their families, their interests, things they do outside school, their pets, their favourite people - this helps to understand each child and plan learning experiences for each of them.

b. **Listening to children -** their stories, their narrations of what happens at home, their opinions and views on everything that interests them - this conveys care and respect, builds trust, helps children think and communicate, and gain confidence.

c. **Observing children -** consciously observing while continuously interacting with children - this helps to discover how each child thinks, reasons and responds to different situations, which is critical to planning for teaching and learning.

d. **Encouraging children's intuitional responses -** words, actions, solving a small problem, analysing what happened - this helps to meaningfully build on children's naturally creative and resourceful selves.

e. **Recognizing and responding to the emotions and moods of children -** through conversation, music, storytelling, art, playing together - this helps children to settle better, learn better, learn to slowly regulate their own emotions, and begin to understand and respond to the emotions of others.

f. **Visiting their homes regularly -** this is important to understand children and their home environment and build trust and a positive bond.

4.3.2 How can Teachers Support Children to Learn Better

Early learning classrooms aim at enhancing children's learning and development through activities and play. Teachers play a critical role in supporting children through this in many ways, most importantly:

a. Listening: Teachers need to carefully listen and attend to young children's conversations, enquiries, questions, and theories about the world. For example, if a child says, 'a spider has many eyes,' the Teacher may need to repeat and emphasize the same, 'yes, you are right, a spider has many eyes - how did you know that?' This tells the child that the Teacher has heard, acknowledged, and is helping extend the topic. The Teacher may further guide them to a book on insects, share a fact, or show a video expanding their curiosity and learning.

b. Modelling: One of the ways through which children learn is through observation and imitation. Teachers need to consciously model different behaviours for children to pick up new concepts and skills. For example, while teaching one-to-one-correspondence for pre-numeracy, the Teacher can take five coins and five stones, and show exactly how every coin corresponds to a stone and tell the children the corresponding number. She can say: One stone - one coin, two stones - two coins and so on while counting and pointing. Children will see and repeat this. Similar modelling would occur in all routine behaviour - songs, actions, clay work, word pronunciations, and so on. Teachers must, therefore, be alert to what they are saying and doing in the presence of the children.

c. Solving problems: Children are curious, constantly engaged in trial and error, and exploring new things. When children play with blocks, cardboard, or even in sand, they are trying to solve simple problems. How much water to add to the sand to make a good sand mould? How to stick cardboard such that it can form a curve, or not get unstuck? How to place blocks or dominoes such that the tower or domino sequence does not break? The Teacher then provides scaffolds to the child in the form of questions (e.g., can you think about it in a different way?) or physical support (e.g., holding the cardboard while the child puts glue on it) or an idea to solve the puzzle (e.g., perhaps putting in the red piece first may help). Such scaffolding helps children imagine and think through solutions on their own.

d. Questioning: Children think while verbalizing their ideas. Questions from the Teacher will help them think through a particular subject in depth while responding. This also supports language development. For example, asking 'why did you put the big block at the base?' will help children verbalize the reason behind a choice they have made. It is important for the Teacher to be attentive to what children are doing in their play activities and ask relevant questions.

e. **Provoking**: Challenging children's ways of knowing, thinking, and doing deepens their understanding of the world around. Children tend to pick up stereotypical notions based on what they see and hear around them. The Teacher needs to be proactive to question, to provoke and provide alternate perspectives e.g., picking a story that talks about the capabilities of a child with disability or women as bus drivers or pilots.

f. **Researching**: Teachers needs to provide children with tools and skills to learn how to understand their inquiry into a topic - where to look, whom to ask, what to use for solving questions and arriving at some understanding. Teachers themselves need to practice researching in order to understand children better, respond to their queries, and develop and conduct new activities to enhance children's learning.

g. **Making children independent**: Planning well helps Teachers take active steps with children to make them independent - first, closely work with them, then gradually release support to make them confident in a new skill or a new understanding.

4.3.3 Relationships between Teachers, Families and Community

Families are children's first Teachers. Children are, therefore, a shared responsibility between schools and families in supporting their learning and development.

Families are partners in the child's learning and development. It is important for families to understand and support what happens in school as well as for the Teacher to understand the child's situation at home.

Communication between the Teacher and the home should be continuous - this could be accomplished by families visiting the school regularly or by the Teacher visiting the child's home on a regular basis.

Teachers and Families should work together to understand the child better and together create a more positive experience for the children. When families ask questions and clarify doubts in their minds, they learn more about school processes. When Teachers understand a child's home environment, they are able to plan better learning experiences for the child. By sharing and working together, Teachers and families support the child's development across all domains. This kind of involvement helps families to support the learning that happens in school through good practices at home as well. Families could also contribute to assessing the child's progress and areas of need. They would also gain further confidence in their own parenting abilities through this process.

Families and members of the local community can also be involved in other ways in the functioning of the school e.g., sharing their knowledge and experiences, planning and celebrating special days together, joint forums to ensure regular attendance of children, responses to specific situations such as simple resource requirements in the school.

Please see Chapter 10, Section 10.4 for more details on the relationship between schools, families, and community.

Section 4.4
Learning through Play - Conversation, Stories, Toys, Music, Art and Craft

Classrooms for young children are vibrant and full of life. Children enjoy learning through several ways - talking, listening, using toys, working with material, painting and drawing, singing, dancing, running and jumping. As Teachers, we use all these ways to work with our children.

4.4.1 Conversations

Language is the medium through which children talk to themselves and to others, and it is with words that they begin to construct and get a grip on their reality. The ability to understand and use language clearly and cogently is essential for learning.

Conversations are very important for children's ability to connect with people and things around them. Continuous conversations with children in the classroom help to build relationships of trust.

Conversations in the classroom can be of two kinds:

a. **Free conversations**: During free conversations, the Teacher gathers a few children around and allows them to talk about interesting things that have occurred during the day, on their way to school or any information they wish to share. The task for the Teacher is to draw children out with simple questions that will help them to talk about their experiences.

b. **Structured conversations**: Structured conversations are planned and organized by Teachers. These typically occur in the morning hour to assemble children together and talk and think through a topic together. Topics are often about children's daily life events and happenings, and their feelings.
When all the children sit in a circle with the Teacher and talk, this kind of conversation time is called Circle Time. Children enjoy sitting in a circle and gain a feeling of togetherness, and the Teacher can see every child during this period. It is good to have one session of Circle Time every day.
When a specific topic is chosen, there is a focus which helps increase children's language, information and understanding of that topic.
Conversations around a specific topic (e.g., vegetables) can be held using real objects. E.g., while talking about vegetables, real vegetables can be used so that children can look at them, feel them, talk about their shape, colour, texture, and even taste them. The Teacher can also use picture cards to explain further and even construct a story around vegetables.
One other possibility is for the Teacher to demonstrate small experiments at this time e.g., placing a bowl of water in the middle of the circle and putting small objects in to see what sinks and what floats. This helps children talk about why this would happen and hypothesize on properties of objects.
Questions with yes and no answers are not very helpful at this time. Questions that push children to speak, describe something using more words and sentences are useful. Children should never be reprimanded for giving incorrect answers. All children should get equal opportunities to participate and to express themselves without being judged.

Teacher's Voice 4.4A

Guided Conversation during Circle Time

I teach in a school situated in a buffer zone of a Tiger Reserve. Around 9 children, ages 3-6, come regularly to my class. For Circle Time, I usually pick up a topic interesting to them, like animals. Since, in my village, most families have livestock, all my children are used to being around animals especially dogs, rats, goats, pigs, frogs, fish, and ducks. It is not unusual for them to, have heard and sometimes even have seen an elephant, bear, or tiger from the forest. I prepare required material such as flash cards or shortlist a video related to what they might have seen or heard the previous day. On the day itself, I begin by asking them to sit in a circle, in a way that we all can see each other.

Photo 4.4A: Animal Flash Cards

Then, one by one, I pick up the flashcards to talk about their content. For example, the flashcard we picked up was that of a tiger – so we started talking about it like this. Do you know which animal is this? Have you ever seen it? How does this animal speak!? What does it eat? Where does it live? And so on. I encourage all children to respond and appreciate all responses without any judgements. The idea is to encourage them to talk as much as possible. Sometimes, I also give each child a card and we do a role play. One would become a tiger; another would become a goat and we all create a mad ruckus of all animal sounds! It is a lot of fun! By the end of Circle Time, I ensure children are aware of different animal names, how they look, how they walk, what noise they make and where they live.

In the next day's conversation, I will take up animals that are not around us, say, camel, and discuss why it doesn't live around us.

Box 4.4A

Show and Tell sessions

The concept of 'Show and Tell' has been a great success in India and around the world in developing public speaking and listening skills and promoting communication and interaction among children in the early years. All children in the Foundational stage will have the opportunity (along with their Teachers) to participate in an enjoyable 'Show and tell' session at least once every week.

This will involve children and Teachers bringing in their favourite toys, games, family photos, flowers, books, original stories, and personal anecdotes (e.g., about family members, friends, festivals, experiences, holidays, favourite lessons that week, favourite subjects), and speaking for a few minutes about them in front of the class. These 'Show and Tell' sessions would initially be in the children's home languages, but eventually would also include other languages that children are learning.

Children and Teachers would also ask questions and give comments during or at the end of each presentation to make the sessions more fun and interactive. Teachers can lead the way with their own presentations to set an example. They must participate throughout, while encouraging discussion, in order to truly bond with children and for children to bond with each other.

4.4.2 Storytelling

Stories are a window to the world for children. They are fascinating, beautiful, enchanting!! Listening to stories is great fun and young children, particularly, love to listen to them. Stories told with feeling, with gestures and animated expressions are magical and take your breath away. Every word becomes an experience in itself.

Stories are a particularly good medium for learning about social relationships, ethical choices, for understanding and experiencing emotions, and becoming aware of life skills. While listening to stories, children learn new words thus expanding their vocabulary, and learn sentence structure and problem-solving skills. Children with very short attention span concentrate for a longer time while engrossed in a story. Through culturally contextual stories, we can acquaint children with their culture, social norms and create awareness about their surroundings.

Box 4.4B

Brave and Courageous Kanaklata Barua

Kanaklata Barua was born in Barangabari, Assam, many, many years ago. She grew up like all other girls in her village, playing and looking after her brothers and sisters.

But she was very, very special. She knew that her family needed her but as she grew up, she realised that her country needed her even more.

There was trouble all around her. This was because the English ruled India at that time. The Police Inspector in her village never allowed anyone to hoist the flag of India. She bravely tried to do that, and they shot her dead.

It was a sad, sad day but she became a hero who fought for her country. We are proud of her.

Now there are schools named after her, there are two statues of her and there is a big ship named after her. And there is a stamp with her picture and her name on it which we use for all our letters!

Young children like listening to the same story again and again. Over a period, they make better meaning of the content and also remember it when reinforced. Repeated listening of the same story in different forms helps them engage better with the characters, events, and ideas of the story, and of course, imagination, and vocabulary development.

While narrating stories orally, the Teacher should know the story very well. Stories should be narrated with voice modulation and expressions. A well-told story can help children visualize and participate in the events that are unfolding through the story.

Books should also be used to tell stories. A child need not know how to 'read' to enjoy books touching books, turning pages, looking at pictures, finger reading - this must be encouraged at all times

Pictures in books support content and retain the interest of children. When children observe their Teacher reading stories from books, they understand the importance of print and books, and value reading as a skill. Teachers can read stories aloud from books, pointing to the words with their finger, thus drawing children's attention to the fact that each spoken word has a form. Reading aloud stories also helps children realize that formal written language is a little different from the spoken language. Books can be picture books, story books with or without pictures, or story books in multiple languages.

Puppets, both ready-made and made by the Teacher with children, can be used to narrate stories. Stick puppets, glove puppets, finger puppets, box puppets, paper bag puppets or sock puppets can be used. Children can be involved in making simple puppets. Marionettes or string puppets are attractive but may require special training for the Teacher.

Flash cards that have story scenes drawn or printed on them can also be used to tell stories. They may be larger than a book and also easy to hold. Flash cards serve as sequence cards to be given to children, to organize in the correct order. Besides these, story charts, posters and other story telling aids are available in the market or can be created.

Children and Teachers can dramatize stories, act, and speak the dialogues and thus experience the story. Children can be shown stories on television or laptops. They can also listen to audio tapes of stories.

Besides listening to stories, children must also have the opportunity to tell stories. Stories told by children can be the same ones they have heard or something they have created. The Teacher can begin to tell a story and ask children to complete it.

Selecting the right story is critical. Stories should be age-appropriate, in familiar language, and should be of interest to children. Stories could be connected to whatever else is being taught in the classroom e.g., counting or shapes or colours. Stories could also be used to reinforce important learning objectives like sensitivity to others and good work habits. They should be rooted in the local or in the Indian context to the extent possible to maximise relevance and relatability.

Indeed, India has a long history and tradition of people and stories that beautifully teach us about many core values and the importance of relationships. Children should have the opportunity to listen to, read and learn from the original stories of the *Panchatantra, Jataka, Hitopadesha,* and other fun fables and inspiring tales from the Indian tradition.

After telling a story, the Teacher could find out whether the children have understood the content of the story. The Teacher can ask questions of what, whom, why, where, how and what if. As children grow a little older, the Teacher can discuss why a character behaved in a certain way, what was the consequence, and talk about right and wrong actions. Another follow-up activity could be drawing. Children can draw a scene or characters in the story. Role play and dramatization can be other follow-up activities.

4.4.3 Toy-Based Learning

This is an important sub-set of play-based pedagogy. Young children learn from first-hand experiences and working with actual objects. They try out and explore and learn. The classroom environment should cultivate this spirit of exploration through playing with toys and manipulatives. Many local toys are available in every child's surroundings. These should be used as important resources for teaching and learning.

Whether a toy is simple or complex, it has a lesson for the child to learn. When a child holds a toy, and manipulates it, she is practicing her motor skills and strengthening her hand-eye coordination. Toys that require children to push, pull, grab, pinch, turn, or otherwise use their hands and body to make it do something are instrumental in a child's growth. When a child builds a tower with blocks and eventually watches it fall to the ground, she learns concepts and thinks about a solution to stop this fall. A puzzle helps a child explore patterns. When children use blocks, dolls, animal toys, balls, mini-cars, or pretend toys, they start creating stories and living out scenarios in their minds. Board games teach children to follow simple rules and enhance understanding of language and mathematics.

Puzzles encourage experimentation with cause and effect, strategic thinking and problem solving. The use of craft materials such as clay, beads, collage materials, paint, washable inkpads and stamps, washable markers, and scissors support creative expression and aesthetic awareness. Complex construction sets and accessories allow children to experiment with how things fit and

work together, increase their fine motor skills, and express their creativity. Fitness and fun materials such as balls, beanbags and jump ropes help children gain self-confidence, exercise, release tension, have fun with others, and develop fine and gross motor skills.

Toys can also be made from readily available items such as fabric, bottles, cardboard boxes, yarn, cooking pans, bangles, pipe cleaners and pinecones.

Some examples of traditionally used toys are:

a. **Ring Set Puzzle**: This is a set of seriated rings, made up of wood. Made in Channapatna, Karnataka, it can be used to learn seriation and also helps in development of fine motor and gross motor skills, understanding of colour and shape.
b. **Dhingli (Cotton dolls)**: Dhingli is one of the traditional toy dolls from Gujarat. It is made of cotton and decorated with embroidered cloth in different, attractive colours like red, blue, green, yellow. These dolls are available in small and large sizes. They can be used for dramatic play; they are also used by very small children to nap with to feel secure.
c. **Rasoi (Kitchen set)**: Rasoi is a set of kitchen utensils used for play by children in many parts of India. They are made of wood and painted to look attractive and appealing.

NCERT's handbook on Toy-Based Pedagogy is an excellent guide for this.

4.4.4 Songs and Rhymes

Children love singing songs and rhymes, and dancing to music. Songs are also a wonderful means of learning language.

Songs can be selected so that they support the concept that children need to learn. For example, the song *'Five little monkeys, jumping on the bed, one fell off and hurt his head, mama called the doctor and the doctor said, no more monkeys, jumping on the bed.'*

This song can be used to learn about animals, their movement, being careful, getting hurt, the work of a doctor and counting. Singing and acting on this song is also a lot of fun!

Children understand different concepts through songs and their vocabulary also expands. Physical movements accompanying the songs enhance gross and fine motor movements, and body movements and gestures help children in understanding concepts. Songs promote interaction among children and lead to cooperation.

Local context specific songs and rhymes (e.g., *Pancharakunju in Malayalam, ghum parani mashi pishi in Bangla, machili jal ki rani hai in Hindi, aane banta in Kannada)* are another good way to increase vocabulary, imagination, and expression in different kinds of songs. Songs of different languages provide children an ability to infer, make connections between common and different words in a language. Most of us in India are multilingual, and it is important that the songs and rhymes promote children's ability to remain multilingual.

The Teacher could select a few rhymes or songs in two or three local languages, practice them and sing with children. Grandparents, parents, and community members can be wonderful resources for this. The Teacher can choose songs that have rhyming words, those that have a few lines and those which are popular and known to the local community. Songs can be humorous too - children enjoy funny songs.

Box 4.4C

To develop musical literacy, singing scales with the group can be a useful and fun activity. The Teacher sings a scale 'Sa re ga ma pa dha ni sa,' then asks the group to repeat. Once the children master the notes going upward, the Teacher says 'Can you sing it downwards? Sa ni dha pa ma ga re sa'. Once the children master that, more complex exercises with group singing (and individual singing) can be pursued: 'sa re ga, re ga ma, ga ma pa, ma pa dha, pa dha ni, dha ni sa', 'sa ni dha, ni dha pa, dha pa ma, pa ma ga, ma ga re, ga re sa' (triplets), followed by quadruplets 'sa re ga ma, re ga ma pa, ….' Then the Teacher can ask the children to sing 'sa re ga ga ga ga ga ga ga ga ga re ga ma' and ask them if they recognize the tune!

Analogously, clapping exercises in groups can be used to develop rhythm. Musical instruments at hand can also be employed to enhance these group and individual activities as children explore both melody and rhythm.

Box 4.4D

How to conduct Rhymes with Children

Be familiar with the rhyme and the actions that go along with it. Write the rhyme on a chart paper in large print with a related illustration at the corner and display it at the eye level of the children. Let the children look at the rhyme.

Note: All rhymes should be done at least 3-4 times.

Introduce the rhyme and explain what it is about.

Recite the rhyme fully with rhythm, expression, and intonation while children listen.

Ask the children to repeat each line after you and explain the meaning of each line showing the picture.

Show the actions that go along with the words and ask children to follow.

Children now sing along with you with actions.

Encourage the children to sing by themselves in groups or individually

4.4.5 Music and Movement

Music is joy. Children grow up listening to lullabies and the humming of their grandmothers. There are so many sources of music around us - farmers singing in the field, buzzing of the bees, cooing of the *koyal* or rain pattering on a window.

Music is also a strong stimulation for brain development and formation of synaptic connections. So, following rhythm and playing simple musical instruments, and singing should be encouraged. Body movements can accompany claps or rhythm played on a tin box or a khanjari (tambourine) or manjira (cymbals).

There are different ways to use songs. The Teacher can sing a song and have the children repeat it. This can be accompanied by actions, gestures, and body movements. The children can also sing songs by themselves in groups, pairs or individually. The Teacher can sing the tune of a popular song and have children play a small game to identify it. Children can hum tunes of different songs without the words. The Teacher and children can sing songs that have already been learnt in different tunes. Children can be encouraged to make simple songs.

Music and movement activities can also be done in different ways. Children could quietly listen to instrumental music or dance freely to rhythm or make body movements accompanied by rhythm. Children could also make simple musical instruments from available material e.g., utensils as drums, putting small bells on a ribbon and making a *ghungroo*. They could play the tambourine, *manjira, lyziums,* and clap together, creating an orchestra. Children could also dance using props such as ribbons, small branches with leaves or *dupattas*.

Children are naturally attracted to the sounds of musical instruments and enjoy playing drums, bells, rhythm sticks and tambourines. Children can be involved in music making through body percussion and musical instruments, and by playing movement and musical games. A range of instruments, which are either local, homemade or purchased, should be made available to children for first-hand experiences in sound exploration and music-making.

Teachers could include a variety of music, dances, sound sources, rhymes, chants and songs with different moods, contexts, and languages for children to listen to and perform in the classrooms. Dancing, singing, rhymes, folk songs, action songs and finger plays provide opportunities for children to learn musical concepts.

Teacher's Voice 4.4B

Action Song: When you are happy and you know it!

I request all children to stand up and get them to clap their hands in different rhythms by following my lead. Then I ask them "Can you show us what other ways in which you can move your body and create sounds?" Some would snap their fingers, stamp their feet and so on. I also ask them "What do you do when you are happy?" Some say they clap their hands in joy and some say they shout in joy.
Then I tell them "Let's make a song of all these sounds". I sing first and ask them to join me whenever I make a sound.

When you are happy and you know it, clap your hands!

When you are happy and you know it, clap your hands!

When you are happy and you know it and you really want to show it,

clap your hands!

When you are happy and you know it, stamp your feet!

When you are happy and you know it, stamp your feet!
When you are happy and you know it and you really want to show it,

stamp your feet!

When you are happy and you know it, say hurray!

When you are happy and you know it, say hurray!

When you are happy and you know it and you really want to show it,

say hurray!

Such action songs never fail to get my children engaged and they have a lot of fun.

(Image Source: Sikkim Textbook Grade 1)

4.4.6 Art and Craft

Children enjoy playing with colours and creating something that is of interest to them. Art and craft provide another medium for children to express their ideas, emotions, and feelings.

a. **Drawing** could involve the use of paper and crayons, sketch pens, coloured or black pencils or charcoal. Children can also draw on slates, blackboards, or floors. The advantage of blackboards and the floor is that it provides lot of space to children to create large drawings. Paper too can be of different sizes, shapes, and colour. Instead of a white paper and crayons of different colours, if children are given black paper and yellow or white crayons, the images that emerge are different and unique. Young children who learn to hold crayons for the first time begin to scribble and gradually move to drawing random shapes, and finally they are able to draw specific shapes and designs. Drawing is a valuable activity for expression as well as fine motor coordination.

Photo 4.4B : Drawing

b. **Painting** is exploring the use of wet colour on paper, floor, or fabric. Children can use brushes that are available in the market, or the Teacher can make brushes with sticks and fabric or cotton. Variations with wet paint are thumb printing, palm printing, printing with vegetable waste, printing with other materials like bottle caps, blocks, vegetables (e.g., potato or lady finger). Children also enjoy thread printing, finger printing, as well as finger painting.

Photo 4.4C: Painting

c. **Pasting** involves use of glue and things than can be stuck on paper or fabric. The Teacher or children can draw a shape on which children paste matchsticks or coloured paper or it can be a free pasting activity. Different materials like sand, pencil shavings, saw dust, dry mud, coloured, or newspaper print paper can also be pasted on paper. A collage using different materials can also be created. Readily available glue as well as glue made by the Teacher can be used for the same.

Photo 4.4D: Pasting

d. Potter's clay or wet mud with a little glue added to it can be used for **clay moulding**. Dough made by the Teacher, with or without food colours added to it, can be provided. Play dough is also available in the market. Children should be encouraged to explore this medium and create different shapes and objects. As an extension of the activity, the clay objects created by children can be dried and painted on a later day.

Photo 4.4E: Clay Moulding

e. Children can begin by **tearing** paper of different sizes and thickness and then move on to **cutting** with scissors. Blunt scissors can be provided to 4+ and 5+-year-old children to snip at paper, and later on cut shapes and make designs. The cut and torn pieces can be used for pasting activities.

f. Children can be taught the skills of **folding** paper, pressing it to create fine paper fold models. They can begin by folding paper in half and later on a variety of folds can be taught. This promotes fine motor coordination and creativity.

g. Children can use empty cardboard boxes, sand, mud, and their cutting and pasting skills to **construct** new things e.g., vehicles, animals, buildings.

4.4.6.1 Things to Keep in Mind during Art and Craft work

All these should be open-ended activities. Minimal direction from the Teacher is best. Children should be encouraged to think for themselves and think differently.

If a child wants to draw a tree, it is best that the Teacher not draw a tree and ask the child to copy it. Instead, she could ask questions (e.g., how does the tree look - tall or short, what is the shape of its trunk, how are the branches spread, are there many branches or only two or three, what is the shape and colour of the leaves) and thus encourage children to draw a tree as they see it. Of course, the Teacher can contribute to ideas and suggest ways of doing things better (e.g., cutting and paper folding).

For young children, the process involved in art and craft is more important than the product.

a. **Uninhibited artistic expression**: Children must be allowed to create visual arrangements, artworks, tunes, songs, role-play, dramatic play, dance, and creative movements from their own imagination; as well as through guided exercises facilitated by the Teacher. **Notions of 'right' and 'wrong', 'good' and 'bad' in terms of artistic expression must be avoided. Instead, different viewpoints, experiences, expression, and imagination are encouraged and celebrated.**

b. **Exploration of materials, mediums, and tools**: It is important for children to develop and apply their curiosity in exploring a variety of materials and expanding the possibilities of using them as tools and mediums in the arts in multiple ways. A brush might be used as a tool in the visual arts but might also have the possibility of being used as a musical instrument, or a theatrical prop. **Within each arts discipline too, children need to be encouraged to discover their own methods and techniques of using instruments and materials, in addition to conventionally accepted methods.**

c. **Observation**: **Children not only need to observe their surroundings visually, but also become keen observers of their own thoughts, feelings, emotions, expressions, actions, and overall behaviour.** Introducing children to the basic elements of the arts provides them multiple frameworks to organise and understand multisensorial stimuli and develop their aesthetic sensibilities. Simple exercises based on elements of sound, colour, or movement, can be applied to their everyday contexts to corelate these with emotions, thoughts, and actions.

d. **Conversation and dialogue**: The Teacher should ensure that the arts classroom is always an inclusive environment. The Teacher must pay keen attention to children's verbal and non-verbal communication, appreciate their visual and performance artwork, and ask questions that merit personalised responses from every child.

e. **Aesthetic appreciation**: The art class must include regular conversations and discussions around the appreciation of what we like personally, what is appreciated collectively, and what is desirable aesthetically. These conversations must be based on the practical work

done in the class and aesthetic experiences that children can relate to from their everyday lives (e.g., their preferences in colour, clothing, food, dance, festivals, performances). The Teacher's role in these conversations must be participatory and non-judgmental. Discussions need not take up more than 8 to 10 minutes during an art class.

For Grades 1 and 2, planning for blocks of time for arts and craft may be useful. Since the arts require time and opportunities for exploring a variety of materials, their preparation, organisation, distribution and cleaning up, one-hour blocks that focus on making art, can be scheduled on alternate days (Block 2). Arts processes related to performance, presentation, conversation, and appreciation can be organised into shorter time blocks of 20 minutes every day (Block 1).

Table 4.4A: Blocks of teaching for Arts in Grade 1 and 2

Blocks	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	Music exercise	Theatre exercise	Dance/ Movement exercise	Music exercise	Theatre exercise	Dance/ Movement Exercise
2	Making and appreciating art	-	Making and appreciating art		Making and appreciating art	

4.4.7 Indoor Games

Just as exercising the body is important to keep it fit and healthy, so too is exercising the mind. Games of strategy, logic and word puzzles, and recreational mathematics are the best way to excite children about mathematics, and to develop the logical skills that are so critical throughout their school years and indeed throughout life.

Jigsaw puzzles, playing with blocks, and solving mazes help to develop a child's spatial reasoning; games of strategy (e.g., tic-tac-toe, and leading up to deeper games like chess) develop strategic thinking and problem-solving skills.

Playing games (e.g., *Chaupad,* Snakes and Ladders, Ludo) is fun - it also teaches counting, strategy, collaboration, healthy competition, bonding with peers.

Box 4.4E

A Simple Arithmetic Game with Pebbles

Some games require minimal material, but such games can often be the most fun, addictive, and instructive. The following '10 Pebbles Game' can be appreciated at many levels. It can be played by the youngest children yet be revisited again and again due to the deep mathematical concepts it reveals and leads to.

Start with a pile of 10 pebbles (10 coins, stones or beads or anything else may be used instead of pebbles). Two players alternate taking away one or two pebbles from the pile. The player to take away the very last pebble in the pile wins!

This game can be played multiples times, with the two players alternating as to who starts the game first. The children can play this game over and over until they start to pick up different strategies for winning. After some games, the Teacher can ask a child, "Do you prefer to be the first player or the second player? Why?" This fun game teaches arithmetic reasoning as the child starts to think about strategy.

Variations include using, e.g., 10 or 21 objects, where the player is allowed to take 1, 2, or 3 objects in each turn.

Once children can count and add small numbers, one does not even need any objects any more to play the game. The first player starts by saying the number 1 or 2; then the second player adds 1 or 2 to the first player's number and says that number; then the first player adds 1 or 2 to the last number said and says that number as it goes on. They alternate, and the player that says "10" first wins. The Teacher can ask children, "Why is this game the same as the 10 Pebbles Game?" This exercise gets children to think about the concept of correspondence between number words and cardinalities of objects.

Riddles and jokes are questions or statements that are intentionally phrased so as to require out-of-the-box thinking in order to understand the answer or meaning - they are also generally presented as games. Riddles and jokes are well known to be cognitively beneficial, as they help knock children and adults alike out of standard ways of thinking, thus encouraging creativity and innovation.

Box 4.4F

A well-known musical riddle

तीतर के दो आगे तीतर

तीतर के दो पीछे तीतर

आगे तीतर पीछे तीतर

बोलो कितने तीतर

This can be sung in a group in class before discussing the answer to the riddle - there are two pheasants in front of a pheasant; there are two pheasants behind a pheasant; there is a pheasant in front of and behind a pheasant; tell me how many pheasants!

Word and logic puzzles are another fun way to teach deductive reasoning. Simple puzzles such as those in the box above help develop in children's skills of logical and creative thinking in an enjoyable manner. The puzzles can get more challenging, and incorporate arithmetic and other elements, as children get older. Arithmetic puzzles and games can help develop a comfort with numbers and develop quantitative reasoning.

Making learning enjoyable through fun exercises, games, and puzzles can be a key aspect in ensuring that children stay engaged and at the same time develop mental capacity and creativity.

Puzzles and problem-solving activities that involve spatial reasoning, wordplay, strategy, logic and arithmetic, should be part of the classroom throughout the Foundational Stage, in order to develop a love for thinking, logical deduction, mathematical reasoning, and creativity. Examples relevant to India, and which incorporate India's rich local and national traditions of problem-solving and riddles should also be extensively incorporated.

4.4.8 Outdoor Games

Walking, running, jumping, chasing, kicking, and throwing balls, playing in water or sand or mud, jumping into puddles, crawling through tunnels, climbing over fallen trees or climbing small trees help children develop gross motor skills. Going on a nature walk and naming different sounds they hear, looking for birds or insects or plants and naming them is also part of outdoor activity of a different kind.

Old tires can be used creatively to make play equipment. The Teacher can use bricks to make children balance themselves and walk, provide play materials like big balls, rings, hoola-hoop and rope-jump. Local material such as bamboo can be used to make play structures. A short tree of manageable height can be a great source of outdoor play.

Younger children can play group games with no rules or simple rules (e.g., run and catch, throw and catch, throw the ball into the hole). As children grow older, they enjoy group games following simple rules (e.g., *pithoo, gitte, zanjeer,* blind man's buff, statue, look up and look down).

Teacher's Voice 4.4C

Fire in the Mountain! Run, Run, Run!

This is a very old and popular game. I begin by asking all my children to do a slow jog around me in a circle, while I sing "Fire in the mountain, run run run!" After saying this a few times, I would suddenly say a number, say, "Number 3". All children must immediately stop and break from the circle to form groups of 3. In a short span of time, they must stop, follow instruction, understand which group has 3 or needs more and accordingly leave or join a group.

This requires adapting to the situation (changed number of participants in the group) and flexibility (finding different children every time to group with). This is one fun way to develop positive learning habits such as applying various strategies to remember instructions, being attentive and patient, in the children.

(Illustrated by Anjali Shekhawat)

It is important to keep an eye out for safety while playing outdoors. The Teacher will have to watch children while they play and ensure that injuries do not happen.

In case there is no safe outdoor space, children can play indoor physical games that promote gross motor development, but this is sub-optimal. Children at this age need to be out in the sun to help them develop and grow well.

Box 4.4G

The Japanese have a practice called Shinrin-Yoku. Shinrin in Japanese means 'forest,' and Yoku means 'bath.' So Shinrin-Yoku literally means forest bath. It is a means of connecting with nature, through senses of sight, hearing, taste, smell, and touch.

This practice can be translated simply into enabling children to spend time in and with nature. While rural areas will allow access to woods or ponds or forests or fields; in urban areas, school gardens or local parks or lakes, could be adequate substitutes.

4.4.9 Spending Time in and with Nature

It is so much easier to understand what a fish is when you see it in front of you than only reading about it in a book or hearing about it in a story. And it is great fun too!

Teacher's Voice 4.4D

Some of my children have gardens at home. When we discussed plants, the other children became interested, and asked many questions about how plants grow, what they need and how do we know when to eat them.

So, I decided to use a part of the small open area in the school as a vegetable garden. Some of the children brought seeds from home, and I planted them with their help. The children took the responsibility of caring for and tending to the garden. As we harvested the 'crops', which were tomatoes and pumpkins, we distributed the produce among the children to take home to share with their families.

Next, we tried growing some *dhania* and *pudina,* and I brought in some potted flowering plants. Again, the children took care of the class 'garden!'

As the children began to develop more interest in plants, we decided to explore the parks and green zones near our school. We took many nature walks, and the children and I were surprised to 'discover' flowers and weeds in the cracks at the side of the road, butterflies along with bugs, bees, ants, worms, and spiders.

My goal was to encourage children to observe, explore, question and respect nature in their immediate environment. My desire was to develop in them an affinity with the natural world, which would hold them in good stead as they grew older.

There are so many bright and beautiful and interesting things out there that intrigue a child or encourages her curiosity. A visit to the local woods or small forest or local park and seeing all the birds around would leave a child awestruck.

Spending time with plants and trees and birds and animals or just being quiet around nature can develop the basis for Lifestyle for Environment (LiFE).

Ancient Indian texts have said that whether it is the individual human body or the larger cosmic body, essentially, they are made of five elements or the *Panchabhutas* – earth, water, fire, air, and ether. Illustratively: the *Bala Chikitsa,* one of the eight sections of *Ashtanga Ayurveda*, says the *Panchabhutas* manifest in different parts of our bodies. At this Stage, it is, therefore, important to introduce direct experience with water, air and earth so that children can experience this deep connection with the elements.

Teacher's Voice 4.4E

When I take the children out into the garden, when I stay close to them when they are playing outside the classroom, or while waiting for their parents to pick them up, I wonder at the questions they ask.

Shireen asked the other day, pointing to a small rock leftover from construction work that lay by the side of the road 'What is under that rock?'

Sushma asked, upon seeing a small flock of birds descend into the school during assembly, 'What are those birds picking up from the ground?'

Harpreet's attention was drawn to the birds, and he exclaimed, 'Why are the birds made of so many colours?'

I found Doma squatting near a wall, peering closely at something. It was a line of ants moving into a crack in the wall. 'Where are they going? How will they find their way back?' she asked when I checked on her.

I am not always sure how to deal with their questions. However, I want my children to keep asking these questions, since I understand that they can help children develop respect and appreciation for nature, and all its beauty.

I also understand that I must display the same curiosity and enthusiasm to ensure that their engagement with nature grows.

Most important of all, I understand that my response to their questions must be, 'I am not sure of the answer, but let us try and find out together'.

4.4.10 Field Trips

The local vegetable market could be an equally exciting place full of new sights and sounds! The doctor's clinic, bus depot, post office and police station could all introduce children to an unfamiliar but interesting world, teaching them many new things. **Small, local field trips as part of the learning process reinforce the knowledge the children have gained in the classroom and push them to ask more questions and build further connections with things that they already know. Children also learn to manage themselves and learn to be with others through these experiences.**

Teacher's Voice 4.4F

Learning Math through Nature Walk!

I often take my entire class to the nearby park for a 'Nature Walk'. I usually start with asking my children to close their eyes and hear all the noises and see if they could name them. There are many possible ways I can engage my children here on. For example, we go around to find five things that are bigger than they are (e.g., tree, swings, car, gate, fountain) and five things that are smaller than them (e.g., pebbles, leaves, sticks, worms, butterfly). As we go around, I ask them to remember names of these things and how they look so that when we go back to the classroom, we can fill it in our worksheet.

I find this a great activity to break the monotony of sitting in a classroom and to make learning more fun and a very useful way to engage them in important concepts like sorting and comparing objects around them according to various properties like size.

Things that are:	
Smaller than me	**Bigger than me**

Section 4.5
Strategies for Literacy and Numeracy

A significant component of structured learning will be added for literacy and numeracy especially for Grades 1 and 2. It is important to ensure that the curriculum for children of ages 3-6 onwards must be planned in a way that builds on children's capacities of that particular age and leads to formal learning instead of a downward extension of the curriculum from Grade 1.

4.5.1 Teaching Language and Literacy

At present, early language classrooms are focussed mainly on teaching the *varnamala* and *matras*, choral repetition of a text being read by the Teacher or children and copying or handwriting practice. There is little emphasis on meaning-oriented work, and few opportunities are provided for children to develop as readers and writers.

In the early years, the teaching of language and literacy should provide children ample opportunities to explore themselves as readers and writers, along with providing a balance of learning 'lower-order' skills (e.g., phonological awareness, decoding, writing letters and words correctly) and 'higher-order' skills (e.g., oral language development, engaging with books, drawing, and original writing) which are meaning-focused.

4.5.1.1 Emergent Literacy

Emergent Literacy is defined as the skills, knowledge, and attitudes that children develop about reading and writing before they become conventional or fluent readers and writers. With adequate exposure to print and opportunities to read and write, children could start learning to read and write from a very young age and much before they are able to decode and write conventionally (using letters and words).

The emergent literacy phase is an important part of the process for young children to learn how to read and write. Emergent literacy includes both emergent reading and writing:

a. **Emergent reading skills** include print awareness and learning print concepts, pretend reading, and reading words as pictures (logographic reading). Concepts about print is an awareness about how print works: that print conveys meaning, that it is used for different purposes, and that written texts and books have different features, forms, and conventions.

b. **Emergent writing skills** include drawing and scribbling to represent something. Children express themselves in a form of writing and talking about what they have written. Young children's writing is related to their talk, experiences, drawing, reading, and pretend-play. At later Stages, children also use letter-like shapes and invent their own spellings (e.g., kat for cat, बनद for बिंदु) before gradually understanding the relationship between sound and symbols and moving towards conventional spellings and writing.

Children acquire emergent reading and writing skills through exposure to print at home and outside (e.g., recognizing labels, listening to story books being read to them, seeing people write or draw). Many children do not get exposure to print and may join school with little awareness of print. They need to be initiated into understanding print through a print-rich environment at school and through engagement with books. Children need to understand how literacy is useful for them before they are taught to read and write letters.

4.5.1.2 Strategies that support Emergent Literacy

Some strategies that support emergent literacy include:

a. Encouraging children to engage with books and to 'pretend read' (look and say), illustrated storybooks that they have listened to being read aloud by the Teacher.

b. Encouraging children to draw and write or scribble on the floor, on their slates or notebooks to express themselves (e.g., after a storytelling session).

c. Creating a print-rich environment in the classroom through use of print resources (e.g., big books, picture books, story posters, poem posters, children's magazines) displayed or kept in the classroom within children's reach.

d. Setting up a 'reading corner' and 'writing corner' in the classroom.

4.5.1.3 Components of Early Language and Literacy

Development of early language and literacy in the formative years requires developing a wide range of skills, knowledge and attitudes. Skilled reading and writing require a child to distinguish different sounds in spoken words, recognize letter-sound relationships, make words by combining sounds, develop vocabulary, comprehend what is written and develop reading fluency. This requires teaching of literacy to include several processes that build comprehension, vocabulary, fluency, word recognition, letter knowledge and phonological awareness.

The components of early language and literacy include:

a. **Emergent literacy skills:** Developing awareness about print, pretend reading (reading pictures), logographic reading (reading words as pictures), drawing and scribbling to represent and express something. Concepts about print include:

   i. Knowing printed words are symbols for words in a spoken language, which help to see the interconnectedness between oral and written language.

   ii. Functions and forms of print e.g., in a storybook, in notices and advertisements, posters, for writing letters, and communicating thoughts to others.

   iii. Knowing that writing mostly has a left to right orientation (with exceptions e.g., Urdu); that a word is preceded, and followed by a space; that there are letters, words, and sentences in a printed text; knowing punctuation marks and how words differ in length.

   iv. Book awareness and ways of handling a book.

b. **Oral language development**: Improved listening comprehension, oral vocabulary development, and using talk and conversation for learning with peers and knowledgeable others (e.g., older students, Teachers, parents)

c. **Phonological awareness:** Phonological awareness is the understanding of the sound structure of language, i.e., sentences which are made up of words, syllables, and smaller units of sound. This knowledge is first developed orally. Phonological awareness and print concepts are the two most important foundational skills for learning decoding.

d. **Decoding:** Deciphering written words by sounding them out, based on understanding the relationship between symbols and their corresponding sounds. It is the ability to associate sounds with individual letters and letter combinations *(aksharas)* and blending the sounds together to pronounce (or read) the whole word and identify the meaning (if the word is known).

e. **Reading with comprehension**: Constructing meaning from a written text and critically thinking about it.

f. **Fluent reading**: Accurate, automatic recognition of words and reading with expression.

g. **Writing:** Ability to write words correctly, along with presentation of thoughts or information in a logical and organised manner.

h. **Developing a desire or habit of reading**: Engaging with a wide variety of books and other reading materials and developing an appreciation for literature

4.5.1.4 Balanced Literacy Approach

Research has shown that developing the above components of language and literacy requires a comprehensive and systematic approach known as the Balanced Literacy Approach. The Balanced Approach focuses on developing word recognition skills as well as a focus on meaning-making. It balances decoding work with the use of whole language (sentences); as well as the balance between oral language and reading and writing.

In the early years, teaching of language and literacy should be focussed on children acquiring skills related to two broad categories:

a. **Word recognition and accuracy in writing words (lower order skills):** These include print awareness and phonological awareness (considered as foundational skills before teaching of decoding), decoding, writing letters and words correctly.

b. **Language comprehension and expression (higher order skills):** Oral language development, vocabulary development, reading with comprehension (including active response to reading), and original writing or composition.

A balance between these lower order and higher order skills is planned through the use of a variety of activities such as oral games, phonological awareness activities, explicit instruction for letter recognition, decoding and word-work, fine motor activities, read alouds, shared reading, guided reading, independent reading, modelled writing, guided writing and independent writing.

a. **Oral Language development**: Strategies for this can include storytelling and discussion, conversation on pictures and themes, opportunities for children to talk and share their experiences through free and guided conversations, role play activities.

b. Decoding Instruction and Word Solving: This refers to explicit instructions to establish letter-sound relationships. Decoding instruction should follow activities of phonological awareness, where attention needs to be directed to sounds in words (beginning, middle, ending sounds). Letters and words are to be introduced simultaneously so that meaning making remains at the centre of language and literacy instruction (since words are fundamental units of meaning).
Indian scripts contain numerous *aksharas* and hence *akshara* groups need to be carefully chosen and ordered so that children can generate meaningful words with their recently acquired *akshara* knowledge. Explicit instruction needs to be given for word decoding and spelling with segmenting and blending words and aksharas. In the case of English, phonics instruction would mean paying attention to specific letter combinations that represent sounds in English, rather than a sequential introduction of the alphabet.

c. **Reading Strategies:**

i. **Read-aloud**: The Teacher reads aloud to the children from well-chosen children's literature (not textbooks). The intent is not for the children to repeat after the Teacher but to develop their language capacities and vocabulary. Read-alouds are opportunities to introduce children to good literature, and familiarise them with vocabulary, language use and meaning making. Discussions and conversations are an essential part of this activity, where the children are actively engaged with text being read out to them.

ii. **Shared Reading:** Teachers choose texts with large print which is visible from a distance and encourage children to read along with them. As children read aloud stories and participate in shared reading, they can progress beyond the level at which they are currently reading and become confident about their reading abilities.

iii. **Guided Reading**: In guided reading, the responsibility for reading shifts from the Teacher to the children. This is different from shared reading, where the Teacher takes the lead in reading while children contribute occasionally. In this case, the children read while the Teacher supports them as needed. In this process, strategies and techniques the Teacher may have modelled during read-alouds and shared reading are reinforced and practised.

iv. **Independent Reading:** Children must be given opportunities to read independently or with a partner. While reading independently, they develop the habit of reading quietly, begin to value the act of reading, and of reflecting on and experiencing a book for pleasure. It follows that children should have the freedom to choose the book they would like to read independently or with a partner.

d. **Writing Strategies:**

i. **Modelled Writing**: Teachers need to model the writing process to young children who are learning to write. If we want to keep meaning at the centre of language instruction, copywriting is not a very meaningful activity for children, even if it helps in developing writing fluency. Teachers, by modelling the writing process, encourage young children to begin seeing writing as an expressive activity along with speaking.

ii. **Shared Writing:** Like shared reading, shared writing is a more collaborative process where the Teacher assists the children in writing with them. For example, they can start a sentence "I ate ___ for breakfast" on the board and ask a child to come and complete it. Talk, conversation, and writing goes along side by side, and the Teacher is continuously modelling, prompting and guiding children in the writing process.

iii. **Guided Writing**: While free writing by children is desirable, it doesn't emerge on its own, by just giving writing tasks to young children. From shared writing, responsibility is partially shifted to the child, while the Teacher gives frequent feedback, suggestions and prompts to the keep the writing flowing. Setting appropriate tasks for writing, which combine elements of purposiveness, functional and imaginative, would sustain the interest of young children to write. Guided writing could include peer writing and multiple drafts of writing with Teacher feedback.

iv. **Independent Writing:** Children should be given time write on their own. Encouraging them to write stories, poems, messages, instructions, and recipes gives them opportunities to use their creativity and imagination as well engaging with functional aspects of literacy.

Another dimension of balanced language and literacy teaching at the Foundational Stage is that oral language development, decoding related work, reading and writing activities should happen simultaneously and on a daily basis. An approach to use these as four blocks of instructional time is presented next.

4.5.1.5 The Four-Block Approach for Literacy Instruction

There are four major components in language and literacy instruction - oral language, word recognition, reading, and writing. While activities for the four blocks may be implemented in an integrated manner, it is important that children spend time working on each of the blocks on a regular basis.

While children are learning decoding, they should continue to engage with storybooks e.g., listen to and respond to interactive reading-aloud of storybooks and write or draw in response to the text being read to them. Also, teaching of letters and vowels or *varnas* and *aksharas* can be organised in a clustered manner so that children can begin to read and write simple words and meaningful sentences soon after learning a few symbols, instead of waiting to learn all varnas and matras together. The four-block model [11] comprises:

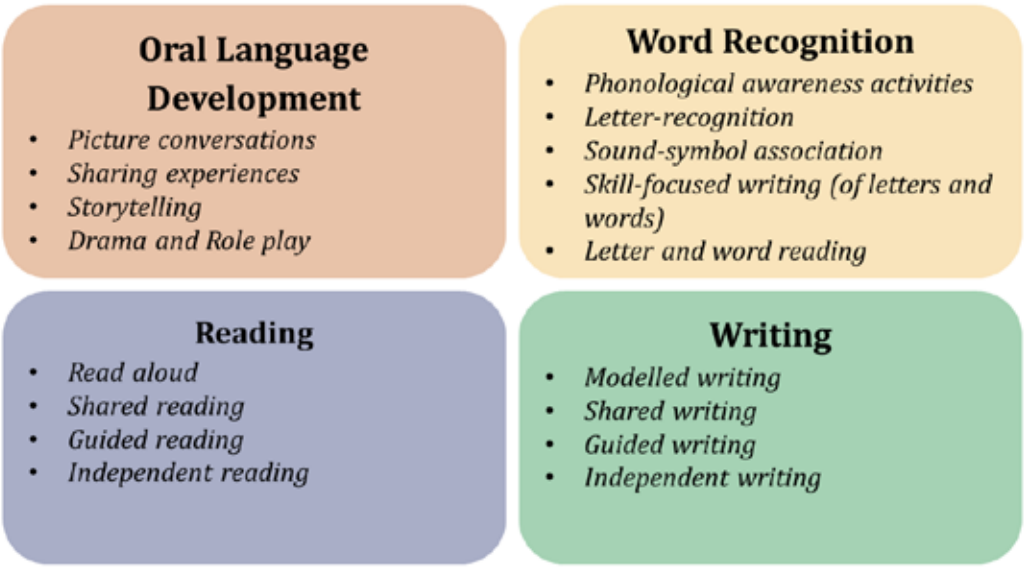


Figure 4.5A: Four Blocks Model - Language

By the end of Grades 1 and 2, there would be a need to provide time for additional support to children who have not acquired basic word recognition skills. A **differentiated approach** to teaching *(Please see Section 4.2 in this Chapter)* for addressing the needs of such children should be a part of the activities in all the four blocks.

4.5.1.6 Some strategies for teaching an unfamiliar language

The Teacher might encounter children in their classroom who are not familiar with the language that is being taught. The pedagogy of teaching an unfamiliar language needs to be understood better with strategies like Total Physical Response (TPR) activities, extended oral and communicative work, vocabulary development, simple phrases and sentences used as commands, conversations, and stories.

Some strategies for teaching of an unfamiliar language are below:

a. Promote oral language development initially with lots of fun-filled and interactive activities; like TPR (e.g., physically demonstrating action words - jumping while saying the word jump), extended oral and communicative work, vocabulary development, simple phrases and sentences used as commands (e.g., shut the door, look outside) and conversations and stories.

b. Provide comprehensible input in the unfamiliar language. It includes providing many opportunities of listening to the language and reading it in a form that is within the children's sphere of comprehension, also called 'comprehensible input.' The language used by the Teacher should be simple and supported by gestures, pictures, actions, and use of words from the children's home languages. Using a familiar context that children can easily relate to is important for better comprehension.

c. Build a meaningful and purposeful context. It means children should be encouraged to acquire an unfamiliar language by using it for effective communication instead of being stuck with purity and correctness of language. This will improve the oral expression of children in an unfamiliar language.

d. Provide ample exposure to unfamiliar language. This could be done by providing opportunities of listening, using the language for communication, and ample print materials.

e. Create a stress-free and safe environment. There should not be any pressure on early production or speaking and formal assessment of learning for an unfamiliar language. A positive and supportive classroom environment where children are motivated and have high self-esteem and low level of anxiety helps children learn better and at ease.

4.5.2 Teaching Mathematics

Children bring various mathematical skills from their surroundings and culture into the classroom, which must be the basis of learning mathematics.

Mathematics learning goals can be categorised into higher goals such as mathematization of a child's thought processes (e.g., ability to handle abstract thinking, problem-solving, visualisation, representation, reasoning, and making connections of mathematics concepts with other domains) and content-specific goals (those related to different concepts in mathematics (e.g., understanding numbers, shapes, pattern).

Children achieve content-specific goals once they are mathematically proficient in it. So, teaching and learning in the early years must emphasise achieving both higher goals and content-specific goals as both goals are interdependent and interconnected.

Learning mathematical skills must follow the simple to the complex path. It means that in the initial years, children learn mathematical vocabulary (e.g., matching, sorting, pairing, ordering, pattern, classification, one-to-one correspondence) and mathematical concepts related to numbers, shapes, space, and measures. These skills gradually move to more complex and higher skills (e.g., quantity, shapes and space, measurement) at later ages. In the mathematics teaching-learning process, those mathematical skills which are more focused on applying mathematical skills in a real-life situation to understand, solve, reason, communicate, and make decisions need emphasis.

There are various mathematical processes which help children achieve both higher and content-specific goals. These are problem-solving i.e., solving mathematical problems both realistic and 'pure;' reasoning i.e., justifying and reasoning about solutions and processes; connection-making i.e., connections between one concept and another; representation i.e., using concrete, visual diagrams to represent mathematical concepts and ideas; communication i.e., explaining and communicating mathematical ideas; and estimation i.e., using approximation to quantify and solve.

Incorporating these processes in the classroom helps children to get a comprehensive mathematical experience and achieve mathematical proficiency as part of conceptual understanding, procedural understanding, application, adaptive reasoning, and a positive attitude towards mathematics.

4.5.2.1 Approaches to Teaching Mathematics

The following approaches can be integrated into mathematical teaching-learning processes to give children comprehensive mathematics experiences considering the nature and cognitive demand of the tasks and skills.

a. Developing mathematical abstract ideas (concepts) through concrete experience (ELPS)

Mathematical concepts are abstract e.g., learning to understand numbers, doing operations, and drawing 2D shapes. So, it is important that children learn these abstract concepts through concrete experience and gradually move from the concrete to the pictorial to abstract notions.

When children engage with a concrete experience, they can understand the meaning of mathematical concepts easily. The following sequence can be followed to teach the abstract mathematical concept.

An example of learning numbers through **ELPS**:

- **E – Experience:** Learning the mathematical concept of concrete objects, e.g., counting concrete objects for learning numbers.
- **L – Spoken Language**: Describing the experience in language, e.g., what is being counted, how many have been counted.
- **P – Pictures:** Representing mathematical concepts in a pictorial form e.g., if 3 balls have been counted, these can be represented through 3 pictures of the ball.
- **S – Written Symbols:** Mathematical concept that has been learned through concrete experience and pictorial can be generalized in written symbol form such as writing the number 3 for three balls.

b. Connecting mathematics learning with children's real-life and prior knowledge

Learning mathematics must relate to children's real life and their prior knowledge. Real life examples also help children to understand a mathematical concept, develop the ability to apply mathematical skills in real life and, more importantly, see mathematics as worth learning and doable. So, while teaching mathematical skills, Teachers should use real life examples to build conceptual and problem-solving abilities.

c. Mathematics as a problem-solving tool

Problem-solving is an important higher goal of mathematics learning and children must quickly understand that mathematics can be used as a problem-solving tool to solve a real-life mathematical problem. So, learning should not only focus on developing concepts but also on problem-solving skills. Problem-solving abilities provide children an opportunity of making

meaning of skills and knowledge as well as an understanding of where they can apply their knowledge or skills. Setting up rich mathematical tasks, understanding the problem, devising strategies, solving, and checking the solution and justification are important steps to help children build problem-solving abilities.

The following steps could help develop problem-solving abilities among children:

i. Understand the problem - What is known? what is unknown?

ii. Devise a strategy/plan- Do I know a related problem? What strategies could be useful to solve it?

iii. Solving the problem - What steps I am taking to solve it? Am I taking the correct steps? Can I argue about why and how I solved this problem?

iv. Looking back/Checking the solution - Did I do the right thing? Did I answer the question?

v. Encouraging flexible thinking and use of multiple strategies for problem-solving.

Children should learn more than one way of problem-solving. For example, what would be different strategies to solve 8+7? Children can count on 7 more from 8 or some children can split 7 into 5+2 and add 2 in 8 to make it 10 and then add both 10 and 5 to arrive at 15. Hence, teaching-learning must be focused on helping children to invent multiple strategies to solve the problem and not only a single way of problem-solving. Children must be encouraged to invent their own strategies but for these strategies, children need a strong understanding of mathematical concepts and processes.

d. Using Mathematical talk, communication, and reasoning.

Mathematics has its own language, different from everyday language in many ways. It has its own unique vocabulary, symbols, and sign systems which are often not used in daily lives e.g., addition, multiplication, +, -, =.

A child may be encountering these for the first time in a mathematics classroom. There is a need for rich conversation between Teachers and children around mathematical concepts, processes, applications, and reasoning. This discussion must also focus on mathematics that children encounter in their real life and provide an opportunity for children to explain their mathematical thinking, reason, justify and listen to other mathematical ideas and also the opportunity to listen to the Teacher's explanation, reasoning, and justification. So, an oral math talk must be encouraged in the classroom rather than engaging in written tasks silently.

e. Developing a positive attitude towards learning mathematics

There is vast research on the strong dislike and negative attitudes children may develop towards mathematics even as early as Grade 3. Early learning should not only focus on developing mathematical competencies but also on supporting children to develop a positive relationship with mathematics as a domain. The system needs to generate awareness of the strong affective responses mathematics as a subject can generate, and the pivotal role a strong foundation in early mathematics can play in pruning the negative image the subject has for many. Children should learn to enjoy mathematics.

4.5.2.2 Components/Areas of Mathematics Learning in the Early Years

a. **Number and its Relations** refers to understanding number concepts (Sound, Symbol, and Quantity) in various contexts, counting, representation, and its relation.

b. **Basic Mathematical Operation** refers to understanding concepts of calculation and developing strategies to solve problems using them.

c. **Shapes and Spatial Understanding** refers to developing an understanding of shapes and making and classifying shapes as well develop spatial sense understanding.

d. **Patterns** refers to the understanding of the repeated arrangement of numbers, shapes, and designs and making a generalisation based on some rules and structure.

e. **Measurement** refers to understanding units of measuring something and using it to quantify.

f. **Data Handling** refers to understanding the collection of data, collecting and analysing it.

4.5.2.3 Blocks of Teaching for Mathematics Instruction

To become mathematically proficient, children need to build conceptual understanding, procedural understanding, strategies competence/application, communication and reasoning, and a positive attitude towards mathematics.

All these strands of mathematical proficiency can be designed in the following four blocks for the daily classroom process. A mathematical approach/process must be the basis of and based on the nature of the task.

a. **Block 1: Oral math talk**: At the beginning of class, for 5-10 minutes, children could sing a poem with numbers or discuss their experiences with mathematics or problems they encounter in their life. Discussion can also be on oral calculation, concept, strategies, and reasoning. It works as a warm-up activity before going into the formal teaching process.

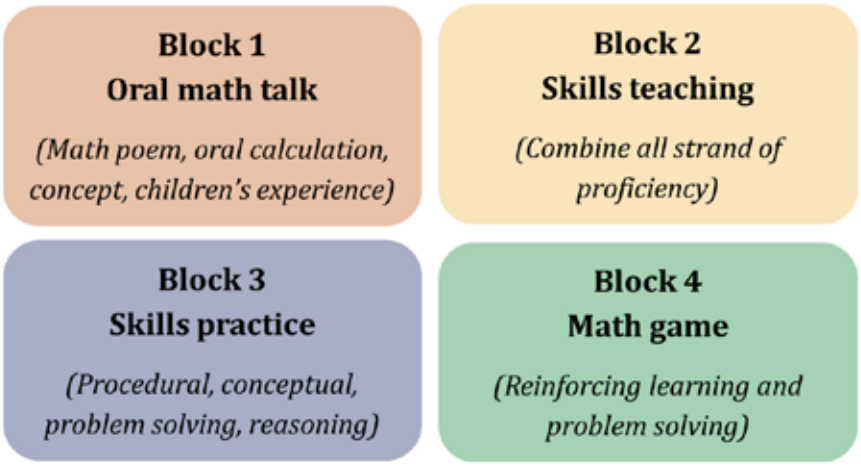


Figure 4.5B: Four Blocks Model – Mathematics

b. **Block 2: Skills teaching (combining all strands):** This is teaching mathematical concepts, problem-solving, and communication through concrete experience, systematic activities, and instruction that follow the Gradual Release of Responsibility *(Please see Section 4.2 in the Chapter)* approach, though not necessarily in the same sequence for every activity or mathematical task. Teachers could also anticipate a mathematics task and let children solve

it independently before providing guiding support. Every child must get an opportunity to learn, explain, and be given feedback.

c. **Block 3: Skills practice:** Providing children with various kinds of rich mathematical tasks based on concepts, processes, problem solving, reasoning, and communication for practicing mathematical skills. This can be through a workbook, textbook or a Teacher-created task set.

d. **Block 4: Math game for reinforcing learning/problem solving**: Children enjoy playing games. There could be various kinds of mathematical games which help children to strengthen their learning in various ways. These games must be based on problem-solving, concepts as well as reasoning. Group-wise games can also be planned according to the learning levels of the children.

The total suggested time in the day for mathematics is 60 minutes.

Table 4.5A

Blocks		Objectives	Suggested Strategies and Approaches	Suggested time
Blocks 1 & 2	Math Oral Talk	As warm-up activities for encouraging oral math	Open-ended/large group discussion Singing, poems, talk about children's real life math experience, concept, oral calculation, reasoning	5-10 mins
	Skills teaching (Combining all strands)	Helping children to achieve mathematical skills through structured instruction/ activities	GRR/ELPS/Problem-solving approach Conducting activities to build concepts, processes, application, strategies and reasoning	20-25 mins
Blocks 3 and 4	Skills Practices	Helping children to master skills through skills practice	Providing math tasks through workbooks or worksheets Individual, peer, group practice	15 mins
	Math game for reinforcing learning	Reinforcing taught skills through games Focusing on problem solving	Playing math games with children to reinforce learning and supporting children who are struggling	15 mins

Section 4.6
Creating a Positive Classroom Environment

As children enter school, their worlds expand, they make friends, begin connecting with adults beyond the family, and become more and more mobile and verbal. They want to explore and learn about everything. The role of the Teacher is very important in guiding children in their behaviour and in forming strong positive relationships.

Teachers, therefore, have to be thoughtful and responsive to the needs of children. Caring for children is complex and important work. It is complex because there are many parts involved in establishing relationships with children and their families.

4.6.1 Classroom Environment

The word environment refers to both the physical space and the 'atmosphere' or psychological environment in the classroom. The physical environment provides a structure that allows safe exploration, cognitive growth and challenge. The atmosphere or psychological environment is made up of all the relationships and social interactions that happen in the classroom.

A safe, secure, comfortable, and happy classroom environment can help children to learn better and achieve more. For this, it is important that the necessary facilities such as learning materials, aids, equipment, and space for doing activities, working together and playing so as to help each child learn better are made available. **The classroom must be an inclusive, enabling learning environment that provides every child freedom, openness, acceptance, meaningfulness, belonging and challenge.**

Care is central to the classroom environment at the Foundational Stage. Empathy and respect are at the heart of care. This is an attitude of concern and responsibility for children and relationships.

4.6.2 Creating Classroom Norms with Children

Introducing children, gently but clearly, to agreed norms of being in a classroom together should be done as early as possible. This gives them both clear direction and a way to settle well in class.

It is best to have conversations with children and agree on norms with them. This leads to an enhanced sense of ownership and responsibility while helping nurture and build a positive classroom culture. Norms should be short, clear, and easy to understand with positive phrasing. Once the norms are agreed upon, each one must be explained in detail with examples.

Listing the norms with a corresponding visual for each on a poster and hanging it up at the children's eye-level would help children understand and follow them better. The norms could be:

a. Listen when another person is talking
b. Raise your hand before speaking in a group
c. Speak respectfully to your classmates and your Teacher
d. Keep your hands, feet, and any objects to yourself

Enforcing norms should be done in a positive manner. When rules are broken, gently point children to the 'norms' poster up on the wall and talk about it

Teacher's Voice 4.6A

Attendance Bucket!

In my class of 20 children who are between 5 and 6 years, we have decided that we will not have usual attendance marking system. Instead, we have created name plaques of children in class; there is a plaque for me too and we put them in a bucket. Those who come to class, pick up the plaque with their name and keep it in their shelf next to their other belongings. While going back we put these plaques back in the bucket.

4.6.3 Managing Difficult Behaviour

Children behave inappropriately for many reasons. Behaviour is often the unspoken language through which children act out feelings and thoughts. It is also because they are unaware of group behaviour norms or alternative ways of behaving, and not because they are 'bad' or they want to 'trouble us.'

Sometimes they use behaviour to seek extra attention. They could be angry or helpless and don't know any other way to express this. Children need to feel secure and in control - when that control is taken away, they may seek to regain it through this kind of be- haviour. Sometimes this behaviour could be because of lack of sleep, poor nutrition, health reasons or developmental delay or deficits, family dysfunctionality or stress.

Some examples of difficult behaviour which harms children or disrupts the classroom are:

a. Aggressive behaviour (e.g., hurting others - hitting, biting, pinching, throwing objects)
b. Antisocial behaviour (e.g., using inappropriate language, name-calling, refusing to share)
c. Disruptive behaviour (e.g., disrupting circle time, running around the classroom, shouting in the classroom, dropping objects, tearing books, breaking toys, destroying the work of others)
d. Inappropriate expression (e.g., excessive crying, pouting, whining)

4.6.3.1 Helping Children Settle, Guiding their Behaviour Positively

Every adult who cares for children has a responsibility to guide, correct, and socialize children toward appropriate behaviours. Positive guidance is crucial because they promote children's self-control, teach children responsibility, and help children make thoughtful choices.

Caring and respectful adults create a supportive atmosphere to help young children explore alternative behaviours, develop social skills, and learn to solve problems. This is called a positive approach to guidance. An effective guidance approach is interactive. Adults and children both learn to change as they interact with one another toward a common goal.

Understanding the development of a child will help us set appropriate standards of behaviour/ expectations from children, think of appropriate alternatives, as well as age-appropriate explanations or ways to explain to the child. This will also preserve the child's self-esteem and dignity.

Actions that insult or belittle are likely to cause children to view their Teachers, parents and other caregivers negatively, which can inhibit learning and can teach the child to be unkind to others.

However, actions that acknowledge the child's efforts and progress, no matter how slow or small, are likely to encourage healthy development.

4.6.3.2 Illustrations of Positive Guidance by the Teacher

a. Tell children what is expected from them. Make directions and suggestions in positive statements, not in negative forms. For example, 'Walk around the edge of the grass, Shubha, so you won't get hit by the swing' instead of 'Don't go near the swing.'
b. Reinforce what children do right and what Teachers want to see repeated. This helps build the relationship on positive grounds. For example, 'Good job, Jacob. You worked hard on building those blocks.'
c. Give direct suggestions or reminders emphasizing what you want children to do. Help them refocus on the task without nagging or confrontation. For example, 'I know you are excited about the nature walk, Nemi, it looks like you have almost finished putting on your sandals so we can go' instead of 'Hurry up and buckle your sandals so we can go.'
d. Use positive redirection whenever possible. For example, 'Let's get a basket for you to toss those balls into, Selva. That way you won't bother the other children who are playing nearby.'
e. Use encouragement appropriately, focusing on helping children achieve success and understanding what it is you want them to learn. For example, 'Now that you have finished two puzzles, can you finish the third one, Tenzing?'
f. Give reasons for your request. Let children know in simple, straightforward statements the reasons behind your request. Children are more likely to cooperate when they can understand the reason why. For example., Pallavi, if you move those chairs, then you and Abdul will have more room to dance' instead of 'Move the chairs, Pallavi.'

Teacher's Voice 4.6B

Telling the Truth

Most children at the Foundational Stage are naturally honest and direct. It is important to build on this and encourage it in every way.

Many Teachers find simple ways to recognise and appreciate children for telling the truth thus reinforcing it as the right thing to do. This also helps strengthen the bond between Teacher and child.

Voices from two Teachers are below.

The start of school each day is a hectic time for Teachers like me.

Today, as I was making my mental preparations for my class and interacting with parents dropping off their children, and the children themselves, I got a phone call. The voice on the other side said 'Teacher, I am Gurpreet's mother. Gurpreet is refusing to come into the school. Can you please talk to him?'

I agreed, and asked Gurpreet what was the matter. He replied, 'My shoes are quite worn out. Mama has agreed to buy me new shoes and I want to go shopping with her.'

I appreciated the fact that he told me the truth and did not try to make up a reason. I thought about it for a few seconds and then told him, 'You must get the new shoes, but you can go to the shop during the long break and then come back in your new shoes. So, you won't miss any class.'

He agreed. The smile on Gurpreet's face when he came back to class in his new shoes was all I needed to be assured of the value of such honest engagement with children.

At the end of every day, I give very short workbook tasks to the children. One day, I noticed that Mumtaz didn't have any task in her workbook. She remained silent when I asked if I had missed giving her a task. I let it go. However, this happened frequently over the next couple of weeks.

When I asked her again, she replied 'You have been giving me the tasks. But I have been tearing off the pages as I am finding it difficult to complete them. I am sorry.'

I was impressed by her honesty. I didn't scold her. I told her that I really appreciated her honesty and would give her simpler tasks and she promised to do them. And that is how things panned out over the next few weeks.

4.6.4 Discipline

Discipline is a part of the guidance strategies adults use to help children become responsible for their actions, learn self-control, and behave appropriately. Discipline does not mean punishing and preventing behaviours.

One of the major goals of a good guidance process is to help children achieve self-discipline. This happens only if adults lead in ways that support children's developing ability to control themselves. By gradually handing over to children the opportunity to govern their actions, adults communicate trust.

For young children, with their emerging initiative, this is an important step to take. With added responsibility and trust comes an added dimension of self-respect and self-confidence. Such children feel capable and worthwhile. For example, on a nature walk, let children handle the basket in which you want them to gather pebbles. During indoor play, encourage children to bring materials from the shelves/boxes and put them back. Encourage older children to serve food to everyone.

Along with self-respect, the child must taste the freedom that comes with a reduction of adult controls. Children do not learn to handle freedom by being told what to do all the time. Only when they have an opportunity to test themselves and make some decisions on their own will they know their capabilities. Young children must learn this in safe places with adults who allow them as much freedom as they can responsibly handle.

Teacher's Voice 4.6C

As I walked into class today, I was greeted by something unusual. In one corner of the class, Moite was crying and Siama was standing beside her. Siama is one of the more mischievous children in my class and my first thought was that he had done something to Moite.

I asked what was happening and heard the chorus, 'Moite hit Sangtei, and she has gone to get medicine for her wound.'

I was surprised. Moite and Sangtei were good friends and Moite had never done something like this before.

I asked Moite why she was crying but didn't get an answer. Soon, Sangtei was back in class - there was a small wound on her forehead that had been covered with plaster. She too said, 'Moite hit me.'

I asked the children to settle down and tell me what had happened. The versions were consistent. It so happened that Moite had taken one of the learning materials in the class – a string of wooden beads – and swung it around, hitting Sangtei on her head. Sangtei confirmed the description of the event.

I continued discussing the incident with the children. Finally, all of them, including Sangtei, agreed that Moite had hit Sangtei by mistake. Both Moite and Sangtei calmed down. I then continued the conversation to help Moite, and the rest of the children,

understand that it was dangerous to play with the string of beads like that and that the beads were meant for a different purpose. Moite apologised.

It would have been wrong if I had responded to my first thought that Siama had hurt Moite. It would also have been wrong if I had assumed Moite had hit Sangtei.

But it was important for all the children to understand that actions have consequences, intended or otherwise. I was satisfied with both the way I handled this situation and with the outcome as well.

4.6.5 Language Used by the Teacher

As Teachers gain experience in handling problem behaviours, they learn to use the right kind of language. Teachers discover how potent the voice can be and what words will work best and when. They become aware of facial expressions and what a touch or a look will convey to children. How they use their body reflects a distinct attitude and approach to discipline. Through experience, new Teachers learn how to use these tools in ways that will work best for them and the children.

a. **Voice**: Talk to children in the same way you talk to other people. Learn to control the volume and use good speech patterns for children to imitate. To be heard, get close enough to speak in a normal tone; get down to the child's physical level. Often, lowering volume and pitch is effective.

b. **Words:** The fewer the words, the better. Simple, clear statements, spoken once, will have more impact. The child will be able to focus on the real issues involved. A brief description of what happened, a word or two about what behaviour is acceptable and what is not, and a suggestion for possible solutions are all that are necessary.
Teachers have to choose the words carefully. They should convey to the child exactly what is expected. E.g., 'Kinnari, move the block away from the truck so Anand will not bump into it again.' This tells Kinnari in a positive, concrete way what she can do to protect her block building. If she had been told, 'Kinnari, watch where you are building' she would not know what action to take to solve the problem.

c. **Body Language:** When working with small children, the Teacher must be aware of body height and position and get down to the level of the child. It is difficult to communicate warmth, caring, and concern from two or three feet above a child's head, or by shouting from across the room.
The way Teachers use their body invites or rejects close relationships and familiarity. A child will find Teachers more approachable if they are seated low, with arms available, rather than standing, with arms folded.
Making full use of the senses can soften the impact of words. A firm grip on the hand of a child who is hitting out, or a gentle touch on the shoulder, tells children the adult is there to protect them from themselves and others. Eye contact is essential. Teachers learn to

communicate the seriousness of a situation through the eye and facial expressions. They also show reassurance, concern, sadness, and affection this way. Physical presence should convey to the child a message that the Teacher is there, available, and interested.

d. Attitude: Attitude is part of the unspoken language of guiding children. Attitudes are derived from experience. The Teacher has to examine the way she was disciplined and acknowledge her experiences and feelings about it, particularly assumptions she may have on how children be- have depending on their context and background.
As Teachers gain experience in handling problem behaviours, they learn to use the right kind of language. Teachers discover how potent the voice can be and what words will work best and when. They become aware of facial expressions and what a touch or a look will convey to children. How they use their body reflects a distinct attitude and approach to discipline. Through experience, new Teachers will learn how to use these tools in ways that will work best for them and the children.

4.6.6 What Not to Do

a. Avoid constantly telling children what they cannot do. If adults use many negative words such as NO, don't, stop it, cut it out, or shut up, children may decide to tune the Teacher, parent, or caregiver out. Too many 'don'ts' also cause negativism in children.
   i. E.g., instead of *'Vijay, don't drop the egg*' you could say '*Carry the eggs in both your hands like this, Vijay, so they won't break or fall from your hands.*'
   ii. E.g., instead of '*Chitra, don't drag your dress in the mud*' you could say '*Tie your dress around your waist like this so it won't get dirty*.'
b. Be careful of damaging children's self-esteem.
   i. E.g., When Pavani spills the milk that she was carrying onto the table instead of saying '*Can't you do anything right*' say '*That's a hard job, we'll wipe it up and you can try again carefully*.'
c. When a child makes a mistake, respond genuinely, and avoid sarcasm.
d. Try not to ignore a child, irrespective of their behaviour.
e. Never criticise a child in front of others.

The most effective methods of guidance are clear, consistent, and fair rules that are enforced in consistent, humane ways. Children should be aware of the consequences if the rules are broken. Good guidance practices emphasize the positive aspects of a child's behaviour, not just problem behaviours. Guidance measures have greater meaning to children if they are encouraged to take responsibility for their actions and are part of the problem-solving process.

Box 4.6A

Learning to make Ethical Choices and Learning to be Sensitive to the Environment

It is important for children at the Foundational Stage to learn to do the right thing as part of their everyday. They also must learn to care for all beings and nature.

However, given the way they learn at this age, all this must be done as a part of their everyday - through their everyday conversations and play activities, the stories they tell and listen to, and, more than anything, their Teacher's responses to their actions.

There are illustrations of this throughout this Chapter especially in the Teacher's Voices. It is the way Teachers pick the right cues and use the immediate situation to reinforce and encourage the right choices that children learn the most from.

Section 4.7
Organizing the Environment

4.7.1 Seating

Sitting together is one good way of learning to be together in a simple and natural manner. Sitting together encourages friendships, bonding, and being with other children who may be 'different from me,'. Sitting together e.g., in small groups or in a large circle, encourages learning together, collaboration, and a natural acceptance of diversity.

Classroom seating at the Foundational Stage should be flexible and reflect the pedagogy being used in the class. Sometimes children need quiet individual time, sometimes they work in pairs or small groups and sometimes they work with the whole group together.

Seating can be organized in different ways, giving children variety and choice while ensuring that pedagogical requirements are met. **Fixed individual seating is not necessary at this Stage. In fact, it could come in the way of both Teacher and children.**

4.7.2 Displays and Print-Rich Environment

Classroom displays constitute part of the learning process. Displays in the classroom are not necessarily limited to 'finished' products of what children have created but includes aspects of work in progress e.g., a collection of pebbles or plants that are being used for a particular study. Work of all children is displayed and not only the 'best' ones selected each time.

Teachers must ensure age-appropriate language and style in organizing displays so that they are accessible and comprehensible to all children. Displays are best kept at the eye level of children.

Children could be involved in displaying their own work, replacing them from time to time. Selected finished and used displays can be added to individual children's portfolios.

Given the focus on language learning in these early years, the availability of a print-rich environment (e.g., word walls, word cards, word labels on objects in the classroom and easily accessible classroom libraries) to encourage reading and writing is critical.

4.7.3 Creating Vibrant Learning Corners in the Classroom

Learning Corners help to organizes spaces in a way that is inviting, provokes children's thought, interest, and curiosity. They provide flexibility and freedom to participate in a variety of activities along with opportunities for independent and collaborative play. They also enable quiet play in an area that is separated from active play. They promote both independent learning and Teacher-guided interactions, providing opportunities for holistic development through various types of play encouraged in different Learning Corners. Learning Corners include Corners for Dramatic Play, Blocks/Puzzles, Math, Arts/Drawing, and Books.

Teachers play an active role in setting up and maintaining Learning Corners. They are responsible for keeping these Corners attractive and vibrant, and ensuring that they cater to the learning needs of all children.

a. The Teacher should choose materials appropriate for different groups of children. The materials should be such that any child, one who has just begun to learn a concept or another who has learnt more about it, finds something suitable.

b. Children should be allowed to explore whatever material they want. Initially, children may move from one Corner to another often. Once they settle, they begin to engage seriously with activities and materials of their choice for longer periods of time.

c. The Teacher should encourage children to visit all the Corners during the week. If there is limited material, the Teacher could decide on the number of children allowed in each Corner every day. Some of the material could be changed every 15 days. This will encourage children to explore new things. The Teacher could align the material to the Learning Outcomes of that period.

d. When children are playing in the corners, the Teacher may need to move from one group of children to another, interact with them, and play with them. She could let half the group of children use their time as Free Play and could focus on Guided or Structured Play for the other half of the group, helping them learn something specific.

e. The Teacher must observe children as they use the Corners. She could ask questions, introduce, or extend an idea, give a clue to solve a puzzle, clarify something in a story, record children's responses and note anecdotes of what children are doing. This process helps the Teacher take informed decisions while planning for the next day, next week or month based on observations.

f. Safety of children must be ensured while they use the Corners.

Please see Chapter 5, Section 5.6 on Learning Environments for more details.

Chapter 5
Choosing, Organising, and Contextualising Content for Teaching

The content to be used in the teaching-learning process includes the learning environment, the teaching learning materials (TLMs), and books. The choice of content is largely determined by the Competencies and Learning Outcomes to be achieved along with the pedagogical approach being adopted.

The arrangement and organization of the learning environment is very important for the Foundational Stage. Children in the Foundational Stage, learn most effectively through manipulating and engaging actively with the material world around them using all their senses. To enable this rich sensorial experience, carefully chosen TLMs play an essential role in classrooms.

Section 5.1 elaborates on the process of developing a syllabus for the Foundational Stage based on the NCF. Section 5.2 outlines the principles and considerations for content selection across all the age groups in the Foundational Stage. Language, mathematics, and arts provide their own specific considerations for content selection. Section 5.3 outlines different approaches to organising content. Section 5.4 lists out the relevant TLMs that are appropriate for the Foundational Stage. Section 5.5 gives guidelines for selecting books and for textbook design appropriate for the Foundational Stage. Section 5.6 provides guidelines and suggestions for organizing the learning environment, both indoors and outdoors.

Section 5.1
Developing a Syllabus

This curriculum framework puts down the Curricular Goals and Competencies to be achieved and gives guiding principles for content selection, pedagogical approaches relevant for the Stage and assessment practices that are appropriate. The framework also gives suggestions on the allocation of time for different curricular areas that is proportional to the intended Learning Outcomes.

Syllabus developers need to take these as inputs and develop a syllabus after considering the local context – the socio-cultural environment and practices, capacities of teachers, the infrastructure and material environment of the schools and so on.

a. The syllabus should rearticulate the Learning Outcomes for each of the Competencies outlined in the NCF. This should be done based on the considerations of the local contexts as mentioned above. The Learning Outcomes articulated in the NCF can act as a useful illustration for this purpose.

b. **The syllabus should make specific choices for content and materials based on the Learning Outcomes, the principles and guidelines of NCF along with considerations for the local context.** Principles of content selection, approaches to organizing content, choice of TLMs are further elaborated in the following Sections of this Chapter.

c. Based on the Learning Outcomes and content selection, the syllabus should articulate the sequence of activities and learning experiences that are to be facilitated by Teachers. For this sequencing, time allocation for achieving different Learning Outcomes needs to be appropriately balanced. Guidelines and approaches articulated in Chapter 4 on Pedagogy would assist syllabus developers in creating activities and learning experiences.

d. **For the Foundational Stage it would be appropriate to develop activity books and other handbooks for Teachers, that would guide them through the sequence planned in the syllabus.** Section 5.5 on books and textbooks in this Chapter gives further guidance for syllabus developers.

e. **The syllabus should design broad guidelines for assessments that check for the achievement of Learning Outcomes articulated in the syllabus** *(Please see Chapter 6 on Assessments)*. These guidelines should assist Teachers in developing specific assessments to be conducted in school. The syllabus should design a specific format for the Holistic Progress Card, based on the Competencies and Learning Outcomes appropriate for this Stage.

Section 5.2
Principles of Content Selection

While the Competencies and Learning Outcomes give clear direction as to what content is to be used for creating learning experiences for children, there are several other considerations to be kept in mind for content selection. Some of these considerations are given below:

a. Concepts formed in the Foundational Stage are largely perceptive (e.g., colour as visually discriminated) and practical (e.g., spoon used as a lever to open a tin cover, money to buy things in a shop) but not theoretical (e.g., colour as a spectrum of light, lever as a simple machine, or money as a medium of exchange). Exploring the theories behind the perceptive and practical concepts is expected only in the later Stages of schooling. **Hence content chosen should be sensorially engaging (e.g., activate the child's senses, have aesthetic appeal) and/or be practically relevant in the context of the child's experiences.**

b. **Content should be derived from children's life experiences and reflect the cultural, geographical, and social context in which the child is developing and growing.** Day-to-day activities of working, cooking, traveling, folk songs and stories, festivals, and rituals in a community or group are also worth knowing and experiencing systematically.

c. Content should move from familiar to unfamiliar, simple to complex, and from self to others. Young children can handle and are interested in objects and events in their immediate environment - things that they can relate to themselves and are simple. Gradually, the content can get more complex and can also include topics that are not found in children's immediate environment.

d. Since the goal of cognitive development is to know about the world around and adapt to one's environment successfully; **the content should reflect topics and themes which will acquaint children with the natural and human environment in which they are growing and developing, the social and the physical world, people, places, living and non-living things.**

e. Content should be tied to emerging skills i.e., individual characteristics of children. All children are different and learn at their own pace. **The content should be diverse and inclusive to accommodate the varied interests of individual children** and offer multiple levels of activities and experiences so that it meets the challenges for individual children in terms of their abilities and skills.

f. **Special care should be taken to avoid promotion of stereotypes** e.g., owls and snakes as evil, or dark-skinned people as scary, or the mother always handling the kitchen.

5.2.1 Content for Language

The texts for language should be a good balance of stories and poems, along with content on the local natural and human environments. While stories and poems enhance the imaginative and linguistic capacities of young children, content on both flora and fauna as well as social and cultural aspects allow children to gain understanding of the world around them.

Textual Content

a. The textual content in early Grades should have adequate visual cues in terms of pictures and illustrations, to assist the beginning reader in meaning-making.

b. The choice of fonts should give preference to reducing visual complexity rather than adding aesthetic appeal.

c. The fonts should be a minimum of 14-point size.

d. The vocabulary used needs to have a judicious mix of familiar and unfamiliar words closer to the spoken form of language than the standard written form (many Indian languages have a very distinct vocabulary in the spoken and written forms).

Forms of Content

a. Textbooks/Workbooks: While textbooks can make an appearance in Grade 1, they need to allow for active engagement of children. Textbooks and workbooks should complement each other well.

b. Children's Literature: For a comprehensive literacy classroom, access to good and abundant children's literature is a must. This should include stories, songs and other forms of literature of local culture. For example, this lullaby in Bangla could be included as sing-along song in the classrooms

Ghum parani mashi pishi, *Moder bari esho* *Khaat nai palang nai* *Chokh pete bosho*	*Sleeping aunts,* *Come to our house.* *No bed, no bed.* *Bring the sleep to our eyes.*
Bata bhora bhaat debo *Gaal bhore kheyo* *Khokar chokhe ghum nai* *Ghum diye jeyo.*	*I will give you a bowl full of rice,* *Eat until your cheeks are full.* *There is no sleep in the boy's eyes,* *Give him sleep.*

The classroom should have a bookshelf with an attractive display of children's literature. The Teacher should take an active interest in changing the display with different books, based on their weekly plan.

c. Worksheets: Simple worksheets that children pick and work on and complete on their own play an important role in both practice and formative assessment of children's work in literacy.

d. Materials: Flashcards, *akshara* forms in cardboard/sandpaper, games, puzzles, and materials for other activities keep language and literacy activities engaging and interesting

e. Audio-Visual Material: With ubiquity of digital devices like smartphones, good quality audio material can be very effective content for Grades 1 and 2. Rhymes, stories, and other narratives can be a good source of oral language input for children.

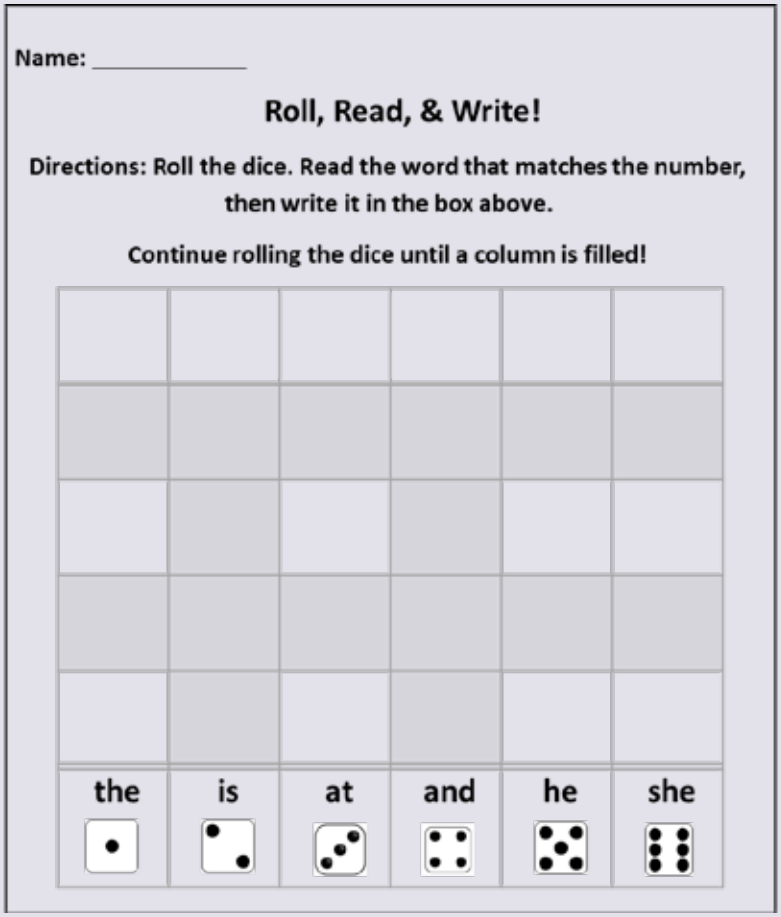
Teacher's Voice 5.2A

Roll, Read and Write!

I teach Grade 1, and my children just don't like sitting in one place. So, to practice recognising, reading, and writing 3-lettered high frequency words, I came up with this game of Roll, Read and Write! For this, I just need a worksheet, dice, and a pencil. Kids take turns to roll the dice and read the word that matches that number and write it in the corresponding box in the worksheet.

We continue to play till either an entire column is filled, or the entire board is filled depending on the time. With this activity, I am also able to work on their ability to identify numbers on the dice and on their pincer grip. It is a simple, fun, and engaging activity.

The worksheet I used for practicing 'the, is, at and, he, she' is given below:


Name: _____

Roll, Read, & Write!

Directions: Roll the dice. Read the word that matches the number, then write it in the box above.

Continue rolling the dice until a column is filled!

the	is	at	and	he	she

5.2.2 Content for Mathematics

Similar to language, content in mathematics can reflect engagement with the local environment. Mathematical activities, whether understanding shapes or counting, can be integrated with engagement with the natural and human environments.

a. The conceptual content for mathematics in grades 1 and 2, in **textbooks and workbooks,** needs to be embedded within a narrative that is engaging and interesting for children E.g., in the illustration below the concept of bigger and smaller is introduced through a simple story.

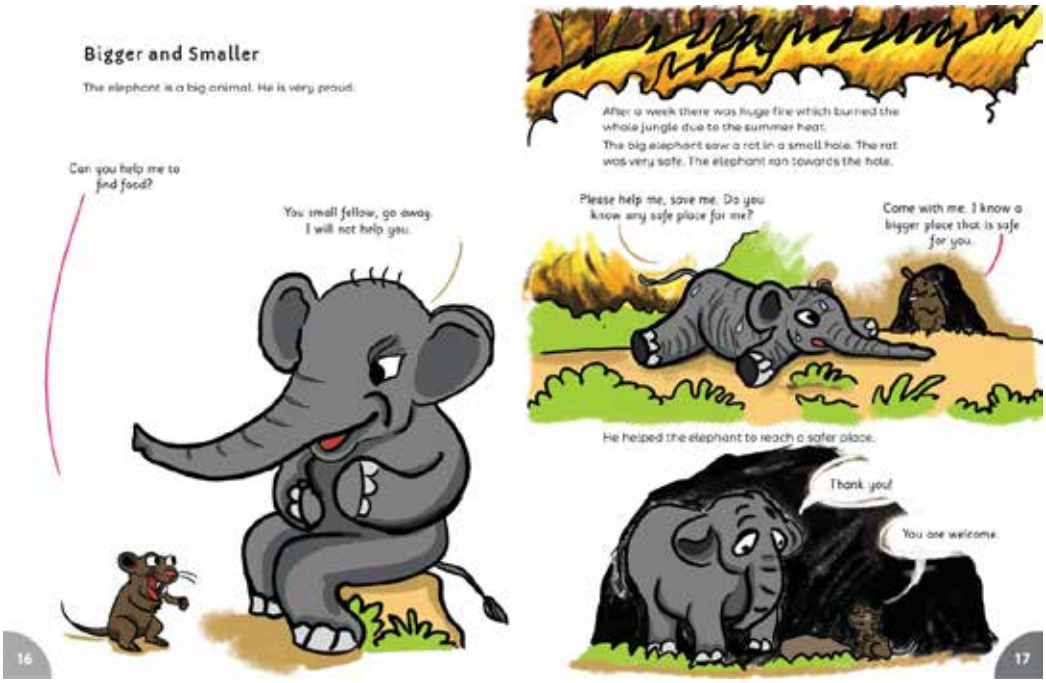


Photo 5.2-A: An illustration from Sikkim Mathematics Textbook

b. The content in textbooks and workbooks should be complemented with appropriate **manipulatives** in the classroom. Counting, shapes, seriation – they all need to be engaged with both in the concrete form of manipulatives and through pen and paper.

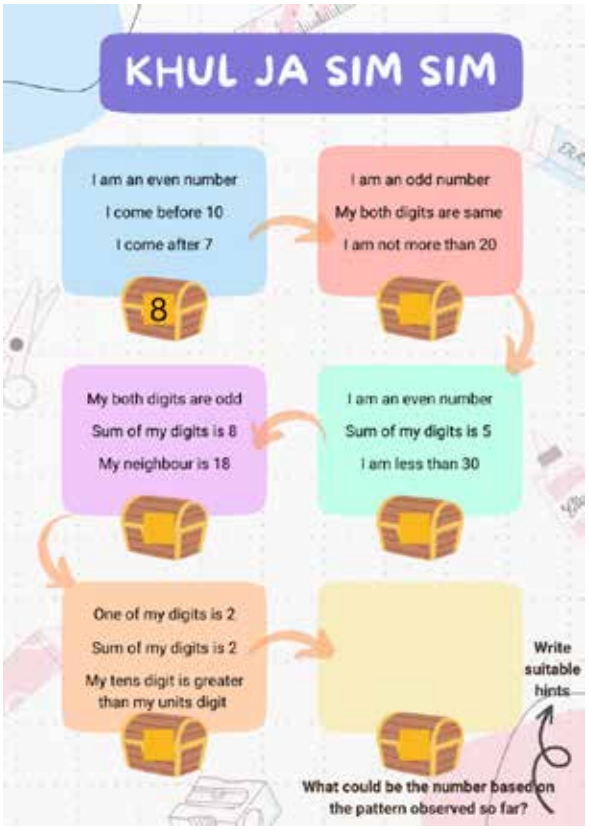
Teacher's Voice 5.2B

Hathira Hathu!

To practice adding numbers up to 20, we came up with this game "Hathira Hathu" meaning Near 10. For this, we need a deck of cards numbered from 1-10, set of 10 pebbles for each pair of children, few pieces of chalks and a chalkboard. We begin by pairing the children. Each pair will be given a deck of cards, to be kept face down and a set of 10 pebbles to do the calculation. Each child will pick up 2 cards. Each of them will add the numbers on the two cards and see which one is closest to 10. For example, Hira picks up the cards 8 and 1, which has a total value of 9. Rohan picks up the cards 6 and 7, which has a total value of 13. Hira would win this round since 9 is closer to 10 than 13. Both of them use the set of pebbles to add and subtract.
This activity could be modified to practice different concepts, such as: choosing 3 cards to see who is closer to the number 30; subtracting the 2 cards to see who is closest to 0.

c. **Worksheets**: The primary purpose of worksheets is to provide children with adequate practice of mathematical skills and strengthen their learning. This practice should be in a meaningful context, and it must focus on specific mathematical tasks. The worksheet should have adequate space with clear instructions.

Sample worksheet below:



5.2.3 Content for Arts

Art learning experiences are to be planned as activities focused on specific Learning Outcomes and the content is drawn from the local context of the school. The Teacher should be attentive to the colours and patterns around the lives of the children in their school and bring in those to the visual arts classroom. Similarly, local forms of singing, tunes, dance, and stories (both folk and contemporary) can be used in the performing arts context of music, movement, and theatre.

Photo 5.2-B: Rangoli Art

Photo 5.2-C: Collage Art

Section 5.3
Ways of Organizing Content

Content for learning in the early years can be organized in many ways with 'play' being the primary experience of the child. Some of the most commonly used approaches are illustrated below.

5.3.1 Project-based Approach

Learning by doing is critical in early education. Projects, especially those involving collaboration with peers, enable children to develop a wide range of skills. Children gain knowledge and skills in learning environments centred around projects, as they are able to work consistently over a period of time on a specific question, problem or challenge. By their very nature, projects involve flexibility and continuity over a period of time. This in turn allows each child to explore and discover, thereby developing critical thinking and problem-solving. Children also get opportunities to collaborate with each other, learn to manage themselves, ask questions, inquire, and thereby learn. All these are critical life skills not only for schooling but also later success as young adults.

Projects, for this Stage, can be short and simple to be within the grasp of young children. Authenticity is key to project-based learning. Children engage with a real-world context and are allowed to pursue their own interests and questions. Sustained, and real-world opportunities are provided to children for exploration, discovery, and critique, which contribute to their growth and learning.

There is no correct or incorrect answer either during the process of doing a project or in its outcomes. The implication is that a child can, without fear of failure, explore their own creative thinking. In this way, projects nurture the natural curiosity of children, and allow for exploration and discovery. Children's learning needs are met, while their ideas are valued, and their interests and creativity nurtured.

An advantage of project work is that it allows students to work with a broad range of content, instead of simply reading about and attempting to memorize content from a textbook. In this way, Teachers do not cover the content but rather set up opportunities for students to discover and interact with the content and to connect it with any number of disciplines and real-life experiences. This interaction involves the acquisition and application of skills, discussed later in more detail.

By nature, projects are interdisciplinary, involving as many subjects as language arts, social studies, math, science, art, drama, dance, and health-along with any number of real-life experiences. In addition, projects provide occasions to acquire, practice, and apply skills used within academic disciplines and real-life scenarios.

5.3.2 Story-based Approach

Everybody loves a good story, especially children.

Stories are one of the oldest tools of communication. In our culture, stories play a very important role in binding together our families and communities. Stories have been used to talk with children about the world around - nature, animals, people, tell them about the richness of tradition, introduce them to different ways of doing things and engage them in questions of ethics and morality. Stories have also been an effective means of maintaining family and community relationships.

Stories are also able to stimulate the attention and the memory of children because of their emotional connect. Stories play an important role in everyday conversation – different aspects of life are communicated through stories. Since most children have already been introduced to stories in their home language, their use in school is an effective introduction to new languages in a meaningful context.

Stories, through involving children directly in their learning process, help them build their own vocabulary. Besides being a rich resource in language learning and teaching, stories also introduce the world beyond their immediate experience, thereby helping children learn much more than words.

There is an infinite variety of stories to choose from. At the same time, authentic stories or those that reflect the child's reality are preferable to adapted stories. These stories not only provide a rich source of 'authentic input' but are motivating and challenging. It is not necessary for children to understand each word since pictures, gestures and intonation help them understand the gist of the story and provide them with a sense of achievement.

Stories also serve as a powerful tool for the holistic development of children. They foster language learning as well as emotional, social, and intellectual development.

Teachers can choose from a rich repository of children's literature, preferably stories in their home language that children are already familiar with, e.g., traditional stories and tales. Other genres include picture books, myths, legends, folktales, fables, poetry, songs, rhymes, alphabet and counting books, animal stories, stories with humour, and so on.

Teachers must carefully consider the aims they want to achieve while planning a story-based approach. They must think of possible activities, time required, links across the curriculum, the languages children speak – these and similar considerations must inform material preparation as well as lesson planning.

A story-based approach is generally developed on the basis of three phases - pre-story activities, activities while reading a story and post-story activities.

a. The first step is to select stories based on teaching objectives and children's needs. This must be followed by considering as well as brainstorming ideas for activities based on the stories, leading to preparation of a lesson plan.
b. Pre-story reading activities could include the following: Show the cover of the book and the title and talk about it, ask children questions on the name of the story and the picture being used, ask questions about the story to be read, play small games around the story to be read.

c. Activities while reading could include the following: Repeat and mime vocabulary, hold up cards, predict what is going to happen next, sequence parts of the story, ask yes/no questions, guess the ending.

d. Post-reading activities could include the following: Choose another title, order pictures or sequence events, make a mini-book or poster, read or act out the story, play games around the story, sing a song about the story, make puppets/masks, retell the story.

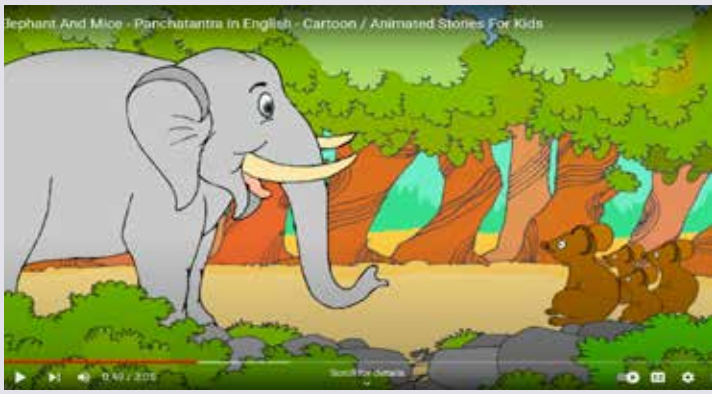
Teacher's Voice 5.3A

Using Stories

I teach 3-6-year-olds where stories form an important way of keeping all of them engaged, build their imagination, vocabulary as well as to convey and have dialogue on positive learnings. I select a story based on what children like or a value that I want to emphasise and discuss with them. I already have a collection of age-appropriate stories. Usually before the class, I plan a pre-story activity for context setting, the story itself (which I sometimes narrate, sometimes play an animated video and sometimes do a role play) and a post-story activity. I also keep in mind the new words they should learn by the end of this period. For example, I have already done an activity on animal flash cards in my circle time as pre-story activity. Now, I plan to do the Panchatantra story on the elephants and the mice.

The story goes like this:

Once upon a time there lived a group of mice under a tree peacefully. But once a group of elephants came that way and destroyed the homes of all the mice because of which many of them were crushed to death. Then the king of mice decided to approach the elephant chief and request him to guide his herd through another route. The elephant king agreed to this and took another route to the water. And so, the lives of the mice were saved. One day a group of elephant-hunters came and trapped many of the elephants in huge nets. Then the elephant king suddenly remembered the king of the mice. He summoned one of the elephants of his herd which had not been trapped, to go and contact the king of mice. On listening to the elephant, the mice king took his entire group of mice and they cut open the nets which trapped the elephant herd. So, the elephant herd was totally set free.



(Source: YouTube channel - MagicBox English Stories)

A friend in need is a friend indeed!

The new words we focused on were 'peaceful', 'approach', 'guide', 'summoned' and a discussion about friendship.

After the story I initiate a discussion by asking questions such as "what all did you see? What was happening in the story? What did the elephants do when the mice asked for help? Why did the elephants help the mice? What did the mice do when elephants asked for help? Why did the mice help elephants? Do you have friends? How many friends do you have? Can you tell us their names? What do you do with your friends?" And so on.

In any such activity, I accept all responses, appreciate them without judgement and encourage all my children to answer and participate.

As a post-story activity, we will create a drawing about 'My friends'.

5.3.3 Theme-based Approach

The thematic approach is a way of teaching and learning where many areas of the curriculum are connected together and integrated within a theme. Rather than learning different skills at different points of time or learning different subjects, children are helped to make meaningful connections through a theme and explore different topics or aspects within the theme.

A theme is defined as an overarching idea/topic that guides the development of specific learning experiences. Children explore a topic through different modes for a long period of time rather than learning different subjects for shorter periods. We can look at it as the common thread that is used to weave learning experiences together.

Children explore various aspects of the themes not as isolate discrete concepts but as processes that take place in real life situations. It makes experiences relatable, contextualized and concrete for children. It helps children in developing an integrated understanding about the topic.

The theme provides familiar situations on which new knowledge can be built. Each theme comes with immense possibilities of learning for children. Any event, idea, object, relationship, or experience within the theme can be imagined as a base for building a learning experience.

Within the theme, children explore topics about themselves, their interests, relationships and interactions with people, objects in the environment. They ask questions to understand these better, explore, experiment, experience and thus build on their already existing knowledge.

Examples of some themes are: My Home, My Neighbourhood, My Garden, My School, Market, Fields and Forests, Hills and Mountains, Rivers and Oceans, Vehicles. All themes have sub-themes within them so that children can explore different aspects within themes.

a. Children are at the centre of the themes. When the focus is on children, the curriculum as well as the Teacher will focus on helping children connect learning experiences to their life.
b. Knowledge and learning will not hang in isolation but will be connected to children's everyday life experiences.

c. The diversity of contexts and children's personal experiences is integral to planning the learning experiences within the themes.

d. The process is more significant than the product in this learning journey.

e. The role of the Teacher is that of a facilitator who mediates the process of learning. Some experiences may emerge out of children's interests and are facilitated by Teachers. Other experiences may be Teacher-initiated with enough opportunities of decision-making and exploration for children. Children and Teacher have the creative freedom to explore various ideas/strands within the sub-themes.

The theme and the sub-themes provide a concrete base for children to make sense of experiences so that they can make connections/generalizations to other experiences and eventually build on more abstract ideas. Children develop new concepts, practice new skills, build dispositions and have emotional experiences in each sub-theme.

Box 5.3A

Theme: Home

Sub-theme: What is happening in the kitchen?

Young children are quite fascinated by the kitchen. The smell of the food, the different utensils and the cooking processes attract them. Often parents or grandparents will talk to children in the kitchen area as they to cook the food. A lot of sharing happens around the kitchen area. So, we see that the kitchen is already a meaningful space for children.

They are learning a lot of things too. They learn about the physical properties of different objects in the kitchen- using all their senses to gain knowledge about these objects. The apply different skills to draw relationships between the objects like using skills of seriation to place spoons from biggest to smallest or categorize the different food items. While doing so they are also building scientific and mathematical concepts through inquiry and experimentation.

They also learn about and question gender roles through concrete experience of how these cooking and caring roles are taken up in their families. They are also building dispositions and are relating to these experiences emotionally.

5.3.4 Eclectic Approaches

All the above approaches have different strengths. We do not recommend a single, specific approach for the early years. It is left to schools and Teachers to choose the right kind of approach to design content for learning depending on their context and needs.

Schools and Teachers often use specific approaches to organizing content for a specific set of competencies. Learning experiences can also be planned for individual learning outcomes with a specific combination of content, pedagogy, and assessment which does not fit into any specific 'approach.'. While this kind of planning has a risk of appearing incoherent, a well-designed sequence of learning experiences without adhering to any specific approach can be equally engaging and effective in achieving Learning Outcomes.

Section 5.4
Teaching-Learning Materials (TLM)

a. **Children in the Foundational Stage are more engaged in learning when they use multiple senses and actively use their hands. From simple toys for play to specific manipulatives for counting and numeracy, a variety of TLM is essential in this Stage**

   Books in general, and children's literature in particular, are mandatory to make early childhood learning environments print rich and promote the excitement of reading. As children grow, use of workbooks and worksheets are also appropriate. Some of the important principles for the choice of TLM are:

b. Material chosen should be attractive and safe to use by children of this age group. Since 3-year-olds put things in their mouth, it is important that the materials and colours are appropriately chosen and do not have components or paint that can be toxic.

c. Material chosen should provide adequate opportunities for the children to explore and experiment with curiosity. Durable and well-made material would allow 'rough' use and still be available for future use.

d. Material chosen should be preferably locally made or locally available. This would allow for easy replacement.

e. The mix of TLM should include materials purchased, materials locally made, materials made by Teachers and even materials made by children.

Along with materials, books play a very important role in developing language and literacy. Having a small but good collection of children's literature completes the TLM set for the Foundational Stage.

5.4.1 Materials that can be prepared by Teachers

Most of the TLM required for the Foundational Stage can be made using locally available and low-cost materials. **Teachers should develop capacities for creating simple TLMs from locally available materials.** Cardboards, straws, packaging material, old clothes, bottle caps/seeds/pebbles (for counting), match sticks (with chemicals removed), old tires, plastic bottles, and containers (for measuring), coconut shells, used paper, used egg cartons (for sorting) all become sources for developing TLMs.

5.4.2 Materials that can be prepared by Children

Children can make simple TLMs as part of their art and craft work. Teachers can bring used fabric to make soft cloth balls, puppets, and toys for play. **Making simple toys, puzzles and board games can be very engaging activities for young children and they can employ all domains of development in designing and creating these materials.**

5.4.3 Materials that can be purchased from the market

Some of the TLM are made of materials that might not be locally available. They might require more sophisticated tools and equipment to produce. These materials can be procured from the market. An illustrative list of such material is given below:

Table 5.4A

Building block set (basic shapes that vary in colour, size, and thickness)	
Colourful beads and wires	Modelling materials (e.g., dough, clay)
Lacing board	Balls of varying sizes
Simple puzzles (e.g., jigsaw puzzle, colour puzzle, body parts puzzle and shape puzzle)	
Magnifying glass	Magnets of varying strength
Dot and number dominoes	Alphabet and number cards
Picture cards or flash cards	Picture books with one or two text lines
Story books	Dafli or small drum
Picture conversation chart	Soft toys (e.g., dolls)
Kitchen set	Doctor set
Model fruits and vegetables	Plastic balance scale
Measuring cups of various sizes	Mats
Paste, Glue, Tape	Ropes
Blunt scissors	
Variety of containers (e.g., bowls, buckets, jugs)	
Variety of tools (e.g., spoons, funnels, measuring cups, spoons/cups, paint brushes)	
Variety of paper (e.g., newsprint, glazed, recycled paper)	
Crayons, markers, coloured pencils, coloured chalk	

5.4.4 Mathematics TLM for Grades 1 and 2

Here are some basic TLM that are simple to make with locally available materials. These materials make learning mathematics a more concrete experience for children.

Counters: Can be anything that can be counted – pebbles, seeds, buttons, legumes, grains, pulses, beads.

Even simple counters can be made using used cardboard packing materials

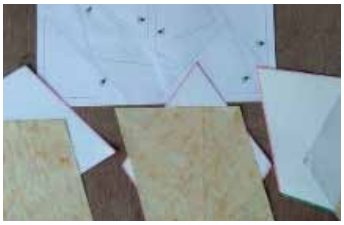
Bundle-sticks: Bundle and sticks can be made with any sticks of roughly the same size. Twigs, straw, hay, coconut broom sticks (cut to roughly 10 cm long pieces), toothpicks, dried up sketch pens - all these can be used along with rubber bands to make bundles. It is important that these are introduced when children are learning numbers from 0-100 and that they get a lot of practice of making bundles of 10 sticks. 10 bundles can be combined to make a bigger bundle of 100. These are fundamental for the understanding of place value (decimal or base-10 system) and can be used to compare numbers as well. They are also very useful in understanding the standard algorithms for addition and subtraction.

Ganitmala: 100-beads Mala in 2 colours for learning whole numbers and operations (and more) can be extended to a Mala in 4 colours for integers.

Arrowcards: Numeral cards that help in understanding place-value.

Flats-Longs-Units: 2D base 10 materials for whole numbers.

Shapes Cut-outs: Geometrical shapes cut out of cardboard help in developing an understanding of shapes.



Straw Models: Models for angles and polygons.

Polyominoes: This is a popular puzzle where each piece is made of identical square(s) and can be used in different ways

5.4.5 Library and Children's Literature

The idea of a library, a space for a collection of books, for browsing through the books and reading books is essential in the Indian context where the culture of reading texts from books is still emerging. A big challenge in learning to read is the motivation and libraries, and easily accessible children's literature are one part of the solution to generate this motivation and interest in reading.

A library is not merely a collection of books. An attractive display of books captures children's attention and changing this display periodically is essential for the library to be an active place for reading.

The library should not just be seen as a storage space for books, rather as an active environment for engagement with books. Read-alouds and other engagements with texts is best done in a library environment. Teachers and other adults can also model reading behaviour in the libraries.

Children should be encouraged to "borrow" books from the library, take them home and bring them back in time to return them to the library.

If the school has space for a library, the Teacher should ensure that the classroom displays give access to good quality children's literature. This can be done by periodically 'borrowing' books from the library and placing them in the classroom. Where schools don't have enough space for a separate library, reading corners can be set up within classroom environments.

Box 5.4A

Panchatantra

There is something to learn from every Panchatantra story! The great scholar, Vishnu Sharma, wrote the Panchatantra tales a very, very long time ago to teach four princes, the wisdom for life.

A collection of beautiful interwoven fables, magical tales and animal stories, the Panchatantra has enchanted young and old over centuries. These fables have stood the test of time and are pertinent even today.

The Panchatantra found their way outside India through oral folklore and by way of translations. They substantially influenced other writers of fables across the world. It is also one of India's most influential contributions to world literature.

India has a diverse and rich tradition of folklore and local legends. These can be translated into high quality children's literature and made available in different languages

Graded readers, from simple picture books to books with short paragraphs on each page (along with pictures), is appropriate for this Stage. Books in both L1 and L2 should be in the list along with books in other languages, particularly home languages of children which may be different from L1 and L2. Books written in different dialects of languages would also promote the idea of linguistic diversity and give legitimacy and dignity to all forms of language use.

Along with print books, audio books, and books that engage with the tactile abilities of young children make books more accessible to diverse learners.

5.4.6 Usage Culture

As important as stocking of materials and books in the school, adequate attention needs to be given to the culture of care and maintenance in use of these materials. Teachers should see this as part of their pedagogic practice and model careful use of material. Schools often swing from locking up material to careless use of material, in both cases the children are left with no material to work with meaningfully. A culture of care and responsibility in using and sharing material should be seen as an essential Learning Outcome for this Stage. These habits form early and are carried through the later Stages of schooling.

Library books when borrowed and taken home should be returned by the due date and in good condition. Equally important to this usage culture is the actual and effective use of TLMs in the classroom.

5.4.7 Technology, Digital and Audio-Visual Material

a. How should Technology be used at this Stage?

i. **Enabling access to a diverse range of content and material that is contextual for the child, age-appropriate, and in a range of languages, and materials.**

ii. **Enabling access to content in diverse forms, spaces, and formats to ensure equitable access and to ensure inclusion of Divyang children.**

iii. **Ensuring that the key focus of the material would be to create an enjoyable experience for the learner and feed the child's innate curiosity and agency.**

iv. **Supporting the capability development of Teachers, parents, and the community.**

b. Diversity in Content, Formats, and Access

i. Diverse formats of content for multimodal access

1) Audio - will enhance listening skills and aid language development.

2) Video - visuals are engaging and content with subtitles will enhance language acquisition; video content in sign language will ensure wider access.

3) Text in accessible digital formats.

4) Text with images (e.g., picture books)

5) Interactive content (e.g., games, puzzles, quizzes)

6) Augmented Reality/Virtual Reality-based content, which can give children and adults a virtual experience of an event, place, or experience that is difficult to experience e.g., inside the human body, on the surface of the moon, under the ocean

ii. Multi-Modal access

1) Radio, loudspeaker
2) TV, projectors
3) Interactive Voice Response (IVR) - messaging services
4) Smartphones (audio, video, text, and interactive content)
5) Tablets (audio, video, text, and interactive content)
6) Computers/Laptops (audio, video, text, and interactive content)
7) Smartboards (audio, video, text, and interactive content)
8) Assistive technologies

c. What could be the different types of Technology based TLM?

i. **Content repositories - enabling wide and diverse access**

1) Age-appropriate and relatable audio content as distinct from video content and audio-visual content will be a useful aid for educators, parents, and the community. They should be made accessible to Balvatikas, Anganwadis, and schools.
2) Unfamiliar ideas (e.g., dinosaurs, planets, or introducing the ocean to children living in the desert or vis-a-versa) explained simply in an entertaining manner will help build vocabulary and background knowledge in children which they can carry as they move along in their learning journey.
3) Themes such as family, animals, the universe and planets, food, natural elements, and several others may be explored.
4) Listening to a story a day or watching a video together and talking about the same will be able to generate lively interactions among children.
5) The Teacher or parent having access to a range of story books digitally will enable them to "read aloud" to their children; especially for those parents who may be unfamiliar with the language of instruction or not fluent in reading.
6) In addition to digital puzzles and games, using videos on "how to play" diverse games be it sorting, counting, or physical games indoors and outdoors are greatly beneficial for the mind and body of little children.
7) Content to develop digital literacy among children which is age appropriate without overexposure to screen time or undermining the central role of the Teacher.

ii. **Leveraging digital infrastructure and platforms**

1) Sourcing content through ecosystem contributions: The vibrant ecosystem of content creators may be encouraged to contribute content for children, teachers, parents, and the community by using NDEAR (ndear.gov.in) and VidyaDaan (vdn.diksha.gov.in) capabilities. Through these platforms, teachers have ready access to a variety of content in different formats. They can use digital material judiciously based on the needs of their classroom.

2) 'Energizing' Teacher and student material using QR codes for ease of access to contextual curriculum-linked content. Leveraging QR codes also ensures that content linked can be updated/modified at any point in time.

3) Technology in multilingual situations, assist teachers so that they can take care of each child's need to be engaged in their mother tongue. Bhashini (https:// bhashini.gov.in/en/ and ULCA (https://bhashini.gov.in/ulca) programs can be leveraged for the translation of TLM in local/regional languages.

iii. **Digital infotainment for children**

1) Recognising the reality that children of all ages and backgrounds have become consumers of digital content and users of the internet, responsible creation of content even for entertainment purposes is essential. It is also an opportunity to invest in and develop quality materials catering to the diverse needs of children across the country. Songs, rhymes, riddles, puzzles, stories, movies, short films, and animation series are much needed in the early years.

2) TV and OTT shows have been educational and entertaining for children. There have been examples of specific channels and programming for early years in many parts of the world. India with its vast entertainment and creative talent could generate unparalleled materials in many languages based on scientific knowledge of the development of children in the early years.

3) Radio - public broadcast media, as well as community radio initiatives, could be very powerful allies to distribute content for early years children.

4) The Internet - children can have access to devices even for a short while using various forums to seek content for their entertainment. Generating bite-sized materials such as the 90-second stories are useful and can be easily shared on social media or content sharing applications.

5) A story being read aloud from a picture book or even access to an audiobook would be highly beneficial. While reading aloud is ideal in person, having access to a video of stories read aloud by an expert narrator would be just as beneficial. The ecosystem of publishers of books and content for children in the early years must be encouraged to develop and generate content on such ideas.

6) Tools in the form of apps for children to help them read along, access free digital books, and puzzles and games would be beneficial for cognitive development.

d. Technology for Inclusive Access (Divyang)

i. **Digital Content:** All digital content must be accessible, inclusive, and usable. Usability in tech solutions must receive specific focus and attention. The need for developing language and numeracy skills for all Divyang children using any digital means for learning is critical.

ii. **Tools designed in accessible formats** to quickly sense many words a child knows to identify and read; or a tool to assess the reading level and numeracy level of a hearing-impaired child available digitally to teachers could enable action and remediation. Often screening and assessment tools are not designed for children with special needs

iii. **Platforms to encourage the creation and curation of content** must be representative of children of all kinds. Stories, songs, poems, and plays created digitally with the representation of Divyang children are required so as to counter marginalization or the lack of relatability.

iv. **Specially curated e-content** to address the learning needs of Divyang students should be available on audio, video, ISL, and other digital formats like Epub, Flip Books, interactive, Digitally Accessible Information System (DAISY), etc.

e. Cautions in using Digital Technology in ECCE

Digital Rights of Children: Equity requires that every child have the right to and access to participation and use of technology. A balanced approach between protection and participation must be ensured. Children have the right to information, freedom, and privacy, and the right to be protected from abuse and harm. The principles of non-discrimination in enabling access to digital environments, while at the same time ensuring their protection of privacy, safety, and protection from abuse. The UN commission on the Rights of the Child adopted General Comment 25 on the digital rights of children in 2021 and issued the following guidance. There are four principles for children's rights:

i. **Non-discrimination:** Children must be protected from discrimination and treated fairly, whomever they are.

ii. **Survival and development:** Children must be supported to grow up into what they want to be without harmful interference. In this context, the privacy and use of data of children must be handled with care.

iii. **Best interest of the child:** When making any decision, adults — including governments and businesses — must do what is best for children rather than themselves.

iv. **Respect for children's views:** Children have opinions that must be taken into account in all things they care about.

f. As recommended by UNICEF[1] & Acknowledged in NDEAR

"In a digital world, where their actions and interactions could impact them into adulthood, the duty to protect children is that of governments, private organizations, and civil society

i. Children have the right to privacy and the protection of their personal data.

ii. Children have the right to freedom of expression and access to information from a diversity of sources.

iii. Children have the right not to be subjected to attacks on their reputations.

iv. Children's privacy and freedom of expression should be protected and respected in accordance with their evolving capacities.

v. Children have the right to access remedies for violations and abuses of their rights to privacy and free expression, and attacks on their reputation."

1 India's data protection bill and laws related to the protection of children contain principles that must be applied in the digital context as well. Children have to be protected from tracking, tracing and in the context of education, labelling and discrimination.

g. Other Concerns

Several concerns have also been raised about the time children spend using digital technology and its effect on their physical activity and mental health. Evidence suggests moderate and controlled use of digital technology can be beneficial to children's mental wellbeing, whereas excessive use can be detrimental.

Section 5.5
Books and Textbooks

Children at the Foundational Stage need to engage with texts in a variety of forms (e.g., picture books, storybooks, graded readers, and worksheets). However, given the current ground realities, Teachers in Grades 1 and 2 are more familiar with the idea of using textbooks. Textbooks may be developed for Grades 1 and 2, but in accordance with the pedagogical ideas of this NCF, they must be completely different in their imagination and usage. This Section describes the development and use of all kinds of books including textbooks appropriate for the Foundational Stage.

5.5.1 Children's Books

The previous section talked about the relevance of concrete materials in the form of toys and other manipulatives that is essential for a classroom environment in the Foundational Stage. It is equally important to give children access to a variety of books and other reading material. The wealth of human heritage is captured in books, and it is an important function of school education to encourage young children to enter this world. As mentioned in Section 4.5, good quality children's literature plays a very important role in the language and literacy development of the child.

A wide variety of books that are appropriate for all children including 3-year-olds should be made available to schools. Large picture books, colourful graded readers, books with engaging stories and poems, all these would make reading books an exciting and engaging experience for children. Our country has a rich heritage of stories, folklores and legends that vary from region to region. These stories need to be translated into all languages and good children's literature can be produced from these sources and be made available to all.

Well-designed bilingual books can be used to promote competencies in multiple languages. Bilingual texts have been useful in certain contexts when Teachers have the capacities to use them effectively.

By making a variety of books available in schools, a sense and taste of *sahitya* can be encouraged in young minds.

5.5.2 Importance of Textbooks for Children Aged 6-8 years

NEP 2020 has made specific recommendation regarding textbooks. NEP 2020 (4.31) states that 'the reduction in content and increased flexibility of school curriculum - and the renewed emphasis on constructive rather than rote learning - must be accompanied by parallel changes in school textbooks. All textbooks shall aim to contain the essential core material (together with discussion, analysis, examples, and applications) deemed important on a national level, but at the same time contain any desired nuances and supplementary material as per local contexts and needs. Where possible, schools and Teachers will also have choices in the textbooks they employ – from among a set of textbooks that contain the requisite national and local material - so that they may teach in a manner that is best suited to their own pedagogical styles as well as to their students and communities' needs.'

The role of textbooks for the Foundational Stage must be very clear:

a. In the first three years of the Foundational Stage, for ages 3 to 6, there should not be any prescribed textbooks for the children. The learning environment, the TLMs and, where appropriate, simple worksheets are more than sufficient for meeting the curricular goals and pedagogical needs. **Children in this age group should not be burdened with textbooks. While textbooks might be inappropriate for children of ages 3 to 6, activity books can guide Teachers to sequence activities and learning experiences.** Syllabus developers can develop such books along with handbooks for Teachers to plan and organize classroom experiences for this age group.

b. In the last two years of the Foundational Stage, for ages 6 to 8, simple and attractive textbooks can be considered. **Textbooks for this Stage should not only contain content for classroom instruction but also act as workbooks** to give opportunities for children to work on their own and also as a record of their work.

c. **Utmost care needs to be taken to ensure that the content and activities in the classroom are not limited only to what the textbook contains.** Particularly for language and literacy development, a wide variety of sources of text, including good children's literature, needs to be brought into the classroom. Teachers should supplement the textbook with worksheets where necessary and appropriate.

d. Textbooks can be appropriately augmented with digital and audio-visual material references through appropriate QR codes.

Well-designed textbooks play a critical role in providing the Teacher direction for classroom processes – the content in focus, pedagogy, and assessment. Areas for further exploration can also be indicated in textbooks. While providing Teachers the scope to use material of their choice (and this can be indicated in the textbook as well), they help the Teacher by providing a ready resource for organizing sequential, coherent, and meaningful learning experiences so as to achieve the expected learning outcomes.

Textbooks are often the only books many children will engage with. Their understanding of the world beyond their immediate surroundings is built through the illustrations in the textbooks, the activities and assessments introduce them to the expectations from them, and the content of the textbook, as well as the language it uses, motivates them.

Given their centrality to the work of the Teacher and the learning of children, textbooks are often the means for bringing about change in classrooms. This is even more so when we consider that textbooks are an important medium through which the Aims of Education, Curricular Goals, Competencies, Learning Outcomes, principles related to pedagogy, content and as articulated in this NCF are translated into classroom processes.

With a shift of focus towards Competencies, the textbooks should also reflect coherent mapping of content towards enabling achievement of specific Competencies.

5.5.3 Principles for Textbook Design

The following principles for textbook design are a useful guide to textbook development.[12]

a. **Curriculum Principle**: The textbook should be designed specifically to achieve the Competencies as articulated for the Foundational Stage. Textbook developers and designers should not only be aware of the competencies of the particular domain or subject area for which the textbook is being developed, but also of the Competencies for the whole Stage. This would allow them to bring in horizontal connections across the domains in the Foundational Stage.

b. **Discipline Principle:** Textbook developers should have sound knowledge of applied linguistics and mathematics. The content and sequence included in the textbook should be careful not to contradict some of the core principles of these disciplines.

c. **Pedagogy Principle**: Textbook developers need to have a clear understanding of the pedagogy that is appropriate for the Competency and content (e.g., in language the balanced approach of including oral language, phonics and word solving instruction and meaning making needs to be incorporated all together).

d. **Technology Principle**: Textbook developers should be aware of the current technology and audio-visual materials available for enhancing the learning experience of children. Activities that involve digital technology and references to external material should be embedded appropriately in the textbook.

e. **Context Principle:** The local context and environment of the child should be a very important consideration for choice of content in the textbook. Moving from the familiar to unfamiliar is an important aspect of learning and the textbook should contain a balance of both familiar contexts that is a comfort for the children and unfamiliar contexts that should generate curiosity and challenge to their thoughts and preferences.

f. **Presentation Principle:** The textbooks need to be attractive and should grab the attention of young children. For the Foundational Stage, the balance between visual material and text should be tilted towards visual materials. The colour schemes and design themes should be attractive and consistent. The fonts and size of text material should be both visible and least confusing for young children to decode.

g. **Diversity and Inclusion**: In the Indian context, it is important to maintain diversity and inclusion as an important principle in the choice of content for textbooks. Even within States

Photo 5.5A: Source- Sikkim EVS Textbook for Grade 2

there are regional variations and these need to find adequate representation in textbooks. Balanced gender and community representation (e.g., through use of stories, characters, pictures) must be ensured.

5.5.4 Process for Textbook Development

Applying the principles of textbook development, the process could be the following:

a. **Creation of a syllabus document** – Drawing from the guiding principles of the curriculum, stated Competencies, Learning Outcomes; nature, pedagogy and assessment of a subject; the syllabus document could include the objectives of teaching the subject, approach to the content to be included (concept or theme), structure of the syllabus document (as questions, key concepts, suggested strategies or activities), choosing content that is cognitively and socio-culturally relevant. The syllabus document could also use literature from research studies, policy papers, Teacher experiences, subject matter expert opinions for deciding the extent and depth of the content.

b. **Panel of textbook writers, reviewers, and designers/illustrators** - The people involved in textbook development could be:

   i. **Textbook writers and reviewers** – Teachers must be part of this group – others could include subject experts, university faculty and research scholars.

   ii. **Designers/Illustrators** – People/organisations that have both design understanding and understanding of the local context, preferably local experts and should be involved from the start of the process.

   iii. **Technical expert –** A lot of content that complements the textbook can be made available through digital media. It is important for the technical expert to be part of the textbook development team from the start - media content should not be an afterthought.

   The group should work together from the beginning to create a common understanding of the process and be open to feedback, suggestions, and multiple iterations of the textbook.

c. **Choice of content, pedagogy, and assessment** – The topics/themes chosen would need to include the context of the learner (including previous experiences, language) and scope for further exploration. For example, in Kumaon this popular lullaby could be used in classrooms to initiate conversation.

Ghughuti basuti *Kya khandi* *Dudh bhati?* *Ke unda kansey thakuli!* *Ku deli* *Bwey meri!*	*Dove is cooing* *What will you eat?* *Milk and rice?* *In a platter of bronze!* *Who will serve it?* *My mother!*

The content at each Grade should be a precursor to the next. It is essential to ensure an alignment of the pedagogy and assessment with the content and the Learning Outcomes.

d. **Structure of the textbook and language used** – Considering that the textbook is an important point of connect between the Teacher and the child, it would need to be useful for both. Apart from the content, the textbook could include a note to Teachers and parents, Teacher notes that guide the Teacher towards the suggested pedagogy and Teacher pages that provide a brief overview of each textbook chapter, the pedagogic style and assessment opportunities with specific examples.

e. **Presentation and design** – The presentation of a textbook relies on the font size, images, sketches, the colours used, and on the amalgamation of the three e.g., textual content in the early Grades may be limited with a large number of images. Font size should be large, and the illustrations used should be sensitive and inclusive. The language used would need to be Grade-appropriate and relevant to the subject.

f. **Writing, review, and pilot run** – The writing of a textbook needs sufficient time, regular peer reviews and panel reviews. Regular sittings with the illustrators to define and reiterate the requirement of the content being worked on is necessary. This adds to the rigour of textbook creation and assists in avoiding repetitions in text, images, ideas across subjects as the illustrators work with all the writers.
The review provided would need to be constructive and encouraging. The feedback should include suggestions and alternative ideas. The writers should be open to multiple iterations and be cognizant of the principles of writing content. The review process must be done chapter wise and then for the textbook as a whole. Meticulous proof reading of the textbook is essential and contributes to their quality.
Selected schools must be identified for the pilot run of the textbooks. During the pilot run of the textbooks, the writers must visit schools and schedule classroom observations, conversations with Teachers, children, parents, and receive feedback about the textbook.

g. **Teacher orientation to the textbooks** - There must be provision for Teacher orientation on the genesis of the textbook, its rationale, the approach to pedagogy and assessment to ensure its appropriate use in the classroom. This orientation must be followed up through school visits, webinars, sharing of best practices and regular interactions with the Teachers to understand the challenges being faced in the use of the textbooks.

5.5.5 Textbooks and Assessments

The textbook must provide Teachers with concrete ways of integrating assessment with teaching-learning. A few possible ideas that could guide such assessment exercises in the textbook are listed below:

a. The textbook should explicitly state the Competencies and Learning Outcomes that are meant to be achieved through the entire book, and the respective chapters. If needed, these outcomes can be simplified and presented in an easy-to-read manner for Teachers and parents.

b. Multiple opportunities can be provided in the textbook for the Teacher to assess learning. These could be in the form of questions and assessments tasks.

c. Assessment exercises could be interspersed throughout the textbook. Guidelines for conducting these exercises and suggested assessment tools and rubrics could be provided in the textbooks.

d. Providing timely, credible, and individualized feedback is a key component of effective assessments. Within the textbook, prompts and cues can be provided for Teachers to provide feedback on specific assessment tasks.

e. Worksheets and activity sheets comprising simple exercises that children can do independently, usually accompanied by attractive visuals are of particular help not only in assessment but also learning.

5.5.6 Teacher Support for Meaningful Use of Textbooks

A textbook must contain guidelines for the Teacher to indicate the broad approach to teaching-learning, as well as how to use the textbook optimally. It must indicate the Competencies children are to attain as a result of transacting a set of materials/activities suggested in the textbook, as well as expected Learning Outcomes for each chapter or unit or lesson.

The textbook must also provide the Teacher guidelines on processes like learning tasks, activities, projects, field trips, simple experiments as well as assessment. It must contain tables, figures, flow charts, cartoons, pictures that enable attainment of Learning Outcomes while also providing inputs to the Teacher on similar materials that can be sourced locally.

Notes to the Teacher explaining the rationale for content or activity as well as suggestions, and dedicated Teacher pages containing notes at strategic points in the textbook, as well pages providing practical suggestions which can extend to both the Teacher's classroom transaction in addition to the scope of the textbook are some devices that can be used within the textbook.

If practicable, a Teacher manual can be developed as a companion to the textbook, aligned to both its approach and content. While the Teacher manual is primarily intended for the Teacher, its use will benefit children as well. For example, the Teacher manual can include suggestions on accommodating diversity in the classroom, contextualizing content that may have been selected at the State level and linkages with other subjects. It can explain the developmental needs of children and how learning happens in the specific subject that will help the Teacher align pedagogy and assessment accordingly.

Section 5.6
The Learning Environment

An inclusive, welcoming, colourful, and joyful environment that supports every child's participation is very critical for achieving the Competencies outlined in the NCF.

a. The indoor environment needs to be well lit and well ventilated.

b. It should feel safe and inviting for the children.

c. It needs to be inclusive.

d. It should have a balance of both familiar and novel experiences for the child.

e. It should have a balance of materials that encourage different domains of development.

f. It should allow for both individual work and cooperative work.

g. It should include displays of children's work and also allow for children's work-in-progress to be preserved.

5.6.1 Organising the Indoor Environment

Based on the above principles, one way to organize the classroom has been illustrated below. This arrangement has been made using some of the fundamental principles of ECCE. Teachers have the autonomy to arrange their classroom environment based on the dimensions and shape of the classroom, local conditions, and materials available.

Both the floor space and the wall space has been represented in the drawing and the different locations and their uses have been numbered and detailed below:

Photo 5.6A

a. **Running Blackboard**: Running blackboards can be painted on the bottom of the three walls of the classroom after leaving half a foot of space at the bottom of the wall as children can't write in that space. Each child needs at least 3 feet of space on the blackboard. The running blackboard can be put to use in multiple ways for children to express themselves in the arts as well as for literacy and numeracy activities. The advantage of this arrangement is that children's work becomes immediately visible for both the Teacher and other children in the environment.

b. **Circle**: It would be good to draw a set of concentric circles on the floor for children to sit during circle time. Keeping the floor space clean and organized is very import for the children to work with a sense of order and purpose.

c. **Corners set up**: Corners can be planned inside the classroom. This space could accommodate around four children at a time. The corners can be demarcated by cardboard boxes or low height shelves and the appropriate materials can be kept within them. This could be of various kinds, illustratively:

   i. **Dramatic Play Corner -** This corner could be covered with transparent curtains on two sides. Along with masks and puppets, different kinds of material sets can be placed in the corner. These materials can be gathered or prepared with the use of low cost and locally available material. Children get the opportunity to play without hesitation and imitate what they observe adults doing.

   ii. **Blocks/Puzzles and Math corner -** In this corner, we could arrange blocks, puzzles, beads, pegboards, matching, classification materials and so on. Materials would need to be changed often. Activities for sensorial development as well as numeracy are very effective using such material. Children can also use blocks and other materials to build models and talk about these models to develop their imagination and oral expressions.

   iii. **Art/Drawing corner -** This corner can have paper, crayons, pencils, colours, brushes, leaves, and sticks. This corner would give opportunities to children for free drawing and express their views and emotions. Cloth, thread, origami paper, cardboard sheets, would also enable 3-D expressions through craft work.

   iv. **Books/language corner -** This corner can contain picture books, picture charts, picture cards, and children's literature. Through this corner, children would get the opportunity to browse through books, read books quietly on their own, talk about the picture cards and share their thoughts with other children in the group, and so on. Through these activities children gain oral language competence, print awareness and reading abilities.

   Additional corners can be added based on the space availability. A tinkering corner where common household devices that are safe for young children to dismantle and put it back together would be ideal to challenge young minds.

d. **Classroom Display:** A specific place in the room to display both children's and Teachers' work is important to keep the classroom lively and dynamic. The display can be arranged with the use of a cardboard piece with a white sheet pasted on it. The display needs to be hung on the wall, not very high, but at the eye level of the children. It is important to make sure that all children's work is put up for display by rotation.

   i. Weather chart: The daily and weekly weather along with the day of the week information can be displayed in this location. Again, a cardboard piece with a chart paper can be the background and the weather for the day can be indicated pictorially and through text.

ii. Timetable: It is important that the timetable is displayed clearly in the classroom, and this guides the Teacher as well as the children. Children of this age appreciate structure and sequence.

iii. Teacher prepared charts: This location in the classroom can display charts prepared by the Teacher. It can contain relevant stories, or picture of objects found in the vicinity of the school or in the children's' homes that is relevant to the topic being learnt. Teachers and children can prepare these charts together for display.

iv. Norms charts: It is important to prominently display classroom norms. These charts should not be mere sequence of instruction, rather should be conveyed creatively through pictures and stories.

e. Portfolio Bags: It is important to record and store children's work. Making it accessible and visible to other children is equally important. This becomes relevant for assessment too. Portfolio bags can be hung on a wire/rope and should be neatly labelled with each child's name.

Along with these display areas, every classroom should have a mirror, clock, allotted spaces outside to keep footwear and a dustbin.

The labelling of these locations, the text in the displays and the reading corners should make the environment print rich, colourful and a happy place.

5.6.2 Outdoor Equipment and Materials

a. Sand pit: If adequate space is available, a sand pit would be an excellent play area for children. For environments where such space is a premium, a sand box can be setup with the use of bricks and filled with sand or mud. The sand pit/box should be periodically cleaned to remove stones and other sharp objects. During free play, children can use the sand area.

b. Clay box: A small box built with bricks and containing claying soil would allow children to mix and knead clay and make clay figures and toys. This is a very good exercise of both their gross motor and fine motor abilities.

c. Water: Very young children find playing with water calming. Pouring water without spilling helps coordination of multiple muscles and increases attention. Water is useful for measurement too. A simple arrangement of buckets, mugs and a tub for water activities should be kept along with the sand and clay areas.

d. **Kitchen garden:** A small kitchen garden adjoining the indoor environment with a variety of plants (e.g., flowers, climbers, roots, vegetables, leafy vegetables) gives children sensorial experiences, opportunities to work with their hands and concepts about the natural environment. Group work, physical labour and other such positive attitudes towards work can also be achieved by children working in a kitchen garden.

e. **Outdoor play equipment**: Slides, see-saws and swings are some essential outdoor play equipment. If the slides have a ladder to climb, that gives opportunities for very young children to climb, which is an important developmental activity, especially if they don't have access to small trees to climb. Otherwise, short ladders can be placed in the outdoor area for them to climb. In later years, simple rope ladders can be set up for a more demanding climbing experience. Simple swings can be fabricated by using used tyres.

Chapter 6

Assessment for Furthering Learning

Assessment is a part of the teaching-learning process. It involves the systematic gathering of information from different sources regarding children's learning. While content and pedagogy help to organize learning experiences for children, it is assessments that help provide information to the Teacher, parents, and children themselves about their achievements. Teachers can use information from regular ongoing assessments for planning and organizing learning experiences for children.

All children are unique and have different ways and a different pace of learning. Assessment should be designed to accommodate such diversity. Assessment findings can also help Teachers identify children who need additional support and attention.

Section 6.1 lays down some of the fundamental principles of assessments that are relevant for the Foundational Stage. Section 6.2 details the methods and tools of assessments that are appropriate for the Foundational Stage. Section 6.3 elaborates on how Teachers can analyse children's responses. Section 6.4 details the ways in which assessments and progress of the child's learning are documented and communicated.

Section 6.1
Guiding Principles for Assessment

6.1.1 Nature and Purpose of Assessment

In a Competency-based curriculum as proposed by the NCF, assessment is, simply, ways and means through which evidence of the learning achievements of children is gathered.

Assessment in the Foundational Stage can serve the following purposes:

a. Identify the needs, preferences, and interests of the child - this information can guide the Teacher in the selection of content and pedagogical approaches.

b. Give the Teacher an insight into the learning achievement of the child and guide the Teacher on the future course of action - children's responses to assessment tasks are a wealth of information on which Teachers can further act. These responses give a window into the child's thinking and learning process. Careful analysis of a child's responses is as much a task for the Teacher as designing well thought-out assessments.

c. Allow consolidation of learning - assessment tasks, when well designed, help children in consolidating their learning through meaningful activities and exercises. Through the application of recently acquired knowledge and skills, children further deepen their understanding and abilities.

d. Make collaboration and coordination possible in efforts to provide the appropriate learning opportunities for the child - information gathered through the assessments can be shared with all stakeholders who have an interest in promoting learning of the child.

e. Give the rate of progression over a period of time for each child - it is not just the achievement of Competencies, but also the time taken to achieve these Competencies that give important information about the learning process.

f. Give an overall view of the learning achievement of children in a classroom, at an aggregate level - this information is helpful for both the Teacher and the school leader in planning and organising content and pedagogy to achieve Curricular Goals for all children.

g. Given the different socioeconomic backgrounds of children and differences in the pace of learning, gaps in learning between children in the same class begin to emerge early and could get pronounced by Grade 2, if not addressed in good time. Ongoing, well-designed assessment can help a Teacher design appropriate additional learning experiences for children who are not learning adequately.

h. Give early signals about possible developmental challenges or learning difficulties the child might be facing - while this is particularly important in the Foundational Stage, equal care must be taken not to label children especially based on poorly designed assessments. *Please see Chapter 8 for more details on this.*

6.1.2 Assessment Considerations for the Foundational Stage

Children in the Foundational Stage are very young, and any unnecessary emotional strain caused due to the process of assessment is antithetical to any good teaching-learning process. The following considerations need to be kept in mind:

a. Assessment should not contribute to any additional burden for the child. Assessment tools and processes should be designed such that they are a natural extension of the learning experience for the child. Explicit tests and examinations are completely inappropriate assessment tools for this Stage.

b. Assessment should be a reliable source of information. Since it is such crucial evidence of the learning of the child, the assessment should accurately reflect the intent of evaluating the achievement of a Competency or Learning Outcome. The connection between the intended Learning Outcome and the assessment should be clear and precise.

c. Assessment should allow for diversity in children and in their learning. Children learn differently and express their learning differently too. There might be many ways to assess the achievement of a Learning Outcome or Competency. The Teacher should have the ability to design different kinds of assessment for the same Learning Outcome and use each assessment appropriately.

d. Assessment should enable recording and documentation. Children's progress should be described and analysed through systematic collection of evidence.

e. Assessment should not overly burden the Teacher. The Teacher should have the autonomy to judiciously choose the appropriate tool for assessment and the periodicity in which assessment-related record keeping is maintained. While such autonomy is important, systematic record keeping of children's assessment should be seen as an important part of a Teacher's professional responsibilities.

Section 6.2
Methods and Tools of Assessment

The two broad methods of assessment that are appropriate for the Foundational Stage are **observations of the child and analysing artefacts** that the child has produced as part of their learning experience.

This Section elaborates how these methods and tools can be put into use in the Foundational Stage. Other tools and methods that are created should follow the principles of assessment as articulated in the previous Section.

6.2.1 Observations of the Child

Observation across time provides the Teacher with a comprehensive understanding of the child's learning. There can be several contexts where children exhibit their behaviour, attitudes, and their learnings.

Children show their understanding by doing, showing and telling. Observations can help Teachers see the child's achievement of different Competencies which children can exhibit in many possible ways. The Teacher can also make a note of the factors influencing this. Sometimes, specific situations or objects can stimulate the child to act in a certain way. For example, if the Teacher wants to find out the child's ability to share toys and take turns, then a particular circumstance must be created so that the child is able to display their ability to share or take turns. The Teacher may ask a child to play with something that requires taking turns with another child in a quiet corner of the classroom.

Systematic observation for assessment involves the following steps:

a. Planning: Identify a few children for observation in the classroom. Determine which Curricular Goals would you like to observe. Make a list of the Competencies and Learning Outcomes you would like to observe within that. Determine and prepare the tool that would be needed to record observations.

b. Gather evidence: Find out a time where the selected Competencies or Learning Outcomes can be exhibited by children. For example, if it is related gross motor development, then outdoor play would preferably be a good setting for observation. If it is about social development, then children can be observed in group activities or in the dramatic play corner. Keep recording exactly what you observe, e.g., if you see a child being able to take turns independently and you may mark a tick on your checklist and note down the exact observation as evidence.

c. Reflect and assess: Read the evidence and the records to track the progress of each child over a period of time. Every concrete evidence would inform the Teacher how to plan and modify her teaching for the children in future.

Some illustrative pointers for observation during a few common pedagogical processes are below:

a. Story telling:
   i. Is the child getting involved in the story?
   ii. Is the child describing the pictures?
   iii. Is the child asking questions about different characters of the story?
   iv. Is the child connecting personal experiences with the events of the story?
   v. Is the child recalling familiar words from the story?
   vi. Is the child expressing likes or dislikes about the story?

b. Guided conversation:
   i. Is the child listening to others during Circle Time?
   ii. Is the child waiting for their turn to speak?
   iii. Is the child expressing their pleasure or displeasure listening to others?
   iv. Is the child able to predict what is going to happen next?

c. Play - Free, Guided, or Structured:
   i. Is the child solving simple problems?
   ii. Is the child able to use large and small muscles to engage with play material?
   iii. Is the child able to express different emotions?
   iv. Is the child able to respond appropriately to the emotions of others?

6.2.1.1 Tools to record observations

Teachers can use tools such as anecdotal records, checklists, and event sampling to record their observation.

a. Anecdotal records

An anecdotal record is an attempt to record in detail a specific episode or event that is of particular interest or concern.

When a specific event catches the attention of the Teacher, they can write a narrative account of the event as soon as possible. An anecdotal record is an observation of what children say and do while they are engaged in a particular activity.

Teacher's Voice 6.2A

Sample Anecdotal Observation Record	
Context**:** I teach a class of 4-5-year-olds. This is an observation I made of something that caught my attention while I was doing 'story time' with my children.	
Name: Devi	Age: 4.5 years
Date & Time of observation: DDMMYY, HH:MM	Setting/Area: Classroom
Purpose of observation: Emotional regulation	
Observation: I read the story 'Rajesh hugs her sister' to my class. Devi got agitated and pushed around the children sitting beside her. After the story reading, I asked the children to draw a picture of their family. Devi did this but blackened out the boy in the picture using her crayon. I asked her about it, and she said 'That's my brother. I don't like him. He always teases me and takes my food. Mother and Father like him.'	
Interpretation: • Devi seems to be having difficulty coping with her feelings for her brother. • She may not know how to communicate her feelings to her parents. • This was affecting her behaviour with other children too.	
Plan of action: • Talk to Devi's parents about this. They may need to do few things at home - like making her brother and Devi play together, do some chores together share food, and explicitly assure her how they love her equally. • Give more attention to Devi's responses and attitudes in class towards stories and role play involving characters of parents and brothers; observe and record progress.	

b. Checklists

A checklist is a tool for identifying and recording whether a child has accomplished a listed Learning Outcome. It usually offers a yes/no format in relation to the child's demonstration of the outcome.

Checklists are usually based on a sequential approach to learning and assume that all children will proceed through the sequence in the same systematic order. Checklists are used when many outcomes are to be observed. They can be used quickly and easily. Teachers should use checklists and questionnaires for the purpose of improving and not as a 'report card' of children's achievement. When using checklists, a 'mix and match' approach that combines checklists with another data collection method is preferred (e.g., checklist with observation record to take a decision).

A sample checklist for observation of skills for language and literacy is below which can be used for an individual child and for a group of children.

Table 6.2A: Sample Checklist for Observation

	Listening and speaking	**Quarter1**	**Quarter2**	**Quarter3**
1	Listens with attention to spoken conversation and stories			
2	Recites, repeats small poems, action songs and participates in music and rhythmic activities			
3	Able to follow 2 or 3-step instructions			
4	Responds to questions through sentences used appropriately			
5	Uses appropriate vocabulary and speaks complete sentences about an idea/object/picture/experience			
	Emergent reading			
6	*Print awareness* and meaning making - demonstrates awareness of print in the classroom and environment			
7	Able to associate and recognize their own name and one-to-one association of spoken words and written words			
8	*Bonding with books* - Demonstrates the ability to explore a range of age-appropriate books (e.g., picture books, rhyme books, story books)			
9	*Pretend reading* - Demonstrates interest and looks through books and tries to read them			
10	Able to comprehend and interpret the meaning of the print from picture books or story books			

c. Event sampling

While anecdotal records are detailed qualitative observations and checklists are summarized observations in tight formats, event sampling allows for a combination of both. Each time a targeted event occurs, the Teacher may capture, in writing, as many details as possible from the beginning of the event until the end.

Event or frequency sampling is especially useful when Teachers want to redirect children's unacceptable behaviour or action. Recording can take the form of a simple table where the Teacher checks off the number of times the unacceptable behaviour or action occurs. Details such as events leading up to the behaviour, time of the day and the presence of another person and situation can also be included.

Similarly, if the Teacher wants to assess certain behaviour or actions at regular intervals to understand the intensity of the problem, they can do it in 'time sampling,' like recording an action in the span of 10 minutes throughout a one-hour activity, over two morning sessions (e.g., if the Teacher wants to observe the aggressive behaviours of a child, she can record every 10 minutes, during free play time for two days on the same activity, she will get a clear sense of tantrums and conflicts of the child and understand their socio-emotional behaviour in a particular situation).

Teacher's Voice 6.2B

Event Sample – Observation record Context: This was a class of 4-5-year-olds. I had given group work to my children and recorded my observations. This led me to useful insights for further action.	
Names of the children: Muthu, Chandri, Suryan, Karthik	Age: 4.5 years
Date & Time of observation: DDMMYY, HH:MM	Setting/ Area: Creative activity, outdoor
Purpose of observation: Children's group work	
Description of the incident	Interpretation
• I had given them a task to work in small groups of 3 or 4 and create a picture using twigs and leaves. They had to collect these from outside, and then come in and finish the task. • Muthu, Chandri, Suryan, and Karthik were in one group. Karthik touched the twigs and leaves but did not contribute towards completing the task. He ran around, disrupting other children. • Chandri and Muthu cooperated with each other and created a tree model from the twigs and leaves they collected. • Suryan seemed to enjoy the process but didn't contribute much.	• These children are at different levels: • Karthik exhibits disruptive behaviour, is not able to focus on the task. I will need to work with him on this. • Suryan, while not disruptive, will need support to demonstrate appropriate social behaviour. • Muthu and Chandri can work well in groups, complete tasks.
I was specifically concerned about Karthik's disruptive behaviour. To understand it more, I decided to do a frequency-sample observation of Karthik e.g., observing him every 5 minutes in a period of 30 minutes every alternate day and interpreting his behaviour, how much time he is able to focus on a given task and understanding the cause of his behaviour. I recorded this in a simple checklist format. I could then work on the solution along with his family, give him tasks based on interest, and appreciate him on completion of the tasks.	

6.2.2 Analysing Artefacts

An artefact in an early childhood classroom refers to an object created by a child during the teaching-learning process. Artefacts could be used by looking at the child's work and seeing how their level of understanding of a particular Learning Outcome affected what they were able to produce. Artefacts provide a rich source of information about a child's strengths and abilities.

6.2.2.1 Some examples of such artefacts

Teachers may keep children's completed work or photographs of their work in progress in a folder. Children will take the entire folder home at the end of the term. This compilation of artwork and activity sheets, collection of artefacts from field trips, photographs of children in ac-

tion, video or sound recordings (if possible), together with a systematic record of Teachers' comments and observation notes can provide comprehensive information of a child's learning, development, and progress.

This can be treated as evidence for the child's progress and maintained for documentation in an organized way in a Child Portfolio.

A portfolio is an intentional collection of significant work samples and records of children that allow for assessment by providing evidence of effort and accomplishment related to specific Learning Outcomes. The Teacher should analyse the portfolio of the child with regard to specific outcomes and mark the child's progress against competencies. The organization of a child's portfolio should clearly indicate outcomes to be achieved. Each child should have a dedicated folder to store their relevant artefacts.

a. Work samples such as artwork

Teacher's Voice 6.2C

Student work as evidence

Developing fine motor skills is one of the learning outcomes for the 3-4-year-old children I work with. Artwork is one of the key methods I have been using to help children develop these skills. The artwork done by children at the beginning and towards the end of the term also serve as clear evidence of the progress they have made. This is a sample from one child's work. As you can see, there is progress in hand-eye coordination and fine motor skills over this period.

Beginning of the term	***Towards end of the term***
	

b. Worksheets

Worksheets contain tasks that children perform and respond to in written form. These tasks can be designed to achieve specific Learning Outcomes.

Worksheets can be very effective assessment tools for Teachers. Analysing student responses in worksheets can give the Teacher a clear understanding of the learning level of the child.

For specific literacy and numeracy competencies, it is useful to include such assessment worksheets as part of the workbooks for children in Grades 1 and 2.

A sample worksheet and the insights that can be obtained from analysis of student responses are illustrated in Annexure 2.

Section 6.3
Analysing Children's Responses for Effective Teaching-Learning

Assessment provides us with several insights into children's learning. These insights help us plan and design classroom pedagogy that is better aligned with children's needs and interests. In any classroom, assessment should typically follow a cyclical and iterative process to meet their purpose as illustrated below.

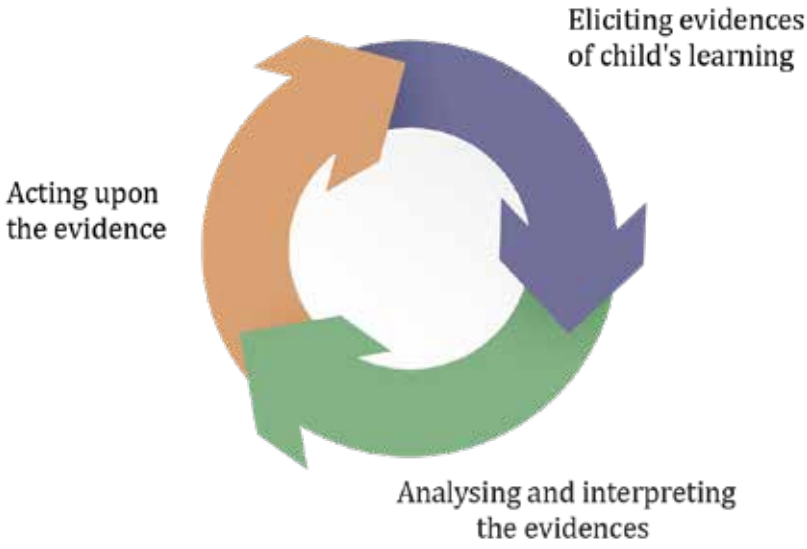


Figure 6.3A: Flow for analysing responses

6.3.1 Analysis of evidence

How should the Teacher analyse and interpret this evidence for furthering learning? What are some prerequisites and general principles for analysing student work?

6.3.1.1 Pre-requisites for analysing evidence from assessment

a. Teachers should be unbiased and open-minded towards the children they teach. Their opinions about children and their abilities or capabilities should not be influenced by other factors (e.g., caste, gender, religion, socioeconomic status).

b. Assessment should be well-designed and aligned to the Learning Outcomes and Competencies of the Foundational Stage. Only then will they provide accurate and useful information about children's learning.

c. Assessment should be formally and informally integrated through the course of the day in the classroom and out-of-classroom activities. These assessment instances should be used as evidence of children's learning. Teachers should be able to glean such evidence from children's behaviour, responses, moods, likes, and dislikes.

d. There should be a system of collecting and documenting evidence of children's learning from various assessments (e.g., observations, worksheets, artwork).

6.3.1.2 Principles for analysing evidence from assessment

a. Teachers should not focus on what children don't know and can't do. For their assessment to be fair and accurate, they should focus on what children know and can do.

b. Teachers should analyse evidence to judge the extent to which children have demonstrated understanding and acquisition of skills - completely, partially, or incorrectly.

c. Teachers should be able to identify misconceptions or alternative conceptions, or gaps in children's learning while analysing such evidence.

d. Teachers should use multiple sources of evidence before making conclusions about a child's learning. For example, they should integrate information from classroom responses, written work, and observed behaviour to form a reliable and coherent interpretation of the child's learning.

e. Evidence gathered from assessment should be utilized to plan or alter instruction for meeting children's learning needs. Such instruction may take the form of targeted activities, ability grouping, and independent homework assignments.

6.3.2 Acting upon the analysis

How should the Teacher act upon this evidence of learning? One of the most important and critical aspects of assessments is utilizing the information from observation or children's work to provide scaffolding for their learning.

Some strategies that can be used are:

a. Revision or practice of skills not been learnt by most children.

b. Organising learning experiences through strategies and methods of a different kind (if the earlier pedagogy was not effective).

c. Identifying children who need extra attention and support for specific Competencies in order to be able to work with them separately for some time.

Section 6.4
Documenting and Communicating Assessment

While assessments can be ongoing, even daily, in the Foundational Stage, it is important to periodically aggregate, summarise and analyse all the assessments during a term.

The school should maintain a folder for each child. The folder can contain all information about the child and the Teacher's narrative summary for each term/year.

The summary of such an analysis can be captured into a Holistic Progress Card (HPC) and this can be used to communicate to the parents and families of the child.

6.4.1 General Information about Family Background

The general information is at the heart of the profile of the child. It plays a vital role in interpreting children's behaviours, participation, and progress. Basic details like the child's name, date of birth, information about the family, the child's likes and dislikes, information about the health of the child like height, weight, growth, immunization needs to be recorded and periodically upgraded.

6.4.2 Teacher Narrative Summary

The narrative summary is a description of the child's learning with qualitative information about the child's progress based on interpretation of multiple sources of information (e.g., anecdotal records, event samples, checklists, portfolios, worksheets).

This is of help to parents and other Teachers to know about the children's learning progress in an in-depth manner. The narrative summary covers the following:

a. Child's strengths and challenges, development and learning progress

b. Child's interests

c. Areas that need strengthening

If recording and maintaining a narrative summary is found too burdensome, the narrative summary can be considered as an optional additional input, but the HPC, described in the next section, is an important piece of documentation of the child's progress and hence needs to be maintained for every academic year. The Teacher will need to maintain enough records to be able to make the HPC for each child.

6.4.3 Holistic Progress Card (HPC)

NEP 2020 suggests that HPC is a 'multidimensional report that reflects in great detail the progress as well as the uniqueness of each learner in the cognitive, affective, and psychomotor domains.' (Para 4.35)

The HPC can contain not just the assessments done by the Teacher but can also include comments and observations by the parents and simple self-assessments by the children themselves.

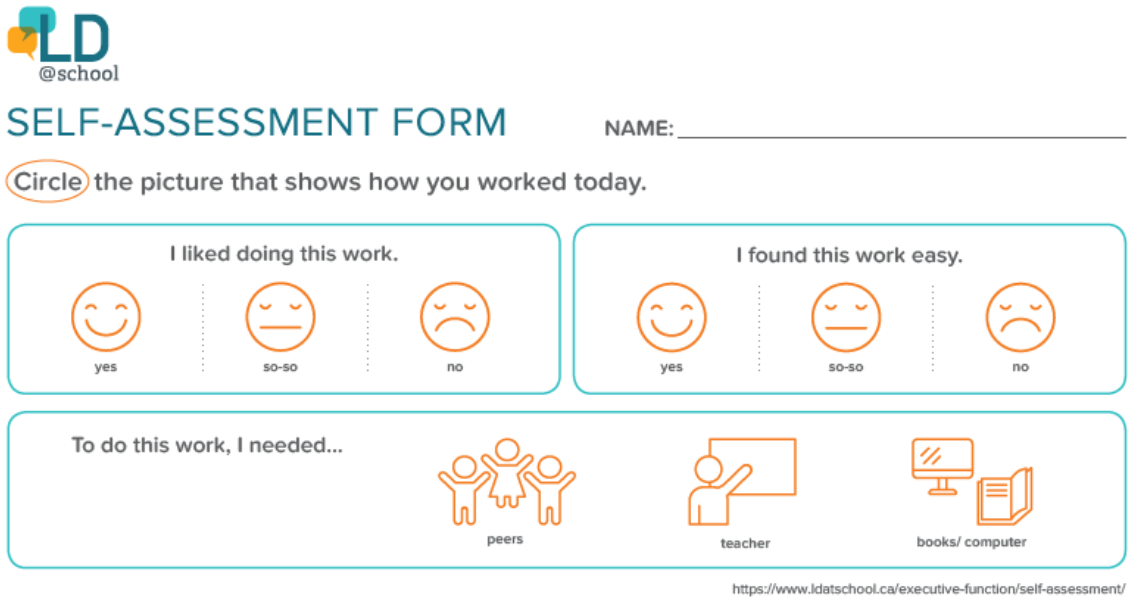


Figure 6.4A: A sample self-assessment form for children

The HPC is an individualized and comprehensive reporting of a child's progress based on evidence gathered through classroom activities over a period of time. It is important to capture parents' assessments and understanding of the child's learning in the HPC as well.

There are different stakeholders for whom the HPC would be relevant. HPCs are the medium through which the school communicates the learning progress of the child to families. Teachers can get a very good understanding of the child by analysing the HPC. It is the primary source of information upon which parent-teacher meetings can be effectively conducted.

HPCs maintained systematically and organized consistently, are important sources for school system functionaries. Aggregated data from HPCs can be used to effectively understand the learning achievements of children at scale and this understanding can be used to provide effective and relevant intervention where appropriate.

6.4.3.1 Competencies in the HPC

The HPC needs to have a section that is Competency based. This section would track the progress of the child against each Competency that is defined for specific Curricular Goals.

These competencies can be further broken down into Learning Outcomes with five stages of growth (A,B,C,D,E) on a trajectory. These stages, while they approximately map to an age group, are not necessarily tied to a specific age group. Children can progress from one stage of growth to another at a pace they are comfortable with. Some of them may achieve it at a faster pace and some of them might take more time. Each of these five stages have indicative Learning Outcomes which act as a rubric for evaluating the achievement.

The Teacher can mark against each Competency based on the child's current stage in the learning trajectory. Further, each stage can be marked for different levels (I,II,III, IV) of achievement as given in the table below:

Table 6.4A

Grading children	Level I	Level II	Level III	Level IV
Description of gradation of the children to support their learning and development	Tries to achieve the Learning Outcomes with Teacher support in the given timeframe	Achieves the Learning Outcomes with teachers' support in the given time frame	Achieves the Learning Outcomes on their own	Achieves the Learning Outcomes Helps and supports others to achieve the Learning Outcomes Requires more challenging tasks
Description	**BEGINNER**	**PROGRESSING**	**PROFICIENT**	**ADVANCED**

In effect, each competency can have A-I which is the lowest level of achievement to E-IV which is the highest level of achievement. For example, for the Competency ***"Listens to and appreciates simple songs, rhymes, and poems",*** the illustrative Learning Outcomes are given below:

Table 6.4B

	A	B	C	D	E
	Competency: Listens to and appreciates simple songs, rhymes, and poems				
	Ages 3 - 8				
1	• Listens to a wide variety of songs and poems	• Listens and enjoys humming a variety of songs in different languages regularly heard in the environment	• Listens to longer songs/poems (familiar) with attention and has conversations about them	• Listens to longer songs/ poems (unfamiliar) with attention and has conversations about them	• Shows preferences in listening to certain kinds of songs and poems and explains the reason for their preference
2	• Repeats a simple song or a rhyme	• Sings along to songs and rhymes with intonation and gestures	• Sings/recites short (4-5 sentences) songs/poems from memory	• Sings/recites longer (10 sentences) songs/poems from memory	• Sings/recites songs/poems with multiple stanzas from memory

The HPC would be marked E-IV for this Competency if the child shows preferences in listening to songs and poems and sings and recites poems with multiple stanzas from memory fluently. This marking assumes that the child has achieved the learning outcomes of the previous stages (A to D).

Chapter 7

Organising Time

Simple and well-organised daily routines are very important for young children. They help children to settle in well and they make children feel secure because they know what will happen in the day.

Organising time in a way that ensures that children are comfortable and get opportunities and learning experiences across all development domains is the main purpose of this Chapter.

Section 7.1
Organising the Day

Young children enjoy free time exploring their immediate environment. However, as they grow older, they also need organised activities that are play-based but guided and structured.

The day needs to be carefully organised so that all domains of development receive adequate time and attention. While activities of each domain of development are connected with other domains (e.g., a good story will help language development as well as socio-emotional and ethical development), the routine must ensure that children get ample opportunity for a range of experiences in every domain.

a. Considerations for the Daily Routine

The organisation of the day is based on the institutional setting and the number of working days, and daily working hours for each day.

Each activity may be planned keeping in mind the attention span of the child. There may be a balance between child-initiated and Teacher-guided activities, group (whole group or small group) and individual or pair activities, and alternating activities (e.g., quieter activity after physical activity, group activity after individual activity, indoor activity after outdoor activity).

Art and Craft, Outdoor Play and Free Play must have adequate time and focus in the day.

b. Illustrative Daily Routine for Ages 3-6

There are multiple ways to organise the daily routine for children of ages 3-6.

Two illustrations given below.

The first illustration is more appropriate in contexts where experiences like Circle Time, Story Time, Concept Time/Pre-numeracy are Teacher-guided and Free Play and Corners Time are independent activities for the children.

Table 7.1A

From	To	Duration	Activity
Morning Routine/Free Play/Corners Time			
09:30	10:15	45 minutes	Circle time/Conversation
10:15	10:30	15 minutes	Snack Break
10:30	10:45	15 minutes	Rhyme/Song/Music/Movement
11:45	11:45	1 hour	Concept Time/Pre-numeracy
11:45	12:15	30 minutes	Arts/Craft/Free Play
12:15	13:00	45 minutes	Corners Time
13:00	13:45	45 minutes	Lunch Break (ages 3-4 go home)
13:45	14:30	45 minutes	Emergent Literacy/Story Time
14:30	15:00	30 minutes	Outdoor Play and Wind Up

The second illustration is more appropriate in contexts with fewer children and a range of appropriate material available for them to use. Emphasis is on self-learning and children learn to use materials independently and with care.

'Work Time' is allotted for children to independently choose the activity they would like to engage with. Children select activities of their choice and work with materials for those activities independently. Teachers observe children's activities and extend support as and when required. Teachers also decide and present the next activity to an individual child based on the observations during Work Time. Activities and the corresponding materials are arranged according to the domains of development (e.g., Physical, Cognitive, Language, Arts) and children are made familiar with this arrangement.

Table 7.1B

From	To	Duration	Activity
Morning Routine + Silent Game			
09:30	10:15	45 minutes	Circle Time (Conversation, Songs, Poems)
10:15	10:30	15 minutes	Snack Break
10:30	12:15	1 hour, 45 minutes	Work Time
12:15	13:00	45 minutes	Arts/Craft/Sports/Free Play
13:00	13:45	45 minutes	Lunch Break (ages 3-4 go home)
13:45	15:00	1 hour, 15 minutes	Language and Emergent Literacy (ages 4-6)

Both the illustrations have a five-and-a-half-hour school day with about four-and-a-half hours of active instructional time for children of ages 4-6.

c. Illustrative Daily/Weekly Routine for Ages 6-8

The daily routine for ages 6-8 would be slightly longer and a little more structured.

While for ages 3-6, all languages can be handled together; for this age group, dedicated time for each language is necessary. Specific blocks of time for literacy, numeracy and arts can be incorporated. L1 would need 90 minutes every day and L2 would need 60 minutes. Mathematics and numeracy would require 60 minutes a day. These periods of time can be organized into blocks as described in Chapter 4.

Table 7.1C

From	To	Duration	Activity
09:00	09:30	30 minutes	Circle Time - Song/Movement
09:30	10:00	30 minutes	L1 - Oral Language
10:00	10:30	30 minutes	L1 - Word Recognition
10:20	10:35	15 minutes	Snack Time
10:35	11:35	1 hour	Mathematics
11:35	12:05	30 minutes	Arts and Craft
12:05	12:45	30 minutes	L1 - Reading/Writing
12:45	13:30	45 minutes	Lunch Break
13:30	14:30	1 hour	L2 - Oral Language, Word Recognition
14:30	15:00	30 minutes	Play

A longer day would allow more time for activities like arts, sports and gardening. The illustrative weekly timetable below allows for such possibilities. As mentioned earlier, Mathematics and L1 would include activities in blocks of time as described in Chapter 4, Section 4.5.

Table 7.1D

From	To	Mon	Tue	Wed	Thu	Fri
09:00	10:00	Math	Math	L2	Math	L2
10:00	10:45	L1	L1	L1	L1	L1
10:45	11:00	Snacks				
11:00	12:00	L1	L1	L1	L1	L1
12:00	13:00	L2	L2	Math	L2	Art
13:00	13:45	Lunch				
13:45	14:45	Art	Math	Art	Art	Math
14:45	15:30	Library	Gardening	Sports	Gardening	Sports

d. Annual School Calendar

The school calendar is an annual plan of knowing when specific events will occur over the year. This allows Teachers to plan their classroom activities accordingly. It informs children and families of what is coming up as far as the school is concerned so they too can plan for it. This calendar should be accessible to all, including parents and families.

The annual calendar detailing all important school events and timings may be drawn up prior to the commencement of the school academic year. This should be done collaboratively keeping in mind local requirements. Minor changes may be made to accommodate exigencies of a particular school's situation.

The calendar should cover all important events of the school over the year (e.g., duration of the school term, vacations, annual day, sports day, other school celebrations, exhibitions/field trips, parent teacher meetings, teacher professional development programs, school meetings).

Schools may also plan an annual calendar of teaching topics. This helps Teachers to schedule classroom activities and track progress on the curriculum better.

Chapter 8

Additional Critical Areas

The Foundational Stage is critical to learning and development. It is our aim to provide a safe, supportive, and responsive environment that upholds the dignity of every child learning with us.

Section 8.1 speaks of children at risk - it is important for Teachers and educational institutions to identify and address such risks as early as possible so that all children attain their learning goals.

Our children must be safe and secure while they learn. Section 8.2 outlines aspects of safety and security that are the responsibility of the institution that our children are in.

Section 8.1
Addressing Developmental Delay and Disability

Deepti is an active six-year-old who loves to play board-games and read stories. Deepti uses a wheelchair to move around and uses her hands to engage with work at school. Her school replaces the three steps that lead to the classroom with a ramp for her. Her Teacher arranges the classroom in such a way that Deepti can move around easily in her wheelchair. She gives Deepti activities that can be accomplished on a table under which her wheelchair can go. Deepti's friends listen to her patiently, though Deepti's speech is slow. The Teacher is in constant communication with Deepti's parents and doctor to understand her progress, and plans activities at the school accordingly.

Ismail is a cheerful five-year-old who loves to talk and have fun with all his classmates. For more than a week now, he has been very quiet, and has no energy. The Teacher observes him, talks to him gently, meets his family, and realizes that he has continuous stomach pain which leaves him hungry and undernourished. The Teacher ensures that that his family takes him to the health centre, and that he eats his meals well. After a few weeks of medical treatment and regular food, Ismail is back to being his cheerful, happy self.

Selvi is a happy three-year-old who loves to play with water and sand. She doesn't speak much. The Teacher notices that Selvi does not respond if anyone calls her name from behind. She also notices that Selvi takes time to understand a simple story when narrated only with words. She draws her family's attention to this, and Selvi's mother also begins to notice the same things. They quickly decide to meet the local doctor and get advice. Selvi now wears a hearing aid, has started using a few words, and is able to participate better in classroom activities.

Every child is unique. We know that no two children learn in the exact same way. Like Deepti, Ismail and Selvi, many children may have difficulty in participating in school activities for many reasons. Some reasons could be temporary (like Ismail), and some could be long-lasting (like Deepti and Selvi).

Though the development of children follows a consistent trajectory, and every individual passes through each major stage, there are individual differences in development in various domains. All children do not achieve developmental milestones at the exact same time. These individual differences occur due to various factors.

The first eight years of a child's life are the most important years for growth and development. These are vital years which lay down the pathways on which future learning is based. The sooner we recognize and address any challenges to learning and development, the better the chance for redressal and success. Optimal nutrition, and a caring and stimulating environment are crucial to learning and development at this Stage.

We need to support children in such a way that there are bridges, rather than gaps, between early and later school learning.

8.1.1 Recognizing Developmental Delay and Disability

Developmental delay refers to very noticeable lags in achieving developmental milestones. This kind of delay is well beyond the individual difference that we all know exists among children. The delay could be in any development domain - physical, language, socio-emotional, cognitive - or a combination of domains. For example, a child struggling to climb up or down three stairs at four years or a child struggling to understand three-word sentences in a familiar language at five years or a child struggling to sit comfortably at three years.

Developmental disability - e.g., autism spectrum disorder, cerebral palsy, intellectual disability, visual impairment, hearing impairment - usually becomes apparent during infancy or childhood and is marked by delayed development and functional limitations in learning, language, communication, cognition, behaviour, socialization, or mobility.

Sometimes it is hard to know the difference between delay and disability, and these terms are occasionally used interchangeably. Children often catch up or outgrow developmental delays with continuous support and stimulation. Developmental disabilities are long-lasting though children can make a lot of progress in managing them as well with similar support.

Early identification of children who are 'at risk' for developmental delays and disabilities is very crucial for timely intervention. Timely intervention can help address both developmental delays and disabilities.

8.1.2 What Should Foundational Stage Institutions Do?

Educational institutions and Teachers are not authorized to make any diagnosis of developmental delay or disability. That is the job of authorized medical professionals.

But Teachers play a crucial role in identifying children at risk for developmental delay and disability. This is critical for children to receive the right kind of support as early as possible so that future difficulties are mitigated as much as possible.

a. Teachers must start with the assumption that each child learns at their own pace. Differences in levels of learning and development are part of every child's growing years.

b. But if they do see a noticeable concern or persistent issue, the **first step** is to observe the child carefully to understand the child's functioning in all developmental domains.

c. The **second step** would be to keep a record of daily or weekly observations of the child based on some basic questions. The WHO list of Ten Questions below could be used as a guide to identify and observe children at risk.

Box 8.1A

The World Health Organization's Ten Questions Screening

- *Compared with other children, did the child have any serious delay in sitting, standing, or walking?*
- *Compared with other children does the child have difficulty seeing, either in the daytime or at night?*
- *Does the child appear to have difficulty hearing?*
- *When you tell the child to do something, does she seem to not understand what you are saying?*
- *Does the child have difficulty in walking or moving her arms or does she have weakness and/or stiffness in the arms or legs?*
- *Does the child sometimes have fits, become rigid, or lose consciousness?*
- *Does the child learn to do things like other children her age?*
- *Does the child speak at all (can she make herself understood in words; can she say any recognizable words)?*
- *For 3-to-9-year-olds, ask: Is the child's speech in any way different from normal (not clear enough to be understood by people other than her immediate family)? For 2-year-olds ask: Can she name at least one object (for example, an animal, a toy, a cup, a spoon)?*
- *Compared with other children of her age, does the child appear in any way dull or slow?*

It is important to remember that all children need nurturing and care, whatever their level of functioning or development. The Teacher must keep playing and working with the child just the way they do with other children. Sometimes, children need something small - extra attention or adjustment in the daily schedule or some time alone or a change of diet - for things to settle.

a. If the concern is persistent and does not get corrected by everyday actions, the **third step** would be to share this concern with parents and family. Conversations must be as gentle as possible, with no judgement or final conclusions on the child's situation - it should just be a shared concern.

b. If the family is in agreement, the **fourth step** would be to refer the child to an appropriate medical professional to check whether the concern is valid and whether the child is indeed at risk for delay or disability. A developmental paediatrician would be the best person to consult. The institution should have a list of local institutions/organizations and professionals for such references, so that the Teacher can guide the family accordingly.

c. If the medical professional confirms the risk, the family, the Teacher, and the medical professional should together plan for the next steps. This could include consulting a disability rehabilitation professional (e.g., physiotherapist, speech therapist, special educator), starting medicines, using aids (e.g., hearing aid or crutches), simple speech and language activities or therapy, simple physical activities or therapy, cognitive exercises, and instructions for the classroom, or anything else that is necessary for the child.

d. The **fifth step** would be to begin focussed work with the child in school.

   i. The Teacher should start a documented profile of the child that is regularly updated.

   ii. Regular assessment will have to be done based on an appropriate checklist or tool suggested by the medical or rehabilitation professional.

   iii. The Teacher needs to prepare an Individualized Education Plan in consultation with parents and caregivers. Please see the sample at the end of this Section

   iv. If the child has a severe disability for which the school does not have adequate resources, it would be important to discuss this in detail with the family, relevant education functionaries and the medical/rehabilitation professional to find an alternative solution.

Box 8.1B

NCERT's PRASHAST is a checklist that enables identification of children at risk. It comprises two parts - for use by regular teachers for first level screening, and for use by special educators and others for second level screening. It is a safeguard against unscientific diagnosis, and needless labelling of children. It is aligned with the Rights of Persons with Disabilities Act (RPWD) Act 2016.

8.1.3 What Can Teachers Do in the Everyday Class?

All children learn by listening, by watching, and by connecting with the Teacher in different ways. Irrespective of whether the child at risk receives support from other professionals, Teachers can help children by using the following simple strategies:

a. Learn as much as possible about the child.

   i. For example, what the child can and cannot do, what the child likes and do not like to do.

   ii. For example, what are the different ways in which the child learns best; what is the child's home environment, family, and the community like.

b. Make for success by setting goals for the child that are realistic and achievable.
    i. For example, 'Amit will start speaking in 3–4-word sentences in a month' is unrealistic when Amit has only 30 words in his vocabulary and struggles to combine two words. A realistic goal would be 'Amit will be able to speak around 50 meaningful words in one month and try to combine two words to form phrases.'
c. Seat the child as close to you as possible.
d. Use simple, familiar language, speak clearly and slowly.
e. Praise and encourage generously.
f. Use a multisensory approach.
    i. For example, use action rhymes, speaking and doing at the same time.
    ii. For example, teach a concept by simultaneously showing pictures, talking about them, and doing a related craft activity.
g. Make information as concrete as possible.
    i. For example, to teach patterns, use available objects like sticks and stones, toys, blocks, and then move on to paper-pencil tasks.
h. Allow for plenty of practice, and plenty of time to complete a task.
i. Give breaks from tasks whenever needed.
j. Show, demonstrate, and model - repeat this cycle as often as possible.
k. Encourage interactions with other children.
l. Sensitize other children to the situation.
    i. Hold a question-and-answer session on the subject, e.g., Do you think Suresh looks different? Do you feel that Ashwini does not understand when you talk to her? Why do you think Ahmed does not talk to you?
    ii. Explain when children get impatient, e.g., Can you wait till Narendra finishes talking? I know that he takes a long time to say some words and he repeats a lot of words; but can you be patient with him?
m. Use stories, role plays that highlight different abilities.

    Some examples of this are available in Annexure 2, Section 2.10

n. Teach and encourage other children to communicate and play with the child.
o. Choose a mentor/buddy for this child from among the rest of the class (make it a great honour to be chosen!).
p. Actively discourage the use of hurtful language or behaviour towards the child.
q. Have a list of clear do's and don'ts to ensure the safety of the child and communicate this to all the other children.
r. Always encourage, support, and honour the child.
    i. Do not use labels/terms that are hurtful and derogatory (e.g., lame boy, blind girl, dumb fellow, stupid girl) or allow others to do so.
    ii. Do not make negative remarks about the child or allow others to do so.

Teacher's Voice 8.1A

Sample Individualized Education Plan (IEP)		
Shashank is a five-and-a-half-year-old child. He can fully understand whatever is being said to him and can speak about twenty words meaningfully. He speaks in one-word utterances. Although he cannot walk independently, with some help, he can stand, and he tries to walk a few steps forward. He drools most of the time. This is a 3-month individualized education plan (IEP) I put together for him.		
Goals	**Learning Outcomes**	**Specific Classroom Activities**
Physical Development	Stand without support Walk ten steps forward with support	Draw a line, place a red ball (which he loves) at the end point. Support him to walk up to the ball. Count from 1-10 as he takes 10 steps with support. Continuously encourage him as he does this.
Language Development	Speak 50 words meaningfully Indicate needs using two words Reduce drooling by strengthening mouth muscles	Place different objects, e.g., ball, cup, plate in a colourful box close to him. Help him take them out one object at a time, and prompt him to name them. The same activity can be done using clear pictures of objects or people. Encourage him to make animal sounds and say action words during song-time and rhyme-time. Use play activities such as feeding a doll, giving it a bath, putting it to sleep and ask him to use words to describe the same. Use a mirror to show him how to make each sound, specifying the shape of the mouth and placement of the tongue. Do specific mouth muscle exercises four times a day.
Self-Help	Brush his teeth on his own Eat food on his own Indicate toilet needs using words and gestures	Break down each activity into simple steps and take him through each step. Use a mirror to show him how he is doing it. Use pictures to help him point to what he is doing. Use beginning sounds for each activity, e.g., 'su' for toilet needs, 'eee' for brushing, 'um' for eating.

Cognitive Development	Sort objects based on categories Match objects to pictures Count meaningfully from 1 to 10	Mix different categories of objects together, e.g., animals and fruits. Place two bowls before him and help him sort/separate them into the two bowls. Place pictures that are familiar to him (e.g., ball, cup, doll) on the table. Give him an object corresponding to the picture and help the child match the picture accordingly. Name the object-pictures while doing the activity. Use building blocks or clothes clips and help him fit them correctly. Once done, help him count them meaningfully and say the number that is present. Vary the numbers and help the child count.
Socio-Emotional Development	Sit in a group, acknowledge the presence of peers, greet, and call out for his friends	Ask a group of children to sit with him in a circle to play passing the ball. As he passes the ball, prompt and encourage him to name himself and others. Give him a set of *chikkis* – ask him to call each child in the group by name and give each a *chikki*. Thank you can also be learnt by the others in this process.

Section 8.2
Safety and Security in Schools

All our educational settings are committed to providing an environment that is not only stimulating and joyful but safe and secure as well.

8.2.1 Physical Safety

a. Teachers must ensure that children are physically 'visible' at all times. A responsible adult must supervise children during breaks and playtime.

b. All buildings and equipment must adhere to safety standards, e.g., grills on windows, railings on balconies, safe electrical connections, earthed electrical equipment, open wells which are covered.

c. Safety equipment (e.g., fire extinguishers) must be immediately available and maintained in good working condition.

d. Windows should not open into classrooms as they are often the source of accidents (e.g., children often hit their heads on window shutters as they stand up or move around).

e. All materials that may be potentially hazardous must be stored carefully and not be accessible to children; they must be used under adult supervision (e.g., knives, scissors, blades, cleaning liquids).

f. A first aid kit should be kept in working order in the school, and all Teachers must be trained in the use of basic first aid.

g. Nutritious mid-day meals must be served under safe and hygienic conditions.

h. In case of an accident or a medical emergency, the supervising adult (e.g., Teacher or Head Teacher) must take a decision and inform parents immediately.

i. If a child feels unwell in school but it is not a medical emergency, the Teacher may contact the parents, and ask them to pick the child up or, if possible, some responsible person from school may take the child home after ascertaining that there will be somebody responsible at home. Alternatively, if there is a place to rest, the child may rest in the school, and return home at the normal time.

8.2.2 Emotional Safety

a. No adult in school may use physical violence or corporal punishment with children.

b. Adults must not bully, harass, or intimidate children even by implication or covertly. They may not use abusive or demeaning language or label children.

c. Teachers must provide equal opportunity and ensure equal participation of all children in everyday activities.

d. Teachers must use positive language with the children at all times and provide encouragement that reinforces affirmative behaviour and actions in the classroom, and otherwise.

e. Teachers must intervene if they encounter inappropriate behaviour that hurts others. If a child crosses a significant boundary, the first step would be to try and understand the reasons or underlying causes and address them.

f. Confidentiality of sensitive information (e.g., regarding a child's particular circumstances) must be maintained.

Box 8.2A

The Ministry of Education's Guidelines on School Safety and Security clearly define the measures that schools, and other relevant stakeholders must take to create a safe and secure environment for all children. They are an excellent resource for all educational institutions and settings.

8.2.3 Child Sexual Abuse

a. In accordance with the Protection of Children from Sexual Offences (POCSO) Act, 2012, there must be zero tolerance of child sexual abuse.

b. Teachers and all other adults must be aware of child sexual abuse, and the POCSO Act, and recognise possible indicators of sexual abuse (e.g., unexplained bruises or injuries on the face, legs, bottom, or torso, becoming withdrawn, aggressive, or self-destructive).

c. Through stories and play (e.g., use of puppets), Teachers could introduce ideas of safe touch and unsafe touch to children.

d. If Teachers notice a significant pattern of change in the child's behaviour, they must report it immediately to the Head Teacher/Principal/Supervisor.

e. All procedures to deal with such incidents must ensure safety of the child. In all cases, the most important consideration to be taken into account is the protection of children.

f. Confidentiality at all times needs to be maintained. Information regarding concerns of possible child abuse should only be shared on a need-to-know basis.

8.2.4 Other Overall Safety Measures

a. Addresses and phone numbers of parents should be regularly updated and kept accessible. Emergency contact numbers must be available for all children/adults.

b. Information about any particular medical condition, and the associated medication or preventive measures should be obtained at the time of admission and be updated regularly and made available to all concerned. This is important for all children and particularly for children at risk.

c. Particularly, everybody in the school should be aware of children having asthma, epilepsy or known allergies. Anti-epileptic or anti-allergic medicines as prescribed by the doctor treating these children should be available in the school. The school must have written consent from parents/care-givers to use these.

d. Information about any emotional upheaval or trauma that the child may be going through temporarily must be made available to all concerned Teachers.

e. Telephone numbers of the closest medical centre/hospital/ doctor, ambulance, fire station and police station must be easily accessible or put up in a central place for all to see.

Chapter 9

Linkages to the Preparatory Stage

The 5+3+3+4 design of school stages necessitates both continuity and change when the child moves from the Foundational Stage to the Preparatory Stage.

The most significant change is the shift from a developmental imagination in the Foundational Stage to a focus on development of capacities and skills that are necessary for gaining a systematic understanding of the world around us. These capacities are broadly – literacy, numeracy, and the abilities to hypothesize, make observations, collect data, and analyse data. Along with these scholastic capacities, engagement in arts and sports become an important part of the Preparatory Stage, as also the development of values, beliefs, and social capacities. Children are expected to attain Foundational Literacy and Numeracy by the end of Grade 3, which is part of the Preparatory Stage.

Section 9.1
From Development Domains to Curricular Areas

In the Foundational Stage, the Curricular Goals are organized based on development domains – physical, socio-emotional-ethical, cognitive, language and literacy, aesthetic and cultural, and positive learning habits. In the Preparatory Stage, the Curricular Goals would be organized into Curricular Areas – Languages, Mathematics, World Around Us, Arts, Physical Education, Vocational Education.

a. **Languages** – Both L1 and L2 language and literacy development would continue in the Preparatory Stage. While children would achieve Foundational Literacy in L1 in their first year in the Preparatory Stage, they would be expected to achieve the same in L2 by end of the Preparatory Stage. So, by end of Preparatory Stage, the goal would be to make children independent readers and writers in both L1 and L2.

b. **Mathematics** – In the Foundational Stage, mathematical abilities are seen as part of cognitive development. In the Preparatory Stage, specific focus would be given to mathematics as a curricular area. Foundational Numeracy is expected to be achieved in the end of the first year in the Preparatory Stage.

c. **World Around Us** – This curricular area in Preparatory Stage expands from the cognitive domain of the Foundational Stage. Children would engage both broadly and deeply with the environment around them, both natural and human environments. They would further develop their skills of observation, data collection, and analysis for forming and verifying hypothesis. They would also gain socio-cultural understanding of the human world around them.

d. **Arts** – There is continuity in the Preparatory Stage from the Foundational Stage. While in the Foundational Stage, it is freer and more exploratory in nature, in the Preparatory Stage, children would start gaining specific skills in different forms of arts that would enable them to express themselves in more elaborate ways.

e. **Physical Education** – In the Preparatory Stage, physical development is given specific focus in the form of Physical Education. While in the Foundational Stage, exploratory and free play is the emphasis; in the Preparatory Stage, introduction to sports and more formal engagement in physical activity would be the emphasis.

f. **Vocational Education** – In the Foundational Stage, there one curricular goal for "*seva*". This would further expand significantly so that children engage in productive work in the Preparatory Stage. NEP 2020 sees education holistically, not just understanding of the world but acting upon the understanding meaningfully and productively. From simple activities, like growing vegetables and cooking, to more skilled work, like stitching, children would be encouraged to use their minds and bodies towards productive work.

g. **Socio-Emotional-Ethical Learning and Positive Learning Habits** – In the Foundational Stage, it is appropriate that these two domains are given special emphasis in terms of articulating Curricular Goals, given the developmental needs in early childhood. This emphasis would continue in the Preparatory Stage, with the goals being met through a diverse set of approaches.

Section 9.2
Continuity and Change in Content, Pedagogy and Assessment

The second shift is in the form of content used in the classroom. Children in the Preparatory Stage are ready to deal with more abstract presentation of content, rather than only concrete experiences. Textbooks and workbooks can start to play a bigger role in organizing learning. The content can also expand the context of understanding and need to be fully local to the child's experience. Children's imagination expands both in terms of space and time, and the content used should reflect this expansion. The choice of content can reflect a judicious balance of familiar and unfamiliar, that both comforts and challenges children.

The third shift is in classroom organization and pedagogy. While the pedagogy needs to continue to allow children to learn through their own exploration and inquiry, children would enter a more formal classroom setup, and the learning experiences become more cohort based. Children are expected to learn in group environments and become more independent in learning. More self-directed work can be expected of children in the Preparatory Stage. Strengthening and deepening skills would require more repetition and practice. While settings become more formal, it is important to continue the learner-centric approaches of the Foundational Stage into the Preparatory Stage. Some children would continue to need more individual attention, and it is important that in the Preparatory Stage, the pedagogical strategies adopted are chosen so that all children have attained foundational capacities in preparation for more formal engagement with different forms of understanding in the Middle Stage.

Finally, there would be a shift in the ways of assessment. While in the Foundational Stage most of the assessments are based on Teacher 'observations' of student work, in the Preparatory Stage, more explicit assessment tasks can be introduced. Again, the continuity would be in terms of keeping assessments 'low stakes', even though they are explicit. In the Preparatory Stage, it is useful for children to have some aspects of meta-cognitive awareness of their own learning, and this can be provided by more explicit assessment tasks. Apart from worksheets, children can be given written assessment tasks that they need to complete within a specific time.

Chapter 10

Creating a Supportive Ecosystem

The NCF is one of the core transformational forces of NEP 2020. As is evident from the previous chapters, the curricular implementation of the NCF for the Foundational Stage requires several actions around content, pedagogy, and assessment. All of this needs a supportive environment. This Section mentions the role of Teachers, functionaries and parents and community in making this happen.

Section 10.1 talks of empowering teachers in different ways in line with the NEP 2020. The infrastructure and learning resources support required to implement this curriculum are mentioned in Section 10.2. Section 10.3 outlines the role of academic and administrative functionaries. Section 10.4 enumerates the importance of parents and community supporting the learning of their children at the Foundational Stage. Technology is an important enabler - Section 10.5 describes ways in which technology can be used to support teaching and learning at the Foundational Stage.

Section 10.1
Enabling and Empowering Teachers

Teaching is an intellectually and ethically demanding profession. Teachers of the Foundational Stage are required to have particular qualities that enable them to work with young children with care, energy, rigour, patience, and humour.

10.1.1 Ensuring an Enabling Environment for Teachers

A culture that encourages people to learn and work together, and is characterised by trust and respect for all is critical to a good school - this is possible in an environment that is open and caring, and where dialogue, collaboration, enquiry, and reflection are embedded practices.

Teachers need resource-rich, motivating environments and continuous opportunities for professional learning and interaction. Teachers must feel a sense of pride in belonging to a well-qualified, close-knit, and vibrant professional group.

10.1.2 Conducive Facilities and Work Environment

Adequate and safe physical infrastructure, facilities, and learning resources must be made available with safe drinking water, functioning toilets with running water, and basic hand washing facilities.

The infrastructure and teaching materials necessary to teach students effectively, including functional classroom boards, material for arts/crafts, material to set up learning corners, and a range of children's literature must be made available.

10.1.3 Pre-Service Teacher Education

The first step is to estimate Teacher demand and supply for the Foundational Stage. This must be undertaken by NCTE on priority, building on existing studies related to demand and supply of Teachers for specific Stages.

This will help to ensure that the right number and type of universities offer the four-year Integrated Teacher Education Programme (ITEP) with specialization in the Foundational Stage.

The curriculum for the Foundational Stage specialization within the ITEP must be based on the curriculum and pedagogy of the NCF for the Foundational Stage. It must also ensure adequate practice opportunities for student Teachers in all environments of the Foundational Stage, e.g., Anganwadis, Balvatikas, stand-alone preschools, preschool classes of larger schools, and Grades 1 and 2.

The Teacher Eligibility Test (TET) should also be extended to all teachers of the Foundational Stage once the re-structuring of school stages is complete. NEP 2020 envisages the extension of the TET to cover all stages of education, including the Foundational Stage. This certification of suitability to teach will cover teachers across all kinds of schools.

Recruitment of teachers must be through a rigorous process comprising not only a written test but also an interview and classroom demonstration, as stated in NEP 2020.

10.1.4 In-Service Teacher Education, Mentoring, and Support

Teacher professional development is a journey, and Teachers progress through it at their own individual pace. Teachers will be at different phases of their development journey, and will have different development needs. Each phase requires exposure to different content. Within each phase, the learning experience needs to be holistic and complete to a point that it can help Teachers to bring about sustained change in their practice, and move to the next phase.

Professional development of Teachers must be such that they become competent and reflective individuals with the ability to drive educational improvement. Support structures and enablers must be in place to facilitate their work, and further their learning.

Teachers must engage continuously with their professional development through a variety of means. Content must be comprehensive and complete, relevant, and connected to the classroom, and address challenges Teachers face. Platforms for peer learning with mentoring and coaching support must be made available.

Teachers of the Foundational Stage focus on helping young children learn in a safe, stimulating, and engaging environment that emphasizes play and discovery. The NCERT, SCERT, DIETs, BITEs, BRCs, CRCs provide academic mentoring and support to schools and Teachers through the development of support material, capacity building sessions, on-site visits, and quality monitoring and supervision. These academic resource institutions play a key part in ensuring that teacher professional development opportunities are continuously available.

Professional Development for Teachers - Illustrative Components and Modes

Table 10.1A

Components of Professional Development	
Global Research	Brain development Developmental stages, developmental milestones How children learn, why play is important Understanding families, communities Implications for learning in school
Understanding Content	All domains of development Early language and literacy, Early mathematics
Curricular Goals Competencies Learning Outcomes	Understanding Curricular Goals - rationale and connection to Aims of education, domains of development Understanding Competencies and Learning Outcomes to be attained Implications for the classroom

Pedagogy	Making children feel safe, comfortable, respected, encouraged Using play - toys, story, art, games, music, conversations Reading, writing, mathematics in the classroom
Content and Material	Identifying appropriate content - rationale for choices Selecting appropriate material Creating appropriate material using local resources Using technology
Assessment	Principles of assessment Using appropriate tools and techniques for assessment Using assessment data to improve teaching and learning
Children at Risk	Recognising red flags for developmental delay and disability Appropriate classroom processes Working with professionals
Planning	Creating multi-level teaching plans adapted to student needs across all learning areas
Working with Parents and Community	Building positive relationships Involving parents and community in school
Building a Teacher Learning Community	Forums for teacher engagement Face to face, Using technology
Research and Documentation	Using research literature Writing case studies

Table 10.1B

Modes of Professional Development	
In-School Processes	Planning, weekly discussions, sharing meetings, peer classroom observation and feedback.
Scaffolding and support in School	Members of the CRC, BRC, DIET and other support organizations could visit schools on a regular basis. During the visit, they can observe Teachers, hold discussions with them, demonstrate pedagogy, work on material development with Teachers, share information about upcoming events, and activities.
Formal Workshops	These are face-to-face sessions on all domains of learning and development. They can be of varying durations and formats, ranging from 3-day residential workshops for large groups of Teachers to half-day sessions on specific topics for small groups.
Material Development Workshops	Early years learning needs plenty of teaching learning material. If groups of Teachers (e.g., within a large school or at the Cluster or Block) could get together and develop material, it would be an excellent learning opportunity for all of them.
Teacher Forums	Forums for Teachers of the Foundational Stage (e.g., at the Cluster) could have monthly meetings to discuss work. Teachers could take responsibility for particular topics, and design teaching plans, resources that could be shared with all. This could reduce preparation load, and Teachers could adapt such resources for their own students.
Social Media Groups	Groups on social media platforms that support and moderate sharing of experiences, teaching resources, and discussion amongst like-minded or subject-specific Teachers - these could be administered by Teachers themselves.
Handbooks	Handbooks that guide Teachers to plan on achieving Learning Outcomes could be prepared. References of additional material that they can read/access and use may be a good addition to such handbooks.
Using DIKSHA	Content on DIKSHA specific to early years learning could be used by individual Teachers and Teacher groups.
Mentor Teachers	Experienced, dedicated teachers could be identified for each Cluster. They can visit other schools, support other Teachers. Teachers wanting support can reach out to these mentor Teachers independently.
Annual Teacher Seminars	Large scale, short duration events focussed on specific topics where Teachers could present their ideas/practices/material, and listen to expert speakers. Teachers can be exposed to new and different ideas relevant to teaching in the early years.

Please see a few Illustrations in Annexure 2

10.1.5 Career Ladder and Professional Development Opportunities

Early stages of school education are critical, and will require Teachers who are highly qualified in the practice of early childhood education.

NEP 2020 speaks of parity in service conditions across all Stages of school education. This means that, as soon as possible and in the long term, pay and service conditions of Teachers have to be commensurate with their social and professional responsibilities, and must be set so as to attract and retain talented Teachers in the profession. All Teachers, from Foundational Stage Teachers to Secondary Stage Teachers, will be recruited with standard service conditions as per their work requirements, and the same salary structure.

All Teachers must have the opportunity to progress in their career (in terms of salary, promotions, etc) while remaining as Teachers in the same stage of education (i.e., Foundational, Preparatory, Middle, or Secondary). The approach will be to ensure that growth in one's career (salary and promotion) is available to Teachers within a single school stage, and that there is no career progression-related incentive to move from being Teachers in early stages to later stages (though such career moves across stages will be allowed, provided the Teacher has the desire and qualifications for such a move).

10.1.6 Teacher Autonomy and Teacher Accountability

Teachers are responsible for student learning and must be held accountable for it. But Teacher empowerment and autonomy are preconditions for accountability. Accountability is critical but so is autonomy - an empowering culture based on autonomy is a necessary condition for accountability.

Competent and capable Teachers are critical to improve the quality of learning. Supportive environments within schools and the eco-system improve teacher effectiveness. Teachers are unique individuals, with their own set of beliefs and personal theories about learners, learning, and education.

To a creative and discerning Teacher, every learning episode presents unanticipated opportunities to spontaneously and naturally stimulate and support learning of what was not planned, and to omit, on that particular occasion, learning of what was originally intended or planned.

Teachers must have the pedagogic autonomy to plan and organize content, decide the sequence, and methods of teaching children as the situation demands, along with ways of assessing their learning. All this must be based on the prescribed Curricular Goals, Competencies, Learning Outcomes, and pedagogical approaches and principles in the Foundational Stage.

Section 10.2
Ensuring an Appropriate Environment for Learning

10.2.1 Design Imagination

The importance of physical spaces to provide safe, joyful, and comfortable environments, which are enablers of learning in the Foundational Stage cannot be overstated. It is such vibrant spaces that must be developed with the significant investment thrust of NEP 2020 on ECCE in the Foundational Stage.

Highly creative imagination would be required for the design and implementation of these spaces, so as to fulfill this important role as an enabler of high quality ECCE. And this would have to be done while considering the practical aspects of cost-optimization, operational feasibilities, and implementation capacities.

This creative imagination would have to cover not only all the aspects of buildings that house institutions implementing Foundational Stage education, but also their immediate environment. Both buildings (or rooms) being newly constructed or those that are being remodelled from existing infrastructure, should be informed by this imagination.

One of the more effective approaches, for such imagination to flower and take concrete shape, is to construct cross-disciplinary/cross-field teams, which are chartered to develop these ideas, blueprints, and guidelines. The disciplines/fields could include ECCE, Child Development, Engineering and Architecture, Sociology and Anthropology, and more. Multiple such teams may be required across the country to be adequately responsive to local contexts and requirements. These could be formed by the relevant bodies in the states, such as the DWCD, SCERT, etc.

Actioning this quickly will be critical for investments in ECCE to be channelled appropriately.

10.2.2 Infrastructure and Learning Resources

Appropriate and adequate infrastructure and learning material to learn in an optimal manner must be available for all children. Availability of adequate and appropriate infrastructure facilities, and learning resources has significant impact on creating a conducive environment for learning. Quality, completeness, and maintenance of infrastructure is a key differentiator between a good school and a not-so-good one, especially in the eyes of parents and community.

A high-quality programme for children should help satisfy their curiosity, provide freedom for exploring the environment, opportunities for interaction, and promote optimal holistic development. Children should get opportunities to engage with materials, play outdoors, and interact with each other, and the Teacher every day.

A supportive learning environment would give children a holistic experience for learning and development. Child development does not only depend on Teacher-student interaction but also on sensory experiences children have in the physical environment in and outside the classroom.

Safe, barrier-free, and adequate physical infrastructure must be available as per prescribed norms. Buildings and equipment must meet safety standards as per the law. Adequate budgets and utilization for infrastructure development, infrastructure maintenance, and teaching-learning material must be available.

This includes:

a. Clean, safe, and functioning toilets, and safe drinking water.
b. Safe and nutritious meals (as per committed norms), and health support for all children.
c. Clean, well-ventilated, and well-lit classrooms maximising the use of natural light and ventilation.
d. Learning spaces segregated from other spaces (e.g., cooking) in an optimal way that does not hinder safety or learning.
e. Separate classrooms for Grades 1 and 2.
f. Safe outdoor spaces, and/or small gardens for children to play.

g. Buildings and walls painted in cheerful colours (children could participate in this painting).

h. Appropriate high-quality learning resources/material, and books.

i. Material organized and stored in specific spaces with appropriate safety mechanisms (e.g., cleaning material or knives are stored in locked spaces).

j. Learning corners and appropriate displays at the eye level of children.

k. Cleanliness/hygiene maintained with regular checks of spaces, material.

Please see Chapter 5, Sections 5.4, 5.5 and 5.6 for details.

10.2.3 Pupil Teacher Ratio

It is widely understood and accepted that the right Pupil-Teacher Ratio (PTR) enables individual attention by Teachers, and therefore can increase student engagement and achievement. It is important to look at the PTR as not just a number, but as a measure that would lead to better Learning Outcomes for the child. Many crucial classroom processes can be better implemented if the Teacher could operate in an environment of favourable PTR.

Pedagogy specialists argue that a lower PTR has a larger impact during the early years of schooling. It is found that children who attend schools with lower PTR have a greater likelihood of continuing schooling for a greater number of years.

One important caveat is that reducing PTR does not imply filling schools with underqualified and contractual Teachers. PTR must be improved through the appointment and professional development of qualified Teachers. Along with improved PTR, issues of infrastructure, and the academic and pedagogic capability of Teachers must also be taken care of to take full advantage of lower PTR. There must be a full complement of Teachers for all children at the Foundational Stage.

10.2.4 Age of Admission

Policy documents such as RTE 2009, National ECCE Policy 2013, and NEP 2020 have emphasized that children should participate in a preschool or Anganwadi from age 3 to 6 years, after which point, they should enter Grade 1 of primary schools.

NEP 2020 states that the Foundational Stage begins at Age 3 and ends at Age 8 i.e., five years of schooling from preschool to Grade 2. Children should, therefore, begin Grade 1 at the age of 6 years. However, many State policies do not reflect these age and developmental milestones.

Given the rapid pace of brain growth, and overall development of the child in the early years, a difference of even a few months is significant. The curriculum for Grade 1 is designed with the assumption that children will be over 6 years old.

The trend of officially advancing the entry age for Grade 1 to below 6 years defies this assumption and can pose significant damage to children's cumulative learning.

Section 10.3
Role of Academic and Administrative Functionaries

10.3.1 Head Teacher/Principal

The most important role of the school leader is to create a supportive and empowering culture in the school through processes that provide autonomy and ensure accountability.

Head Teachers/Principals/Supervisors must support Teachers in every way so that they teach well. This can happen through helping them to plan their classes, providing access to appropriate resources, observing classes and providing constructive feedback, and creating an ethos where Teachers think and talk about teaching and learning of children.

It would be very useful if Head Teachers could also teach a class from time to time at the Foundational Stage to stay in touch with children, to build rapport with them, to lead by example, and to stay in touch with the Teacher's perspectives and challenges. This would also demonstrate how important this Stage is to the entire school, and give the Teacher further confidence.

The Head Teacher should build rapport with parents, families, and the local community to ensure regular attendance of young children, and ensure parents/families understand the criticality of this Stage of learning and development. This would also help the school respond appropriately to relevant issues and challenges, e.g., sensitively informing parents/families when a child has a suspected developmental delay or behavioural concern.

10.3.2 Academic Functionaries

School visits and on-site support through classroom observation and constructive feedback to Teachers is the most important role of this group at the Cluster and Block level. Functionaries at Cluster and Block level should also regularly demonstrate the pedagogy that Teachers must use - this helps Teachers understand better, and helps them to stay in touch with teaching and children.

The Cluster level meetings must be used to discuss classroom processes, and one meeting every few months could be held exclusively to discuss classroom experiences at the Foundational Stage. They should also be part of discussions with parents and the community on the importance of the early years for learning development, and ensuring regular attendance and participation in school. Academic initiatives by the school, e.g., setting up learning corners, adding children's literature, must be fully encouraged and supported.

The focus of academic functionaries at the DIETs should be to develop extensive engaging, joyful, and innovative material for children and Teachers in the local language rooted in the local context. This could include a comprehensive Teacher support plan to use this material. Each DIET could also develop a pool of academic resource persons for every Block in the district with expertise in supporting Teachers for the Foundational Stage.

The focus of the academic functionaries at the SCERT should be to develop the State curriculum for the Foundational Stage, textbooks and workbooks for Grades 1 and 2, sample additional material which DIETs could further contextualise and build on, and assessment checklists and processes that Teachers could use. The SCERT should take responsibility for sourcing, contextualising, and anchoring translation of materials for use in the Foundational Stage.

10.3.3 Administrative Functionaries

Ensuring availability of teachers, and facilitating timely supply and distribution of teaching-learning resources (e.g., play materials, books, activity books) would be critical for the implementation of the curriculum at the Foundational Stage. Appropriate budgetary allocations may be made for curricular requirements, and teacher professional development needs, with regular monitoring and review of progress.

Carefully planned and thoughtfully collected data would help with ensuring access for Socially and Economically Disadvantaged Groups (SEDGs). Specifically, it is necessary to have an accurate estimate of the population of children aged 3-8 years, so that appropriate planning can be done – this would require both projection and tracking. Technology should be used, where possible, to ensure accurate data is collected with minimal effort but maximal accountability, such that the data is available to decision makers in a matter of days, and not weeks and months.

An indicator of the quality of education in the Foundational Stage will be the attainment of outcomes, particularly those related to FLN in Grade 3. The NAS makes this tracking possible. In addition to NAS, States may plan State Learning Achievement Surveys (SLAS) with this focus.

Large-scale advocacy through public service messages and media campaigns, direct communication with parents, and wide-scale dissemination of simple methods and materials needed to enable parents to actively support their children's early learning needs could also be designed.

Section 10.4
Role of Parents and Community

10.4.1 Parents and Family

Parents and family are co-partners with the school in the child's learning and development. In the early years, it is even more important for parents to understand and support what happens in school as well as for Teachers to understand the child's situation at home so that they can take cognizance of it in their interactions with the child.

Relationships with parents and families may be built and sustained with focus. Communication with parents needs to be frequent and ongoing, with parents being treated as equal partners in the process, not as people who are talked down to or only reported to. Parents need to be kept abreast of the child's progress. This could be done by inviting parents to school regularly for discussions about their child's learning, and by the Teacher conducting home visits. The meetings also provide space to elicit their views about the school's functioning. Parents may solicit meetings with Teachers as and when required.

A shared understanding would be useful, especially of the importance of child development in the early years, different domains of development and learning, the need for stimulation and engagement in a conducive and safe home environment, the importance of basic health and nutrition, the effects of deprivation and child abuse, and the importance of the family and Teachers in the child's development.

Parents and family can individually contribute to the school in several ways. Illustratively: participate in special celebrations, important days of the school, and school events; help with organising and supervising small local field trips; share their knowledge and experience when particular topics are being studied (e.g., growing plants and controlling for pests, how to perform first aid for basic injuries, cooking a simple healthy meal, demonstrating basic woodwork, talking about animals or vehicles); help the Teacher to align aspects of school practices to the local context (e.g., local festivals, local food, local art forms); and be part of the classroom on designated days as an observer or co-teacher.

Parents can also be part of the School Management Committee, and become the bridge between the parents, the community and Teachers. They can take responsibility for ensuring clear, transparent communications about all matters between other parents and the school, they could help to collect additional resources or learning material, and be part of parent groups to plan, coordinate and manage events like Teachers Day or Sports Day.

10.4.2 Community

The local community is defined as parents, family, residents of the neighbourhood, youth groups, community leaders, and local governance institutions. The community could be involved in and support the school in several ways. Illustratively: ensure enrolment and regular attendance of all local young children, share observations with Teachers, provide support with additional infrastructure, learning materials, better nutritional sources for children's meals or other services (e.g., the Gram Panchayat could use funds from other schemes for providing a water connection), motivate all parents and community members to become active partners with the school, and help make the school an integral part of the community.

Teacher's Voice 10.4A

Bal Mela

I have always believed that it is important to get parents and the larger community engaged in children's learning. Bal Melas are very effective for this. In a Bal Mela, my children enjoy displaying and demonstrating their learning to their parents and the local community. Such an event helps create a better connect between the school and the community. It helps create awareness among parents and community on the importance of learning at the Foundational stage.

All Teachers in our village, and other functionaries work together for this. While we keep changing the details each time, a typical Bal Mela goes something like this.

- We Teachers decorate the venue and display the following:
  - Children's artwork with the name of the child, age, and date of creation
  - Teaching-learning materials prepared by us
  - Children's portfolios with all their work
  - Charts, posters on the importance of early years, brain development, how children learn, how a friendly learning environment should be - we use pictorial representation so that everyone can understand easily
- Children enjoy drawing and painting till other participants reach the venue.
- Once the participants arrive, we (along with some of the older children) explain the purpose, event schedule, and expectations of lots of encouragement from them.
- Activities begin – some with children, some with children and parents, and others could even be exclusively with parents.
- At the end of each activity, the Teacher concerned and some of the older children explain the purpose of that activity, how the activity enhances or supports the development of children, and how these activities can be conducted at home with available resources.

- We try to specially ensure active participation of fathers, and encourage them to share their thoughts on their child's development
- After the activities, we discuss important elements like brain development, the importance of early years, the role of parents in child development, etc using charts and posters.
- Parents share their experiences in sending their children regularly to class.

In the end, we, the Teachers, share our expectations from parents and the community, especially in terms of enrolment and attendance of the children, and thank them for their participation. Bal Melas are truly a celebration where the entire village comes out to participate in their children's learning!

Section 10.5
Leveraging Technology

In addition to using technology as a source of content for teaching (*Please see Chapter 5, Section 5.4*), technology can significantly contribute to building a supportive ecosystem for the Foundational Stage.

Leveraging existing technology, and building upon digital infrastructure and frameworks can help in accelerating capacity building, enable participation and engagement, and synergies. An example is the National Digital Education Architecture (NDEAR), which was launched on the first anniversary for NEP 2020 as a key enabler for NEP implementation, with a vision 'to create a unifying national digital infrastructure and act as a super connector to cross leverage ecosystem capabilities.'

While the NCF may suggest a few ideas for use of technology in the early years, one cannot imagine all possible scenarios for the future, and certainly not solutions that will be relevant going ahead. It would be prudent to leverage technology frameworks, such as NDEAR, that will enable development of diverse and modular solutions as needed from time to time.

10.5.1 Technology for Capacity Building

Digital courses to enhance understanding of children in the early years, bit-sized 'how to' guides on a range of topics related to supporting and enriching young children, demonstration of innovative practices, planning for teaching are available to teachers and parents across Indian languages. These need to be further enhanced.

Some ways of doing this could include informative and educative content (e.g., value of conversations, information on developmental milestones), good practices (e.g., using locally available material for young children), transforming static lesson plans into interactive, personalized plans that give Teachers flexibility and choice.

Technology also significantly enables peer learning, sharing of content and practices, asking for help and feeling a sense of community with others who may be navigating similar contexts. This works best when material is available in local languages, which technology can enable.

NISHTHA is a National Mission which aims to improve the Learning Outcomes of students through a digitally enabled teacher training programme offered through an online mode. It should be leveraged and continually improved.

Teachers can upload self-made content on platforms like DIKSHA and can also leverage NDEAR compliant open-source content authoring tools for creating a variety of content.

10.5.2 Leveraging Digital Infrastructure, Platforms, Tools

The vibrant ecosystem of content creators may be encouraged to contribute content for children, teachers, parents, and the community by using NDEAR (ndear.gov.in), and VidyaDaan (vdn.diksha.gov.in) capabilities.

'Energizing' material for teachers and children using QR codes for ease of access to contextual curriculum-linked content works very well. Leveraging QR code also ensures that content linked to it can be updated/modified at any point of time.

Tools to note and identify developmental challenges, and early screening tools will help Teachers to recommend necessary support for the child e.g., PRASHAST, a disability screening checklist.

Practical and efficient technology-enabled tools to ease the administrative tasks of teachers save time, and enable efficiencies. Enabling tools could be used by teachers and administrators to help plan and execute ideas and programs for micro-improvements in their learning spaces. Technology could also enable building cohesive parent-teacher communities. Tools to discover specialist and expert resources, especially where support is needed for children with special needs or developmental delays, can also be addressed. In multilingual situations, technological tools assist teachers, so that they are able to take care of each child's needs.

Artificial Intelligence (AI) and Machine Learning (ML) can be used to solve some of the challenges such as translation (e.g., Bhashini https://bhashini.gov.in/en/ and ULCA https://bhashini.gov.in/ulca), and content discovery solutions to enable discovery of relevant materials by and for teachers when they need them (e.g., Chatbots). AI and ML must be strictly avoided for any solutions that are child facing or child related.

10.5.3 Technology for Parents and Community

Responsive parenting may be encouraged by using broadcast media Radio, TV, OTT platforms as well as messaging through IVR and other means. Several innovative programs currently being implemented in States in partnership with civil society organizations could be expanded.

Ideas for parental engagement with children through enabling access to 'a story a day,' activities of play and learning, reading or listening together, and even practice through worksheets are currently made available using community radio stations. Many parents now use messaging services to connect with people and consume content. These could be leveraged as well.

Annexure 1:

Illustrative Learning Outcomes

The Illustrative Learning Outcomes for each competency are articulated here. These are learning trajectories over the five years in the Foundational Stage that lead to the achievement of the related competency.

- As the Curricular Goals are developmental, so are the Competencies and the Learning Outcomes.
- All the Learning Outcomes have a developmental trajectory across every age group through the Stage. They must be seen as a continuum and a trajectory, rather than exact age-specific goals.
- As learning between ages 3 and Age 8 is developmental, it happens at a varied pace for different children. All children will not achieve the same age-wise Learning Outcomes at the same time.
- The age-wise categorisation below is indicative and will help the Teacher to organise learning experiences for each child in the classroom.
- Each Learning Outcome is observable. The Teacher will be able to observe the child's progress on Competencies using these Learning Outcomes.
- The Learning Outcomes need to be read as cumulative. The child's learning of previous age groups continues to be observed in later stages. For example, if the Learning Outcome for ages 4-5 is 'eats without spilling' this is assumed to continue for age 5-6 onwards.

In the section below, **Curricular Goals** are numbered as CG-1, CG-2, CG-3… and **Competencies** are numbered as C-1.1, C-2.1, C-3.1… **Learning Outcomes** are mapped to Competencies.

As mentioned above, the Learning Outcomes must be seen as a continuum. In the tables below they are placed in reading grids – with 1,2,3…in the vertical axes and A,B,C…in the horizontal axes – only for easy referencing. For example, readers can refer to Learning Outcome D.1 against Competency C-2.1 to point to a specific Learning Outcome within this illustrative list.

1.1.1 Physical Development

A healthy body houses a healthy mind. Also, in this Stage, children learn most when they use all their senses and whole body to engage in playful activities. Hence, the focus here is on developing healthy eating and hygiene habits, becoming aware of safety, sharpening sensorial attention, and exercising and coordinating their different muscle groups.

CG-1: Children develop habits that keep them healthy and safe

Children develop both habits of healthy eating and understanding of nutrition. Early exposure to a range of food groups is essential for developing a taste for a variety in food.

Lack of hygiene often causes ill-health and children lose the gains made through nutritious food. This makes it important to develop good hygiene practices in early school years. While early childhood is a crucial time when the immunity of the child is also developing, since children come to school in concentrations, some basic hygiene practices become necessary for a school context.

Since schools are public places, school readiness necessarily involves special attention to safety and security. By acquiring specific practices of safety and security, children are better prepared to engage with learning in schools, which may be distant from home, both geographically and culturally.

Competencies are attained over a period of time. Therefore, interim markers of learning achievements are needed. These interim markers are Learning Outcomes. The table below illustrates the detailing of Learning Outcomes for a Competency. Each column in the table (A-E) are milestones, and these milestones in a sequence indicate a Learning Trajectory for attainment of a Competency.

C-1.1: Learning Outcomes

Table 1

C-1.1: Shows a liking for and understanding of nutritious food and does not waste food

Age 3 - 8

	A	B	C	D	E
1	• Identifies things that can be eaten and cannot be eaten • Begins to eat and name a variety of foods with adult prodding	• Eats a variety of food from different food groups – grains, vegetables, fruits, and proteins (e.g., dal, beans, nuts, dairy) with adult support	• Eats from a variety of food groups independently	• Enjoys the variety in food from different food groups	• Seeks for a variety to fulfill nutritional requirements
2	• Names a few healthy food items and a few unhealthy food items	• Identifies healthy and unhealthy food items in a shop • Gives reasons for why some food is healthy	• Recognises foods from different food groups and explains the benefits/ill-effects of different food groups • Names some qualities of good nutritious food (e.g., eggs and dal build strength, palak 'cleans the blood', milk gives strong teeth)	• Identifies major ingredients in familiar food with help (e.g., dal in sambar, peanut in chutney) • Names the connection between ingredients and nutrition (e.g., gur and peanut in chikki is good for health)	• Guesses ingredients of cooked food and says whether they are good or bad for health • Recognises ingredients in packaged food (e.g., biscuits, noodles) and says whether they are good or bad for health
3		• Follows picture recipes to prepare simple snack	• Participates in preparing nutritious snacks (e.g., mixing boiled chana, sprouted salads, bhelpuri) with adult support	• Prepares nutritious snacks based on recipes, independently	
4		• Eats without spilling	• Eats without wasting food when served appropriate portions	• Asks for appropriate portions of food	• Serves appropriate portions of food on their own without spilling

C-1.2: Learning Outcomes

Table 2

	A	B	C	D	E
	C-1.2: Practices basic self-care and hygiene				
	Ages 3 - 8				
1	• Gets help to wash and dry hands before and after using the toilet or eating	• Begins to wash and dry hands before and after using the toilet or eating	• Always washes and dries hands before and after using the toilet or eating	• Demonstrates appropriate use the of toilet	• Becomes independent in basic self-care and hygiene
2	• Can wear clothes (without buttoning them) and put on their footwear with the help of adults	• Can wear clothes and footwear independently	• Begins using needle and thread to do small mends under supervision	• Fixes buttons and mends small tears with needle-thread with help	• Fixes buttons and mends small tears with needle-thread independently
3		• Begins to use personal care objects (combs, toothbrush) on their own		• Use personal care objects appropriately	

C-1.3: Learning Outcomes

Table 3

	A	B	C	D	E
	C-1.3: Keeps school/classroom hygienic and organised				
	Ages 3 - 8				
1	• Aware of their belongings such as bags, bottles, shoes, handkerchiefs, etc.	• Keeps and retrieves their personal belongings from the correct place	• Maintains their personal belongings in good shape	• Handles study material with care	• Takes care of school property, books, materials, and furniture
2	• Places soiled plates and utensils in the designated space with the help of adults	• Identifies and uses clean glasses and plates, and places soiled plates and utensils in the designated space independently	• Washes their plates and utensils	• Begins to maintain cleanliness in classrooms, playgrounds, etc	• Participates in the cleaning of classrooms and playgrounds
3	• Uses dustbin with assistance	• Begins to use a dustbin to dispose of waste	• Always uses a dustbin to dispose of waste	• Begins to segregate waste (wet waste and dry waste)	• Segregates garbage appropriately

C-1.4: Learning Outcomes

Table 4

	A	B	C	D	E
	C-1.4: Practices safe use of material and simple tools				
	Ages 3 - 8				
1	• Avoids danger by not touching harmful objects like fire, hot stove, knife, electric plugs	• Handles harmful or dangerous objects with care like scissors, knife, matchstick	• Uses scissors, knife with care under supervision	• Uses nail cutter, small knife with care under supervision	• Independently uses scissors, small knife, nail cutter

C-1.5: Learning Outcomes

Table 5

	A	B	C	D	E
	C-1.5: Shows awareness of safety in movements (walking, running, cycling) and acts appropriately				
	Ages 3 - 8				
1	• Identifies road safety as important, holds hands of adults and walks on the road	• Looks both ways before crossing the road, holds hands of peers or adult, and walks safely	• Follows road safety rules (walking on the side, crossing road, etc) independently • Identifies traffic symbols (signal lights, symbols – zebra crossing, U-turn, bridge/ railway bridge etc)	• Follows basic safety rules in public transportation, on the street, when riding a bicycle, etc.	• Follows traffic rules while riding a bicycle, walking on the road • Recognizes most safety symbols and avoids danger (electric, fire, repair, digging, etc)

C-1.6: Learning Outcomes

Table 6

	A	B	C	D	E
	C-1.6: Understands unsafe situations and asks for help				
	Ages 3 - 8				
1	• Differentiates between familiar and strange adults	• Communicates discomfort with trusted adults when asked • Does not accept toys, chocolates, money, or other things from strangers	• Understands the difference between safe and unsafe touch • Maintains distance from strangers • Communicates discomfort with trusted adults on their own	• Uses some language to seek adult and peer help	• Reports any bad touch/behaviour noticed, maintains appropriate distance
2			• Seeks help from adults when there is an injury (e.g., scraped knee, burns, electrical shock) • Identifies people in the community who would be of help in an emergency – doctor, fire-fighter, etc	• Understands and uses basic safety protocols (e.g., washing with cold water after a burn)	

CG-2: Children develop sharpness in sensorial perceptions

Sensory development is fundamental to all learning. The deep neural connections between our sensorial receptors, our developing perceptions, our thoughts and even our consciousness is slowly getting unearthed. Adequate experiences for sensorial development should not just be seen as a precursor to cognitive development but as an independent capacity for holistic development of the child. Paying attention to sensorial development also gives opportunities for early detection in difficulties that might affect learning.

C-2.1: Learning Outcomes

Table 7

	A	B	C	D	E
	C-2.1: Differentiates between shapes, colours, and their shades				
	Ages 3 - 8				
1	• Differentiates and names the primary colours (red, blue, yellow) and other common colours in their environment (black, white, brown)	• Differentiates shades within primary colours and secondary colours (e.g., light blue, dark blue, light green, dark green)	• Attempts to predict resulting colour when two colours are mixed (e.g., blue and yellow makes green, or red and white makes pink)	• Predicts resulting colour when two colours are mixed	• Experiments and use colours in art forms and drawings, decorating, display
2	• Groups objects based on their colour (e.g., all red things together)	• Groups objects based on dimension - length, breadth, height (e.g., all long things together)	• Groups objects based on combinations of visual characteristics of colours and shapes (e.g., all red triangles together, all large green leaves together)	• Makes patterns, solves puzzles, plays games using identification and grouping of various shapes, colours and shades	

C-2.2: Learning Outcomes

Table 8

	A	B	C	D	E
	C-2.2: Develops visual memory for symbols and representations				
	Ages 3 - 8				
1	• Matches two visual symbols with same pattern and orientation and size (e.g., match + with +, match ∞ with ∞)	• Matches two visual symbols with same pattern but different orientation and size (e.g., match × with +, match ∞ with 8)	• Recalls and matches visual symbols from memory (e.g., memory game using cards)		

C-2.3: Learning Outcomes

Table 9

C-2.3: Differentiates sounds by their pitch, volume and sound patterns by their pitch, volume, and tempo

Ages 3 - 8

	A	B	C	D	E
1	• Differentiates sounds in the environment as the sound of humans, animals, vehicles, sound of clap, tap, sound of material etc	• Distinguishes between high (*uncha swar*) and low pitches (*neecha swar*) in the sounds of birds and animals, musical instruments and the human voice	• Able to recognise the mid-range in pitch (*madhyam swar*)	• Discerns if any two sounds/ notes (*sur*) match in terms of pitch and volume	• Distinguishes between a linear and non-linear progression of musical notes in a given scale
2	• Differentiates loud and soft sounds	• Distinguishes between slow and fast tempo (*dheemi, teevra gati*) in rhythmic beats (*taal*)	• Recognises the mid-range in volume and tempo	• Identifies a change in tempo in any given musical piece	

C-2.4: Learning Outcomes

Table 10

C-2.4: Differentiates multiple smells and tastes

Ages 3 - 8

	A	B	C	D	E
1	• Identifies good and bad smell (perfume, flowers, garbage etc)	• Differentiates fragrance of flowers, perfumes, food items etc	• Recognizes smells that indicate danger (e.g., smoke, rotten eggs)		
2	• Identifies sweet, salty, bitter, sour, and hot (spicy) taste	• Explores different tastes and textures from different kinds of food			

C-2.5: Learning Outcomes

Table 11

	A	B	C	D	E
	C-2.5: Develops discrimination in the sense of touch				
	Ages 3 - 8				
1	• Differentiates hard and soft, hot and cold, rough and smooth surfaces	• Compares two objects based on hard and soft, hot and cold, rough and smooth	• Seriates 3-5 objects based on hard and soft, hot and cold, rough and smooth with right vocabulary (smoothest, smooth, hard, harder, hardest)	• Extends the comparison of textures to finer variations like fluffy, furry, woven, prickly, pitted, etc.	

C-2.6: Learning Outcomes

Table 12

	A	B	C	D	E
	C-2.6: Begins integrating sensorial perceptions to get a holistic awareness of experiences				
	Ages 3 - 8				
1	• Blows breath with force	• Bows light objects (e.g., paper)	• Breathes in and out rhythmically	• Breathes out slowly over a longer period of time than breathing in	• Does 'anulom-vilom' breathing
2		• Sits or lies still for a short duration	• Sits still and pays attention to their breath for a short duration	• Sits still and pays attention to other sensorial perceptions for a short duration	• Sits still and is able to observe one's own flow of thoughts

CG-3: Children develop a fit and flexible body

Opportunities for exercising different muscle groups and coordinating them for achieving specific goals is an important developmental need for children of this age group. Gross motor development involves coordination of the large muscles that affective movement that balance. Fine motor development involves smaller muscles related to the eyes and hands. Coordination across muscle groups is also important.

C-3.1: Learning Outcomes

Table 13

	A	B	C	D	E
	C-3.1: Shows coordination between sensorial perceptions and body movements in various activities				
	Ages 3 - 8				
1	• Begins to catch, throw and kick balls with very basic control	• Catches a large ball, throws and kicks balls forward with good force • Shows some accuracy in aiming throws within short distances	• Improves catching, throwing, and kicking using different sized balls	• Catches, throws, and kicks balls in play/game situations	

C-3.2: Learning Outcomes

Table 14

	A	B	C	D	E
	C-3.2: Shows balance, coordination and flexibility in various physical activities				
	Ages 3 - 8				
1	• Stands on one foot with support/aid	• Stands on one foot for longer periods without support • Hops 4-5 steps	• Hops 10-15 steps	• Hops and plays a full game	• Skips and hops with rope with comfort
2	• Balances on one leg for a short time	• Balances on variety of surfaces (e.g., bricks, ladders)	• Balances things on head/hand (e.g., walks with a book on their head) • Shows good body balance (e.g., rides bicycle without support)	• Carries heavy objects chairs/ tables/ bag with good balance and technique • Shows good body balance with speed (e.g., rides bicycle with speed)	• Shows agility and balance (e.g., climbing on trees, jungle gym) • Can stand on one leg with the other leg folded for a minute (e.g., *dhruvasana*)

C-3.3: Learning Outcomes

Table 15

	A	B	C	D	E
	C-3.3: Shows precision and control in working with their hands and fingers				
	Ages 3 - 8				
1	• Exhibits fine motor skills, eye-hand coordination and muscle strength in simple activities (e.g., scribbling, tearing paper, pasting, free hand colouring, clay work)	• Exhibits motor control for tasks that require fine-motor, eye-hand coordination with moderate precision (e.g., cutting big shapes, threading big beads, buttoning, screwing/ unscrewing bottlecaps, drawing with crayons)	• Uses coordinated movements of fine motor muscles for working on activities that require more precision with some assistance (e.g., pencil drawing, cutting on straight or curved line, threading small beads, legible writing of letters, stringing flowers, colouring within closed figure)	• Creates craft and artwork that requires precision in coordinated eye-hand movements of smaller muscles without assistance (e.g., tracing, clear writing, and drawing, catching a small ball, copying geometric shapes, creating patterns)	• Works with precision and detail for activities that require fine motor control for longer duration (e.g., threading needles, needle work, painting, sketching)

More Examples

Age 3-4	Age 4-6	Age 6-8
• Holds glass with one hand • Holds crayon with thumb and fingers • Involves in spontaneous drawing: Scribbles, Paints with some wrist actions • Rolls clay into balls or squiggly worms • Holds spoon with less spilling of liquids • Makes simple one level fold of paper • Uses coordinated movements to string beads, fit small objects into holes, fasten large buttons, cut paper with blunt scissor, paste small pieces of paper on a large paper, etc. • Builds simple structure with small blocks	• Serves food to self without assistance. • Uses spoon properly while eating. • Uses various drawing and art materials (crayons, brushes, finger paint, etc) • Copies shapes shown in the book of blocks • Cuts in a straight line or curve line • Uses coordinated movements to complete complex tasks like cutting along a line, pouring, buttoning, using large zippers etc • Builds tower of small blocks (8-10 blocks) • Strings the Stringing board, Strings whole flowers (may not follow a pattern) • Independently uses both hands for building things • Writes some letters or numbers that can be recognized • Uses one hand consistently for drawing and writing	• Catches a ball that jumps from the floor • Strings flowers, beads with desired pattern • Grips pencil correctly, uses smooth, controlled finger and hand movements while cutting, holding, threading, buttoning, etc • Uses coordinated movements while using writing/colouring tools • Demonstrates control and appropriate pressure when using writing and drawing tools • Traces outlines of blocks (2”x 2” blocks) • Copies simple geometric shapes and designs

C-3.4: Learning Outcomes

Table 16

C-3.4: Shows strength and endurance in carrying, walking, and running

Ages 3 - 8

	A	B	C	D	E
1	• Walks in straight line • Able to walk backwards • Walks on tiptoe (6+ steps) • Walks, and runs easily changing direction and speed comfortably	• Walks on straight and curved line/ zigzag with ease • Walks on 6-inch-wide beam with balance • Walks up and down stairs, on alternating feet with ease • Crawls inside tunnels, etc.	• Walks and runs easily, coordinating body movements harmoniously • Walks on toes with hands held above the head (e.g., tadaasana) for 10 metres	• Walks for a km or more on different terrains with ease • Stands stably with hands held above the head (e.g., tadaasana) for one minute	• Shows strength and endurance in walking long distance (2-3 kms) on different terrains
2	• Jumps in place, jumps across one short hurdle • Jumps landing on feet (height 2½-3 feet)	• Jumps on both feet and over short objects without/ with little support	• Jumps from a reasonable height with ease (e.g., 2 or 3 steps, bench of height 3 feet)	• Climbs and jumps with ease (e.g., small trees)	• Runs around and jumps over objects with ease
3	• Carries simple weights and moves with them (e.g., carries a small mug of sand from one place to another)	• Shows willingness to exert their strength for tasks that require use of the large muscle groups (e.g., helps to move small furniture in classroom)	• Shows comfort in executing tasks that require strength in play situations (e.g., play tug of war)	• Shows strength and endurance in work and play situations (e.g., lifts small pots in the garden, carries bucket of water, runs for 15 minutes)	

1.1.2 Socio-Emotional and Ethical Development

Along with physical and cognitive development, it is important to pay attention to the emotional development of the child. It is now well established that emotional intelligence, the ability to understand and manage our emotions, is equally if not more important than cognitive intelligence. Understanding and managing our own emotions along with understanding others emotional states helps us build empathy and compassion. A strong foundation for emotional and social intelligence is articulated through Learning Outcomes in this stage.

CG-4: Children develop emotional intelligence

This includes:

- Positive 'Self-Concept': The ability to recognize and become aware of the change and continuity in the idea of a 'self' needs directed attention.
- Emotional Awareness and Regulation: Becoming aware of one's emotions and developing abilities to regulate them appropriately is critical and it is better developed earlier than later. It is important to understand that such regulation is a skill developed through voluntary practice and not as a fearful response to a threat. Emotional development can truly occur only in a compassionate environment
- Social Development: The foundation for the development of ethical, humanistic, and constitutional values is social intelligence. The development of such intelligence starts early with the interaction of others and, through these interactions, recognising the needs and emotional states of others. This "other regarding", along with recognition of diversity of background and needs of others, develops valuable capacities in young children.

C-4.1: Learning Outcomes

Table 17

	A	B	C	D	E
	C-4.1: Starts recognising 'self' as an individual belonging to a family and community				
	Ages 3 - 8				
1	• Demonstrates awareness of self as a unique individual (e.g., refers to favourite shirt or bag or thing)	• Identifies self as a member of a family, neighbourhood, school, city, with different people doing different roles		• Begins to express their capabilities and interest with a view to contribute to society – when I grow up, I want to be a farmer, a doctor, pilot, be a soldier, etc	
2	• Says own first and family (last) name	• Shares other identifying information (e.g., parent's name)	• Shares personal identifying information such as home address, details of family members, school, etc	• Shares personal details about family members occupation, their place of work, details about • Values the work of adult members of the family (e.g., my mother is a farmer, and her work helps all of us to eat well)	

C-4.2: Learning Outcomes

Table 18

C-4.2: Recognises different emotions and makes deliberate effort to regulate them appropriately

Ages 3 - 8

	A	B	C	D	E
1	• Identifies their wants and feelings (e.g., I don't want to colour today, I want to go out) • Recognizes simple emotions (fear, joy, sadness)	• Associates emotions with words and facial expressions • Expresses emotions through verbal and non-verbal modes (e.g., gestures, drawings)	• Describes their feelings and their causes (e.g., I am angry because he broke my block tower) • Shares with others (peer and familiar adults) their feelings/ emotions	• Describes their emotions in socially approved ways (e.g., stops crying and explains why they were crying)	
2			• Agrees to change of activity when upset/ angry to help themselves calm down	• Responds with appropriate emotions (e.g., laughs at jokes in circle time, sits quietly when upset) • Consciously uses strategies to calm themselves down (e.g., breathing, changing activity)	

C-4.3: Learning Outcomes

Table 19

C-4.3: Interacts comfortably with other children and adults

Ages 3 - 8

	A	B	C	D	E
1	• Identifies/names close family members/ particular adults • Interacts comfortably with familiar adults		• Begins to interact comfortably with less familiar adults	• Interacts with familiar and less familiar adults with respect (e.g., namaste, please, thank you, sorry)	
2	• Demonstrates comfort in staying in the classroom without parents or familiar adults	• Demonstrates spontaneity and preference to play with familiar children, joins a group of children playing, with adult's help if necessary	• Demonstrates strategies to play and work with other children (e.g., invites them to join a game, accommodates mutual rules, negotiations, roles for play)	• Plays in a coordinated manner with other children, recognises mutual interests with friends	• Understands and responds to specific (procedural) rules in play with other children
3			• Separates willingly from adults to play with peers, most of the time	• Enjoys being in the company of peers	• Spends long hours with peers and can manage with adult support in a strange environment (long field trips)
4			• Makes and maintains a close friendship with at least one child • Asks for help from familiar adults		• Has a circle of friends at school • Asks for help from less familiar adults when in need • Helps adults or other children when in need

C-4.4: Learning Outcome

Table 20

	A	B	C	D	E
	C-4.4: Shows cooperative behaviour with other children				
	Ages 3 - 8				
1	• Begins to play with other children	• Enjoys playing with other children	• Initiates playing with other children and makes plans (e.g., what, how, when to play)	• Demonstrates willingness to include other's ideas during play • Follows rules while playing with others	• Frames rules for play with others and follows those rules

C-4.5: Learning Outcomes

Table 21

	A	B	C	D	E
	C-4.5: Understands and responds positively to social norms in the classroom and school				
	Ages 3 - 8				
1	• Participates in everyday activities	• Enjoys everyday activities with other children	• Demonstrates independence in daily activities, • Takes responsibility for completing own work • Shares discomfort and seeks help when in need	• Takes initiative to conduct an activity • Displays skills to work with different children for different tasks, negotiating responsibility and tasks with other children	• Expresses their point of view while playing or working together • Takes on a task and completes it
2	• Follows simple instructions with teacher's support	• Waits for their turn • Follows short simple instructions	• Follows simple rules in school without adult reminders	• Follows instructions/rules • Understands consequences of violating rules	

C-4.6: Learning Outcomes

Table 22

	A	B	C	D	E
	C-4.6: Shows kindness and helpfulness to others (including animals, plants) when they are in need				
	Ages 3 - 8				
1	• Shows affection towards other children and adults	• Shows care in handling materials	• Shows care and tenderness in dealing with other living things	• Works in common tasks with kindness and affection to others in the group	

C-4.7: Learning Outcomes

Table 23

	A	B	C	D	E
	C-4.7: Understands and responds positively to different thoughts, preferences, and emotional needs of other children				
	Ages 3 - 8				
1	• Plays and interacts with all children irrespective of background or ability	• Begins to notice similarities and differences among children (e.g., height, gender, skin colour, way of speaking, eating preferences)	• Works well in mixed groups for classroom activities • Does not bully/ label other children because of their differences	• Shows curiosity and interest in "people not like me" • Articulates questions on similarities and differences among people • Engages comfortably with a diverse group of peers despite knowing similarities and differences	

CG-5: Children develop a positive attitude towards productive work and service or 'Seva'

C-5.1: Learning Outcomes

Table 24

	A	B	C	D	E
	C-5.1: Demonstrates willingness and participation in age-appropriate physical work towards helping others				
	Ages 3 - 8				
1	• Places materials and toys back in their appropriate locations after use	• Assists the teacher and organizes the classroom	• Cleans own plates or tiffin after eating food • Performs appropriate chores at home and/or at school (e.g., putting away toys, watering plants)	• Germinates and takes care of seedlings of local trees	• Assists teachers to create TLM • Helps in the kitchen with cleaning and cutting

CG-6: Children develop a positive regard for the natural environment around them

C-6.1: Learning Outcomes

Table 25

	A	B	C	D	E
	C-6.1: Shows care for and joy in engaging with all life forms				
	Ages 3 - 8				
1	• Shows curiosity in observing plants and animals	• Does not harm plants and animals unnecessarily	• Shows joy in engaging with plants and animals in the local environment • Shows no discomfort in physical engagement with nature (e.g., in garden or parks)	• Shows curiosity and interest in identifying specific flora and fauna • Takes responsibility for tending and caring for saplings and plants	• Takes responsibility for tending to and caring for animals like kittens, puppies, chicken • Enjoys going out for nature walks and observing plants and animals

1.1.3 Cognitive Development

Children in this age group are rapidly developing concepts about the world around them based on their experiences. For learning with understanding, concept development in formal education should give priority to experience and development of understanding. Mere recollection of facts should not be the intention. Here, cognitive development is seen through development of object knowledge, development of general abilities in logical thinking and problem solving, development of mathematical abilities and thinking, and concepts related to the natural and social environment around the child.

CG-7: Children make sense of world around through observation and logical thinking

Children come with strong, perhaps innate, abilities to recognize the world around them through objects and the interactions between them. Adequate attention and opportunities would further strengthen these abilities. Focusing on the logical thinking and problem-solving abilities of young children also allows them to continue to be curious and lifelong learners.

C-7.1: Learning Outcomes

Table 26

C-7.1: Observes and understands different categories of objects and relationships between them

Ages 3 - 8

	A	B	C	D	E
1	• Identifies and names common objects, people, pictures, animals, birds, events etc. with assistance	• Identifies and describes common objects, people, pictures, animals, birds, events etc. on their own	• Notices and describes general details of common objects, people, pictures, animals, birds in the immediate environment and in pictures/models (e.g., the big door in the house)	• Identifies and describes finer details of the objects, signs, places, common activities in the in the immediate environment and in the picture/models (e.g., the big brown door in the small green house)	
2	• Identifies the missing part of a familiar picture of familiar object	• Identifies 3-5 missing parts of a picture of familiar object	• Identifies 4-6 missing parts of a picture of familiar object	• Compares given objects/pictures and identifies similarities and differences	
3	• Recognizes hierarchical relationships within categories (e.g., animals and their younger ones) • Makes comparisons within and between categories • Plays using object substitution (e.g., uses banana as telephone) • Makes connections between objects and their uses (e.g., spoon is for eating, bucket is for bath, mechanic is to a garage as a doctor is to hospital)				

C-7.2: Learning Outcomes

Table 27

C-7.2: Observes and understands cause and effect relationships in nature by forming simple hypothesis and uses observations to explain their hypothesis

Ages 3 - 8

	A	B	C	D	E
1			• Recognizes the effect of one object on an another (e.g., if I put salt in water it will dissolve, if I put ice in the sun it will melt) • Explains effects of simple actions on objects (e.g., the harder I kick the ball the further it goes) • Makes causal connections (e.g., Abdul did not come to school because he was sick, the plant died because it has not rained) • Makes predictions based on causal relationships (e.g., if there are white clouds in the sky it will not rain)		
2	• Uses ideas based on observations (e.g., imitates adults blowing on hot food before eating)	• Applies known information in a new context (e.g., builds a castle out of blocks as seen in a story book)	• Observes and forms generalizations (e.g., notice things that roll – tires, bangles, have "round" shape)	• Forms and tests simple hypothesis (e.g., plates float and pins sink, drop a piece of paper and a stone together and see which will reach the ground first) • Applies their understanding to solve simple problems (e.g., while making a sand house, use a stick to support the structure, or add water to set it)	
3	• Differentiates between day and night	• Identifies summer and winter • Names objects in the sky (sun, moon, stars, clouds)	• Explains clothing and food for summer and winter • Connects sunrise and sunset today and night	• Differentiates among summer, winter, and monsoon seasons • Indicates where sun and moon rise and set	• Names the directions (north, south, east, west)
4	• Makes choices and expresses preferences	• Expresses own preferences, interests and makes choices	• Takes responsibility and makes choices based on own preferences and interests	• Plays/participates in activities, makes friends according to their own choice, preference and interest	• Selects games/ play equipment according to their own choice, preference and interest

5		• Answers simple questions about events and phenomenon in the physical environment with the support of the teacher and peers	• Collaborates with peers to come up with answers to questions related to natural phenomenon that can be investigated (e.g., what floats and sinks, which objects do magnets attract)	• Develops a list of questions to break up a larger question related to natural phenomenon • Asks questions about patterns in the natural environment (e.g., different kinds of leaves and flowers, sunrise, and sunset)	• Asks 'why' and open-ended questions related to natural phenomenon and seeks answers through dialogue and/or exploration (e.g., why it does rain, what if we did not have sunlight)
6	• Explains the impact of one's actions/ behaviour on others (e.g., hitting a dog with a stone hurts a helpless creature, not turning off a tap wastes water)	• Expresses views on needs of plants, birds and animals	• Explains the concept of shared natural resources (e.g., water is used by us, birds, plants)	• Describes the interdependence between natural environment and humans (e.g., water in homes comes from water bodies)	• Describes how a balance must be maintained between the needs of human society and the natural environment (e.g., being kind to animals enables them to work with us, correct garbage disposal is necessary to avoid diseases)

C-7.3: Learning Outcomes

Table 28

	A	B	C	D	E
	C-7.3: Uses appropriate tools and technology in daily life situations and for learning				
	Ages 3 - 8				
1	• Shows dexterity in using simple tools for drawing/ colouring	• Shows inclination to use simple tools while playing • Shows attention and regulation when interacting with digital audio-visual material	• Chooses appropriate tools for appropriate work when doing land work or in arts/crafts • Engages with digital technology like smartphones/ tablets with the assistance of the teacher	• Uses tools and implements effectively in work situations • Shows simple usage of digital technology in learning situations (e.g., starting/pausing audio-visual material)	• Builds simple tools and implements for using in day-to-day activities • Shows fluency and comfort in using digital audio-visual material in learning situations

CG-8: Children develop mathematical understanding and abilities to recognize the world through quantities, shapes, and measures

It is very important to engage first with pre-mathematical concepts like counting, seriation, sorting, and engaging with patterns before numbers in their symbolic forms and number operations are introduced. This strongly aids in developing conceptual understanding of numeracy along with procedural fluency.

C-8.1: Learning Outcomes

Table 29

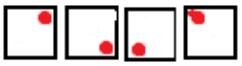
	A	B	C	D	E
	C-8.1: Sorts objects into groups and sub-groups based on more than one property				
	Ages 3 - 8				
1	• Sorts objects into 2 groups based on size, length, height, and weight (big- small, Long - Short)	• Sorts objects into 3 groups based on size, length, height, and weight (smaller sized – big sized – bigger sized)	• Sorts objects into groups based on attributes that they recognize	• Sorts objects into groups based on attributes they recognize and describes the rule of sorting. (e.g., sort animals that live in the same surrounding - dogs, cats, rats, snakes. Within this are able classify grass-eating and meat-eating animals.)	• Sorts objects into groups and sub-groups (e.g., in a group of blocks, first sorts based on colour, then within the colour, sorts based on shape, then sorts based on size. Sorts between trees and creepers, within that sort fruit bearing and non-fruit bearing, within that edible or non-edible)

C-8.2: Learning Outcomes

Table 30

C-8.2: Identifies and extends simple patterns in their surroundings, shapes, and numbers

Ages 3 - 8

A	B	C	D	E
• Recognizes & repeats the patterns in pairs – Objects, pictures, shapes (leaf, flower, leaf, flower, in A B A B A B A B A B A B A pattern) • Recognizes and repeats the patterns of sounds (da-ma-ga, da-ma-ga, etc.) • Recognizes and repeats the patterns of the movements (hop-stand, hop-stand)	• Recognizes the unit of a repeating pattern, and extends the patterns of 3 to 4 objects/ pictures/ shapes repetitions ABC (pen-book -pencil; pen-book-pencil in ABC| ABC| ABC| pattern • Recognizes, repeats and extends the pattern of action/ sounds • Recognizes and repeats patterns of 3 different bodily movements clearly	• Creates new pattern based different features – colour, shape, size • Describes the rule of pattern and creates new pattern in different objects (creating mandalas with twigs, flowers)	• Fills in missing elements of simple, repeating patterns in different aspects (e.g., red - blue, red, blue, red, ___;) with adult help	• Describes the rule of patterns and applies this on abstract patterns such as number, symbol, and analogic thinking patterns. (e.g., using colours in pattern while drawing and painting. Using symbols or dots of same quantity into different patterns –  Analogical 

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C-8.3: Learning Outcomes

Table 31

	A	B	C	D	E
	C-8.3: Counts up to 99 both forwards and backwards and in groups of 10s and 20s				
	Ages 3 - 8				
1	• Says/sings number names verbally till 5 in correct sequence/order with context • Imitates adults while counting using one to one correspondence between number names and objects till 3 • Counts objects up to 3 and develop understanding of cardinality till 3 (e.g., counts 3 things in a set and says those are 3) • Counts given manipulatives or objects and can pick and give up to 5 things • Compares quantities between two sets and can distinguish if they are the same or more up to 3 objects	• Says/sings number names in correct sequence up to 10. And keeps one to one correspondence with number words and objects till 5 • Counts objects with understanding of cardinality (recognizing the quantity of set) up to 5 • Demonstrates the understanding of number sense (e.g., 5 could be 5 different objects - 5 people, 5 books, 5 pencils) • Demonstrates fluency of counting concrete, discrete objects, and abstract things up to 5 (e.g., 5 steps, 5 claps) • Counts forward up to 10 from memory in correct sequence • Begins to count up to 20	• Says/sings number names in correct sequence up to 20 and keeps one to one correspondence with counting words and counting objects till 10 • Counts objects with understanding of cardinality till 10 accurately • Counts objects in any order accurately in a given set and understands that the quantity remains same irrespective of the order in which the objects are being counted, (e.g., given a handful of beads, children can count in any order and be able to tell the quantity accurately) • Understands the concept of 0 as a number by reducing (backward counting) objects in a set (e.g., backward counting of 3 beads, after 1 what is left?) • Demonstrates the understanding of the numeral as face value and positioning value (ordinality). And ordinal position of an object from left to right vice versa • Example: In the following sequence 	• Counts objects greater than 20 using number names till 99 and observe the pattern as groups of 10, up to 99 • Counts forward and backward from a specific number (between 0 and 99)	• Demonstrates skip counting in 2s or 3s on a number line (graduated) or blocks / pictures • Reads and writes Indian numerals for numbers up to ninety-nine using place value in groups of tens and ones. • Counts in groups of 10s,20s,30s, up to 99

	• Recognizes instantly the count of a collection of 2 or 3 objects	• Recognizes instantly the count of a collection of 4 objects (e.g., recognize 4 biscuits, chocolates, or blocks without counting)	• Recognizes instantly the count of a collection of 6 objects (e.g., recognize 6 biscuits, chocolates, or blocks without counting) • 	• Recognizes quantities in groups of 2 (e.g., two groups of ten makes 20)

C-8.4: Learning Outcomes

Table 32

	A	B	C	D	E
	C-8.4: Arranges numbers up to 99 in ascending and descending order				
	Ages 3 - 8				
1	• Arranges familiar incidents/ events/ objects in an order (e.g., daily routine, story, shapes, size - 2 to 3)	• Arranges objects in order based on size up to 3 levels and verbalizes their levels (Big – Small – Smaller; Long – Short – Shorter; Tall – Short – Shorter)	• Arranges up to 5 objects based on size/length/ weight in increasing or decreasing order	• Arranges the same set of objects in different sequences based on different properties of objects (e.g., by size/length/ weight/colour)	• Arranges numbers from a given set of numbers in ascending and descending order

C-8.5: Learning Outcomes

Table 33

	A	B	C	D	E
	C-8.5: Recognises and uses numerals to represent quantities up to 99 with the understanding of decimal place value system				
	Ages 3 - 8				
1	• Compares two numbers (orally) up to 3 and uses vocabulary like more and less	• Recognizes numerals up to 5 • Compares two numbers up to 5 and uses vocabulary like more than, less than	• Recognizes Indian numerals up to 9 • Writes comfortably numerals up to 9 • Compares two numbers up to 9 and uses vocabulary like more than, less than	• Recognizes the symbol zero to represent absence of object/thing • Recognizes and writes numerals up to 20 and in words up to 10 • Compares two numbers up to 20 and uses vocabulary like bigger than or smaller than	• Recognises, reads, writes number names and numerals up to 99 using place value concept • Compares and forms the greatest and smallest two-digit numbers (with and without repetition of given digits)

C-8.6: Learning Outcomes

Table 34

C-8.6: Performs addition and subtraction of 2-digit numbers fluently using flexible strategies of composition and decomposition

Ages 3 - 8

	A	B	C	D	E
1	• Takes/puts away very small collections (totalling up to 3) by grouping and ungrouping rather than answering verbally	• Combines two groups up to 5 objects and recounts. (e.g., there are 2 chocolates with me and 3 with my sister, put them together and count and tell me how many I have in all) • Takes out up to 5 objects from a collection and recounts	• Combines two groups up to 9 objects and recounts. (e.g., there are 5 chocolates with me and 3 with my sister, put them together and count and tell me how many I have in all) • Takes out up to 9 objects from a collection and recounts	• Uses real-world situations and concrete objects to model and solve addition sums up to 18 using addition facts • Uses real-world situations and concrete objects to model and solve subtraction (e.g., taking away of chocolates in given set) problems up through 9 using subtraction facts • Develops relationship between addition and subtraction of numbers • Recognizes the +/- symbols for addition/ subtraction operations	• Uses flexible strategies and derives combinations of composing (add together) and decomposing numbers (take away for the set) (for e.g., for 57 + 33, the child can take 3 out of the 33 and add it to 57 to make it 60 and then add 30 to it to come to 90) • Adds two numbers using place value concept (sum not exceeding 99) and applies them to solve simple daily life problems/ situations • Subtracts two numbers up to 99 using place value and applies them to solve simple daily life problems/ situations • Appreciates and applies relationship between addition and subtraction of numbers • Identifies appropriate operation (addition or subtraction) to solve problems in a familiar situation/context • Comprehends and solves simple word problems

C-8.7: Learning Outcomes

Table 35

C-8.7: Recognises multiplication as repeated addition and division as equal sharing

Ages 3 - 8

	A	B	C	D	E
1			• Makes small groups of objects and counts the total number of objects and groups	• Solves small-number multiplication problems by grouping • Recognizes the symbol for multiplication operation	• Uses repeated adding to solve simple multiplication problems up to 99
2	• Distributes a given set of objects to multiple recipients	• Shares objects (up to 6) equally to 2 recipients	• Shares objects (up to 20) equally to 4-5 recipients	• Uses trial and error and sharing into groups for solving division problems • Recognizes the symbol for division operation	• Uses repeated subtraction to find out how many groups for solving division problems

C-8.8: Learning Outcomes

Table 36

	A	B	C	D	E
	C-8.8: Recognises, makes, and classifies basic geometric shapes and their observable properties, and understands and explains the relative relation of objects in space				
	Ages 3 - 8				
1	• Matches by shape, size or colour by one attribute • Compares and classifies objects by one factor like shape, colour and size • Follows simple instructions and places objects based on shape, colour, and position – e.g., bring red balloon here, keep round ball on the table	• Matches shapes of with different size and colours • Compares and classifies objects by two factors (e.g., shape & colour, colour and size) • Describes the physical features of various solids/ shapes in their own language. (e.g., a ball rolls and has no corners, a box slides and has corners) • Follows instructions with multiple steps with understanding positional words different shapes, colours, and positions to form a pattern (e.g., arranges different things into formation of mandala; making a collage/ by understanding positional words – in between, above, below)	• Matches shapes of different size and orientation (e.g., matches differently oriented triangles and sizes?) • Compares and classifies objects by three factors (e.g., shape, colour, size) • Uses positional words (e.g., besides, inside, under) to describe objects • Describes the physical features of various solids/ shapes in her own language (e.g., a ball rolls and has no corners, a box slides and has corners) • Identifies the 2D shapes by tracing the faces of 3D shapes on a plane surface • Draw 2D shapes free hand with some accuracy and control	• Develops and uses vocabulary of spatial relationship (e.g., top, bottom, on, under, inside, outside, above, below, near, far, before, after) • Collects objects from the surroundings having different sizes and shapes (e.g., pebbles, boxes, balls, cones, pipes) • Sorts, classifies and describes the objects on the basis of shapes, and other observable properties • Observes and describes the physical features of various solids/ shapes in her own language (e.g., a ball rolls, a box slides) • Compares shapes based on specific attributes (e.g., length, area, volume)	• Identifies 3D shapes by their names (e.g., cuboid, cylinder, cone and sphere) and describes their observable characteristics (e.g., a cube has six faces) • Identifies 2D shapes by their names (e.g., square, rectangle, triangle and circle) and describes their observable characteristics (e.g., the pages of a book are rectangular and have 4 sides, 4 corners) • Distinguishes between straight and curved lines and draws/ represents straight lines in various orientations (e.g., vertical, horizontal, slant) • Traces 2D outlines of 3D objects • Identifies objects by observing their shadows

C-8.9: Learning Outcomes

Table 37

C-8.9: Selects appropriate tools and units to perform simple measurements of length, weight, and volume of objects in their immediate environment

Ages 3 - 8

	A	B	C	D	E
1	**Length** • Uses vocabulary (length, width, height, distance) to express length through poems and stories	**Length** • Compares two objects in terms of their lengths as longer than/ shorter than, taller than/ shorter than	**Length** • Compares three objects in terms of their lengths as longest/ shortest tallest/ shortest	**Length** • Distinguishes between near, far, thin, thick, longer/ taller, shorter, high, low. • Measures short lengths in terms of non-uniform units (in the context of games e.g., 'Gilli Danda' and 'marble games'). • Estimates short distance and length, and verifies using non-uniform & non-standards units (e.g., hand span, forearm, footsteps, finger)	**Length** • Measures lengths & distances along short & long paths using uniform (non-standard) units, extends to longer lengths. • Estimates and measures length/ distances and capacities of containers using uniform non-standard units like a rod/pencil, cup/ spoon/ bucket
2	**Weight** • Uses vocabulary to express weight through poems, and stories	**Weight** • Compares two objects in terms of their weight as heavier than/ lighter than	**Weight** • Compares three objects in terms of their weight as heaviest/ lightest	**Weight** • Compares and place in order from light to heavy objects or vice-versa.	**Weight** • Appreciates the need for a simple balance. • Compares weights of given objects using simple balance.
3		**Volume** • Uses vocabulary to express volume through poems and stories	**Volume** • Compares volumes of two vessels like bottles, glasses, bucket etc.	**Volume** • Estimates and measures volumes of containers using uniform non-standard units like a cup/spoon/ mug	**Volume** • Arranges in order containers as per their volumes based on perception & verifies by pouring out

C-8.10: Learning Outcomes

Table 38

	A	B	C	D	E
	C-8.10: Performs simple measurements of time in minutes, hours, day, weeks, and months				
	Ages 3 - 8				
1	• Uses vocabulary in daily life like today, tomorrow, and yesterday	• Identifies special days like Saturday, Sunday, holiday (e.g., Sunday is a holiday)	• Knows the names of the days of the week and months of the year	• Distinguishes between events occurring in time using terms like earlier and later. • Gets the qualitative feel of long & short duration, of school days v/s holidays. • Narrates the sequence of events in a day.	• Gets a feel for sequence of seasons (varying locally). • Measures duration of time using standard units -days, hours (e.g., 7 days a week and 24 hours in a day)

C-8.11: Learning Outcomes

Table 39

	A	B	C	D	E
	C-8.11: Performs simple transactions using money up to INR 100				
	Ages 3 - 8				
1	• Uses vocabulary related to money using poems and stories	• Identifies Indian currency coins	• Identifies Indian currency notes	• Adds up notes and coins to form amounts up to Rs. 20	• Adds up notes and coins to form amounts up to Rs. 100

C-8.12: Develops adequate and appropriate vocabulary for comprehending and expressing concepts and procedures related to quantities, shapes, space, and measurements*

Table 40

	A	B	C	D	E
	C-8.12: Develops adequate and appropriate vocabulary for comprehending and expressing concepts and procedures related to quantities, shapes, space, and measurements.				
	Ages 3 - 8				
1	• Names shapes and a few properties of shapes	• Listens to and comprehends simple instructions using number words and shape names • Uses number words, and shape names appropriately	• Uses number words and operations, shape names, and measurements appropriately	• Constructs full sentences to describe a mathematical problem related to quantities, shapes, space, and measurements	• Comprehends texts and extracts simple mathematical problems embedded in the text • Creates simple mathematical riddles and puzzles

C-8.13: Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements

Table 41

	A	B	C	D	E
	C-8.13: Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements				
	Ages 3 - 8				
1	• Solves simple inset puzzles with geometric and non-geometric shapes	• Creates specific figures from tangram shapes	• Uses their number knowledge to solve simple riddles and puzzles	• Recognizes situations in the real world as simple mathematical problems • Solves simple numerical problems using different strategies	• Talks about different ways in which to solve a simple mathematical problem • Rechecks their solutions to see if there are any errors. • Engages in games and puzzles that require quantification

1.1.4 Language and Literacy Development

Language and literacy development are among the fundamental aims of education. All forms of understanding are mediated through our linguistic capacities. There is a very strong connection between our linguistic capacities and cognition. Whether as a form of communication, or as a medium of understanding, or as an aesthetic experience language is central to human experience. While language is innate to our human biology, literacy is a cultural achievement and hence needs more directed attention. Literacy is not a mere decoding of text but making meaning out of the text and the world that it represents.

CG-9: Children develop effective communication skills for day-to-day interactions in two languages

A significant proportion of time and effort in the Foundational Stage needs to be allocated for oral language development of the child. Foundational literacy is built on a strong foundation of oral language competencies. Premature introduction of the script to very young children who are in their early stages of oral language acquisition would be counterproductive for literacy development.

C-9.1: Learning Outcomes

Table 42

	A	B	C	D	E
	C-9.1: Listens to and appreciates simple songs, rhymes, and poems				
	Ages 3 - 8				
1	• Listens to a wide variety of songs and poems	• Listens and enjoys humming a variety of songs in different languages regularly heard in the home and neighbourhood	• Listens to longer (4-8 sentences) songs/poems (familiar) with attention and have conversations about them	• Listens to longer (4-8 sentences) songs/poems (unfamiliar) with attention and have conversations about them and ask questions	• Shows interest in listening to certain kinds of songs and poems and explains the reason for their preference
2	• Repeats a simple song or a rhyme	• Sings along to songs and rhymes with intonation and gestures	• Sings/recites short (4-5 sentences) songs/poems	• Sings/recites longer (10 sentences) songs/ poems	• Sings/recites songs/poems with two to three stanzas

C-9.2: Learning Outcomes

Table 43

	A	B	C	D	E
	C-9.2: Creates simple songs and poems on their own				
	Ages 3 - 8				
1	• Enjoys familiar songs and poems	• Enjoys rhyming words in songs and poems	• Identifies rhyming words from familiar poems and creates new rhyming words	• Extends/Creates short poems/ rhymes with the help of the teacher	• Creates short poems/rhymes independently in their own words

C-9.3: Learning Outcomes

Table 44

	A	B	C	D	E
	C-9.3: Converses fluently and can hold a meaningful conversation				
	Ages 3 - 8				
1	• Listens attentively and speaks in short conversations with familiar people around	• Initiates conversations in daily life with peers and teachers in a variety of school settings	• Engages in conversations based on events, stories, or their needs and asks questions	• Engages in conversations, waits for their turn to speak, and allows others to speak	• Maintains the thread of the conversation across multiple exchanges
2	• Expresses their needs and feelings through short meaningful sentences	• Narrates daily experiences in simple sentences and ask simple questions, using what/when/ how/whom, etc	• Narrates daily experiences in elaborate descriptions and asks why questions too	• Engages with non-fictional content read aloud or discussed in class, is able to link knowledge from their own experiences, and talks about it	• Engages in discussion about a topic and raise and respond to questions

C-9.4: Learning Outcomes

Table 45

	A	B	C	D	E
	C-9.4: Understands oral instructions for a complex task and gives clear oral instructions for the same to others				
	Ages 3 - 8				
1	• Listens and follows short instructions (e.g., bring the blocks here, wash hands properly, etc.)	• Follows some simple instructions comprising of several steps (2 to 3 instructions at a time).	• Follows instructions comprising of several steps - 4 to 5 instructions at a time	• Follows instructions comprising of several steps (8 to 9 instructions at a time)	• Follows instructions that have conditional branching (for e.g., if it is raining, do not water the plans, do weeding instead, otherwise water the plants)
2			• Gives clear instructions to accomplish short tasks to other children or adults	• Gives clear instructions comprising of several steps (8 to 9 instructions at a time)	• Gives clear instruction that includes mathematical (e.g., precise directions, spatial and temporal dimensions)

C-9.5: Learning Outcomes

Table 46

	A	B	C	D	E
	C-9.5: Comprehends narrated/read-out stories and identifies characters, storyline and what the author wants to say				
	Ages 3 - 8				
1	• Listens attentively to stories for a short period of time (5-7 minutes)	• Recalls the characters and a few events in the story that is narrated and is able to retell in their own words.	• Identifies plots and characters in a story and retells it in the correct sequence using vocabulary from the story	• Interprets the intent of the plot and characters in a story and retells the story in a different form	• Interprets the motivations of the author to write the story and retell the story as if they were the author

C-9.6: Learning Outcomes

Table 47

	A	B	C	D	E
	C-9.6: Narrates short stories with clear plot and characters				
	Ages 3 - 8				
1			• Imagines and narrates personalized endings of the story	• Narrates their own short stories with simple plots and characters.	• Creates their own stories, with complex plots and multiple characters (as a group)

C-9.7: Learning Outcomes

Table 48

	A	B	C	D	E
	C-9.7: Knows and uses enough words to carry out day-to-day interactions effectively and can guess meaning of new words by using existing vocabulary				
	Ages 3 - 8				
1	• Begins to use appropriate vocabulary for some common and familiar objects and experiences. (e.g., tells their name, names of friends, common objects, and pictures, sweet, sour, round, big)	• Uses vocabulary acquired from specific themes, and topics introduced in class in their conversations	• Uses expanded vocabulary with intentional use of action words, descriptive words, tenses, etc.	• Predicts meaning of unknown words in texts using picture and context cues	• Uses children's dictionaries to identify meanings of unknown words encountered in texts

CG-10: Children develop fluency in reading and writing in Language 1

While oral language development happens naturally through a process of socialisation and immersion in a language environment, written language is a cultural artefact and there is not natural about it. Children need explicit instruction in making connection between the oral language they have acquired with the writing system (the script) for that language. This begins with recognizing that we use words that contain meaning and these words are further split into sounds that are represented as symbols in the script. While the script reading and writing requires explicit instruction, meaning-making should not be postponed till end of learning all aksharas (letters) of the script.

C-10.1: Learning Outcomes

Table 49

	A	B	C	D	E
	C-10.1: Develops phonological awareness and blends phonemes/syllables into words and segment words into phonemes/syllables in L1				
	Ages 3 - 8				
1	• Sings rhymes	• Identifies rhyming words and alliterations	• Produces rhyming words and alliterations		
2	• Mimics and reproduces syllabic sounds	• Identifies the beginning and end syllables in words	• Breaks down syllables into their consonant and vowel sounds		
3		• Combines 2-3 syllables to form simple words	• Combines sounds (vowel and consonant) to form the most familiar words		

C-10.2: Learning Outcomes

Table 50

	A	B	C	D	E
	C-10.2: Understands basic structure/format of a book, idea of words in print and direction in which they are printed, and recognises basic punctuation marks				
	Ages 3 - 8				
1	• Recognizes/ identifies common signs, logos, and labels (e.g., brand of biscuit based on wrapper colour, soap cover)	• Holds the book, opens it and flips the pages to explore	• Describes that printed material provides information (book, newspaper, pamphlet)		
2	• Distinguishes between printed text and pictures	• Follows words from left to right and from top to bottom on a printed page		• Recognizes simple punctuation marks (full stop, question mark)	• Uses simple punctuation marks (full stop, question mark) appropriately
3	• Pretends to read familiar books based on pictures in the story	• Pretends to read while making appropriate word-like sounds while following a text	• Speaks about the book by looking at the cover page (prediction using the cues on the cover)		

C-10.3: Learning Outcomes

Table 51

C-10.3: Recognises all the letters of the alphabet (forms of akshara) of the script (L1) and uses this knowledge to read and write words

Ages 3 - 8

	A	B	C	D	E
1	• Knows that words are made of letters	• Begins to visually recognize and connects letters (*Moolaksharas/ Bharakadi/ Kaguniita*) to corresponding sounds	• Recognizes most frequently used *aksharas* (including *samyuktaksharas*) and connects to corresponding sounds	• Recognizes all *aksharas* (including *samyuktaksharas*) and connects to corresponding sounds	
2		• Reads simple two-syllable words that are familiar and with known *aksharas*	• Reads simple three to four-syllable words (including a few commonly occurring double-consonants) that are familiar and with known *aksharas*	• Reads multi-syllable words (including consonant clusters)	• Reads multi-syllable words (including consonant clusters) and non-words with accuracy
3		• Recognizes as sight words their names and labels of objects in their environment	• Recognizes as sight words commonly used articles, pronouns, and connecting words		

C-10.4: Learning Outcomes

Table 52

C-10.4: Reads stories and passages (in L1) with accuracy and fluency with appropriate pauses and voice modulation

Age 3 - 8

	A	B	C	D	E
1	• Reads short sentences of known words by recognizing individual letter sounds and sight words	• Reads a few sentences of familiar words with accuracy	• Reads short passages accurately with appropriate intonation and pauses	• Reads short passages accurately and fluently with appropriate intonation, pauses, and voice modulation	

C-10.5: Learning Outcomes

Table 53

C-10.5: Reads short stories and comprehends its meaning – by identifying characters, storyline and what the author wanted to say – on their own (L1)

Ages 3 - 8

	A	B	C	D	E
1	• Listens to "Read Alouds" and responds to questions posed by the Teacher	• Participates in "Shared Reading" along with the Teacher and in discussions about the reading	• Participates in "Guided Reading" along with the Teacher and in discussions about the reading	• Begins "Independent Reading" of books of equal textual and visual content	• Begins "Independent Reading" of books of more textual content than visual content
2	• Reads picture books and identifies objects and actions	• Reads picture books and identifies characters and plots and narrates the story in short sequence	• Reads books aloud with short simple texts and uses both visual cues and text to infer and retell the story with accurate sequence and elaboration	• Begins to read unfamiliar story books and comprehend with guidance from the Teacher • Identifies plots, and characters	• Reads and identifies characters, plots, sequences, and point of view of the author

C-10.6: Learning Outcomes

Table 54

C-10.6: Reads short poems and begins to appreciate the poem for its choice of words and imagination (L1)

Age 3 - 8

	A	B	C	D	E
1				• Reads short poems and narrates the literal meaning of the poem	• Reads short poems and infers the imagination of the poet

C-10.7: Learning Outcomes

Table 55

	A	B	C	D	E
	C-10.7: Reads and comprehends meaning of short news items, instructions and recipes, and publicity material (L1)				
	Ages 3 - 8				
1			• Reads a short set of simple written instructions and follows them	• Reads simple instructions to play a game and plays it with a group	• Reads short news items, and publicity pamphlets, and explains the content

C-10.8: Learning Outcomes

Table 56

	A	B	C	D	E
	C-10.8: Writes a paragraph to express their understanding and experiences (L1)				
	Ages 3 - 8				
1	• Uses various writing instruments like; chalk piece, pencils, coloured pencils, painting brushes, crayons in	• Uses writing/ drawing instruments with ease and fluency			
2		• Begins to write the *aksharas* they recognize and uses them to form simple words	• Writes *aksharas* with accuracy and forms simple words and sentences	• Writes down with accuracy 3 or 4 syllable words when dictated	• Writes down short sentences when dictated
3	• Draws and colours, and orally expresses the intent of the drawing	• Draws and paints with more accuracy with visible forms and objects, and orally describes the drawing/painting	• Draws/paints and adds simple words/sentences to the drawing/ painting (including invented spellings)	• Creates a sequence of pictures and writes short sentences along with them	• Creates a sequence of pictures and writes short sentences along with them with accuracy
4				• Describes a picture card by writing words and short sentences	• Writes the story inferred from a picture book

5				• Writes short instructions for classmates to execute simple procedures	• Writes short journals and descriptions of events and experiences

C-10.9: Learning Outcomes

Table 57

	A	B	C	D	E
	C-10.9: Shows interest in picking up and reading a variety of children's books (L1)				
	Ages 3 - 8				
1	• Shows interest in stories and poems being read out	• Picks one out of several books offered by the teacher and explains why they have chosen the book	• Picks and reads short picture books on their own, and talks about the book to other children	• Explains preferences in book choices, and reads short books on a regular frequency	• Displays interest and reads a variety of book both fiction and non-fiction
2	• Handles books with care	• Puts books back in their appropriate place in the classroom			• Repairs and fixes books in the school library

CG-11: Children begin to read and write in Language 2

C-11.1: Learning Outcomes

Table 58

	A	B	C	D	E
	C-11.1: Develops phonological awareness and blends phonemes/syllables into words and segment words into phonemes/syllables				
	Ages 3 - 8				
1			• Sings rhymes	• Identifies rhyming words and alliterations	• Produces rhyming words and alliterations
2			• Mimics and reproduces syllabic sounds	• Identifies the beginning and end syllables in words	• Breaks down syllables into their consonant and vowel sounds
3				• Combines 2-3 syllables to form simple words	• Combines sounds (vowel and consonant) to form the most familiar words

C-11.2: Learning Outcomes

Table 59

	A	B	C	D	E
	C-11.2: Recognises most frequently occurring letters of the alphabet (forms of akshara) of the script, and uses this knowledge to read and write simple words and sentences				
	Ages 3 - 8				
1				• Begins to visually recognize and connect letters to corresponding sounds	• Recognizes all the letters in the alphabet
2				• Reads simple two-syllable words that are familiar and with known *letters*	• Reads simple three to four-syllable words that are familiar • Recognizes as sight words commonly used articles, pronouns, and connecting words
3				• Recognizes as sight words their names and labels of objects in their environment	
4				• Writes down short words on dictation	

1.1.5 Aesthetic and Cultural Development

Children of this age group are not only enjoying expression of art and beauty they also develop their sensorial and fine motor abilities through engagement with arts. Artistic expression is also a medium of emotional expression and regulation. Talk and oral articulation of the work in art should be encouraged. Observing, reproducing, and extending patterns is a core ability in all forms of art. Thus, engagement with arts, through visual arts, music, movement, and drama is a holistic engagement of all aspects of development in the Foundational Stage. It has to be remembered that in this stage of development, more emphasis should be given to free and creative expressions of the child rather than building skills.

CG-12: Children develop abilities and sensibilities in visual and performing arts, and express their emotions through art in meaningful and joyful ways

C-12.1: Learning Outcomes

Table 60

C-12.1: Explores and plays with a variety of materials and tools to create two-dimensional and three-dimensional artworks in varying sizes

Ages 3 - 8

	A	B	C	D	E
1	• Grasps relevant art materials, tools, and instruments	• Explores a variety of grasps and grips while using art materials, tools, and instruments (e.g., sticks, seeds, pebbles, stones, chalk, thread, pencils, brushes, crayons, powder, scissors)		• Able to vary pressure while using tools to create dark and light impressions/ marks/ lines	
2	• Explores large and small sizes while creating marks, lines, scribbles, and other 2D and 3D imagery in visual artworks		• Creates large scale work (e.g., floor rangolis, wall murals, sculptural forms) in collaboration with peers, facilitators, and local community	• Able to scale own work in large and small sizes, based on available space or materials (e.g., creating a small clay doll, or a big paper doll)	
3	• Creates forms and imprints by mixing materials (e.g., mud and water, sand and water, flour and water, paint and water)	• Creates three-dimensional forms by rolling and patting materials like clay or dough	• Creates collages by combining materials of varying consistencies, colours, and textures in one's own arrangement • Creates three-dimensional arrangements/ assemblages by combining a variety of found materials and objects		
4	• Creates imprints using blocks, stencils, found objects and natural materials		• Creates simple patterns using blocks, stencils, found objects and natural materials	• Creates patterns by combining and arranging materials in a variety of shapes, forms, textures, and colours	• Creates a variety of textures with one material through its manipulation (e.g., clay, cloth, paper, rubber, wood)

C-12.2: Learning Outcomes

Table 61

C-12.2: Explores and plays with own voice, body, spaces, and a variety of objects to create music, role-play, dance, and movement

Ages 3 - 8

	A	B	C	D	E
1	• Explores rhythm through voice and body (claps, taps, waves, jumps, hops, recites lyrics in rhythm)	• Distinguishes fast and slow tempo while exploring rhythm with voice, body or other instruments	• Distinguishes fast, medium, and slow tempo while playing with voice, body or other instruments	• Plays with simple rhythmic patterns in slow and medium tempo	• Follows the beat in songs and movement, and explores own variations based on familiar rhythm patterns
2	• Produces a variety of sounds by playing with voice, body, objects and instruments	• Produces a variety of sounds according to context/ situation using voice, body, or instruments (in role-play, solo or group musical arrangements, mimicry, etc.)	• Explores the difference between their singing voice and speaking voice and uses both playfully • Differentiates between instrumental and vocal music and explores both	• Creates simple sound improvisations in familiar songs, or situations by using voice, body, instruments, and objects (e.g., playing the beats using different body parts/ instruments for a song, creating the ambience of a dramatic scene through sounds)	
3	• Explores volume (loud and soft), and pitch (high and low) while using voice, or body, or playing with instruments and objects		• Uses volume and pitch to convey ideas and emotions, create music, develop characters and create situations	• Moderates volume and pitch based on musical composition, space, context and situation	• Attempts to match pitch using voice or instrument
4	• Explore silence and stillness in everyday situations	• Play with moments of silence and stillness through music, drama and movement practices		• Explore varying durations of silence and stillness based on space, context, and situation	

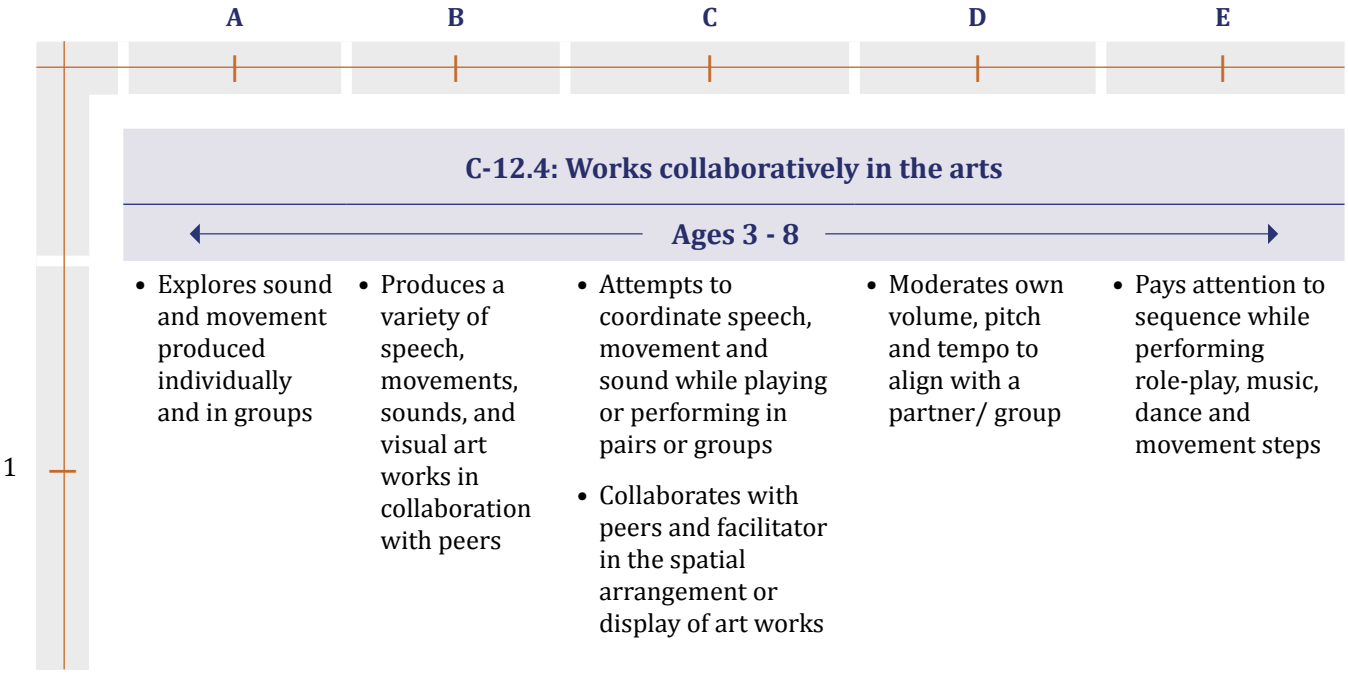
C-12.3: Learning Outcomes

Table 62

	A	B	C	D	E
	C-12.3: Innovates and works imaginatively to express ideas and emotions through the arts				
	Ages 3 - 8				
1	• Observes their surroundings, local culture and examples of art to make connections with their own explorations	• Shares their own ideas, tools, and methods of working in the arts and improvises based on familiar examples	• Identifies and interprets a variety of expressions, ideas and emotions through the arts and applies it in their own artistic explorations	• Explores multiple approaches, or variations while expressing particular ideas and emotions • (e.g., thinking of multiple ways to role-play a cat using body, voice, mask, puppets, or movement combinations) • Persists with challenges by exploring multiple solutions and finding own resources
2	• Creates a variety of visual imagery, body movements, and sound explorations to symbolise objects, people and emotional experiences	• Mimics a few recognisable physical and behavioural characteristics of people, animals, plants, objects, etc. through visual and performative modes	• Imaginatively combines forms, colours, characters, sounds, spaces and situations to represent their ideas and experiences	• Pays attention to thematic details, material properties (texture, colour, size, form), space, and situation while creating and viewing works of art

C-12.4: Learning Outcomes

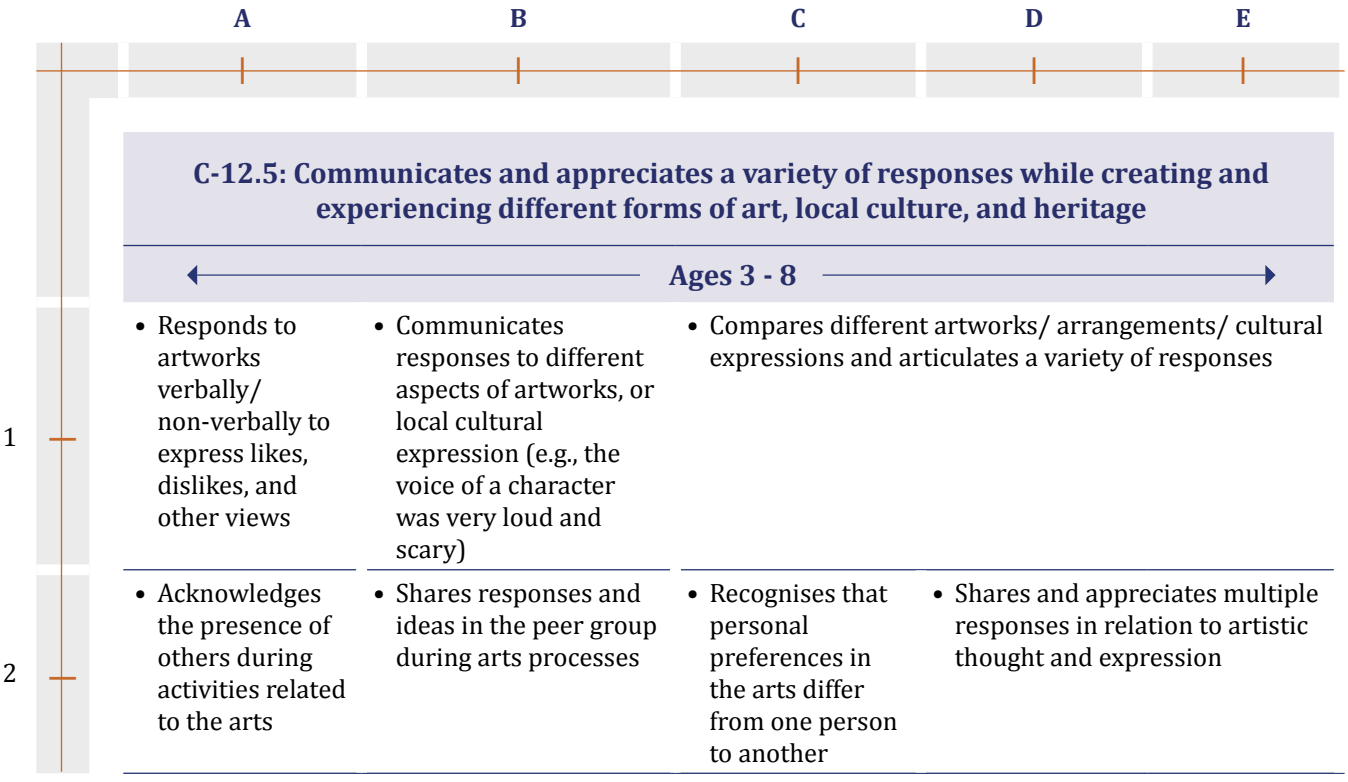
Table 63



	A	B	C	D	E
	C-12.4: Works collaboratively in the arts				
	Ages 3 - 8				
1	• Explores sound and movement produced individually and in groups	• Produces a variety of speech, movements, sounds, and visual art works in collaboration with peers	• Attempts to coordinate speech, movement and sound while playing or performing in pairs or groups • Collaborates with peers and facilitator in the spatial arrangement or display of art works	• Moderates own volume, pitch and tempo to align with a partner/ group	• Pays attention to sequence while performing role-play, music, dance and movement steps

C-12.5: Learning Outcomes

Table 64



	A	B	C	D	E
	C-12.5: Communicates and appreciates a variety of responses while creating and experiencing different forms of art, local culture, and heritage				
	Ages 3 - 8				
1	• Responds to artworks verbally/ non-verbally to express likes, dislikes, and other views	• Communicates responses to different aspects of artworks, or local cultural expression (e.g., the voice of a character was very loud and scary)	• Compares different artworks/ arrangements/ cultural expressions and articulates a variety of responses		
2	• Acknowledges the presence of others during activities related to the arts	• Shares responses and ideas in the peer group during arts processes	• Recognises that personal preferences in the arts differ from one person to another	• Shares and appreciates multiple responses in relation to artistic thought and expression	

1.1.6 Positive Learning Habits

Current research is indicating that along with the usual domains of development, attention to executive functions and self-regulation in early childhood education has high impact on school readiness.

CG-13: Children develop habits of learning that allow them to engage actively in formal learning environments like a school classroom

C-13.1: Learning Outcomes

Table 65

C-13.1: Attention and intentional action: Acquires skills to plan, focus attention, and direct activities to achieve specific goals

Ages 3 - 8

	A	B	C	D	E
1	• Focuses on self-initiated activities for a short amount of time (e.g., works on a puzzle) • Sustains interest with one or two tasks that engage them (e.g., plays at the sensory table for 5-10 minutes)	• Focuses attention on activities with adult prompts and support, like listening to stories read to a group for short periods of time in spite of interruptions or distraction • Stays with a variety of tasks that interest them (e.g., plays in the dramatic play and block areas for 10 minutes)	• Focuses attention on tasks and activities like painting or block building for longer periods of time with increasing independence • Sustains engagement with a task that interests them for long periods of time (e.g., painting for 20 minutes) • Begins to attend to adult-initiated tasks that are not based on their interests (e.g., participates in a teacher-led small group)	• Attends to adult-initiated tasks that are not based on their interests (e.g., participates in a teacher-led small group) • Sustains engagement with a task for long periods of time (20 minutes)	• Attends to adult-initiated tasks that are not based on their interests (e.g., participates in a teacher-led small group) • Sustains engagement with a task for long periods of time (30 minutes)

C-13.2: Learning Outcomes

Table 66

C-13.2: Memory and mental flexibility: Develops adequate working memory, mental flexibility (to sustain or shift attention appropriately), and self-control (to resist impulsive actions or responses) that would assist them in learning in structured environments

Ages 3 - 8

	A	B	C	D	E
1	• Practices remembering by recalling a story or verbally describing a picture no longer in view • Remembers where materials are kept in familiar environments (e.g., can retrieve spare clothes from shelf)	• Repeats a list of items needed for self-care or play • Plays simple memory and matching games • Remembers and follows 2-step directions to complete simple tasks (e.g., "wash your hands then help prepare or eat a snack") • Remembers actions that go with stories or songs	• Remembers several steps in sequence to complete multi-step directions (e.g., complete a puzzle, return it to the shelf, and join the group back) • Teaches another child the steps taken for a given action (e.g., shows a peer how to use soap to wash hands before snack) • Remembers and recalls short stories and songs of up to 5 sentences.	• Remembers and immediately recalls • (e.g., given 4 digits repeats in the same sequence)	• Remembers and recalls, identifies missing things (e.g., two identical scenes with one or two significant difference, studies both pictures and points out the difference)
2	• Adjusts to changes in routines • Identifies signals for changes between activities • Makes transitions that are part of a daily schedule	• Demonstrates "cognitive flexibility" by trying another approach, with adult support, when something does not work the first time (e.g., tries a different way to climb a structure when the first effort does not work or uses a tool or another person to get an item out of reach) • Shows ability to shift attention from one task or activity to another when necessary	• Adapts to new rules in game or activity (e.g., sorting cards by colour and then by shape) • Considers ideas from adults and other children in finding a solution or strategy • Demonstrates flexibility and adaptability with less adult prompting (e.g., sharing toys or trying out new materials) • Responds consistently to adult suggestions to try out different activities	• Adopts and adapts to the classroom situations • Participates in the schedule actively and takes suggestions for improvement	• Adopts, adapts and creates classroom situations congenial for learning • Participates actively in all activities, welcomes suggestions and feedback

3	• Begins to take turns and waits in line for short periods of time with adult support	• Seeks adult help when distressed with behaviour of or interaction with a peer • Begins to use words, signs or gestures to express distress with peers (instead of biting or pushing) with adult support • Begins to inhibit impulsive behaviours with adult support (e.g., inhibits initial response to call out an answer to a question during story time with educator's reminder)	• Controls impulses with more independence (e.g., walks instead of runs; asks for a turn with a toy instead of grabbing; waits to share out instead of calling out) • Uses strategies to help control own actions more frequently such as creating physical distance or finding an alternative toy or activity	• Manages emotions, waits for their turn, follows rules, frames rules, demonstrates leadership qualities and suggests ideas for change in activities

C-13.3: Learning Outcomes

Table 67

	A	B	C	D	E
	C-13.3: Observation, wonder, curiosity, and exploration: Observes minute details of objects, wonders and explores using various senses, tinkers with objects, asks questions				
	Ages 3 - 8				
1	• Enjoys spending time in the garden/ outdoors	• Shows curiosity and wonder in the natural environment	• Draws, paints, sings, dances to express their joy and wonder	• Likes to share their joy with other children through play, music and dance	• Uses language to articulate and express their joy
2	• Shows curiosity in exploring immediate surroundings (in outdoor contexts)-with adult support	• Shows curiosity in exploring immediate surroundings (in outdoor contexts)-with or without adult support	• Shows curiosity and wonder in exploring collections from the nature/ immediate surroundings	• Shows eagerness and takes initiative in exploring the immediate surroundings and use resources from nature (under adult guidance)	• Engages with others fearlessly but respectfully • Shows eagerness and takes initiative in exploring the immediate surroundings and uses resources from nature responsibly

C-13.4: Learning Outcomes

Table 68

	A	B	C	D	E
	C-13.4: Classroom norms: Adopts and follows norms with agency and understanding				
	Ages 3 - 8				
1	• Observes and imitates adult behaviour for classroom norms	• Follows classroom norms with Teacher's cues	• Follows and assists others in following classroom norms • Creates do-it-yourself (DIY) classroom job charts/posters with the support of Teachers and follows it	• Participates in discussing classroom norms and behaves according to norms • Creates DIY classroom job charts/posters and follows it	• Participates in establishing classroom norms and behaves according • Creates DIY classroom job charts/posters and illustrates them as well; follows it responsibly

Annexure 2: Illustrative Practices

This Annexure has illustrative practices of various critical elements of the NCF for the Foundational Stage. These samples are taken from Teachers and other stakeholders across the country. To give a sense of richness of the classroom experience, some of these illustrations are in different languages used by Teachers – just a sprinkling of India's wealth of language diversity and linguistic heritage.

We begin with illustrations of planning and preparations for a day, a week, and a year, followed by activities that could be taken up in the classrooms. We end with few examples of various events and platforms that could be used to enable and empower our Teachers.

These are chosen not because they are perfect, but because they are close to the spirit of this NCF and demonstrate what is possible in the various contexts of our school education system.

1. Planning for Learning

This section comprises of two types of illustrations – section 1.1 has a Teacher's teaching plan for full academic year while showing how it cascades into a daily plan; section 1.2 has samples of weekly and daily plans for language teaching – one in Oriya and another in Hindi.

1.1 Leela's Plan

Leela teaches children in Grade 1 in the Government Primary School in a village near Tonk, Rajasthan. The community in this village primarily speaks Hadoti. She has a mixed group of children, that is, some have attended an Anganwadi in the last 3 years, while this will be first exposure of any kind of schooling for some. She keeps this in mind while planning and preparing for her teaching.

Below, is from her records, her annual plan, plan for a quarter, sample teaching plans for smaller – weeks', day's – units of time, and sample observations against a Learning Outcome.

1.1.1 Annual Teaching Plan for Grade 1

Table 1

Sub-Domain	Learning Outcomes
सुनकर समझना और बोलना	1. भाषा की विविध विधाओं जैसे गीत, कविता, कहानी, वार्तालाप, संवाद, चित्र दृश्य पर चर्चा आदि। 2. ध्यान से एवं धैर्यपूर्वक समझना। 3. परिवेश एवं संदर्भ से संबंधित सामग्री को समझना। 4. गति एवं हाव-भाव के अनुसार बोलना। 5. परिचित एवं नवीन परिस्थितियों में सहजता से अपने विचार प्रस्तुत करना। 6. प्रश्न बनाना व पूछना। 7. घर, परिवेश एवं विद्यालय की भाषा में तालमेल बैठाकर अपने अनुभव व्यक्त करना। 8. सुनी हुई बात को अपने शब्दों में कहना। 9. पढ़ी गई सामग्री को अपने शब्दों में कहना। 10. गीत कविता, कहानी को अपने विचारों को अकेले तथा समूह में प्रस्तुत करना। 11. सुने हुए गीत, कविता, कहानी, वार्तालाप आदि में अपने अनुभव को जोड़कर अपनी बात कहना। 12. अपने अनुभव एवं कल्पनालोक की बातों को सहज ढंग से कहना। 13. सुनी, पढ़ी सामग्री में क्या कौन, कब, कैसे कहाँ जैसे प्रश्न पूछ पाना एवं पूछे गए प्रश्नों के उत्तर देना। 14. कविता कहानी को अपनी कल्पना से आगे बढ़ाते हुए बोलना। 15. ध्वन्यात्मक शब्दों के साथ खेलने व गढ़ने के अवसर का लाभ उठाना ,जैसे अक्कड़ बक्कड़
पढ़कर समझना	1. अनुमान लगाकर पढ़ना एवं अर्थ खोजना। 2. शब्दों और वाक्यों को वर्ण जोड़कर पढ़ने की बजाय इकाई रूप समझकर पढ़ना। 3. अपने परिवेश में उपलब्ध सामग्री का अनुमान लगाकर समझते हुए पढ़ना। 4. परिवेश में उपलब्ध संदर्भों, चित्रों व छपी हुई सामग्री को पढ़कर समझना।
लेखन अभिव्यक्ति	1. शब्द और वाक्य को स्पष्ट रूप से लिख सकना। 2. सुनी हुई विषयवस्तु अनुभवों को अपने शब्दों में लिखना। 3. किसी कविता या कहानी को आगे बढ़ाते हुए लिखना। 4. प्रश्नों के उत्तर अपने शब्दों में लिखना। 5. सुनी हुई विषयवस्तु को यथारूप लिखना।(श्रुतलेख) 6. तार्किक चिंतन के आधार पर सरल रचनाएँ करना एवं अपनी बात लिखना।
व्यवहारिक व्याकरण	(वास्तविक संदर्भ में समझना एवं प्रयोग में लाना।) चंद्रबिंदु, अनुस्वार, विसर्ग, संयुक्ताक्षर , 'र' के रूप, पूर्ण विराम , अल्प विराम, प्रश्नवाचक चिह्न, लिंग, वचन आदि को पहचानना तथा प्रयोग में लाना।

1.1.2 Plan for a Quarter

Table 2

#	Month	Content	Learning Objectives
1	Jul	• आरंभिक गतिविधियाँ • मेरा गांव, हमारा शहर, पक्षी एवं जानवर, जानवर, फल, सब्जी, हमारा शरीर, शरीर के अंग चित्र पठन • पुस्तकालय या अन्य संदर्भ पुस्तकें (कहानी)	• **सुनकर समझना और समझकर बोलना** • सुनी हुई सरल छोटी कविता / बालगीत / कहानी को स्पष्ट शब्दों में दोहरा सकें। • कविता बाल गीत को लय, गति और हावभाव का तालमेल करते हुए सुना सकें। • **पढ़ना और पढ़कर समझना** • चित्रों की सहायता से चित्र के नाम की आकृति (शब्द) का पठन कर सकें। • चित्र की मदद से परिचित शब्दों को पढ़कर मिलान कर सके और परिचित शब्दों को स्वतंत्र रूप से (बिना चित्र की सहायता से) पहचान कर सकें एवं पढ़ सकें। • शब्दों से संबंधित वर्णों को पढ़ सकें। • आ और इ की मात्रा की अवधारणा के साथ चित्र व बिना चित्रों की सहायता से शब्दों को पढ़ सकें। • संबंधित तुकबंदियों को अनुमान लगाकर पढ़ सकें। • **लिखना** • दिए गए अक्सर आनेवाले शब्दों पर पेन्सिल फेर सकें। • अक्षर / सरल शब्दों को देखकर लिख सकें। • चित्र की मदद से शब्दों को लिख सकें। • सीखे गए वर्णों से शब्द बना कर लिख सकें। • **सृजनात्मक अभिव्यक्ति** • चित्रों में रंग संयोजन कर सकें। • अपने मन से परिचित वस्तु का चित्र बना सकें।
2	Aug	• कविता “सूरज दादा” • वर्ण पहचान घ र च ल • वर्ण पहचान अ ब म न • पुस्तकालय या अन्य संदर्भ पुस्तके	
3	Sep	• कविता “आसमान पर बादल” • वर्ण पहचान ज ख आ और आ की मात्रा • कविता “तितली और कली” • वर्ण पहचान द त इ और इ की मात्रा • पुस्तकालय या अन्य संदर्भ पुस्तकें	

1.1.3 Activity Plan for 2 Weeks

The teaching plan for the first 2 weeks will focus on readiness school activities to get children into the habit of sitting in classrooms, following classroom norms, getting to know their peers, and becoming comfortable with the Teacher as well as the school environment. Before that, Leela defines assessment indicators for each of the Learning Outcomes so that she can observe each child’s performance in the classroom and align her teaching style/focus as per children’s needs.

a. An example of assessment indicators:

Table 3

<table>
<tr><th>#</th><th>Learning Outcomes</th><th colspan="3">Assessment Indicators (Level 1<Level 2< Level 3)</th></tr>
<tr><td rowspan="10">1</td><td rowspan="10">सुनकर समझना और सोचकर बोलना
विविध उद्देश्यों के लिए अपनी भाषा अथवा/ स्कूल की भाषा का इस्तेमाल करते हुए बातचीत करते हैं
जैसे- कविता, कहानी सुनाना, जानकारी के लिए प्रश्न पूछना, निजी अनुभव को साझा करना|</td><td colspan="3">अपनी आपसी बातचीत में घर की भाषा का प्रयोग करते हैं।</td></tr>
<tr><td>Level 1</td><td>Level 2</td><td>Level 3</td></tr>
<tr><td>आपसी बातचीत में घर की भाषा का उपयोग बहुत कम कर पाते हैं</td><td>आपसी बातचीत में घर की भाषा का उपयोग थोड़ा कर पाते हैं</td><td>आपसी बातचीत में घर की भाषा का उपयोग सहजता से कर पाते हैं</td></tr>
<tr><td colspan="3">अपनी आपसी बातचीत में स्कूल की भाषा का प्रयोग करते हैं।</td></tr>
<tr><td>Level 1</td><td>Level 2</td><td>Level 3</td></tr>
<tr><td>आपसी बातचीत में स्कूल की भाषा का प्रयोग बहुत कम या नहीं कर पाते हैं</td><td>आपसी बातचीत में स्कूल की भाषा का प्रयोग थोड़ा कर पाते हैं</td><td>आपसी बातचीत में स्कूल की भाषा का प्रयोग करते हैं।</td></tr>
<tr><td colspan="3">अपनी भाषा में कविता/ कहानी सुना पाते हैं</td></tr>
<tr><td>Level 1</td><td>Level 2</td><td>Level 3</td></tr>
<tr><td>अपनी भाषा में कविता/ कहानी बहुत कम या सुना नहीं पाते हैं</td><td>अपनी भाषा में कविता/ कहानी सुनाने का प्रयास करते हैं पर पूरी नहीं सुना पाते हैं</td><td>अपनी भाषा में कविता/ कहानी सुना पाते हैं</td></tr>
<tr><td colspan="3">स्कूल की भाषा में कविता/ कहानी सुना पाते हैं</td></tr>
<tr><td>Level 1</td><td>Level 2</td><td>Level 3</td></tr>
<tr><td>नहीं सुना पाते हैं</td><td>स्कूल की भाषा में कविता/ कहानी थोड़ा बहुत सुना पाते हैं</td><td>स्कूल की भाषा में कविता / कहानी सुना पाते हैं</td></tr>
</table>

Leela prepares a summary of all the activities she plans for a particular lesson, so that she knows what material she will require through these two weeks.

b. An example of week's plan:

Table 4

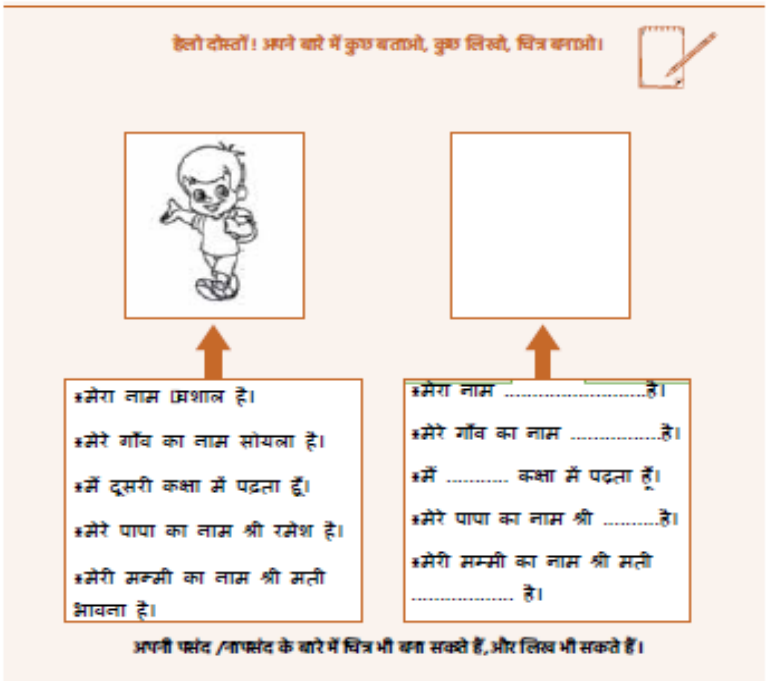
Activity	Objective	Duration
परिचय	बच्चों से परिचय प्राप्त करना व स्वयं का परिचय देना। बच्चों के बाद परिवारजनों का परिचय देना व लेना। अनौपचारिक बातचीत	शिक्षण व अभ्यास हेतु कालांश (Class-es)-10 +1 कालांश (शनिवार गतिविधि एवं बच्चों के काम के फोटो एवं विडियों शेयरिंग) दिनांक 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 (2 weeks) 60 Min/Day 20 Min सुनकर समझना और समझकर बोलना 20 Min पठन 20 Min लेखन
बालगीत व कविताएं गाना	छोटे परिवेशीय गीत, बालगीत व कविताएं हाव भाव के साथ गाना।	
कहानी सुनना – सुनाना	बच्चों को मौखिक कहानी सुनाना व सुनना चित्र आधारित कहानियाँ सुनाना व उन पर चर्चा करना।	
हाथ संतुलन	खड़ी आड़ी , घुमावदार डॉटेड लाइन / चित्र पर पेंसिल या रंग फेरना / मिलान करना। स्वतंत्र रूप से चित्र बनाकर उसमें रंग भरना।	
ध्वनि पहचान	शांत बैठकर आस पास हो रही आवाजों को सुनना और बताना। अपने नाम में आने वाली अंतिम ध्वनि की पहचान करना व उस ध्वनि से बनने वाले 2-2 शब्द बताना। अपने नाम में आने वाली ध्वनियों को अक्षरों में तोड़-तोड़ कर बोलना और उनकी आवाजों को गिनते हुए जानना कि उनके नाम में कितनी ध्वनियाँ हैं? इसी प्रकार से अन्य शब्दों को ध्वनियों में तोड़तें हुए पहचान करना।	
अनुमान लगाना	एक कपड़े के नीचे या किसी कपड़े के थैले में रखी कुछ खास वस्तुओं को छू कर अनुमान से उनके नाम बताना। जो छोटे बालगीत और कविताएं कक्षा में गाए जा चुके हैं उन्हें एक शीट पर लिखना और बच्चों की सामने उनके शब्दों पर अंगुली रख-रख कर हमारे द्वारा पढ़ना फिर बच्चों को भी इसी प्रकार से अनुमान के द्वारा कविताएं पढ़ने के लिए प्रेरित करना।	

Now, finally, before each day, she prepares a detailed activity plan to follow through the day. In this plan, she tries to incorporate observations from the previous day.

c. An example of my day's activity plan:

Table 5

Day/Duration	Description of Activities	Material Used	Comments
Day 10 60 Mins	• खेल से शुरुआत "चूहा दौड़ बिल्ली आई नेता नेता चाल बदल" • प्रश्नोत्तर संवाद • कहानी वाचन हाव भाव एवं चित्रों के साथ कहानी सुनाना • प्रमुख शब्द बोर्ड पर लिखना • कहानी से संबंधित प्रश्न पूछना कहानी में कौन-कौन हैं? बंदर कहाँ बैठा हैं ? बंदर की पूंछ कैसी हैं? पूँछ को झूला किसने समझा ? क्या आपने बंदर और गिलहरी कहीं देखे हैं कहाँ ? • कहानी से संबंधित दो-तीन लाइन बोर्ड पर लिखना फिर हमारे द्वारा अंगुली फेरते हुए पढ़ना। • बच्चों को अंगुली फेरते हुए पढ़ने के अवसर देना। • Followed by a worksheet given below:		Kavita, Ram ने अंगुली फेरते हुए पढ़ने का अच्छा अभ्यास किया और साथ ही किताब पढ़ने को लेकर बेहद उत्सुक लगे। और इच्छा जाहीर की। Kavita ने 1 कहानी पूरी पढ़ी और साथ ही और किताब लाने को कहा। आगामी योजना के साथ-साथ पुस्तकालय से चित्र कथा एवं स्तर एक की किताबों का चयन कर कक्षा पुस्तकालय से परिचय कराते हुए पुन: शुरुआत होगी।



d. Materials: Flashcards, akshara forms in cardboard/sandpaper, games, puzzles and materials for other activities keep language and literacy activities engaging and interesting

e. Audio-Visual Material: With ubiquity of digital devices like smartphones, good quality audio material can be very effective content for early primary grades. Rhymes, stories and other narratives can be a good source of oral language input for children

d. Few examples of daily observations:

Table 6

#	Name	Vocal/shy	Involvement/ participation/ distraction	Identifying letters with picture	Hand balance/ scribbling
5	Amit	Vocal	Involved & participative Needs reminding of instructions	Some	Yes Needs to practice proper writing, and proper spacing between one word and another
13	Nita	Vocal	Involved & participative Needs reminding of instructions	Some	Yes Needs speed, to write on time, and to be regular doing given work
18	Rani	Shy (New admission)	Involved & participative	Needs help	Needs to write letters between the two lines in her Hindi notebook

1.2 Weekly/Daily Plan for Language Teaching

Below are illustrations of 15-week plan for Language teaching in Oriya, and Hindi. The Teacher's plan comprises of weekly plan, followed by a day's plan with few examples of activities.

1.2.1 Plan for Oriya Language Teaching

a. Weekly plan

Table 1

ଦକ୍ଷତା	ଶିକ୍ଷଣ କାର୍ଯ୍ୟ	୧ମ ଦିବସ	୨ୟ ଦିବସ	୩ୟ ଦିବସ	୪ର୍ଥ ଦିବସ	୫ମ ଦିବସ	୬ଷ୍ଠ ଦିବସ
ମୌଖିକ ଭାଷା ବିକାଶ (୪୦ -୪୫ମିନିଟ୍)	କବିତା ଆବୃତ୍ତି	✓	✓	✓	✓	✓	✓
	ଗଳ୍ପ କଥନ ଓ ଗଳ୍ପ ଆଧାରିତ ଆଲୋଚନା	✓			✓		
	ସାମାଜିକ ଓ ଆବେଗିକ ବିକାଶ(ଖେଳ/ ଶିକ୍ଷଣକାର୍ଯ୍ୟ)	✓			✓		
	ମୌଖିକ ଭାଷା ଆଧାରିତ ଖେଳ ଓ ଓଡିଆ ଶବ୍ଦାବଳୀ ବିକାଶ ପାଇଁ କାର୍ଯ୍ୟ					✓	✓
	ଶିକ୍ଷକଙ୍କ ଦ୍ୱାରା ପାଠ୍ୟ ପୁସ୍ତିକରୁ ଗଳ୍ପ ପଠନ ଓ ବିସ୍ତୃତ ଆଲୋଚନା (ଶୁଣିକରି ବୁଝିବା)					✓	✓
	ଚିତ୍ର ଓ ଅନୁଭୂତି ଆଧାରିତ କାର୍ଯ୍ୟ		✓	✓			
	ମୌଖିକ ଭାଷା ସମ୍ପର୍କିତ ଲିଖନ	✓	✓	✓	✓	✓	✓
ଡିକୋଡିଂ (୪୦-୪୫ ମିନିଟ୍)	ଧ୍ୱନି ସଚେତନତା (ସପ୍ତାହ ୧ ରୁ ୧୨)	✓	✓	✓	✓	✓	✓
	ବର୍ଣ୍ଣ ଓ ଅକ୍ଷର ଚିହ୍ନଟ କାର୍ଯ୍ୟ	✓	✓	✓	✓		
	ଶବ୍ଦ ଓ ବାକ୍ୟ ପଠନ	✓	✓	✓	✓		
	କାର୍ଯ୍ୟପୁସ୍ତିକାର ବ୍ୟବହାର	✓	✓	✓	✓	✓	✓
	ମାନ ନିର୍ଦ୍ଧାରଣ ଓ ପୁନରାଲୋଚନା					✓	✓
ପଠନ (୪୦-୪୫ ମିନିଟ୍)	ପିଲାଙ୍କ ଦ୍ୱାରା ବହିର ପୃଷ୍ଠା ଓଲଟାଇବା ଓ ଅଭିନୟ ପଠନ					✓	✓
	ବ୍ୟକ୍ତିଗତ ପଠନ ନିମନ୍ତେ ପିଲାମାନଙ୍କ ଦ୍ୱାରା ପର୍ଯ୍ୟାୟ ଭିତ୍ତିକ ଗପ ଓ ଅନ୍ୟାନ୍ୟ ବହି ସହ ପରିଚୟ ଓ ଅଭିନୟ ପଠନ					✓	✓
	ପିଲାଙ୍କୁ ବଡ଼ ବହିରୁ କାହାଣୀ ପଢିକରି ଶୁଣାଇବା ଓ ତା' ବିଷୟରେ ଆଲୋଚନା କରିବା	✓	✓	✓	✓		
	ପଠନ ପୁସ୍ତିକା ସହ ସାଙ୍କେତିକ ଶବ୍ଦ ପଠନ ଓ ପ୍ରାରମ୍ଭିକ ପଠନ	✓	✓	✓	✓	✓	✓

b. Plan for day 1, of week 7

Table 2

ମୌଖିକ ଭାଷା ବିକାଶ	
ଶିକ୍ଷଣ କାର୍ଯ୍ୟ -ଗଳ୍ପ କଥନ-	**ସମୟ – ୪୦-୪୫ ମିନିଟ**
ପ୍ରସ୍ତୁତି ଓ ସାମଗ୍ରୀ:	ଶିକ୍ଷକଙ୍କ ପାଇଁ ସୂଚନା:
ଗଳ୍ପ ଓ କବିତା ମାଳା ବହି –"ଗୁଣ୍ଡୁଚି ଖେଳିଲା ଦୋଳି" ବହିରୁ ଗପ ପଢି ଶୁଣାଇବା	• ଗପ କହିବବେଳେ ସ୍ୱରର ଉତ୍ଥାନ ପତନ କରି କହିବେ । • ଗପଟିକୁ ପିଲାଙ୍କ ମାତୃଭାଷାରେ କହି ଶୁଣାଇବେ । • ପିଲାଙ୍କୁ ଗପରେ ଥିବା କଠିନ ଶବ୍ଦର ଅର୍ଥ ବୁଝାଇବେ । • ଗଳ୍ପ ସମ୍ପର୍କରେ ପିଲାଙ୍କ ସହ ଆଲୋଚନା କରିବେ ।
ପ୍ରକ୍ରିୟା :	
• ଶିକ୍ଷକ ପିଲାମନଙ୍କୁ ଅର୍ଦ୍ଧବୃତ୍ତାକାର ରେ ଛିଡା କରାଇବା । • ଶିକ୍ଷକ ମଝିରେ ବସିବେ, ଯେପରି ସମସ୍ତ ପିଲା ତାଙ୍କୁ ଦେଖିପାରୁଥିବେ । • ଶିକ୍ଷକ ଗପଟିକୁ ମନରୁ କହିବେ ,(ବହି ଧରି ପଢିବେ ନହିଁ) । • ଶିକ୍ଷକ କହିବାବେଳେ ଚରିତ୍ର ଯେପରି କହୁଛି, ସେହିପରି ଚରିତ୍ର ଭଳି କହିବେ । ଯଥା -ମାଙ୍କଡ –"ଭଉଣୀ ତଳେ ପଡିଗଲା କି?"ଗୁଣ୍ଡୁଚି -ନା ନା... । • ପିଲାମାନେ ପ୍ରଥମେ ଶୁଣିବେ (୨ ଥର) । • ତାପରେ ପିଲାମାନେ ଶିକ୍ଷକଙ୍କ ସହ ଅଭିନୟ କରି ଗପଟିକୁ କହିବେ । • ଏହିପରି ୩ /୪ ରାଉଣ୍ଡ ଗଳ୍ପ କଥନ ଚାଲିବ । • ତାପରେ ଶିକ୍ଷକ ଦଳରେ ବିଭକ୍ତ କରିବେ । • ପ୍ରତି ପିଲା ତା'ର ସାଙ୍ଗମାନଙ୍କୁ କହିବ । • ପ୍ରତି ଦଳରେ କହିବ ବେଳେ ଶିକ୍ଷକ ତତ୍ତ୍ୱାବଧାନ କରିବେ । • ଗଳ୍ପରେ ଥିବା ଚିତ୍ର ଆଙ୍କି ରଙ୍ଗ ଦେବେ ।	
ଶିକ୍ଷଣ ପ୍ରକ୍ରିୟାର ସମୀକ୍ଷା: -	
• ପ୍ରତି ପିଲା ଗପଟିକୁ ନିଜ ଭାଷାରେ କହି ପାରିଲେ କି ନାହିଁ ଜାଣିବେ । • ଯେଉଁ ପିଲା କହି ନାହାନ୍ତି, ପରବର୍ତ୍ତୀ ଶ୍ରେଣୀରେ ସେହି ପିଲାଙ୍କୁ ଅଧିକ ସୁଯୋଗ ଓ ଧ୍ୟାନ ଦେବେ ।	

Table 3

ଡିକୋଡିଙ୍ଗ	
ଶିକ୍ଷଣ କାର୍ଯ୍ୟ : 'ଚ' ବର୍ଣ୍ଣ ଚିହ୍ନଟିକରଣ	୪୦-୪୫ ମିନିଟ୍
ପ୍ରସ୍ତୁତି ଓ ସାମଗ୍ରୀ	ଶିକ୍ଷକଙ୍କ ପାଇଁ ସୂଚନା
• କଳାପଟା, ଚକଖଡ଼ି, କାର୍ଯ୍ୟ ପୁସ୍ତିକା • 'ଚ' ରୁ ଆରମ୍ଭ ହୋଇଥିବା କିଛି ସରଳ ଶବ୍ଦର ସୂଚୀ	• କାର୍ଯ୍ୟପୁସ୍ତିକାରେ କିପରି କାର୍ଯ୍ୟ କରାଯିବ, ପିଲାମାନଙ୍କୁ ତାହାର ସ୍ପଷ୍ଟ ସୂଚନା ଉଦହରଣ ସହ ଦିଅନ୍ତୁ । • ପିଲାଙ୍କୁ ପରସ୍ପର ମଧ୍ୟରେ କାର୍ଯ୍ୟ କରିବାର ଯଥେଷ୍ଟ ସୁଯୋଗ ଦିଅନ୍ତୁ ।
'ଚ' ବର୍ଣ୍ଣ ଚିହ୍ନଟିକରଣ	
• ଶିକ୍ଷଣ କାର୍ଯ୍ୟ ଆରମ୍ଭରେ କୌଣସି ଏକ ସ୍ଥାନୀୟ କବିତାକୁ ଭାବଭଙ୍ଗୀ ସହ ଶୁଣାନ୍ତୁ । ଏଥିପାଇଁ ୫-୭ ମିନିଟ୍ ସମୟ ଦିଅନ୍ତୁ । • 'ଚ' ରୁ ବନୁଥିବା କିଛି ପରିଚିତ ଶବ୍ଦ ଯେପରି (ଚପଲ)ର ଧ୍ୱନିକୁ ଭାଙ୍ଗି-ଯୋଡ଼ି କୁହନ୍ତୁ । ଉଦାହରଣ - (ଚପଲ - /ଚ/ /ପ/ /ଲ/) (/ଚ/ /ପ/ /ଲ/ - ଚପଲ) ଓ ପିଲାଙ୍କ ଧ୍ୟାନ ପ୍ରଥମ ଧ୍ୱନି ଉପରେ କେନ୍ଦ୍ରିତ କରନ୍ତୁ । ୨-୩ ଟି ଆଞ୍ଚଳିକ ଶବ୍ଦ ସହ ଏହାକୁ କରନ୍ତୁ । • 'ଚପଲ' କୁ ବୋର୍ଡ଼ରେ/କଳାପଟାରେ ଲେଖି ତାହାର ପ୍ରଥମ ଧ୍ୱନିର ପ୍ରତୀକ ଉପରେ ଗୋଲ ବୁଲାନ୍ତୁ । • ତାପରେ 'ଚ' କୁ କଳାପଟାରେ ବଡ଼ ଆକାରରେ ଲେଖନ୍ତୁ ଓ ୩-୪ ଥର ଏହାର ଧ୍ୱନିକୁ ଉଚ୍ଚାରଣ କରନ୍ତୁ । ପିଲାଙ୍କୁ 'ଚ' ଶବ୍ଦରୁ ଆରମ୍ଭ ହେଉଥିବା କିଛି ଶବ୍ଦ ପଚାରନ୍ତୁ । ଏଥିପାଇଁ ଶ୍ରେଣୀରେ ସେହି ପିଲାଙ୍କୁ ହାତ ଉଠାଇବା ପାଇଁ ମଧ୍ୟ କହିପାରନ୍ତି ଯାହାଙ୍କ ନାମ 'ଚ' ରୁ ଆରମ୍ଭ । ଏହି ଶବ୍ଦଗୁଡ଼ିକ କଳାପଟାରେ ଲେଖନ୍ତୁ ଓ କିଛି ଅନ୍ୟ ପିଲାଙ୍କୁ ଡାକି 'ଚ' ଅକ୍ଷରରେ ଗୋଲ ବୁଲାନ୍ତୁ । • ପିଲାଙ୍କୁ ଶ୍ରେଣୀ ଗୃହରେ ପ୍ରଦର୍ଶିତ ଚାର୍ଟ ଓ ଛାପା ସାମଗ୍ରୀ ମଧ୍ୟରୁ 'ଚ' ଖୋଜିବାକୁ କୁହନ୍ତୁ । • ତାପରେ ୫-୭ ପିଲାଙ୍କର ଛୋଟ ଦଳ ବନାନ୍ତୁ । ଏକ (କାହାଣୀ) ବା ପାଠ୍ୟପୁସ୍ତକରୁ 'ଚ' ବର୍ଣ୍ଣ ଖୋଜି ଗୋଲ ବୁଲାଇବାକୁ କୁହନ୍ତୁ । ପିଲାମାନେ କାର୍ଯ୍ୟ କରୁଥିବା ସମୟରେ ଶିକ୍ଷକ ବୁଲିବୁଲି ସମସ୍ତଙ୍କୁ ସହାୟତା ପ୍ରଦାନ କରିବେ । • କାର୍ଯ୍ୟପୁସ୍ତିକାରୁ ଭିନ୍ନଭିନ୍ନ ଉପାୟରେ 'ଚ' ବର୍ଣ୍ଣ ଲେଖାଇବାର ଅଭ୍ୟାସ କରାନ୍ତୁ । ଯେପରି ନିଜ ଅଙ୍ଗୁଳି, ବାୟୁ, ବାଲି ଦ୍ୱାରା ।	
ଲିଖନ	୧୦ – ୧୫ ମିନିଟ୍
• ସମସ୍ତ ପିଲାଙ୍କୁ କାର୍ଯ୍ୟପୁସ୍ତିକାର କାର୍ଯ୍ୟଫର୍ଦ୍ଦ ସଂଖ୍ୟା (___) କରିବାକୁ କୁହନ୍ତୁ ଆବଶ୍ୟକ ମୁତାବକ ସାହାଯ୍ୟ ପ୍ରଦାନ କରନ୍ତୁ ।	• ଶିକ୍ଷକ ପିଲାଙ୍କ କାର୍ଯ୍ୟର ନିରୀକ୍ଷଣ ବୁଲିବୁଲି କରିବେ ।
ଶିକ୍ଷଣ ପ୍ରକ୍ରିୟାର ସମୀକ୍ଷା :	
• କ'ଣ ସବୁପିଲାମାନେ କାର୍ଯ୍ୟପୁସ୍ତିକାରେ ଦିଆଯାଇଥିବା କାର୍ଯ୍ୟକୁ କରିଛନ୍ତି । • ଯେଉଁ ପିଲାମାନଙ୍କୁ କାର୍ଯ୍ୟ କରିବାରେ ସମସ୍ୟା ହେଲା, ସେମାନଙ୍କୁ ଚିହ୍ନିତ କରି, ସେମାନଙ୍କ ସହ କଥାବାର୍ତ୍ତା ଓ ପ୍ରୋତ୍ସାହନ ଦିଅନ୍ତୁ ।	

1.2.2 Plan for Hindi Language Teaching

a. Weekly Plan

Table 4

सप्ताह			
दिन	**मौखिक भाषा विकास एवं सम्बंधित लेखन (25-30 मिनट)**	**डिकोडिंग एवम सम्बंधित लेखन (40-45 मिनट)**	**दिन**
1	• कविता/बालगीत "तरिया के दरपन" • मौखिक रूप से कहानी सुनाना: कछुआ आयर खरगोश (तरिया के दरपन) • चित्र बनाना	• 'ग' वर्ण पर कार्य • डिकोडिंग का खेल • अभ्यास पुस्तिका पर कार्य: पाठ-37	• बिग बुक से कहानी पढ़कर सुनाना व् सामान्य चर्चा: पांच चिया गिन बाज़ार
2	• कविता/बालगीत (पाठ्यपुस्तक पाठ – 3) • चित्र चार्ट पर चर्चा: पार्क • स्वतंत्र लेखन	• 'ग' वर्ण पर कार्य • डिकोडिंग का खेल • अभ्यास पुस्तिका पर कार्य: पाठ-38	• बिग बुक से कहानी पढ़कर सुनाना व् विस्तृत चर्चा: पांच चिया गिन बाज़ार
3	• कविता/बालगीत (तरिया के दरपन) • चित्र चार्ट पर चर्चा: पार्क • स्वतंत्र लेखन	• 'म' वर्ण पर कार्य • डिकोडिंग का खेल • अभ्यास पुस्तिका पर कार्य: पाठ-39	• बिग बुक से साझा पठन: पांच चिया गिन बाज़ार
4	• कविता/गाना: जूँ (कविता पोस्टर) • कहानी पढ़कर सुनाना (पुस्तकालय की किताबें) • साझा लेखन	• 'म' वर्ण पर कार्य • डिकोडिंग का खेल • अभ्यास पुस्तिका पर कार्य: पाठ-40	• लोगोग्राफिक पठन: बिग बुक (पांच चिया गिन बाज़ार)
5	• कविता/गाना: जूँ (कविता पोस्टर) • सामाजिक एवम भावनात्मक विकास की गतिविधि – 7 • कविता में आए मुख्य शब्दों को लिखना	• अभ्यास पुस्तिका पर कार्य: पाठ-41(साप्ताहिक पुनराव्रत्ति) • डिकोडिंग का खेल	• बच्चों को कहानी की किताबें उलटने-पलटने के लिए देना और उन पर चर्चा करना
6	• कविता/बालगीत (तरिया के दरपन) • मौखिक खेल गतिविधि – 5: अजीब कहानी हमने बनाई • पाठ्यपुस्तक से गतिविधि	• अभ्यास पुस्तिका – 'मैंने सीख लिया-1' (साप्ताहिक आकलन) • सीखने में पीछे छूटे बच्चों के साथ योजनाबद्ध तरीके से समूह में कार्य)	• बच्चों को कहानी की किताबें उलटने-पलटने के लिए देना और उन पर चर्चा करना
अभ्यास पुस्तिका में सप्ताह के अंत में दिए गए 'स्वतंत्र कार्य' पत्रक पर कार्य.			

b. Plan for day 1, week 7

खंड – 1
कहानी सुनकर समझना और सरल प्रश्नों के उत्तर देना |

Table 5

मौखिक भाषा (25-30 मिनट)	
तैयारी और सामग्री	शिक्षक के लिए मुख्य बातें
• अद्दक – बद्दक (तरिया के दरपन) • कहानी – 'कछुआ और खरगोश' (तरिया के दरपन) • कहानी पर खुले और बंद छोर के प्रश्नों की सूची पहले से तैयार रखे	• सभी बच्चों को गतिविधि में शामिल करें • बच्चों को अपनी भाषा में अलग अलग श्रेणियों से जुड़े नामों को बताने के लिए प्रोत्साहित करें • कक्षा का माहौल रोचक बनाये रखें
कविता पर कार्य: अद्दक – बद्दक	
• शिक्षक पहले बच्चों को कविता लय के साथ गाकर सुनाएं| • शिक्षक कविता गाएं व् बच्चों को साथ दोहराने के लिए कहें| • ऐसा 2-3 बार करें, ताकि बच्चे कविता की लय और शब्दों को अच्छे से पकड़ पाएं| • सुनाई गयी कविता के विषय से जुडी कोई और कविता को याद दिलाएं और उन्हें सुनाने को कहें| अगर कोई ऐसी कविता नहीं है तो पिछली सुनी हुई कविता उनसे सुने|	
मौखिक कहानी सुनाना	
• अब बच्चों को गोल घेरे में बैठाएं और शिक्षक स्वयं भी बच्चों के साथ बैठ जायें और कहें – आज मैं आप सभी को एक कहानी सुनाऊंगा/सुनाउंगी, जिसका नाम है – 'कछुआ और खरगोश'. अब बच्चों से कहानी के नाम से अनुमान लगाने के लिए कहें, जैसे – बच्चों के अनुसार कहानी में कौन-कौन होगा? क्या हुआ होगा? आदि| • अब शिक्षक 'कछुआ और खरगोश' कहानी को बच्चो को आवाज़ में उतार-चढाव और हाव-भाव का उपयोग करते हुए कहानी मौखिक रूप से सुनाए| • कहानी सुनाते समय अधिक चर्चा करने से बचें. बीच-बीच में 1-2 अनुमान लगाने वाले प्रश्नों को पूछकर यह सुनिश्चित करें कि बच्चों का पूरा ध्यान सुनने पर है या नहीं| जैसे – क्या खरगोश जीत जायेगा? खरगोश क्यों बीच में रुका होगा? अब कछुआ क्या करेगा? आदि| • कहानी सुनाने के दौरान यदि कोई कठिन या अनजान शब्द आता है तो बच्चों को उनका अर्थ सन्दर्भ के साथ समझाएं, जैसे – जीत, गति, रेस आदि. कहानी सुनाते समय या चर्चा के लिए छत्तीसगढ़ी का ही प्रयोग करें| • कहानी सुनाने के बाद बच्चों से कहानी से सम्बंधित बंद छोर (तथ्यात्मक) और खुले छोर (उच्च स्तरीय चिंतन) दोनों तरह के प्रश्न पूछें. जैसे – कहानी में कौन-कौन था? दौड़ लगाने की बात किसने की थी? दौड़ में जीत किसकी हुई? अगर खरगोश काम नहीं करता तो कौन दौड़ जीतता? कहानी में कछुआ की जगह अगर लोमड़ी होती तो कौन दौड़ जीतता? इस कहानी को आगे कैसे बढ़ाया जा सकता है? आदि|	
लेखन कार्य	
• सुनी गयी कहानी पर बच्चों को चित्र बनाने को कहें| • बच्चों द्वारा बनाए गए चित्र सभी को दिखाने और उसके बारे में बताने को कहें|	
शिक्षण प्रक्रिया की समीक्षा	
• क्या सभी बच्चों ने इस गतिविधि में प्रतिभाग किया? • यदि नहीं, तो उन बच्चों को पहचान कर, अगले खंड में उन्हें थोडें और मौके दें और उन्हें प्रतिभाग करने के लिए प्रोत्साहित करें|	

खंड – 2
'ग' वर्ण पहचानना और लिख पाना

Table 6

डिकोडिंग (40-45 मिनट)	
तैयारी और सामग्री	शिक्षक के लिए मुख्य बातें
• बोर्ड, चाक, बच्चों का नाम चार्ट| • 'ग' से शुरु होने वाले कुछ सरल शब्दों की सूची बनाकर रख लें|	• अभ्यास पुस्तिका पर कार्य करने के लिए बच्चों को उदाहरण सहित निर्देश दें| • बच्चों को आपस में कार्य करने के पर्याप्त मौके दें|
'ग' वर्ण की पहचान	
• कक्षा की शुरुआत स्थानीय कविता या गीत को हाव-भाव के साथ गाकर करें. इसमें सभी बच्चों को हिस्सा लेने के लिए उनका प्रोत्साहन करें. इस खेल गतिविधि के लिए 5-7 मिनट का ही समय दें| • बच्चों को गोल घेरे में बिठाएं और शिक्षक स्वयं भी बच्चों के साथ बैठ जायें| • शिक्षक बच्चों के साथ किसी परिचित शब्द (जैसे – गमला) को मौखिक रूप से तोड़कर–जोड़कर बोलें, जैसे – (गमला – 'ग', 'म', 'ला') और ('ग', 'म', 'ला' - गमला). अब बच्चों से शब्द की पहली आवाज़ ('ग') पहचानने को कहें. इस प्रक्रिया को 3-4 सरल एवम परिचित शब्दों के साथ करें| • अब 'गमला' शब्द को बोर्ड पर लिखें और उसकी पहली आवाज़ के प्रतीक ('ग') पर घेरा लगाएं और बच्चों को 'ग' का उच्चारण करके बताएं| • फिर बच्चों को 'ग' वर्ण का कार्ड दिखाएं और 3-4 बार 'ग' वर्ण का उच्चारण करें. अब बच्चों से 'ग' वर्ण से शुरु होने वाले अन्य शब्द या नाम बताने को कहें और आप उन्हें बोर्ड पर लिखते जायें, जैसे – गमला, गरमी, गधा, गला आदि. शिक्षक लिखे हुए सभी शब्दों को बच्चों के साथ मिलकर पढ़ें और उनकी पहली आवाज़ के प्रतीक 'ग' वर्ण पर गोला लगवाएं| • बच्चों को 'ग' वर्ण कक्षा में प्रदर्शित सामग्री और पाठ्यपुस्तक से ढूंढकर बताने को कहें. शिक्षक पाठ्यपुस्तक में 'ग' वर्ण पर गोला लगाने को भी कह सकते हैं| • बच्चों को डिकोडिंग के खेल के माध्यम से 'ग' वर्ण लिखने का अभ्यास करवाएं, जैसे – सभी बच्चों को गोल घेरे में खड़े होने को कहें. अब शिक्षक हवा में ऊँगली से 'ग' वर्ण लिखें और सभी बच्चों को दोहराने के लिए कहें| अब यही प्रक्रिया अलग-अलग प्रकार से करें और करवाएं जैसे – 'ग' को पैर से, सिर से, कंधे से, कमर से, कोहनी से, घुटने से, ज़मीन पर चलकर आदि लिखने का प्रयास करवाएं| • अंत में, 'ग' वर्ण लेखन से सम्बंधित अभ्यास कार्य को अभ्यास पुस्तिका में पूरा करवाएं| • सभी बच्चों को अभ्यास पुस्तिका से पाठ – 37 पर कार्य करने को कहें और आव्श्यकता अनुसार उनकी सहायता करें| • आप बच्चों के कार्य का अवलोकन घूम-घूमकर करें|	
शिक्षण प्रक्रिया की समीक्षा	
• क्या सभी बच्चों ने अभ्यास पुस्तिका का कार्य पूरी तरह से किया है? • जिन बच्चों को कार्य करने में परेशानी हो रही है, उनकी पहचान करें| उने बातचीत करें और कार्य पूरा करने के लिए प्रोत्साहन दें|	

खंड – 3
बिगबुक की कहानी सुनकर समझना

Table 7

पठन (15-20 मिनट)	
तैयारी और सामग्री	**शिक्षक के लिए मुख्य बातें**
• बिग बुक: पाँच चिया गिन बाज़ार • शिक्षक बिग बुक की कहानी को पहले से पढ़ लें	• सभी बच्चों को गतिविधि में शामिल करें| • सभी बच्चों की बातों को ध्यान से सुनें और सकारात्मक प्रतिक्रिया दें|
बिगबुक पर सामान्य चर्चा	
• कालांश की शुरुआत छोटी कविता से करें. बच्चों को चलने-फिरने/उठने-बैठने का मौक दें| • बिगबुक का मुख्य प्रष्ठ सभी बच्चों को दिखाएं और बिगबुक के मुख्य पृष्ठ में दिख रहे चित्र और कहानी के शीर्षक के बारे में बातचीत करने एवम अनुमान लगाने को कहें| • बिगबुक के सभी पृष्ठों को एक-एक करके पलटते जायें और बच्चों से पृष्ठों पर बने चित्रों के आधार पर कहानी का अनुमान लगाने को कहें| बिगबुक का आदर्श रुप से पठन कम से कम 2-3 बार करें| • बच्चों को यह भी समझने का मौक़ा दें कि इस किताब के हर पृष्ठ पर जो चीत्र बने हैं, वे कहानी में क्या हो रहा है, उससे सम्बंधित है. अंत में, बच्चों ने चित्रों को देखकर जो अनुमान लगाए गए थे, उन पर बातचीत करें|	
शिक्षण प्रक्रिया की समीक्षा	
• क्या सभी बच्चों ने कहानी समझी है? • यदि नहीं, तो ऐसे बच्चों की पहचान करें, तब उन पर थोड़ा अधिक ध्यान दें|	

दिवस 2, 3, और 4 पर दिवसवार योजना के अनुसार इसी तरह कार्य करें.

2. In the Classroom

This section gives a view of what all goes on in a classroom. We begin with a piece from a Teacher's journal describing her day and then move on to how teachers choose and conduct various activities.

2.1 Teacher-Student Relationship: Deepa's Diary

This note is from the Diary of a Teacher, Deepa. It highlights the ways in which a Teacher creates and nurtures the learning space in her class, and the multiple roles she plays - nurturer, teacher, counsellor, and friend.

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29 July 2014

Today was one of those days, when I felt a teacher should have at least 4 pair of hands, and 3 sets of eyes! The day had begun as usual with the children coming together in a circle and singing. I had planned on continuing the introductory numeracy activities that we did yesterday with the blocks. It was a hit, kids totally loved it, and since it was fresh in their memory, I hoped to continue it to teach next level concepts. Just as we were about to settle down for our circle time, I saw Arun stepping out and falling on his face. I rushed towards him and picked him up. He had started to cry furiously. He had scrapped his elbow, and it started to bleed. He held me tightly. I picked him up in my arms, tried calming him down, and took him inside to clean the wound, and apply ointment. I asked Lakshmi, one of the older children, to get some water from the water pot that was kept in the class and gave it to him. The first-aid kit was in the cupboard. I set Arun down, got the first-aid kit, cleaned his wound carefully, bandaged it, and sat him on my lap. He had finally stopped crying. I could see the other children watching me from the corner of my eye. I thought to myself, today's gone – the class will stay distracted. Nevertheless, I tried. While still holding him, I called out to the children to get back to the activity that I had planned for them. To my surprise, they responded quite quickly and went back to their groups. They started categorising different types and colours of blocks. With Arun still in my arms, I went and sat between them, and started introducing them to English names of the colours. We learned the names of four colours – red, yellow, blue, green.

Arun was much calmer now and finally ready to part with me. I placed him near the toy corner and was about to wind up the circle time activity (which felt like an eternity) when I observed Harsh and Shobha starting to argue about which pile the red block should go on. I paused and waited for them to sort it out. But it didn't work. I intervened after a while and asked them what the problem was. When both started speaking at the same time, I stopped them smilingly and said, 'Can one person speak at a time please?' I showed them the red and green blocks and repeated their colours again. And they repeated the colours of the blocks that I had pointed to.

Reflections from this diary entry:

a. Deepa had to be a mother to Arun when he fell. She had to take care of his physical as well as emotional needs. Children are very observant and sensitive. They observed her response to what had happened and could see that she cared for them. This builds a sense of respect and love for the Teacher. (They responded to her instructions for getting back to their activity.)

b. The process of cleaning the wound is also an important lesson for the children to learn. Wounds need to be cleaned from the inside-out to prevent dirt and germs from the outside getting into the raw area. By observing Deepa cleaning Arun's wound in the correct way, the children were introduced to an important skill.

c. Of course, she had to be a Teacher too! She continued from the activity that had been begun the previous day, building new dimensions as well as reinforcing the previous ones. This attention to sequencing and moving from known to unknown is important from a teaching perspective.

d. By allowing time for Harsh and Shobha to sort out their issue, she was giving them space to figure things out on their own, an important response by Deepa to build autonomy in the children. She also made a choice to facilitate when she observed that things were escalating. Deepa also made sure that each of them spoke one at a time. This served two purposes: one, she taught the children to wait for their turn, and two, she was able to gauge their language abilities. So, an element of assessment was integrated in the interaction. Deepa gave individual attention to (tutored) the children to clarify the names of colours.

2.2 Learning Through Play: Kamal's Kitchen Corner

Kamal loves cooking and wishes the same love that he has for cooking develops in his children too! Hence, he consciously planned this activity to be done with his class of 3–6-year-olds, to be done when the opportunity arose. He has shared briefly how the entire episode rolled out.

Sita is a very shy girl and usually keeps to herself. One day, she came to school with a sad face, uninterested in doing anything. After observing her for a while, I went to her to figure out the reason. Sita started sharing her feelings with me slowly. She narrated that her mother was not well, so she wanted to help her in the kitchen but instead her mother asked her to leave her side and go out. She said it was too dangerous for her to be around fire, sharp knives, and hot cooking vessels. I thought, maybe today is the right day to introduce my children to 'Kitchen Corner'.

2.2.4 Teaching Plan and Assessment

The following activities were done with children sitting in a circle. The class strength is 24; 4 children were given one activity each. These activities cater to multiple intelligence, such as verbal, logical, visual, bodily kinesthetic, interpersonal, intrapersonal, and musical. Six kitchen sets and cooking ingredients like dal, rajma, chana, peanuts (any other bigger grains), vegetables, water, salt, sugar are needed for this activity.

a. Group Activity 1: Pretend play of cooking dal

Instructions to the children: Take a small pan and place it on the toy stove in front of you. Now, pour one cup of dal into the pan. Use the spatula to stir the dal left to right carefully, ensuring it is not spilled.

Sing along:

Fry, fry, fry the dal,

fry, fry, fry the gram,

fry it till it roasts

***Assessment**:* Observe if the child is frying with a proper balance. Dal should not spill over. Ask the child to repeat if required. Observe if the child can recollect new words like pan, fry, and spatula.

b. Group activity 2: Pretend play of rolling chapati

Instructions to the children: Make round-round between your palms with the dough and then put it on the chapati plank. Roll it with rolling pin. Make round shape chapati.

"Roll chapatti roll roll,

mamma ka bindi gol gol,

papa ka paise gol gol,

dadu ka chasma gol gol

……sari duniya gol gol"

(Introducing the round shape with familiar objects)

***Assessment**:* Observe the shape and spread of the chapatti. Check if the child can keep things tidy and neat; although this is not really expected, there may be exceptions. Observe if the child can recollect new words like rolling, rolling pin, rolling plank and round.

c. Group activity 3: Pouring the dal into a graduated measure

Instructions to the children: Keep the container on the table. Observe the marks on the container. Count the number of marks. Pour the dal up to the first mark from the container from the bottom, using three fingers. Put it in a separate container. Now pour the dal up to the second mark.

Pour pour, pour the grains
Pour it till the mark ……

Assessment: Observe if the child can transfer the dal from one container to another. Check if the dal is up the given mark. Observe if the child can compare the quantities (more or less in each case). Observe if the child can recollect new words like pour and grains.

d. Group activity 4: Sorting grains containing chana, rajma, and peanuts

Choose bigger grain to avoid children swallowing them. Children should sort the mixed grains into separate bowls using only three fingers. Rhymes can be part of all these activities. Use available rhymes or create a simple one as illustrated above. Children love singing rhymes to a tune.

Instructions to the children: Children, you have been given three types of grains. They look different from each other. This is chana, rajma, and peanuts. Now you separate them and put in a different bowl.

(Children will learn the concept of similarity and difference. This activity also helps in improving their concentration.)

Assessment: Observe if the child can identify similar grains. Check if the child can transfer the separated grains to their respective containers. Observe if the child can recollect new words like grains, chana, rajma, dry peas, and peanuts.

e. Group activity 5: Playing with vegetables

Children will take the vegetables, wash them, and wipe them with a cloth. Peeling the peas from the pod, breaking the beans by hand, and peeling a carrot with a blunt peeler can be included in the activity.

Instructions to the children: Children, before cooking the vegetables, they should be washed, wiped, and cut. Eat lot of vegetables to be strong. Veggies keep us healthy. Take the pods and peel them. Remove the peas one by one. Wash them with the water in the bowl. Then take the beans and wash them. Break the beans using your first three fingers. All the pieces should be of the same size. Take the carrot, wash, and wipe it. Peel with the peeler. Be careful while using the peeler.

Go to market, buy a carrot

Wash a carrot, wipe a carrot

Peel a carrot, eat a carrot

How does it taste?
Carrot is sweet, carrot is crunchy, carrot is healthy, carrot a day keeps doctor away

Assessment: Observe if the child can peel the pod and break the vegetables into approximately the same size. Check if the child can peel the carrot. Observe if the child can recollect new words like pod, beans, carrot, washing, wiping, and peeler.

f. Group activity 6: Sweet, salt, and sour

Bowls of sugar and salt, and a piece of lemon are placed on the table. A mug of water, and three tumblers are provided.

Instructions to the children: Pour water into three transparent tumblers using small beakers. Add a spoon of sugar to the first tumbler and stir. Observe what happens to the sugar. After it dissolves, taste the water. Add a spoon of salt to the second tumbler and stir. Observe what happens to the salt. After it dissolves, taste the water. Squeeze the lemon piece in the third tumbler and stir. Observe what happens to the lemon drops. After it dissolves, taste the water. Now answer the following questions -

Which one dissolved faster, sugar, salt, or lime?

How did the water in the first tumbler taste?

How did the water in the second tumbler taste?

How did the water in the third tumbler taste?

(Children will learn to pour water, and balancing. They observe the salt, sugar, and lime dissolving in the water, and come to a conclusion. They become aware of the taste.)

Assessment*:* Observe if the child is able to identify the taste of each solution. Check if the child can observe what dissolved first. Observe if the child can recollect new words like salt, sugar, lemon, and squeeze.

At the end of the session, Sita was very happy and so also other children. I was also happy since I was able to introduce kitchen in a positive way to all my children.

2.3 Classroom Activities

2.3.1 Story Telling (Kannada)

ನಾನು 3-6 ವರ್ಷದ ಮಕ್ಕಳಿಗೆ ಕಲಿಸುತ್ತೇನೆ. ನನ್ನ ಮಕ್ಕಳು ಕಥೆಗಳನ್ನು ಬಹಳ ಇಷ್ಟ ಪಡುತ್ತಾರೆ. ಅದರಲ್ಲೂ ಪ್ರಾಣಿ, ಪಕ್ಷಿಗಳ ಕಾಲ್ಪನಿಕ ಕಥೆಗಳೆಂದರೆ ಅವರಿಗೆ ತುಂಬಾ ಇಷ್ಟ. ಅದಕ್ಕಾಗಿ ಪ್ರತಿದಿನ ನನ್ನ ಪೂರ್ವ ಪ್ರಾಥಮಿಕ ತರಗತಿಯ 20 ಮಕ್ಕಳನ್ನು ಗಮನದಲ್ಲಿಟ್ಟುಕೊಂಡು ವಿಷಯವಾರು ಕಥೆಯನ್ನು ಹೇಳುತ್ತೇನೆ. 'ಪಕ್ಷಿಗಳು' ಥೀಮ್ ಅಡಿಯಲ್ಲಿ "ಕಾಗೆಯ ಉಪಾಯ" ಎನ್ನುವ ಕಥೆಯನ್ನು ಮಕ್ಕಳಿಗೆ ಮೌಖಿಕವಾಗಿ ಹೇಳಲು ಮೊದಲು ನಾನು ತಯಾರಿಯಾಗುತ್ತೇನೆ. ಅಂದರೆ ಮಿಂಚು ಪಟ್ಟಿಗಳು, ಚಿತ್ರಪಟಗಳು, ಪಕ್ಷಿಯ ಮಾದರಿಗಳನ್ನು ತಯಾರಿಸಿಕೊಂಡು ಸಿದ್ಧವಾಗಿರುತ್ತೇನೆ. ಕಥೆ ಹೇಳುವ ಸಂದರ್ಭದಲ್ಲಿ ಎಲ್ಲಾ ಮಕ್ಕಳು ಒಳಗೊಳ್ಳಲು ವ್ಯವಸ್ಥಿತ ಆಸನ ವ್ಯವಸ್ಥೆ ಮಾಡಿಕೊಂಡು, ಅನೌಪಚಾರಿಕ ಮಾತುಕತೆಯ ಮೂಲಕ ಉತ್ತೇಜಿತ ವಾತವರಣವನ್ನು ನಿರ್ಮಿಸುವುದರ ಜೊತೆಗೆ ಮಕ್ಕಳ ಮನಸ್ಸನ್ನು ಕೇಂದ್ರೀಕರಿಸಲು ಚಪ್ಪಾಳೆ ತಟ್ಟುವ, ಜಿಗಿಯುವ, ಕುಣಿಯುವ ಚಟುವಟಿಕೆಗಳನ್ನು ಮಾಡಿಸುತ್ತೇನೆ. ನಂತರ ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ಮಕ್ಕಳಿಗೆ ಕೇಳುತ್ತೇನೆ. ಅವುಗಳೆಂದರೆ, ಮಕ್ಕಳೇ, "ನಿಮಗೆ ಕಥೆಗಳೆಂದರೆ ಇಷ್ಟನಾ?", "ನಿಮ್ಮ ಮನೆಯಲ್ಲಿ ಕಥೆಗಳನ್ನು ಯಾರು ಯಾರು ಹೇಳುತ್ತಾರೆ?", "ಯಾರಾದರು ಒಂದು ಕಥೆ ಹೇಳಬಲ್ಲಿರಾ?" ಹೀಗೆ ಮುಂದುವರೆಯುತ್ತದೆ. ನಾನು ಈ ಹಿಂದೆ ತರಗತಿಯಲ್ಲಿ ನಾನು ಹೇಳಿದ್ದ ಕಥೆಗಳನ್ನು ಹೇಳುವಂತೆ ಪ್ರೋತ್ಸಾಹಿಸುವನು. ನಂತರ, ಮಕ್ಕಳೇ, ನಿಮಗೆಲ್ಲ ಇಂದು ನಾನು ಒಂದು ಹೊಸ ಕಥೆಯನ್ನು ಹೇಳುತ್ತೇನೆ ಎಂದು ಪ್ರಾರಂಭಿಸುತ್ತೇನೆ. ಮೊದಲು ಕಥೆಯ ಹೆಸರು, ಸಂದರ್ಭವನ್ನು ವಿವರಿಸಿ, ಅದರಲ್ಲಿ ಬರುವ ಪಾತ್ರಗಳನ್ನು ಪರಿಚಯಿಸುತ್ತೇನೆ. ನಂತರ ಮಕ್ಕಳು ಕಾಲ್ಪನಿಕವಾಗಿ ಊಹಿಸಿಕೊಳ್ಳಲು ಸಹಾಯವಾಗುವಂತೆ ಧ್ವನಿಯಲ್ಲಿ ಏರಿಳಿತಗಳು, ಪಾತ್ರಕ್ಕೆ ತಕ್ಕ ಹಾವಭಾವಗಳೊಂದಿಗೆ ಕಥೆಯನ್ನು ಹೇಳುವೆನು, ಜೊತೆಗೆ ಮುಕ್ತ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತಾ ಮಕ್ಕಳು ಆಲೋಚಿಸಲು, ಕಲ್ಪಿಸಿಕೊಳ್ಳಲು, ಪ್ರತಿಕ್ರಿಯಿಸಲು ಅವಕಾಶ ಕೊಡುತ್ತಾ ಮಕ್ಕಳನ್ನು ಕಥೆಯಲ್ಲಿ ತೊಡಗಿಸಿಕೊಳ್ಳುತ್ತೇನೆ. ಉದಾ: "ಮಕ್ಕಳೇ ಕಾಗೆ ನೀರಿಗಾಗಿ ಎಲ್ಲೆಲ್ಲಿ ತಿರುಗಿತು?", "ಕಾಗೆಗೆ ನೀರು ಸಿಕ್ಕಿತೇ?", "ಕಾಗೆ ಹೂಜಿಯಲ್ಲಿನ ನೀರು ಕುಡಿಯಲು ಏನು ಮಾಡಿತು?" ಹೀಗೆ ಹಲವಾರು ಪ್ರಶ್ನೆಗಳನ್ನು ಮಕ್ಕಳ ಮುಂದಿಡುತ್ತೇನೆ . ಕಥೆ ಹೇಳಿದ ನಂತರ ಪುನರಾವರ್ತಿತ ಪ್ರಶ್ನೆಗಳೊಂದಿಗೆ ಕಥೆಯನ್ನು ಪುನಃ ಹೇಳುವೆನು. ಕಥೆಯನ್ನು ಈ ಒಂದೇ ಪದ್ಧತಿಯಿಂದಲ್ಲದೇ ಗಟ್ಟಿಯಾಗಿ ಓದುವುದು, ಚಿತ್ರಪಟಗಳ ಸರಣಿ ಕಾರ್ಡುಗಳ ಬಳಸಿ ಹೇಳುವುದು, ಹಾಗೆಯೇ ಪಾತ್ರಾಭಿನಯ, ಪ್ರಶ್ನೆಗಳು, ನಾಟಕೀಕರಣ ಹೀಗೆ ವಿಭಿನ್ನ ಪದ್ಧತಿಗಳ ಮೂಲಕ ಕಥೆಯನ್ನು ಹೇಳುವುದರಿಂದ ಮಕ್ಕಳಲ್ಲಿ ಆಲಿಸುವ, ಗ್ರಹಿಸುವ, ಅಭಿವ್ಯಕ್ತಿಸುವ, ಭಾಷಾ ಕೌಶಲ್ಯಗಳ ಜೊತೆಗೆ ಕ್ರಿಯಾತ್ಮಕ, ಕಾಲ್ಪನಿಕ, ಸಮಸ್ಯೆ ಪರಿಹಾರದಂತಹ ಕೌಶಲ್ಯಗಳು ಅಭಿವೃದ್ಧಿಯಾಗುತ್ತವೆ.

2.3.2 Guided Play (Kannada)

ಮಕ್ಕಳು ಆಟಗಳನ್ನು ತುಂಬಾ ಇಷ್ಟಪಡುತ್ತಾರೆ. ನಮ್ಮ ಾಲೆಗೆ ಬರುವ ಬಹುತೇಕ ಮಕ್ಕಳು ಸಾಮನ್ಯವಾಗಿ ಹಳ್ಳಿಯಲ್ಲಿಯೇ ವಾಸವಾಗಿರುವುದರಿಂದ ಇವರ ಪಾಲಕರು ಕೃಷಿ ಕೆಲಸವನ್ನೇ ಮಾಡುವವರು, ಹಾಗಾಗಿ ಅಂಗನವಾಡಿ ಕಾರ್ಯಕರ್ತೆ / ಶಿಕ್ಷಕಿಯಾದ ನಾನು ನನ್ನ ಅಂಗನವಾಡಿ ಕೇಂದ್ರಕ್ಕೆ ಬರುವ 3 - 6 ವರ್ಷದ ಮಕ್ಕಳಿಗೆ ಕೃಷಿ ಮತ್ತು ಕೃಷಿ ಸಾಮಗ್ರಿಗಳ ಕುರಿತು ತಿಳಿಸಲು ಅನೇಕ ಚಟುವಟಿಕೆಗಳನ್ನು ಮಾಡುವೆನು, ಆದರಲ್ಲಿ ಮಾರ್ಗದರ್ಶಿತ ಆಟವು ಒಂದಾಗಿದೆ . ಈ ಆಟಗಳನ್ನು ಆಡಿಸುವುದರ ಮೂಲಕ ಮಕ್ಕಳಲ್ಲಿ ದೈಹಿಕ ಬೆಳವಣಿಗೆಗೆ ಅವಕಾಶ ದೊರೆಯುವುದು ಹಾಗೂ ಆಟದ ನಿಯಮಗಳನ್ನು ಅವರು ಅರಿಯುವರು, ಹಾಗಾಗಿ ನಾನು ಮುಂಚಿತವಾಗಿಯೇ ಪೂರ್ವ ತಯಾರಿಯ ಭಾಗವಾಗಿ ಕೃಷಿಗೆ ಸಂಬಂಧಿಸಿದ ಆಟಿಕೆ ಸಾಮಗ್ರಿಗಳನ್ನು ಸಿದ್ಧಪಡಿಸಿಕೊಳ್ಳುವೆನು, ಆಟದ ಸಮಯದಲ್ಲಿ ಮಕ್ಕಳನ್ನು ವೃತ್ತಕಾರದಲ್ಲಿ ನಿಲ್ಲಿಸುವೆನು. ಒಂದು ಚಿಕ್ಕ ಚಟುವಟಿಕೆಯನ್ನು ಮಾಡಿಸುವುದರ ಮೂಲಕ ಮಕ್ಕಳ ಗಮನವನ್ನು ನನ್ನ ಕಡೆಗೆ ಸೆಳೆಯುವೆನು. ಉದಾ: ಚಪ್ಪಾಳೆ ತಟ್ಟುವುದು, ಚಿಟಿಕಿ ಹೊಡೆಯುವುದು ಇತ್ಯಾದಿ. ನಂತರ ಆಟದ ಸಾಮಾನುಗಳನ್ನು ತೆಗೆದುಕೊಂಡು ಆಟ ಆಡುವ ವಿಧಾನವನ್ನು ಮಕ್ಕಳಿಗೆ ತಿಳಿಸುತ್ತಾ ಒಂದು ಬಾರಿ ಪ್ರಾಯೋಗಿಕವಾಗಿ ಆಟ ಆಡಿ ತೋರಿಸುವೆನು, ಮಕ್ಕಳಿಕೆ ಆಟ ಆಡಲು ಅವಕಾಶ ಒದಗಿಸುವೆನು, ಈ ಸಮಯದಲ್ಲಿ ಮಕ್ಕಳಿಗೆ ಸ್ಪಷ್ಟ ಸೂಚನೆಯನ್ನು ನೀಡುವೆನು, ಉದಾ: ಒಬ್ಬರಿಗೊಬ್ಬರು ತಳ್ಳಬಾರದು, ಜಗ್ಗಬಾರದು, ಹಾಗೂ ಆಟದ ನಿಯಮಗಳನ್ನು ಪಾಲಿಸಬೇಕು ಇತ್ಯಾದಿ. ನಂತರ ಕಂಜೀರಾವನ್ನು ತೆಗೆದುಕೊಂಡು , ಮಕ್ಕಳೇ , "ನಾನು ಕಂಜೀರಾವನ್ನು ಬಾರಿಸುವುದನ್ನು ನಿಲ್ಲಿಸುವವರೆಗೆ ನೀವು ಓಡುತ್ತಾ ಇರಬೇಕು, ಬಾರಿಸುವುದನ್ನು ನಿಲ್ಲಿಸುವಾಗ ನೀಡುವ ಸೂಚನೆಯಂತೆ ನೀವು ಆಯಾ ಕೃಷಿ ಸಾಮಗ್ರಿ ಬಳಸಿ ಅಭಿನಯ ಮಾಡಬೇಕು" ಎಂದು ಮಕ್ಕಳಿಗೆ ತಿಳಿಸುವೆನು. ಕಂಜೀರಾ ಬಾರಿಸುವುದನ್ನು ನಿಲ್ಲಿಸುವಾಗ 'ತೊಗರೆ ಕೊಯ್ಯುವುದು', 'ಬಿತ್ತುವುದು', 'ನೇಗಿಲು ಹೊಡೆಯುವುದು' ಇತ್ಯಾದಿ ಸೂಚನೆ ನೀಡುತ್ತೇನೆ . ಆಗ ಸಂಬಂಧಿಸಿದ ಕೃಷಿ ಸಾಮಾಗ್ರಿ ಬಳಸಿ ಮಕ್ಕಳು ಆಬಿನಯಿಸುವರು. ಇದೇ ರೀತಿಯಾಗಿ ಮಕ್ಕಳಿಗೆ ಆಸಕ್ತಿಯಿರುವವರೆಗೆ (10 ರಿಂದ 15 ನಿಮಿಷಗಳು) ಆಟವನ್ನು ಆಡಿಸುವೆನು , ಎಲ್ಲಾ ಮಕ್ಕಳು ಆಟದಲ್ಲಿ ತೊಡಗಿಕೊಳ್ಳುವಂತೆ ಪ್ರೋತ್ಸಾಹಿಸುವೆನು. ಈ ರೀತಿಯಾಗಿ ಆಯಾ ಥೀಮ್ ಗಳ ಸಾಮಗ್ರಿಗಳನ್ನು ಬಳಸಿಕೊಂಡು ಹಲವಾರು ಆಟಗಳನ್ನು ಆಡಿಸುವೆನು.

2.3.3 Action Song (Kannada)

ನಾನು 3-6 ವರ್ಷದ ಮಕ್ಕಳಿಗೆ ಕಲಿಸುತ್ತೇನೆ. ನನ್ನ ಅಂಗನವಾಡಿಗೆ ಬರುವ ಮಕ್ಕಳಿಗೆ ಪ್ರತಿದಿನ ಬೇರೆ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಹಾಡನ್ನು ಹಾಡಿಸುತ್ತೇನೆ, ಆ ಹಾಡನ್ನು ಮೊದಲು ನಾನು ಸಂಪೂರ್ಣವಾಗಿ ಅರ್ಥೈಸಿಕೊಂಡು, ಅಭಿನಯದೊಂದಿಗೆ, ರಾಗಬದ್ಧವಾಗಿ ಹಾಡಲು ತಯಾರಿಯಾಗುತ್ತೇನೆ. ಅಂದರೆ ಮಿಂಚು ಪಟ್ಟಿಗಳು, ಚಿತ್ರಪಟಗಳು, ಮಾದರಿಗಳನ್ನು ತಯಾರಿಸಿಕೊಂಡು ಸಿದ್ಧವಾಗಿರುತ್ತೇನೆ. ಹಾಡನ್ನು ಹಾಡಿಸುವ ಮೊದಲು ಎಲ್ಲಾ ಮಕ್ಕಳು ವೃತ್ತಾಕಾರದಲ್ಲಿ ನಿಲ್ಲಲು ಸೂಚನೆ ನೀಡುತ್ತೇನೆ. ಆರಂಭಿಕ ಚಟುವಟಿಕೆಗಳಾ ದ' ಚಪ್ಪಾಳೆ ತಟ್ಟಿಸುವುದು', 'ಹೋಯಿ ಹೋಯ್' ಹೇಳಿಸುವುದನ್ನು ಮಾಡಿ ಅವರ ಗಮನವನ್ನು ಕೇಂದ್ರೀಕರಿಸುತ್ತೇನೆ. ನಂತರ ಮಕ್ಕಳೇ, "ನಿಮಗೆ ಹಾಡುಗಳೆಂದರೆ ಇಷ್ಟಾನಾ?" ಎಂದು ಕೇಳಿ ಮಕ್ಕಳಿಗೆ ಇಷ್ಟವಾದ, ಅವರಿಗೆ ಬರುವ ಹಾಡುಗಳನ್ನು ಹಾಡಲು ಪ್ರೇರೇಪಿಸುವೆನು. ಹಾಡು ಹಾಡಿದ ಮಕ್ಕಳನ್ನು ಚಪ್ಪಾಳೆ ತಟ್ಟುವ ಮೂಲಕ ಅಭಿನಂದಿಸುತ್ತೇನೆ. ನಂತರ ಮಕ್ಕಳೇ, 'ಇದುವರೆಗೂ ನಿವೆಲ್ಲಾ ಚೆನ್ನಾಗಿ ಹಾಡುಗಳನ್ನು ಹಾಡಿದ್ದೀರಲ್ಲವೇ ಈಗ ನಾನು ನಿಮಗೆ ಒಂದು ಹೊಸ ಹಾಡನ್ನು ಹಾಡಿಸುವೆ. ನೀವು ಗಮನವಿಟ್ಟು ಕೇಳಿಸಿಕೊಳ್ಳಬೇಕು' ಎಂದು ಸೂಚಿಸುತ್ತೇನೆ. ನಾನು ಹಾಡನ್ನು ರಾಗಬದ್ಧವಾಗಿ ಹಾಡುತ್ತೇನೆ. ನಂತರ ನನ್ನೊಟ್ಟಿಗೆ ಹಾಡುವಂತೆ ಹೇಳುತ್ತೇನೆ. ಹಾಗೆಯೇ ಮುಂದುವರೆದು ಅಭಿನಯದ ಮೂಲಕ ಮಕ್ಕಳು ಹಾಡು ಹಾಡಲು ಪ್ರೋತ್ಸಾಹಿಸುವೆನು. ಆ ಹಾಡಿನಲ್ಲಿ ಬರುವ ಹೊಸ ಪದಗಳನ್ನು, ಪ್ರಾಸ ಪದಗಳನ್ನು ಮಕ್ಕಳಿಗೆ ಪರಿಚಯಿಸುತ್ತೇನೆ. ಈ ಹಾಡನ್ನು ಮನೆಯಲ್ಲಿ ತಮ್ಮ ಪಾಲಕರ ಮುಂದೆ ಪ್ರದರ್ಶಿಸುವಂತೆ ತಿಳಿಸುವೆನು. ಈ ರೀತಿ ಹಾಡುಗಳನ್ನು ಹಾಡಿಸುವದರಿಂದ ಮಕ್ಕಳಲ್ಲಿ ಭಾಷಾ ಬೆಳವಣಿಗೆಯ ಭಾಗವಾಗಿ ಆಲಿಸುವ, ಮಾತನಾಡುವ ಕೌಶಲ್ಯಗಳು ಬೆಳೆಸಲು ಈ ಮೂಲಕ ಅವಕಾಶಗಳನ್ನು ಕಲ್ಪಿಸಿಕೊಡುತ್ತೇನೆ.

2.3.4 Patterns (Assamese)

শিক্ষকে শ্ৰেণীকোঠালৈ মেখেলা বা গামোচা দৰে বোৱা কাপোৰ আনিব পাৰে। শিশুসকলক ইয়াক স্পৰ্শ কৰি, অনুভৱ কৰিবলৈ আৰু কাপোৰটো অন্বেষণ কৰাৰ সুযোগ দিব পাৰি। শিক্ষকে ইয়াক প্ৰদৰ্শনত ৰাখি এনেধৰণৰ প্ৰশ্ন সুধিব পাৰে: তোমালোকে কি কি দেখিছা ? তোমালোকে আৰ্হিবোৰ (patterns) দেখিছা নে? তোমালোকে এই আৰ্হিবোৰ আগতে দেখিছা নেকি? আমি আমাৰ চাৰিওফালে একে ধৰণৰ আৰ্হি দেখিব পাৰোনে? তোমালোকে এনে কিছুমান বস্তুৰ নাম দিব পাৰিবানে য'ত আমি এনে ধৰণৰ আৰ্হি দেখিছোঁ?

শিক্ষকজনে বর্ণনা কৰিছে যে সকলো শিশুৱে কিছুমান এনে ধৰণৰ আৰ্হি প্ৰস্তুত কৰিব। শিক্ষকে কাগজৰ কিছুমান পটি বিতৰণ কৰে। শিশুৱে তেওঁলোকৰ কাপোৰত বিচৰা ডিজাইনৰ বাবে পাত বা কাটি লোৱা পাচলি (যেনে ভেণ্ডি, আলু, পিয়াঁজ আদি) বয্ৱহাৰ কৰি কাগজৰ পটিত বিভিন্ন আৰ্হি প্ৰস্তুত কৰিব পাৰে। শিক্ষকে তেতিয়া এখন ডাঙৰ বাতৰি কাকতত পটিবোৰ আঠা লগাব পাৰে আৰু ইয়াক প্ৰতিটো শিশুৱে মেখেলা বা গামোচা ৰ দৰে বা আনকি কোটৰ দৰে মেৰিয়াই ল'ব পাৰে।

শিশুসকলক সুধিব পাৰি কোনে এনে কাপোৰ তৈয়াৰ কৰে। যদি শিশুৱে কয় যে এগৰাকী মহিলা শিপিনী, শিক্ষকে কৈৱল মহিলাই কিয় বয়ন কৰে বা আমি পুৰুষসকলক কাপোৰ বোৱা ও দেখিবলৈ পাওঁ নে নাই সেই বিষয়ে আলোচনা কৰাৰ এই শিক্ষণীয় সুযোগটো ল'ব পাৰে?

2.3.5 Story Telling (Assamese)

শিক্ষকে কাহিনী কোৱা ৰ বাবে কিছুমান ছবি বা ফ্লেছ্ কার্ড বয্ৱহাৰ কৰিব।

জুপি এজনী 3 বছৰীয়া শিশু । তাই বিহু নাচি ভাল পাই আৰু বহাগ বিহুত নাচিবলৈ আগ্ৰহেৰে অপেক্ষা কৰি আছে। যেতিয়া দিনটো আহিল, বৰষুণ আৰম্ভ হ'ল। তাই বৰ হতাশ হৈছিল। তাই তাইৰ মাকক সুধিলে, "মা, আজি কিয় বৰষুণ দি আছে?। মই মোৰ বন্ধুৰ সৈতে কেনেকৈ গৈ নাচিম? তাইৰ মাকে ক'লে, "জুপি, তুমি একেবাৰে চিন্তা কৰিব নালাগে। আমি আমাৰ বাৰাণ্ডাত নাচিব পাৰোঁ নহয় । আহা আমি তোমাৰ বন্ধুবৰ্গৰ ঘৰলৈ যাওঁ। ছাতিটো ল'বলৈ নাপাহৰিবা "। জুপি আৰু তাইৰ মাকে তাইৰ তিনিজনী বন্ধুক তাইৰ ঘৰলৈ নিমন্ত্ৰণ কৰে। তেওঁলোকে গোটেই দিনটো বিহু নাচে। গোটেই কেইজনী ভাগৰি পৰে। তাৰ পিছত জুপিৰ মাকে লুচি-ভাজিৰ প্লেট লৈ উপস্থিত হয়।জুপীয়ে ফুৰ্তিত জঁপিয়াই পৰে ।

শিক্ষকে প্ৰশ্ন সুধিব পাৰে যেনে:

- কোনে বিহু নাচি ভাল পায়?
- আমি কেনেকৈ বিহু নাচিম? কোনোবাই মোক দেখুৱাব পাৰিবনে কেনেকৈ বিহু নাচিব লাগে?
- আমি বিহুত কি কৰোঁ?
- বৰষুণ হোৱাৰ সময়ত তাই কিয় দুখত আছিল?
- বৰষুণৰ সময়ত আমি ছাতি কিয় বয্ৱহাৰ কৰোঁ? কোনোবাই বৰষুণত তিতিবলৈ ভাল পায় নেকি?
- যেতিয়া আমি বৰষুণত বাহিৰলৈ যাওঁ তেতিয়া কি হয়?

শিক্ষকে শিশুৱে দিয়া উত্তৰৰ ওপৰত আধাৰ কৰি কথোপকথন টো সম্প্ৰসাৰিত কৰিব পাৰে।

2.3.5 Song, Dance Activity (Gujarati)

ગીતો અને નૃત્યો દ્વારા બાળકોનો સર્વાંગી વિકાસ પ્રોત્સાહિત થાય તે માટે વિવિધ પ્રવૃતિઓ નીચે ઉદાહરણ તરીકે આપેલ છે. આ પ્રવૃતિઓ વિવિધ ક્ષમતાઓ અને અભ્યાસક્રમના હેતુઓને પરિપૂર્ણ કરવામાં મદદરૂપ રહેશે.

પ્રવૃતિનું નામ: ગીત, સંગીત અને નૃત્ય

સમય: ૪૫ મીનીટ

સાધનસામગ્રી: ખંજરી અથવા ઢોલક

a. તાલની રમત (૫ મીનીટ);

પદ્ધતિ: રમનાર બાળકોને અર્ધગોળમાં બેસાડવા. એક રમનાર/બાળક ખંજરી કે ઢોલક દ્વારા તાલ આપશે જે તાલ પ્રમાણે બહેન રમાડનાર દૈનિક ક્રિયાઓ જેવી કે બ્રશ કરવુ, નહાવું, સાબુ ઘસવો, માથું ઓળવું, નખ કાપવા વગેરે જેવી ક્રિયાઓ નો અભિનય કરશે. રમનાર બાળકો પણ જોઇને તે પ્રમાણે કરશે. દરેક ક્રિયા પછી રમનાર બાળકોને તે પ્રમાણે કરવા કહેવું.

b. વરસાદ તાળી (૩ મીનીટ)

પદ્ધતિ: રમનાર બાળકોને અર્ધગોળમાં ઉભા રાખવા. એક વાર બહેન કરી બતાવશે. એક બોલે એટલે એક આગળીથી તાળી પાડવી, બે બોલે તો બે આગળીથી આમ પાંચેય આગળી સુધી તાળી પાડવી, પછી પાછા કરતા ૫,૪,૩, ૨, ૧ બોલી એમ એક આગળીની તાળી સુધી પહોંચવું. બધા સાથે કરે તો પાણીના ટીપા પડતા હોય તેવો અવાજ આવે

c. મુક્ત ડાન્સ (૭ મીનીટ)

પદ્ધતિ : શિક્ષક ખંજરી અથવા ઢોલક પર તાલ મધ્ય રીતે વગાડશે જેના તાલ ઉપર સૌ બાળકો તેમની મરજી મુજબ ડાન્સ કરશે. તાલ ને ઝડપી, ધીમું કરતું જવું. તે મુજબ ડાન્સ ની ગતિ પણ ઝડપી ધીમી થશે.

d. અભિનય ગીત (૧૦ મીનીટ)

પદ્ધતિ : દરેક બાળકો ને વર્તુળમાં ઉભા રાખી શિક્ષકે ગીતની અભિનય સાથે રજુઆત કરવી. તે મુજબ બાળકો એ પણ ગીત ગાઇને અભિનય કરવાનો રહેશે.

ગીત: મુંબઈથી ગાડી આવી રે ઓ રસિયા રાજા

એક ગાડીને આગળ હાંકો રે ઓ રસિયા રાજા, મુંબઈથી...

એક ગાડીને ઉભી રાખો રે, મુંબઈથી....

એક ગાડીને પાછળ હાંકો રે ઓ રસિયા રાજા, મુંબઈથી...

એક ગાડીને બેસાડી દો રે ઓ રસિયા રાજા, મુંબઈથી....

એક ગાડીને ઉભી કરો રે ઓ રસિયા રહ્યા, મુંબઈથી...

એક ગાડીને ગોળ ફેરવો રે ઓ રસિયા રાજા, મુંબઈથી ...

(જુદી જુદી ક્રિયા ઉમેરવી)

2.4 Positive Learning Habits through Language Teaching, for Ages 6-7

Skills related to positive learning habits, especially in the earlier grades are best achieved when incorporated as an approach of teaching various subjects in the classroom. To that end, some strategies suggested below can be incorporated in the lesson plans for all academic subjects. The lesson plan below is an example of a language lesson, which can be structured to help children have greater focus and pay attention during the lesson.

2.4.1 Learning Outcomes and Assessment Indicators:

Table 1

Learning Outcomes	Assessment Indicators
1. Focuses on the conversation with the Teacher and peers in the classroom	1. Able to recall the content of the conversation, and ask questions to extend understanding
2. Ability to engage with, and complete a given task to the end	2. Able to complete a given activity in the stipulated time without being distracted
3. Able to listen and engage with audio inputs	3. Able to listen, comprehend. and think about a given story

Attention in the classroom has been considered in the context of:

a. Paying attention to audio inputs (instructions, story, conversations).

b. Paying attention to one's actions.

The day is divided into reading/writing corner activity, circle time, language games, instructions, individual work, and book reading by the Teacher. The lesson plan below is an indicator of how the activities can be structured to ensure that every child is included and encouraged to pay attention in the group activities.

a. Summary

Table 2

#	Activity	Duration	Purpose	Material
1	Attendance marking	5 minutes	Paying attention to written language, and engaging with it	An attendance chart put up on the classroom wall, markers
2	Reading and Writing Corner time	15 minutes	Bring children into the environment of the classroom Help them focus their attention away from the distractions of the outside world and into the classroom	Reading corner (books) and writing corner (papers, coloured crayons, pencils, sketch pens etc)
3	Circle time – A step in the instruction of mulakshar 'म'	15 minutes	Listening, paying attention to what others are saying, paying attention to know when one's turn is up Being focused on the activity instead of zoning out	Ball

4	Language games in smaller groups – find the 'म' sound in the words	30 minutes	Coordination of audio and physical movement. Attention to the auditory input as well as the self.	Three paper cups, three marbles
5	Physical Games and songs	10 minutes	Coordination of audio and physical movement Attention to the auditory input as well as the self	None
6	Book Reading – Neena ani Manjar	20 minutes	Paying attention to the story and active listening	Book – Neena ani Manjar

b. Details of activities

i. Instead of the Teacher marking the attendance, children sign in their name on the common attendance sheet. Children engage with the attendance sheet to find their name, and then mark their attendance opposite it. This activity helps children to focus their attention on the written material and engage with it.

Criteria for assessment:

- Children can mark their attendance against their own name, and do so without fail, without needing to be reminded every day.
- Children can recognize their own name from a list of other names.

ii. Children are in a distracted state when they come to the classroom. A habit of settling in one of the two corners (Reading or Writing) helps them center their attention to the classwork and keep outside distractions at bay. This is a good exercise for developing print awareness in children.

Criteria for assessment:

- Children become quiet as they settle in the reading and writing corners, and start to read a book, draw pictures, or write something.
- They talk less with each other and focus more on the activity they have chosen.
- Children take the first steps towards reading and writing (emergent literacy) circle time.

iii. The Teacher conducts a game for revision of the sound of the mulakshara 'म'. The Teacher says a word that has the sound of 'म' and throws the ball towards any child. The child who receives the ball repeats the word and comes up with another word that has the sound 'म'. Next, the ball is thrown towards another child. Since there is no fixed sequence of turns, all children must stay alert and engage with the game, lest they miss their turn. They also must pay attention to the words being said, as they must repeat the last word. This helps them focus their attention on the activity throughout the duration of the game instead of mentally signing out after their turn is over. In this way, children can decode the sound of 'म', and tell words which have the sound 'म'.

Criteria for assessment:

- Has eyes on the ball and pays attention to whose turn it is.
- Listens actively, and remembers the words being said in the game.
- Can differentiate between different sounds (phonological awareness).

iv. Children sit in pairs. Each pair is given three paper cups and three marbles. Paper cups are arranged in a line as first, middle, and last, and both children sit on the same side of the cups. One child says a word that has the 'म' sound in it. The other child puts the marble in the first, middle or last cup based on where the sound of 'म' was heard in the word. For example, for the word कमळ, the child should put a marble in the middle cup. For the word मामा, the child should put one marble in the first cup and one in the last cup.

Criteria for assessment:

- Listens to the word with attention, can identify the location of the specific sound and place the marble accordingly.
- Can differentiate between different sounds (phonological awareness).

v. The Teacher engages children in a game of 'तळ्यात मळ्यात'. Children stand in a circle and hold hands. When the Teacher says 'तळ्यात', children jump inwards, and when the Teacher says 'मळ्यात', they jump outwards. Children pay attention to the specific word being said by the Teacher and must act accordingly. Unless they pay close attention, they are unable to continue the game.

The Teacher performs actions without singing the words to the poem that the children know, and the children see the actions and sing the poem. Physical activity at regular intervals in the classroom helps to increase children's attention span in the subsequent activities.

Criteria for assessment: Coordinates audio and physical actions together.

vi. As a follow up activity, the Teacher can ask children to read aloud any appropriate story. She can show children the illustrations, ask questions about the story, and ask children to guess what will happen next.

Criteria for assessment:

- Follows through the story.
- Answers the questions asked, is engaged with the story.
- Can come up with guesses about the direction that the story will take.

2.5 Learning Mathematics through Animals Around Us

The community around this rural school in Tarakeshwar shelters several animals and birds, particularly those that are reared as pets or domestic animals. Families in the community take care of these animals by feeding them and providing them with a place. Other animals also live in proximity to human habitation.

The Teacher Barsha uses this extensively in her teaching. Here is a sample from her teaching plans for children of ages 3-6 years. While this plan achieves other Learning Outcomes, for simplicity, the ones related to the domain of Cognitive Development, and within that the Curricular Goal of Developing Mathematical Understanding and Abilities is highlighted in this illustration.

Narrate the story of a cowherd. It goes like this:

"Long long time ago, there was a cowherd family in Tarakeshwar. They had many, many cows. Every day the kids, Debanshi and Dipanjan, used to take them out for grazing in the late afternoon. They passed through the temple street, went into the nearby forest outside the village, and returned in the late evening after gathering all the cows.

One day, Debanshi suddenly started wondering…How do we know if any cow goes missing or gets lost. She was worried. She started thinking about what to do. She also shared this concern with her brother. They didn't know any numbers or counting at that time.

When they shared this with their neighbour Balmiki, he suggested an idea. Balmiki said that for each cow that passes out of their gate, put one pebble in a sack. And when they return home from grazing, when each cow enters their gate, take out one pebble from the same sack. This way you will be able to know if all the cows have returned. Debanshi and Dipanjan still looked surprised as they didn't understand how this works. Children, did you understand how Balmiki's idea helps to check if all cows have returned or not?

Debanshi and Dipanjan wanted to try the idea and see how it went. The next day they did exactly as Balmiki had suggested. As each cow left the gate, they put one pebble inside the sack. When they returned, they took out one pebble for each cow that entered the gate. Suddenly, they understood how this worked, and were so happy. That evening they thanked Balmiki and offered him kheer made with rice and milk as a token of gratitude."

Intersperse the narration with questions to keep the children engaged.

At the end of the story, engage the children in an activity. Take a box of marbles – with as many marbles as children – and another empty box. As children go out, they pick a marble from the first box and put it into the second box. As they come back in, they pick a marble from the second box and put it back in the first one.

Note: We may not get a response immediately from the children. It is more about providing opportunities to observe and think. Premature instruction doesn't help much.

Next day, pick up the story continue. Something like this:

"Debanshi and Dipanjan are happy with their new found method to keep track of their herd. One day, when they returned in the evening after grazing, they started taking out one pebble from the sack as each cow went inside. But they were shocked and worried. Two pebbles were still left but they didn't see any cows outside. Children, why do you think Debanshi and Dipanjan were shocked and worried? What does this mean? Some other day, the sack was empty as all the pebbles were taken out. But still one cow was outside. What does this mean, children? Is this possible?"

Next day, draw sticks – as many sticks as number of children – on the running board just adjoining the floor. Ask the kids to add a face to a stick as they come into class each day.

After a few months, follow this up by asking the class, "We can only know if some kids have not come to school today looking at the board. What can we do if we want to know who has come and who has not come to the school today?"

2.6 Differentiated Learning for Mathematics in Grade 2

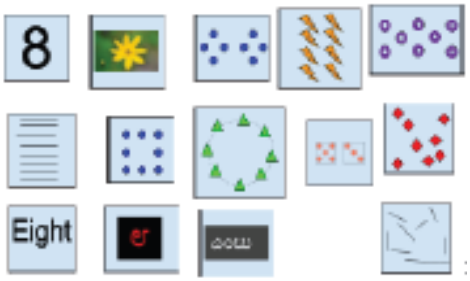
Utpal teaches second grade kids in Morigaon. He had been presenting various scenarios, contexts, and opportunities for children to engage, explore and discover various aspects, concepts and patterns related to addition and subtraction. Over a few days of observation, during his interactions, he could see that the children were at varying levels and paces. Utpal has split the class into a few groups based on his observations.

2.6.1 Group A

Priyom, Aasin and Tashi are still mastering the number names, and counting of 2-digit numerals. This also seems to trouble them while performing basic operations involving 2-digit numbers. Aasin requires some more exposure to the meaning of subtraction. Deepshika is quite comfortable with counting but is still learning to add and subtract.

For this group, Utpal has planned the following activities:

a. A number card activity: to be done in pairs where number cards (for number 1-20) have a pattern on them. Shuffle and distribute between 2 kids. We also have a shared pile of simple objects kept in the centre (buttons, seeds etc.). One card is kept face up, and the corresponding number of objects kept next to it. Each turn, a player must pick out a card from their collection and place it on top of the central card pile, Next, the player must either insert or remove objects from the central pile to match the top card. So, each time they must see how many objects to insert / remove, i.e., find the difference.



b. Counting 1, 2, 3, ...100, and skip counting 10, 20, 30, both forward and backward activity, can be done, with the children correcting each other in the process.

c. To emphasise the meaning of subtraction, and demonstrate the relationship with addition:

   Some objects are placed (say 10 buttons), which the kids can count. Now, say, as Aasin closes her eyes, Tashi hides some of the objects in her hand (say 4 buttons) and hides her hand. When Aasin opens her eyes, she must tell how many objects Tashi has picked up. The Teacher could demonstrate it first, and ask the following questions:

Case 1: Utpal closes his eyes, and Aasin picks and hides the buttons. Next, Utpal guesses how many buttons Aasin has.

i. How was I able to tell? Is this a magic trick?

Case 2: One round where Aasin closes her eyes, and the Teacher picks and hides buttons. Next, Aasin guesses how many buttons Utpal has.

i. Do you agree with Aasin?
ii. Why do you think 4 buttons are hidden?
iii. How did you find out?
iv. Do you all agree that I have 4 in my hand? Are you sure?
v. How can we find out?
vi. Do you have any questions?

Such questions/prompts are important as they will help Utpal to gauge children's thinking process, and provide them opportunities to think, articulate and express. Gradually, the number of objects could be increased. (Counting from 6 objects on ground to reach 10 and counting back from 10 by picking 4 objects can be presented.)

2.6.2 Group B

Although Tsewang, Javed and Toshili understand the meaning, they are yet to comprehend/ internalise the formal symbolic representation in addition (i.e., 4 pencils and 3 more pencils is equal to/is the same number as/is equal to 7 pencils => 4+3 = 7).

For this group, Utpal gives close to real-life scenarios for subtraction through addition.

a. Problem: Rintu and Pinky have 14 shells together. Rintu says he has 5 shells. Can we tell how many shells Pinky has?
b. Problem: Satapida has 3 lemons, but she will need a total of 10 lemons to make lemonade for everyone. How many more lemons should she get from the market?
c. Problem: 13+___=29
d. Problem: ___+45 = 59
e. Simple grid addition puzzles such as:
f. Utpal notices that they can solve simple subtraction word problems with small numbers and has a dialogue with them to show the corresponding symbolic notation. He uses the examples/scenarios that they had finished earlier.
g. During his interaction, he found that the understanding of place value was still not sufficient, and Tsewang at times slipped in identifying bigger and smaller numbers. Utpal suggested playing skip counting by 10s and tried to nudge the children to see what each number name means, i.e., forty-eight is forty and eight: 40 + 8.
h. An activity/game was given using the 1-100 number chart: On the number chart, some treasures (objects) are placed randomly. Each player's pawn is also placed randomly at different places on the chart. On each turn, a player can do either a +1, -1, +10 or a -10 (they have to say out loud their choice while moving). The aim is to collect the maximum number of treasured objects.

i. Utpal realised that it was better for the entire class to engage with the game for sufficient time to appreciate the place value system. He had some ideas - to start with, toothpicks, then flats-longs-units, and then use the exploding dots method; he thought he would think and plan later.

2.6.3 Group C

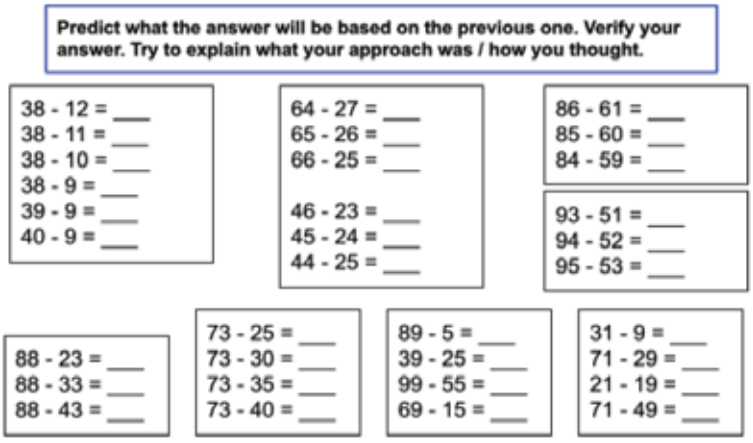
Kabir, Pronoi, and Ridhima can encounter, identify, and employ addition and subtraction using their own methods in several scenarios. They are predominantly using skip counting by 10s, and counting on/back with 1s, i.e., split numbers into tens and ones, and carrying out the operation. Pronoi struggles a bit with comprehending word problems but when Utpal assists him to understand, he can solve the problem. Children are also able to do mental computations for problems involving numbers up to 20 but slip with bigger numbers occasionally.

For this group, Utpal plans:

a. Skip counting (group task) by 2s, 5s and 3s. (Questions like 'Do you think the number 46 comes in the skip counting of 2s? Why/Why not? How do you know?' can be asked for 2s and 5s).

b. To gauge comprehension skills, Utpal Bhaiya asks Pronoi to read a short story, and narrate it in his own words.

c. Custom worksheets with problems to improve number flexibility and number sense.



Khiren and Momtaz have started using numbers flexibly while performing operations and also sometimes doing interim calculations mentally. Utpal bhaiya has thought of:

1. Addition and Subtraction chart to observe patterns and relationships, questions like ___ -

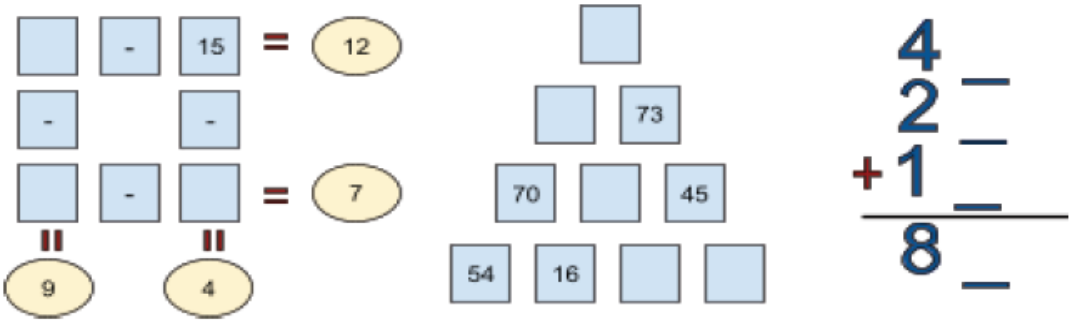
2.6.4 Group D

Khiren and Momtaz have started using numbers flexibly while performing operations and sometimes while doing interim calculations mentally.

For them, Utpal has thought of:

a. Addition and subtraction chart to observe patterns and relationships, questions like ___ - ___ = 18.

b. Simpler versions of puzzles like Grid subtraction, Number Towers and Cryptarithms.



c. Introduce the standard method of subtraction from right to left using place value, i.e., borrowing if necessary (after the whole class session on place value concept activities).

Utpal has tried to keep a good mix of activities that the children can do/pursue individually or in pairs or in small groups while he flexibly keeps moving around groups to assist, have an interaction/dialogue, and lead the activities which require his presence. He has held back presenting the standard method of subtraction till a later point of time before emphasising the meaning and operation of subtraction, and exposing them to various situations, scenarios, and problems to use the conceptual understanding, starting from concrete experiences, expressing, and describing, and using symbolic representation. Once the children have a strong understanding of subtraction and can use numbers flexibly to apply in diverse contexts, they would be able to appreciate and receive the standard method better, he thought. Post the session, while he was reflecting on the session, he felt a marketplace simulation using currency coins and notes would be a good way to wind up after a few weeks.

Note: There is no fixed grouping. Teacher chooses and modifies the grouping dynamically based on where the children are currently, and the appropriateness of the planned task/problem/activity.

Summary of Learning Outcomes covered in the activities above.

a. Demonstrates skip counting in 2s or 3s on a number line (graduated) or blocks/pictures.

b. Reads and writes Indian numerals for numbers up to ninety-nine using place value in groups of tens and ones.

c. Counts in groups of 10s, 20s, 30s, up to 99.

d. Using symbols or dots of the same quantity in different patterns.

e. Uses flexible strategies and derives combinations of composing (add together) and decomposing numbers (take away for the set).

f. Adds two numbers using place value concept (sum not exceeding 99) and applies them to solve simple daily life problems/ situations.

g. Subtracts two numbers up to 99 using place value and applies them to solve simple daily life problems/ situations.

h. Appreciates and applies relationships between addition and subtraction of numbers.

i. Identifies appropriate operation (addition or subtraction) to solve problems in a familiar situation/context.

j. Adds up notes and coins to form amounts up to Rs 100.

k. Follows instructions comprising several steps (8 to 9 instructions at a time).

l. Engages in discussion about a topic and raises and responds to questions.

m. Attends to adult-initiated tasks that are not based on their interests (e.g., participates in a teacher-led small group).

n. Sustains engagement with a task for long periods of time (30 minutes).

o. Responds consistently to adult suggestions to try out different activities.

p. Considers ideas from adults and other children in finding a solution or strategy.

2.7 Conversations on My Body (Tamil)

நோக்கங்கள்:

இந்த செயல்பாடுகள் குழந்தைகளில் பின்வரும் கற்றல் திறன்களை மேம்படுத்துவதை நோக்கமாகக் கொண்டுள்ளன:

- ராகத்துடன் எளிய பாடல்களைக் கேட்டல் , குழுவாக நயத்துடன் பாடி மகிழ்தல்.
- பாடல்களைக் கவனத்துடன் கருத்தூன்றிக் கேட்டுப் புரிந்துகொள்ளுதல்.
- கேட்ட/படித்த பாடல்களிலிருந்து கேட்கப்படும் எளிய வினாக்களுக்கு முழுமையான சொற்றொடரில் விடை கூறுதல்
- கேட்டவற்றுடன் தன் அனுபவங்களைத் தொடர்புபடுத்திப் பேசுதல்
- எளிய சந்தப்பாடல்களை இசையுடன் படித்தல்

செயல்பாடு 1: முன்னறிவோடு தொடர்புபடுத்துதல்

ஆசிரியர் மாணவர்களின் உடல் உறுப்புகள் குறித்த முன்னறிவைச் சோதிக்கும் வகையில் எளிய கேள்விகளைக் கேட்டுப் பதில்களைப் பெறுதல்.

கண்ணால் நானும் பார்க்கிறேன்	
காதால் நானும் கேட்கிறேன்	
மூக்கால் நானும் முகர்கிறேன்	
நாக்கால் நானும் சுவைக்கிறேன்	
பல்லால் நானும் கடிக்கிறேன்	
வாயால் நானும் உண்கிறேன்	
கையால் நானும் எழுதுகிறேன்	
காலால் நானும் நடக்கிறேன்	
வாயால் நானும் பேசுகிறேன்	

- நம் உடலில் உள்ள உறுப்புகள் யாவை? அவை எங்கெங்கே உள்ளன? (மாணவர்களை உடலுறுப்புகளின் பெயர்களைச் சொல்லவைப்பதோடு அவ்வுறுப்புகளைச் சுட்டிக்காட்டவும் செய்யவும்)
  இந்த உடலுறுப்பின் பெயர் என்ன ? இது எதற்குப் பயன்படுகிறது?

செயல்பாடு 2:

ஆசிரியர் எளிய கேள்வி-பதில்கள் மூலம் 'என் உடல்' பாடலின் ஒவ்வொரு வரியையும் அறிமுகம் மாணவர்களிடையே அறிமுகம் செய்வார்.

- ஆசிரியர்: கண்ணால் நாம் என்ன செய்வோம்?
- மாணவர்: பார்ப்போம்.
- ஆசிரியர்: கண்ணால் நாமும் பார்க்கிறோம் (பாடல் வரி)
- ஆசிரியர்: காதால் நாம் என்ன செய்வோம்?
- மாணவர்: கேட்கிறோம்.
- ஆசிரியர்: காதால் நாமும் கேட்கிறோம் (பாடல் வரி)

இதே போன்று ஒவ்வொரு வரியையும் அறிமுகப்படுத்தியபின் ஆசிரியர் பாடிக்காட்ட ஆரம்பிப்பார்.

செயல்பாடு: 3 - ஆசிரியர் உடல்மொழியுடன் பாடிக்காட்டுதல்

பாடலின் ஒவ்வொரு வரியையும் தகுந்த ஏற்ற இறக்கங்களோடும் உரிய உடல் மொழியோடும் ஆசிரியர் ஓரிரு முறை பாடிக்காட்டி மாணவர்களைக் கவனிக்கச் செய்வார்.

நாம் எந்த உடல் உறுப்பால் பார்க்கிறோம்?

நாம் எந்த உடல் உறுப்பால் கேட்கிறோம் ?

மாணவர்கள் நன்கு கவனித்துப் பாடலை உள்வாங்கியபின் ஆசிரியர் மாணவர்களைப் பின்தொடர்ந்து பாடச் செய்வார். மாணவர்கள் ஆசிரியரைப் பின்தொடர்ந்து உரிய சந்தத்துடன் பாடுவார்கள்.

செயல்பாடு: 4 - ஆசிரியர் உடல்மொழியுடன் பாடிக்காட்டுதல்

ஆசிரியர் ஒவ்வொரு உடலுறுப்பையும் சுட்டிக்காட்டி அதற்குரிய பாடல்வரியை மாணவர்களைப் பாடிக்காட்டச் செய்தல்.

ஆசிரியர் கண், காது, மூக்கு முதலிய உறுப்புகளை தன் சுட்டுவிரலால் சுட்டிக்காட்டியபின் அதற்குரிய பாடல்வரியை மாணவர்களைப் பாடச்செய்தல்.

செயல்பாடு: 5 – மாணவர்களைக் குழுவாகப் பாடவைத்தல்

படங்களுடன் பாடல்வரிகள் அடங்கிய தாள்களை மாணவர்களிடையே அளித்து ஆண்/பெண்/ முதல் குழு/ இரண்டாம் குழு என மாறி மாறி பாடல் வரிகளை மாற்றி ஆசிரியர் மாணவர்களைப் பாடவைப்பார்.

கரும்பலகை: ஆசிரியர் உடல் உறுப்புகளின் பெயர்களை கரும்பலகையில் எழுதிக்காட்டி மாணவர்களை வாசிக்கச் செய்வார்.

செயல்பாடு: 6 – உடல் உறுப்புகளின் படங்களைக் காண்பித்துப் பாடவைத்தல் / பாடல்வரிகளை மாற்றிப்பாடுதல்.

ஆசிரியர் கண், காது, மூக்கு முதலிய உடல் உறுப்புகளின் படங்களை மாணவர்களிடையே காண்பித்து அதற்குரிய பாடல் வரிகளை மாணவர்களைப் பாடவைப்பார். மேலும் சிறு சிறு வினாக்களை எழுப்பி உரையாடுவார்.

கரும்பலகை: உடல் உறுப்புச் செயல்பாடுகளுக்குரிய வினைச் சொற்களைக் கரும்பலகையில் எழுதி மாணவர்களை ஆசிரியர் வாசிக்கச் செய்வார்.

பாடல்வரிகளை மாற்றிப்பாடுவதற்கான மாதிரி வரிகளை ஆசிரியர் வழங்கி மாணவர்களை பாடல்வரிகளை மாற்றிப்பாடவைப்பார்.

செயல்பாடு: 7 – மதிப்பிடுதல்

a. பாடலின் அடிப்படையில் வாய்வழி கேள்விகள் கேட்பது எடுத்துக்காட்டு: உணவை சுவைக்க நீங்கள் எதைப் பயன்படுத்துகிறீர்கள்? உங்கள் கால்களைக் கொண்டு என்ன செய்வீர்கள்?

b. மாணவரின் அன்றாட வாழ்க்கையுடன் தொடர்புடைய வாய்வழி கேள்விகளைக் கேட்பது எடுத்துக்காட்டு: உங்கள் கைகளால் நீங்கள் செய்யும் பல்வேறு விஷயங்கள் என்ன? உங்கள் குடும்ப உறுப்பினர்கள் தங்கள் கைகளால் என்ன செய்கிறார்கள்?

c. தனித்தனியாக பாடலைப் பாடுவது. மதிப்பீட்டு அளவுருக்கள் பின்வருமாறு:

மாணவர் பெயர்	குரல் ஏற்ற இறக்கம்	உடல் அசைவு	உச்சரிப்பு

d. பாடலில் ஒத்த ஓசையுடைய சொற்களை கண்டறிதல். அது போன்ற சொற்களை உருவாக்குதல்

2.8 Teaching Plan for Visual Arts (Ages 7-8)

2.8.1 Learning Outcomes

Table 1

Learning Outcomes	Assessment Indicators
1. Observes the environment for patterns, colours, and designs to be represented	Relates colours, their shades and their names with objects and sights from their surroundings Observes, compares, matches, and contrasts colours in the market
2. Pays attention to visual and thematic details while creating and viewing artworks	Makes choices based on pattern, colour, and the image they want to represent while choosing materials for the collage
3. Creates a variety of textures by collaging different materials (applicable from ages 6-7 years)	Juxtaposes fabric, paper, plastic wrappers, fragments from magazines, etc in the collage
4. Uses innovative ways to combine and create different patterns (applicable from ages 6-7 years)	Creates varying textures of the same colour by using different materials Creates visual patterns by collaging two or three materials in a structured way

2.8.2 Connections and Linkages

a. Learning Outcome 3 and Learning Outcome 4 are applicable from ages 6-7 years and become the foundation for collage activities. However, in the age-group of 7-8 years, children are led towards a more detailed exploration of materials, and in the choices, they make, which is expected in Learning Outcome 1 and Learning Outcome 2. They are encouraged to create more iterations.

b. These Learning Outcomes can also be linked to language and vocabulary development related to sensorial experiences.

2.8.3 Instructional Strategy

In addition to classroom activities, this lesson can also be enhanced by a field visit to the local market, and home assignments to collect a variety of fabric rags.

2.8.4 Content

a. The rationale for this content is based on continuing the exploration of colour with more attention to detail in all aspects of our life. It makes the child observe every moment of the day, the objects around, the people on the street, etc.

b. Children will also explore collage using a variety of materials.

c. A trip to a close-by market will take children to an enjoyable exploration of a variety of materials and colours.

d. Material used - Paper, pencil, eraser, crayons, flowers, petals, pebbles, coloured chalks.

2.8.5 Teaching Plan and Assessment

This lesson plan comprises activities panning over two days for 60 minutes each day.

a. Day 1: Field trip to the local market and introduction to Collage

Children can be taken to any lively and active market close-by, where they will observe, and take notes and make drawings of the different things they see and the play of colours in the busy market.

Children should be encouraged to observe/imagine the textures of objects and materials.

Criteria for Assessment:

- Relates colours, their shades and their names with objects and sights from their surroundings
- Observes, compares, matches, and contrasts colours in the market

After the field trip, children are introduced to the collage activity that they would be doing in the next lesson, for which they need to prepare.

Children can be asked to make some drawings or plan what kind of artwork they would create, and the different materials, colours, and textures they would like to collage.

Remind them to create bold drawings with spaces that can allow for pasting paper, fabric, and other materials in the collage. Ask them to keep their drawings safely, to continue with the collage in the next lesson.

Criteria for Assessment:

- Ideates and creates drawings
- Visualises the process of collaging materials and accordingly modifies drawings

Children are asked to explore their surroundings for a variety of materials for their collage. Criteria for selection should be based on colour and texture, and suitability for pasting on paper/ cardboard. Give them some examples like tearing fragments of colours from pictures

in old newspapers and magazines, gathering colourful food wrappers and cleaning them for use, sourcing pieces of waste fabric or textile from a tailor or from one's own home, etc. They can be encouraged to take help from their siblings, friends, and family members. They should be asked to bring their materials in the next lesson.

Criteria for Assessment:

- Children collect a variety of materials after school hours, on their way home, at home and from the community
- Children bring the collected material in the next lesson

b. Day 2: Collage Activity

Everyone in the class is seated in groups so that scissors and glue can be shared.

They can be asked to look at their drawings again and organise their materials. All the children should be encouraged to share their materials, and ideas with their groupmates.

Children work on their individual artworks but share their materials and tools in the group. They are encouraged to observe one another's work, discover new ideas, methods, and learn from one another.



Conversations with the children could be initiated in these ways:

- You have so many different shades of yellow. Where did you source these?
- Could you tell me a little about how you will be colouring your artwork?
- Could you tell me more about the pattern that you are creating? Have you seen this some where, or did you imagine it?
- Your friend here seems to need some dark colours; would you be able to help him find some dark colours?

Criteria for Assessment:

- Juxtaposes fabric, paper, plastic wrappers, fragments from magazines, etc. in their collage
- Pays attention to colours, shades and variations in patterns and textures while creating the collage
- Creates varying textures of the same colour by using different materials
- Creates visual patterns by collaging two or three materials in a structured way
- Modifies and improvises over the original drawing to accommodate materials
- Creates associations with everyday objects and their surroundings through the artworks

Children are asked to clear their workspace and put back materials in an organised manner. Those who finish early are requested to help their peers. The children are asked to display their completed works so that everyone can take a look.

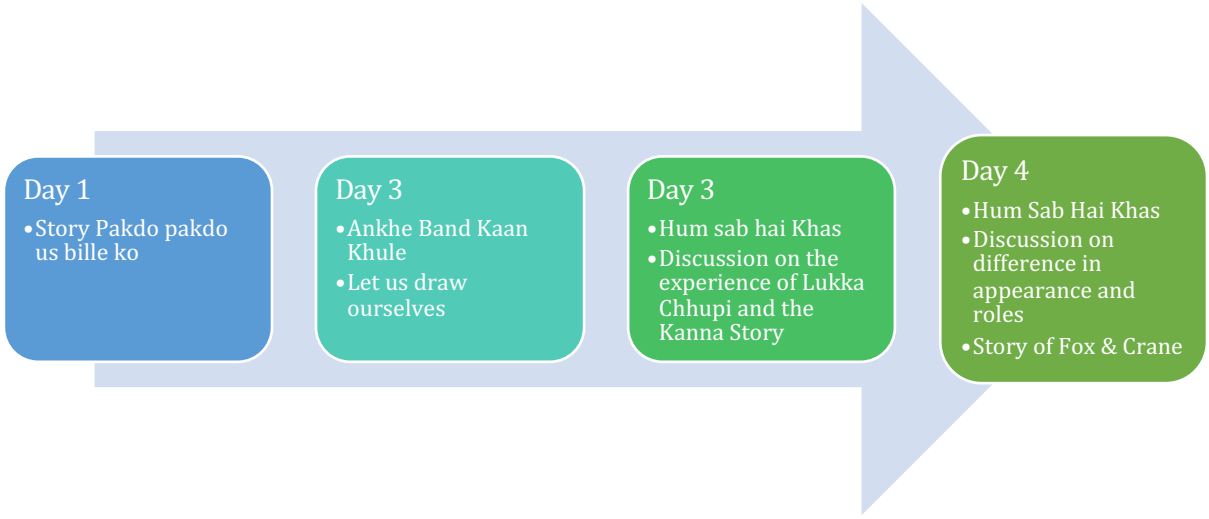
A brief closing discussion is initiated to appreciate the works and share their learnings.

Criteria for Assessment:

- Children appreciate the details of colour and texture, as well as choice of materials used in the artworks of their peers
- Children appreciate and share the methods discovered through the working process
- Children appreciate help received or express their problems and challenges while working

2.9 Introducing Diversity, for Ages 3-5

This set of activities are for children whose home language is Hindi.



2.9.1 Day 1

This story normalises disability, through the story of Dip Dip, a spirited girl in the wheel chair.

a. Activity - Story- Wings to Fly/Ud Chali (20-25 minutes)

Teacher: Okay children, let us read a story about the girl who had adventures on her gaadi the wheelchair.

Kaapi, the cat is lost, and Dip Dip wants to help her friend Mimo find it. She enthusiastically moves around on her wheelchair, looking for Kaapi. Dip Dip looks everywhere until finally she finds Kaapi high up a tree. But it takes more than a naughty cat to outsmart Dip Dip, and no, she's not going to let the fact that she is in a wheelchair stop her.

The book is quite an adventure, telling the story of an ordinary special girl. Though in a wheel-chair, she can manage her life. She does need your help, but as much as any other kid would do in different ways.

The full story read aloud can be found here
https://www.youtube.com/watch?v=HPzK3ooyJ2A

Teacher: What fun Dip Dip had!! Did you all ever have such fun?

Child B: Once when I was chasing a hen.

Child C: Whenever we play pakdam-pakdaai.

Teacher: Yes, let us play a special kind of pakdam-pakdaai tomorrow. Have you played aankh micholi? We will have to take turns, blindfold our eyes, and catch hold of the other players.

2.9.2 Day 2

a. Activity 1 - Ankhe band-kaan khule (Eyes closed – ear open) (40-45 minutes)

Aankh Micholi is an old and popular outdoor game among children. In this game, one child who is the 'seeker' or the 'it' is blindfolded with a piece of cloth and must catch another one among the other children. All the other children scatter and make noises for the 'seeker' to chase and catch them. The 'seeker's' turn comes to an end as soon as they can catch another player. Now, this player becomes the 'seeker', and the game continues till everyone decides to end the game.

This game helps in developing sensory skills and alertness. The 'seeker' must make a judgement of space based on the sounds they hear.

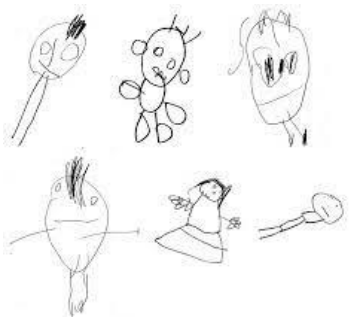
Variation: Children can also play a one-legged race; hop on one leg to reach from one spot to another.

b. Activity 2 - Let us draw ourselves (15-20 minutes)

The Teacher distributes paper and crayon to children.

Teacher: Now children let us imagine how we looked we were blindfolded and draw our picture.

Children are in Grade 1, not very sophisticated in their drawings, but they should have developed good control when holding a pencil, crayon, or paintbrush. They may just draw a few lines as follows:



Drawing A

Drawing B

Drawing C

The drawing could be of any shape or structure. While the children are doing their sketches, the Teacher should move to each table. She may find something like Drawing A or B. Teacher will talk to the children and write whatever they explain about their drawing. To elicit their explanations, she may ask questions such as, 'Oh, this is nice, what have you made here, Ra-

hul?' 'Wow, Razia, is this you in the drawing? What were you feeling while closing your eyes?'.

Teacher should then ask children to see each other's work and appreciate how they have drawn themselves.

Teacher should wind up the activity roughly in the time she has decided. If some child insists on drawing more, she can keep the sheet in their portfolio, and ask them to finish it in their free time. This way, the Teacher can provide individual space to all the children who are working at different speeds.

2.9.3 Day 3

a. Activity 1 - Discussion in differences in appearances and different roles. Story of Fox and Crane (Panchatantra).

One day, a fox invited a crane for dinner at his house. The crane was happy to receive the invitation and agreed readily. When the fox came out of the kitchen, he carried two flat dishes with soup. He served and sat down to enjoy the soup. The crane could not drink the soup because of its long beak. The fox lapped up his own soup and kept looking at the crane.

The next day, the crane invited the fox to dinner. The crane came out with two jugs full of soup. The jugs had a long narrow neck. Neither could the fox get his snout in the jug, nor could his tongue reach the bottom. The fox returned home hungry.

The full story is available here: https://www.youtube.com/watch?v=v5-kJSy6Yw8&ab_channel=KiddaTV

Both the days, both friends returned hungry from each other's homes as they did not appreciate each other's special features.

Teacher: You see, children, we are all the same yet different. Some of us have brown eyes, some have black, some have curly hair while some have straight, some are tall, some are short. We should accept ourselves and our friends as they are.

3. Understanding Learning

The section has samples of how different Teachers are using assessment in the classroom to understand and further their children's learning.

3.1 Using a Worksheet for Language, for Ages 7-8

As a language Teacher, helping my children develop fluency of reading and writing is a key curricular goal. The Grade 2 (7-8-year-olds) I teach should be able to write short sentences to describe a picture – or sequence of pictures.

How they are doing on a task (in this case, responding to a worksheet) gives me clear evidence on where they are, and what I need to do to further their learning. Here is example of such work by Neeraj, a child in my Grade 2 class.

He	in	on	she
playing	eating	sleeping	jumping
catching	mango	fruits	children
bench	throwing	ball	

Make sentences or a story on picture in own words with the help of given words

Mona was a Playing

Neeraj was Ball catching

Harshu was a eating a Mango

Haldi was a Siting

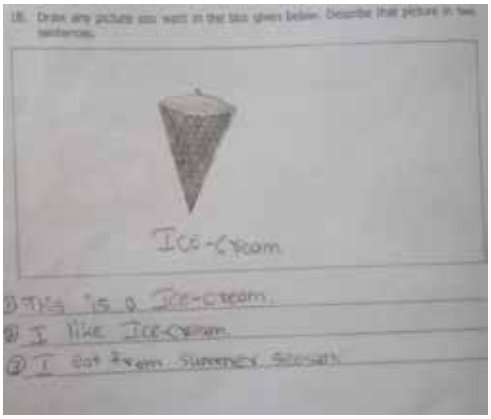
Harshita was was a Wa Yaming

There are several things I can interpret from this. Illustratively: he attempts to use descriptive language; his spellings are correct for most words that can be sounded phonetically, and he shows command of several sight words. He sticks to the picture/topic while writing the sentences, uses conventions such as capital letters, and ending punctuation for all sentences, experiments with placement of article 'a'. Neeraj has a lot of say about the given picture but has written in a list form without variety.

Based on this, I need to scaffold Neeraj in many ways. For example, I need to help him develop a sense of the audience – why and for whom am I writing this – to make his writing more interesting. I need to work with him on combining two short sentences into a longer one, replacing names with pronouns, and on appropriate usage of the articles a/an. I should also encourage him to write about more aspects of the picture by asking questions like 'where is this action taking place, what is happening in the picture'.

3.2 Assessment Sample of Language, for Ages 7-8

I use a lot of worksheets in my work on English with my grade 2 (7-8-year-olds) class. One such worksheet task involved the children drawing any picture and describing it in a few sentences. The following is Mathew's response.



The responses against each of the Learning Outcomes for this work have been analyzed and are presented in the table below. I also planned some activities and next steps to address Mathew's learning needs as interpreted from this assessment.

Table 1

#.	Learning Outcome	Attainment (Attained/Needs further support)	Justification
1.	Uses place value in writing and comparing two-digit numbers.	Needs support	Sanjeev seems to have represented the tens and ones correctly in writing but has not appreciated place-value while solving the sum. The child hasn't realized that the ones place of 63 is less than the ones place of 44.
2.	Solves simple problems based on subtraction of two-digit numbers.	Needs support	Sanjeev seems to have memorized the differences between two one-digit numbers but hasn't understood how to do carry-over problems in subtraction.
Summary			
What the child knows/ can do	Knows that subtraction results in a number that is less than the values of the two numbers provided. Seems to have represented the tens and ones places of a two-digit number correctly. Seems to have memorized the differences between two one-digit numbers.		
What the child doesn't know/can't do	Hasn't understood that carry over must be executed when the ones place of the larger number is less than that of the smaller number. Hasn't verified that the difference and the smaller number add up to the larger number.		
Next steps for supporting Sanjeev's learning: Illustrate carry-over and borrowing problems through concrete aids. Revisit single digit subtraction, and then gradually move to double digit sums. Encourage him to create simple problems using addition and subtraction and try to solve them. Pair him with Mona, give them collaborative tasks of solving addition and subtraction worksheets.			

3.3 Assessment Sample for Mathematics, for Ages 7-8

My children need to develop mathematical understanding and abilities to recognize the world through quantities, shapes, and measures. This includes the competency of performing addition and subtraction of 2-digit numbers fluently using flexible strategies. In my Grade 7 class (7-8-year-olds), I worked with my children on a problem that involved a carry over and borrow from the tens place

Sanjeev responded as follows: ***63 – 44 = 21***

This response has been analyzed and presented in the table below. I also planned some activities and next steps to address the child's learning needs.

3.4 Teacher's Narrative Summary, for Ages 5-6

Table 1

Child Profile	
Name of the child	Suruchi
Class	LKG (She is now in UKG)
S.R. No.	XX XX XXXX
Sex	Female
Date of Birth	DD MM YYYY
Mother's Name	Geetha Das
Father's Name	Vijay Das
Home Address	XX YY
Contact No.	
Siblings	None
Summary of progress: Special interests and talents of the child – Suruchi is a quiet, calm, and shy child. She loves to play with her siblings at home and watch cartoons. She enjoys playing with materials at home, such as dolls, sets, etc. Areas that need attention – Suruchi is the youngest in the family, and so is pampered by all the other members in the family. She is little stubborn in nature and needs support in regulation of emotions. She sometimes bites anyone who takes her things.	
Details of progress:	
Domain of development	Child's progress
General Behaviour	Suruchi बहुत ही शांत, चुप रहने वाली, जो बहुत समय लेकर लोगों के साथ घुलती मिलती है | वह काफी समय लेकर लोगों के साथ सहज होती है और सहज होने के बाद कुछ कुछ बातें साझा करती है | क्लास में भी वह प्रतिभाग करती है और प्रश्नों के जवाब देती है | शुरुवात में जब वह मम्मी के साथ आती थी तो ही सहज हो पाती थी वरना वह एक शब्द भी नहीं बोलती थी | घुलने मिलने के बाद मानवी शायद छोटे समूहों में शायद सहज हो पाएगी लेकिन अगर उसकी मन कि इच्छा पूरी न हो तो वह झगडा कर लेगी | अपनी बातों को रखने के लिए उसे अभी भी सपोर्ट की जरुरत पड़ती है |
Family	Suruchi एक संयुक्त परिवार में रहती है, उसके परिवार में उसके माता, पिता, दादा, दादी, ताऊ, ताई, 2 सगी बहनें है और कजिन है | मानवी के दादा, पिता जी, ताऊ सभी लोग कृषि और कंपनी में काम करने जाते हैं | मानवी की माता, दादी और अन्य सदस्य गहर का काम करते हैं, इन्होने गहर पर जानवर भी पाल रखे हैं | अंशिका अपने परिवार के साथ दुर्गापुर 1 में एक पक्के मकान में रहती है | जिसमें 2, 3 कमरे किचन आदि बने हैं|
Physical Development	Suruchi का शारीरिक विकास अपनी उम्र के अनुसार हो रहा है| उसकी फाइन मोटर स्किल अभी विकसित हो रही है, वह अच्छे से पेंसिल पकड़ पाती है और चित्र में दी गई बाउंड्री के भीतर रंग भरने की कोशिश करती है| ग्रॉस मोटर स्किल भी विकसित हो रही है, संतुलन वाली गतिविधियों में Suruchi को अभी और अभ्यास की जरुरत है | वह धैर्य के साथ गतिविधियों को करने की कोशिश करती है | सरल गतिविधियों को बहुत ही आसानी से कर लेती है, किंतु जहां भी एक से अधिक या मल्टीटास्क के कार्य होते हैं, उसमें वह थोड़ा सा अटक जाती है |

Socio-Emotional Development	Suruchi चुपचाप शांत अपनी दुनिया में खोए रहती है, वह कुछ न कुछ चीजों से खेलते रहती है	वह लोगों के साथ बहुत समय लेकर घुलती मिलती है और फिर सहज हो कर कुछ कुछ बातें शुरु करती है	वह बहुत ध्यान से बातें सुनती है, समझती है और पर उन पर प्रतिक्रिया अपने अनुसार ही देती है	जब वह आपसे पूरी तरह सहज हो जाएगी तब वह आपसे कुछ कुछ शब्दों में बातें कहेगी	विजिट के दौरान भी वह बातें सुनती है और जब कुछ पूछो तो सहज होने पर ही कुछ जवाब देती है	
Cognitive Development	Suruchi के सीखने के कौशल उम्र अनुसार विकसित हो रहे हैं, वह धीरे धीरे समय लेकर चीजों को सीख लेती है ! कौशल की बात की जाए तो वह अभी बोलती नहीं है इसलिए इसका मूल्यांकन अभी सही से नहीं हो पाया है	जिस दिन वह बोलती है उस दिन वह काफी बेहतर तरीके से बताती है लेकिन जब उससे कार्य करवाया जाता है तब यदि उसका मूड नहीं है तो वह कुछ नहीं बताती है	अक्षरों को सही बनावट में लिखने के लिए अभी और अभ्यास की जरुरत है	
Language Development	Suruchi का भाषायी विकास उम्र अनुसार सही है, वह अपने घरवालों के साथ पूरे वाक्यों में अपनी बातें बोल पाती है	कविता को लय और हाव भाव के साथ थोडा मदद से गा लेती है	अपनी बातें स्पष्टता से बोल पाती है, घर में घरवालों से काफी खुलकर बात करती है बिना झिझक उन्हें पूछ भी लेती है	अभी वह स्कूल में किसी से ज्यादा बात नहीं करती है बस कक्षा में खिलौने किताबें सभी चीजों से खेलती है	
Aesthetics and Cultural Development	Suruchi को चित्र बनाने चीजों खिलौनों को सजाने और रचनात्मक वाले कार्यों जैसे क्ले मॉडलिंग आदि का काफी शौक है उससे चीजों को बनाने, सही से रखने आदि में मज़ा आता है	
Term-wise Progress Record	
July - September	...
October-March	Suruchi शुरुवात में बात नहीं करती थी, वह कक्षा में किसी से भी बात नहीं करती थी	वह अपनी दुनिया में खोई रहती थी, बच्चों को देख कर कभी कभी गतिविधि में प्रतिभाग करती थी	वह शांत थी तो सभी उसे पसंद करते थे	यहाँ तक कि टॉयलेट आदि के लिए भी नहीं बोलती थी, वह पूरे दिन बिना टॉयलेट किए रहती थी	धीरे धीरे उसे कक्षा में अपना नाम बोलने, उपस्थिति के दौरान हां/ न आदि में जवाब देने के लिए भी प्रोत्साहित किया गया	अब वह कविता भी सुनाने लगी है किन्तु अभी भी वह केवल हाथी राजा को ही जल्दी से सुना कर बैठ जाती है, किन्तु कक्षा में अब सभी गतिविधियों में प्रतिभाग करती है और खुश हो कर अपनी बातें बताती है	
End Term – Cumulative Assessment	Suruchi शांत और अपनी दुनिया में खुश रहने वाली बच्ची है	कक्षा में ध्यान से बातें सुनती है, कक्षा में जुड़े रखने के लिए बीच बीच में पूछते रहना पड़ता है	चित्र बनाना, रंग करना और ब्लॉक्स से खेलना पसंद है	अपनी बातें समूह में रखने लगी है और स्वयं से पहल करने लगी है	पठन पाठन - अपने परिवार, कक्षा के बारे में बता पाती है	कविताओं को हाव भाव के साथ स्वयं से सुना पाती है	थीम आधारित चीजों जैसे फलों, सब्जियों, जानवरों, दिनों, महीनो के नाम भी बता पाती है	अपने नाम को अंग्रेजी में पहचान कर मदद के साथ लिख पाती है	कहानी सुनना पसंद करती है और चित्रों के माध्यम से किताबों को पढ़ती है	शब्दों में उसके पहले अक्षर और उसमें आने वाले अक्षरों की ध्वनियों को सुनकर बता पाती है	वर्कशीट में सुन कर स्वयं से मिलान, वर्गीकरण, तुलनात्मक कौशलों को कर पाती है	ट्रेसिंग का कार्य और रंगों को दिए गए चित्र के भीतर भर पाती है	गणित में 20 तक मौखिक रूप से, 10 तक के अंकों की पहचान और 5 तक के अंकों का सह सम्बन्ध कर पाती है	अंग्रेजी के अक्षरों को क्रम में सुना पाती है और uppercase letters को पहचान भी पाती है	

During the class assessment – sample

Table 2

Domain: Language, Cognitive, Creative		
#	Oral	Suruchi
1	Introduction - name, class, family, feelings	Yes, knows about school and home
2	Favourite things - I like	Gobhi, study, balloon game bubble shoot
3	Sing Hindi poem at least 3,4	2,3 Hathi, machli jal, aloo kachaloo
4	Sing English poem 1,2	2 Johnny, Twinkle
5	Able to identify his/her name English	Yes
6	Able to write his/her name English	No
7	Able to identify his/her name Hindi	No
8	Able to write his/her name Hindi	No
9	Orientation of Book	Yes
10	Favourite book	Little mouse and big lion
11	Story Narration picture	Yes, only picture reading
12	Story narration with finger tapping on text	No
13	Able to tell story in gist, main character	No
14	Able to tell question answer from story	Yes
15	story/Event sequencing picture at least 4,5	No
16	Picture Identification Hindi and English through charts at least 10 from each chart	Fruits, vegetables, animals, colours
17	Complete the game poem, story	Yes, alphabet, counting, week days, poems
18	Sound identification - initial and syllabi	Yes
19	Able to read chart alphabets English in sequence	
20	Able to read chart alphabets Hindi in sequence	
21	Able to read chart numbers in sequence	
22	Able to recall alphabets in sequence	Yes
23	Able to count up to 20 orally	Yes
24	Able to count meaningfully at least up to 5	Yes
25	Pre-maths concepts like big, small, long, short, sorting, grouping, heavy - light, pattern, more or less	Yes
26	Currency identification	

4. Enabling the Teacher

This section has some examples of how Teachers can be enabled through different modes of capacity building. Teacher Professional Development should be contextual address specific needs of Teachers. As with other parts of this Annexure, this is only meant to give a few illustrations of what is possible and is not a comprehensive or prescriptive account of such efforts.

4.1 Teacher Seminars

Teacher Seminars are one of the modes for continuous professional development. They are an opportunity for teachers to share their experiences and practices with their peers. This builds their confidence, helps improve their own practice, and helps them learn new practices.

This could be a one-day programme that is held annually or biannually at the Block or District level. An illustrative process for doing such seminars could involve announcement of the seminar at least three months prior to the event. Next, an invitation would need to be sent to teachers, followed by review, and finalisation of proposals based on quality and relevance. The seminar itself may be divided into different themes, with presentations and discussions for each topic in the theme being bunched together, and a moderator anchoring each theme.

Teachers could prepare and present on critical themes such as:

a. Effective plan for a typical day for children at the Foundational Stage

b. Using locally available material and teacher-developed material effectively

c. Teaching and learning pre-literacy or pre-numeracy skills, early literacy, or early numeracy skills

d. How to enhance parental/community participation

4.2 Teacher Mela

The Teacher Mela is a day-long event where Teachers participate in a series of vibrant and exciting demonstration sessions on teaching and learning. Along with the sessions, Teachers display and explain their work and teaching-learning materials that they have created. The Teacher Mela could be used to demonstrate teacher practices, illustratively, around play, conversation, story, song, art, craft, or pre-literacy and pre-numeracy work.

A possible design of a one-day mela could involve four sessions along different themes – each one around an hour-long – that is repeated four times that day. Each session could be facilitated by two Teachers. A group of say 30-40 Teachers could move from one session to the other.

Table 1

9:30 to 10:45AM	Participants Registration			
10:45 to 11:45AM	Games, painting, craft music, movement	Scribbling, colours, grouping, same and different	Stories, poems, songs, riddles	Patterns, shapes, matching, big-small, fat-thin, near-far
11:45 to 12:45PM	Patterns, shapes, matching, big-small, fat-thin, near-far	Games, painting, craft music, movement	Scribbling, colours, grouping, same and different	Stories, poems, songs, riddles
12:45 to 1:45PM	Lunch Break			
1:45 to 2:45PM	Stories, poems, songs, riddles	Patterns, shapes, matching, big-small, fat-thin, near-far	Games, painting, craft music, movement	Scribbling, colours, grouping, same and different
2:45 to 3:45PM	Scribbling, colours, grouping, same and different	Stories, poems, songs, riddles	Patterns, shapes, matching, big-small, fat-thin, near-far	Games, painting, craft music, movement
3:45 to 4:30PM	Panel discussion and closing			

The Teachers who demonstrate practices and share materials can get feedback, and the others can learn from observing these better practices. As always, such learnings should be reinforced through various other methods and forums, including meetings at the Cluster and Block levels, and systematic scaffolding by academic functionaries.

4.4 Decentralised Continuous Teacher Professional Development

Effective teacher professional development needs to be contextual, continuous, and to cater to specific needs of Teachers. For this to happen in its true spirit, such professional development needs to be designed and operationalised as close to the Teachers as possible.

While the structure and organisation of school education differs across states, it is decentralised across the country. Such a structure and its personnel could be leveraged fully to make this happen.

This illustration uses the existing structure in Rajasthan as an example and illustrates the teacher professional development process that is happening in some parts, in collaboration between the department and non-governmental organizations.

In the school education system of Rajasthan, at *panchayat* level, one of the principals of the senior secondary school is appointed as the Panchayat Elementary Education Officer (PEEO). All the schools in that *panchayat* form a Panchayat Integrated Education Cluster, and the PEEO acts as the

nodal person for managing administrative, financial, convergence processes as well as ensuring improvement in quality of learning in these schools. The focus of these PEEOs is hence not just operational efficiencies, but also ensuring that the quality of teaching and learning is improved sustainably and at scale over time. On an average, there are 30-odd PEEOs in each block, each PEEO coordinates with 5-8 schools which means 35-45 Teachers.

In many of these *panchayats*, support for Teachers includes monthly workshops for all teachers, school-based scaffolding for specific Teachers, and other voluntary modes of capacity development for interested teachers. As mentioned earlier these are designed and operationalised at the *panchayat* level, by the respective PEEO in collaboration with partner (non-governmental) organizations and other individuals. Illustratively, in a *panchayat*:

a. Monthly workshops

Each month, two one-day workshops are conducted for early grade Teachers, one for each of the subject – early language and mathematics. These workshops provide Teachers with content and teaching-learning materials which they can directly use in their classes to ensure their children attain basic primary level competencies.

b. Continuous scaffolding

Planned school visits follow-up on content dealt within that month's workshop. Resource persons from the partner organisation visit the school with relevant teaching-learning materials and worksheets to demonstrate their use as well as to assess the learning levels of children. Such scaffolding is provided to those Teachers who request for it. This also helps to observe the specific needs of the Teachers, which in turn is used to design the next workshop sessions.

c. Other support activities

The capacity building is augmented through other voluntary activities which also enable an overall better learning environment in the schools. For example:

i. *Thaila Pustakalaya* (books in a bag): To aid the basic language and mathematics skills acquisition better, *thaila pustakalaya* resources with classroom processes are made available to interested Teachers. Rotation of these bags ensure fresh resources are available all the time.

ii. Theatre in Education: theatre is an effective medium to talk about certain issues with teachers and children. Performances are organised in the morning assembly of the schools, followed by an hour of discussion on the topic. This is often led by groups local youths.

As mentioned at the beginning, this is just illustrative. The core idea is to be able to design processes for teacher development that are grounds-up and address real needs of Teachers. In other states, structures such a cluster resource centres are used as effectively to provide such teacher support.

4.5 Workshop on Puppetry

Teachers at the Foundational stage need to incorporate various interesting and engaging elements into their pedagogy. This includes methods like storytelling, dramatics, music, dance, play, and so on. Apart from other aspects, it is important that teacher professional development programmes help Teachers develop skills that enable them to integrate such pedagogy in their repertoire.

One such method is puppetry. Puppetry is an integrated art form which takes into its fold everything from fine arts to performance. Puppetry is one of the oldest forms of performing art and has evolved into a sophisticated form of art over the years. There are thousands of forms of puppetry from simple finger puppets to highly complex puppets 'performed' by more than three people. India has many forms of puppetry that can be incorporated by Teachers.

There are two main aspects of puppetry. One is the designing and creation of the puppets, and the other is the performing of the puppets. Designing needs visualization and technical skills of creation while performance needs excellent communication skills.

This is an illustration of a workshop designed to help Teachers acquire skills of puppetry. In this workshop, Teachers are exposed to different forms of puppets and puppetry. There is a discussion around the forms and the aesthetic sense of the puppets. The Teachers will design and create puppets, prepare a script, and perform with the puppets. Through this workshop, Teachers will be able to appreciate aesthetics and art in everyday life, design puppets, practice, and create short puppetry performances. The pedagogy for the workshop is hand-on experiential learning. Through this, Teachers go through different forms of art - playing with colours, costume designing, facial make-up, script writing, music, and performance.

a. Day 1

i. Groups of four are formed. Each group is given all the stationery resources that they need (e.g., chart paper, scissors, gum, colours, staplers, cello tape).
ii. They make finger puppets by drawing eyes, nose, and mouth on their own finger, cover the finger with a handkerchief and make the finger puppet dance and speak.
iii. They draw fish on chart paper, then cut out the shape. They make a simple bird and colour it, and a simple snake by folding paper. They make a rat by shaping paper into a cone and make a lion using simple sketches. Just by folding paper and using colours, they make different animals.

b. Day 2

i. They exhibit all the puppets they have made and begin to build a story and plan a small performance using the puppets. They practice the story and the performance as a group.
ii. Each group then performs the story with the puppets they have made.

c. Day 3

i. They begin to make simple one-dimensional masks using paper and water colour. They wear the masks, prepare a small script around the masks, and perform using the masks.
ii. They learn to make two-dimensional masks using coloured paper and gum. They wear the masks, prepare a small script around the masks, and perform using the masks.
iii. Comments and inputs are given to each team immediately after performance.

d. Day 4

i. They learn to make three-dimensional puppets with the help of coloured paper and sticks - these are rod puppets which can be used in a similar way as the others.
ii. They work on a detailed script for a performance that can be done with young children in school in their small groups using the puppets they have made.

e. Day 6

i. Each group performs using costumes, material sets, songs, and music along with simple lights.
ii. After the performance they do an evaluation and share their experience of the workshop.

While such a workshop will not make teachers experts in puppetry, it is expected that it will give them ideas that they can start practicing in their classrooms and further develop on. Further, while this illustration is about taking this up in a workshop mode, the same can be achieved through other modes that are spread out over time – example, in monthly cluster-level meetings of teachers.

Annexure 3:
Mapping competencies of NIPUN Bharat and NCF for the Foundational Stage

NIPUN Bharat has taken significant strides and efforts in implementing the FLN aspects of NEP 2020. To enable the Mission, three Developmental Goals have been articulated, along with their associated Competencies and Learning Outcomes.

Curricula will be developed across the country on the basis of this NCF, which has stated the Curricular Goals, from which Competencies have been derived, and from which (illustrative) Learning Outcomes have been derived. These curricula will then be the bases for educational practice across the country.

Each curriculum thus developed will have its own set of Competencies and Learning Outcomes. It is important that the significant efforts of NIPUN Bharat, which includes teaching-learning-materials and training are aligned to these Learning Outcomes and Competencies, so that there is full alignment of the educational efforts and practice toward the Curricular Goals.

The method to ensure this is to first map the Development Goals of NIPUN Bharat to the Curricular Goals of this NCF. The most important step operationally would be to then map the Competencies from NIPUN Bharat to those of the NCF.

This Annexure has the mapping of Development Goals of NIPUN Bharat to the Curricular Goals of this NCF, and the Competencies from NIPUN Bharat to the Competencies of NCF. Similar mapping of the Learning Outcomes can also be done.

These two levels of mapping will enable the use of the methods and artefacts (TLM, training material etc.) created within NIPUN Bharat to be appropriately deployed towards the Learning Outcomes and Competencies of the Curriculum. This exercise needs to be conducted carefully for deep alignment to happen so that all efforts are synergized towards the realization of this NCF, and thus the overall aims of NEP 2020.

1. NIPUN Bharat Developmental Goal 1: Children maintain good health and well-being

1.1 Mapping to NCF Curricular Goals

The following are the Curricular Goals that map to this Developmental Goal 1:

CG-1 Children develop habits that keep them healthy and safe

CG-3 Children develop a fit and flexible body

CG-4 Children develop emotional intelligence, i.e., ability to understand and manage their own emotions, and responds positively to social norms.

1.2 Mapping to NCF Competencies

The Competencies from NIPUN Bharat under Development Goal 1 is mapped to Competencies of NCF in the table below.

Table 1

NIPUN Bharat Competency	NCF Competency
Awareness of self	C-4.1 Starts recognising 'self' as an individual belonging to a family and community
Development of positive self-concept	C-4.1 Starts recognising 'self' as an individual belonging to a family and community
Self-regulation	C-4.2 Recognises different emotions and makes deliberate effort to regulate them appropriately
Decision-making and problem solving	C-8.13 Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements
Development of pro-social behaviour	C-4.3 Interacts comfortably with other children and adults C-4.4 Shows cooperative behaviour with other children C-4.5 Understands and responds positively to social norms in the classroom and school C-4.6 Shows kindness and helpfulness to others (including animals, plants) when they are in need C-4.7 Understands and responds positively to different thoughts, preferences, and emotional needs of other children
Development of healthy habits, hygiene, sanitation, and awareness for self-protection	C-1.1 Shows a liking for and understanding of nutritious food and does not waste food C-1.2 Practices basic self-care and hygiene C-1.3 Keeps school/classroom hygienic and organized C-1.4 Practices safe use of material and simple tools C-1.5 Shows awareness of safety in movements (walking, running, cycling) and acts appropriately C-1.6 Understands unsafe situations and asks for help
Development of gross motor skills	C-3.1 Shows coordination between sensorial perceptions and body movements in various activities C-3.2 Shows balance, coordination, and flexibility in various physical activities
Development of fine motor skills and eye-hand coordination	C-3.3 Shows precision and control in working with their hands and fingers
Participation in individual and team games and sports	C-3.4 Shows strength and endurance in carrying, walking, and running

2. NIPUN Bharat Developmental Goal 2: Children become effective communicators

2.1 NCF Curricular Goals

The following are the Curricular Goals that map to this Developmental Goal 2

CG-9 Children develop effective communication skills for day-to-day interactions in two languages

CG-10 Children develop fluency in reading and writing in Language 1

CG-11 Children begin to read and write in Language 2

CG-12 Children develop abilities and sensibilities in visual and performing arts and express their emotions through art in meaningful and joyful ways

2.2 Mapping to NCF Competencies

NIPUN Bharat categorises the Competencies under Development Goal 2 into three. These are mapped to Competencies of NCF in the tables below.

2.2.1 Talking and Listening

Table 1

NIPUN Bharat Competency	NCF Competency
Listening with comprehension	C-9.1 Listens to and appreciates simple songs, rhymes, and poems C-9.4 Understands oral instructions for a complex task and gives clear oral instructions for the same to others C-9.5 Comprehends narrated/read-out stories and identifies characters, storyline and what the author wants to say
Creative Self Expression and Conversation	C-9.2 Creates simple songs and poems on their own C-9.3 Converses fluently and can hold a meaningful conversation
Language and Creative thinking	C-9.5 Comprehends narrated/read-out stories and identifies characters, storyline and what the author wants to say C-9.6 Narrates short stories with clear plot and characters
Vocabulary Development	C-9.7 Knows and uses enough words to carry out day-to-day interactions effectively and can guess meaning of new words by using existing vocabulary
Conversation and talking skills	C-9.3 Converses fluently and can hold a meaningful conversation C-9.4 Understands oral instructions for a complex task and gives clear oral instructions for the same to others

Meaningful uses of language	C-9.3 Converses fluently and can hold a meaningful conversation C-9.4 Understands oral instructions for a complex task and gives clear oral instructions for the same to others C-9.7 Knows and uses enough words to carry out day-to-day interactions effectively and can guess meaning of new words by using existing vocabulary C-10.7 Reads and comprehends meaning of short news items, instructions and recipes, and publicity material

2.2.2 Reading with comprehension

Table 2

NIPUN Bharat Competency	NCF Competency
Bonding with Books	C-10.9 Shows interest in picking up and reading a variety of children's books
Print Awareness and Meaning Making	C-10.2 Understands basic structure/format of a book, idea of words in print and direction in which they are printed, and recognises basic punctuation marks C-10.7 Reads and comprehends meaning of short news items, instructions and recipes, and publicity material
Pretend Reading	*Aspects of this competency are addressed in the Learning Outcomes of C-10.2 (Concepts of print) and C-10.5 and C-10.6 (reading stories and poems)*
Phonological Awareness	C-10.1 Develops phonological awareness, and blends phonemes/ syllables into words and segment words into phonemes/ syllables
Sound Symbol Association	C-10.3 Recognises all the letters of the alphabet (forms of akshara) of the script, and uses this knowledge to read and write words
Prediction and use of previous experiences with knowledge.	C-10.5 Reads short stories and comprehends its meaning – by identifying characters, storyline, and what the author wanted to say – on their own C-10.6 Reads short poems, and begins to appreciate the poem for its choice of words and imagination
Independent reading for pleasure and various purposes.	C-10.5 Reads short stories and comprehends its meaning – by identifying characters, storyline, and what the author wanted to say – on their own C-10.9 Shows interest in picking up and reading a variety of children's books

2.2.3 Writing with purpose

Table 3

NIPUN Bharat Competency	NCF Competency
Early literacy skills	*Aspects of this Competency are addressed in Learning Outcomes of many Competencies of Language and Literacy as well as Aesthetics and Culture Curricular Goals.*
Writing for self-expression	C-10.8 Writes a paragraph to express their understanding and experiences
Make use of her/his knowledge of letter and sounds, invents spellings to write	C-10.3 Recognises all the letters of the alphabet (forms of akshara) of the script, and uses this knowledge to read and write words
Make efforts to write in conventional ways Response to reading with drawings/ words and meaningful sentences Writing of rhyming words Write meaningful sentences using naming words and action words Write messages to express themselves Using mixed language codes Write for different purposes in the classroom's activities and at home, such as making list, writing greeting to grandparents, messages/ invitation to friends, etc.	C-10.8 Writes a paragraph to express their understanding and experiences (*this Competency has 15 Learning Outcomes embedded which covers various competencies outlined by NIPUN Bharat*)

3. NIPUN Bharat Developmental Goal 3: Children become involved learners and connect with their immediate environment

3.1 NCF Curricular Goals

The following are the Curricular Goals that map to this Developmental Goal 3

CG-2 Children develop sharpness in sensorial perceptions

CG-6 Children develop a positive regard for the natural environment around them

CG-7 Children make sense of world around through observation and logical thinking

CG-8 Children develop mathematical understanding and abilities to recognize the world through quantities, shapes, and measures

CG-13 Children develop habits of learning that allow them to engage actively in formal learning environments like a school classroom

3.2 Mapping to NCF Competencies

NIPUN Bharat categorises the Competencies under Development Goal 3 into seven. These are mapped to Competencies of NCF in the tables below.

3.2.1 Sensory Development

Table 1

NIPUN Bharat Competency	NCF Competency
Sight, Sound, Touch, Smell, Taste	C-2.1 Differentiates between shapes, colours, and their shades C-2.2 Develops visual memory for symbols and representations C-2.3 Differentiates sounds and sound patterns by their pitch, volume, and tempo C-2.4 Differentiates multiple smells and tastes C-2.5 Develops discrimination in the sense of touch

3.2.2 Cognitive Skills

Table 2

NIPUN Bharat Competency	NCF Competency
Observation, Identification, Memory, Matching, Classification, Sequential Thinking, Creative Thinking, Critical Thinking, Reasoning, Curiosity, Experimentation	C-7.1 Observes and understands different categories of objects, and relationships between them C-7.2 Observes and understands cause and effect relationships in nature by forming simple hypothesis, and uses observations to explain their hypothesis C-13.1 Attention and intentional action: Acquires skills to plan, focus attention, and direct activities to achieve specific goals C-13.2 Memory and mental flexibility: Develops adequate working memory, mental flexibility (to sustain or shift attention appro priately), and self-control (to resist impulsive actions or re sponses) that would assist them in learning in structured environments C-13.3 Observation, wonder, curiosity, and exploration: Observes minute details of objects, wonders, and explores using various senses, tinkers with objects, asks questions

3.2.3 Concepts related to environment

Table 3

NIPUN Bharat Competency	NCF Competency
Natural-animals, fruits, vegetables, food	C-6.1 Shows care for and joy in engaging with all life forms C-7.1 Observes and understands different categories of objects, and relationships between them
Physical - water, air, season, sun, moon, day and night	C-7.1 Observes and understands different categories of objects, and relationships between them
Social - myself, family, transport, festival, community helpers, etc.	C-4.6 Shows kindness and helpfulness to others (including animals, plants) when they are in need C-5.1 Demonstrates willingness and participation in age-appropriate physical work towards helping others

3.2.4 Concept formation

Table 4

NIPUN Bharat Competency	NCF Competency
Colours, shapes, distance, measurement, size, length, weight, height, time	C-2.1 Differentiates between shapes, colours, and their shades C-8.9 Selects appropriate tools and units to performs simple measurements of length, weight and volume of objects in their immediate environment C-8.10 Performs simple measurements of time in minutes, hours, day, weeks, and months C-8.12 Develops adequate and appropriate vocabulary for comprehending and expressing concepts and procedures related to quantities, shapes, space, and measurements C-8.13 Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements
Spatial sense	C-8.8 Recognises, makes and classifies basic geometric shapes and their observable properties, and understands and explains the relative relation of objects in space
One-to-one correspondence	C-8.3 Counts up to 99 both forwards and backwards, and in groups of 5s,10s and 20s^

^One-to-one-correspondence is a learning outcome within this competency of counting

3.2.5 Number Sense

Table 5

NIPUN Bharat Competency	NCF Competency
Count and tell how many	C-8.3 Counts up to 99 both forwards and backwards, and in groups of 10s and 20s
Numeral recognition	C-8.5 Recognises and uses numerals to represent quantities up to 99 with the understanding of decimal place value system
Sense of order (can count ahead of a number up to 10)	C-8.1 Sorts objects into groups and sub-groups based on more than one property C-8.2 Identifies and extends simple patterns in their surroundings, shapes, and numbers C-8.4 Arranges numbers up to 99 in ascending and descending order

3.2.6 Number Operations

Table 6

NIPUN Bharat Competency	NCF Competency
Addition, Subtraction	C-8.6 Performs addition and subtraction of 2-digit numbers fluently, using flexible strategies of composition and decomposition of both numerical and word problems
Multiplication, Division	C-8.7 Recognises multiplication as repeated addition and division as equal sharing

3.2.7 Measurement, Shapes, and Other Competencies

Table 7

NIPUN Bharat Competency	NCF Competency
Length, Mass, Volume, Temperature	C-8.9 Selects appropriate tools and units to perform simple measurements of length, weight and volume of objects in their immediate environment
Shapes (2D Shapes, 3D shapes, Straight Line, Curved Line, Plain and Curved Surfaces)	C-8.8 Recognises, makes, and classifies basic geometric shapes and their observable properties, and understands and explains the relative relation of objects in space
Data Handling	*For the Foundational Stage, data handling will involve sorting, classifying, sorting, grouping, and counting objects in groups – C-29, C-31*
Pattern	C-8.2 Identifies and extends simple patterns in their surroundings, shapes, and numbers
Calendar Activity	C-8.10 Performs simple measurements of time in minutes, hours, day, weeks, and months
Use of Technology	C-7.3 Uses appropriate tools and technology in daily life situations and for learning

3.2.8 Additional Competencies in NCF

The following are additional competencies in the NCF, in the domains of aesthetic development and in cognitive development.

Table 8

NIPUN Bharat Competency	NCF Competency
	C-12.1 Explores and plays with a variety of materials and tools to create two-dimensional and three-dimensional artworks in varying sizes C-12.2 Explores and plays with own voice, body, spaces, and a variety of objects to create music, role-play, dance and movement C-12.3 Innovates and works imaginatively to express a range of ideas and emotions through the arts C-12.4 Works collaboratively in the arts C-12.5 Communicates and appreciates a variety of responses while creating and experiencing different forms of art, local culture, and heritage
	C-5.1 Demonstrates willingness and participation in age-appropriate physical work towards helping others
	C-13.4 Classroom norms: Adopts and follows norms with agency and understanding
	C-8.10 Performs simple transactions using money up to INR 100

Annexure 4:
Research on ECCE from India and Across the World

Several contemporary studies across the world have shown that quality early education programmes that provide appropriate stimulation and meaningful learning experiences to young children have enormous benefits on an individual's ability to learn and perform better, not only in school but far beyond.

1. Importance of quality ECCE programmes

a. Evidence from neuroscience suggests rapid brain development during the first eight years of life. The neural connections in the brain get strengthened or pruned based on the quality and consistency of experiences from the environment. These years are considered most critical and formative in human life, when a caring, nurturing, stimulating, and healthy environment are essential for the holistic development of the child.[13]

b. The basic architecture of the human brain is constructed through processes that begin early in life and continue into adulthood. Genetics, environment, and experience interact and influence thearchitecture of the brain. Plasticity, or the ability of the brain to reorganize and adapt, and therefore learn, is greatest in the early years of life. Experiences during sensitive periods of development play a significantly important role in shaping the capacities of the brain. Early environments and early experiences have a particularly strong influence on brain architecture.[13]

c. The period of early childhood lays the foundations for lifelong learning and development and is a key determinant of the quality of adult life. Longitudinal studies indicate a significant rate of return of economic investment in early years, which ensures school completion, and positive contribution as adult members of society.[14]

d. Cognitive, emotional, and social capacities are inextricably intertwined throughout life. Stimulating early experiences lay the foundation for later learning. Impoverished early experiences can have long-lasting detrimental effects on later brain capabilities.[13]

2. Studies in India have come to similar conclusions

a. A gain of 8–20% in retention rates among children who attended preschool centres was attributed to age-appropriate participation in early childhood education.[15] Similarly, another study, conducted in Bihar and Uttar Pradesh, found that children - ranging in age from 7 to 18 years - were more likely to be enrolled in school if they had attended early childhood programmes.[16] From a systemic perspective, support of middle and senior level officials was a key factor in effective implementation of preschool education from a systemic perspective in Haryana ICDS centres.[17]

b. The Early Childhood Education Impact Study (2017) undertaken by Ambedkar University, Delhi showed that across states (Assam, Telangana, and Rajasthan), school readiness levels of children at age 5 were far below expectations in cognitive and language domains (such as matching numbers to objects, identifying location of an object in the picture, etc).[18]

Wherever school readiness levels were better, children had spent most of their time in play-based learning activities. Ample opportunities and activities for concept formation, developmentof conceptual skills, and readiness activities had been designed for children in these programmes.

The age of the child, mother's education, household affluence, and early learning environment at home were other factors that significantly influenced school readiness levels. The study also found that children's participation in preschool and early primary grades does not necessarily follow a linear age-based trajectory. In some states, 4-year-olds are already in school and in others, significant proportions of 6- and 7-year-olds are still in preschool. Children attend school irregularly, and enrolments stabilize only by age 8. This reinforces the need for a curriculum which is focused on learning levels of children rather than an age-based trajectory.

c. Research has shown that in low-income and resource constrained settings, quality ECCE serves as a mechanism to promote equity.[19]

d. A study compared 200 children enrolled in Anganwadis and 200 homebound children in a district in India on six cognitive skills - conceptual information, comprehension, visual perceptions, memory, and object vocabulary. This study confirmed that Anganwadi attendance had a positive impact on the cognitive skills of children. Despite geographical limitations, this study provides important evidence on the link between preschool and cognitive development.[20]

3. Studies on Return on Investment in ECCE

Return on investment in education comprises both - private (i.e., return to the individual in terms of employability and wages with associated benefits), and social (i.e., return to society and the nation in terms of reduced public expenditure on social welfare programmes consequent to well-being, more civic societies, along with revenues earned through taxes).

Estimates of benefits of education are generally through tangible 'market' benefits. They are based on data such as the earnings of individuals in the labour market or their contribution to GDP; and are associated with the duration of the working life of the individual.

However, there is another set of 'non-market' benefits, stemming from a host of beneficial effects of education. These effects compound the more tangible private and social economic benefits; they affect not only the recipients of education and their immediate family, but also society as a whole, e.g., reduced infant mortality, health effects, reduced population growth rate, democratization and human rights, political stability, crime rate reduction, poverty reduction, reduced inequality, and positive environmental influences.

Investment in early childhood and basic education are critical for benefits to accrue. Several studies across the world have confirmed that investment in the early years of child development yields long-term returns. High-quality childcare, parenting programmes and parental leave programmes are crucial; such interventions are typically more important in disadvantaged neighbourhoods.

A longitudinal study conducted over more than 35 years calculated the gains of birth-to-five-year early childhood education programmes for disadvantaged children. These gains were defined in terms of better outcomes in education, health, social behaviours, and employment. Results showed that high quality

birth-to-five programmes for disadvantaged children can deliver a 13% per year return on investment. Further, while the costs of comprehensive early childhood programmes are high, every dollar invested in quality early childhood programmes can yield returns between USD 4 and USD 16.[21]

In 2006, Heckman proposed that rates of return to investment in disadvantaged children declined at different stages of education. The figure below, known as the Heckman Curve, shows that maximum rate of return is associated with preschool education.[22]

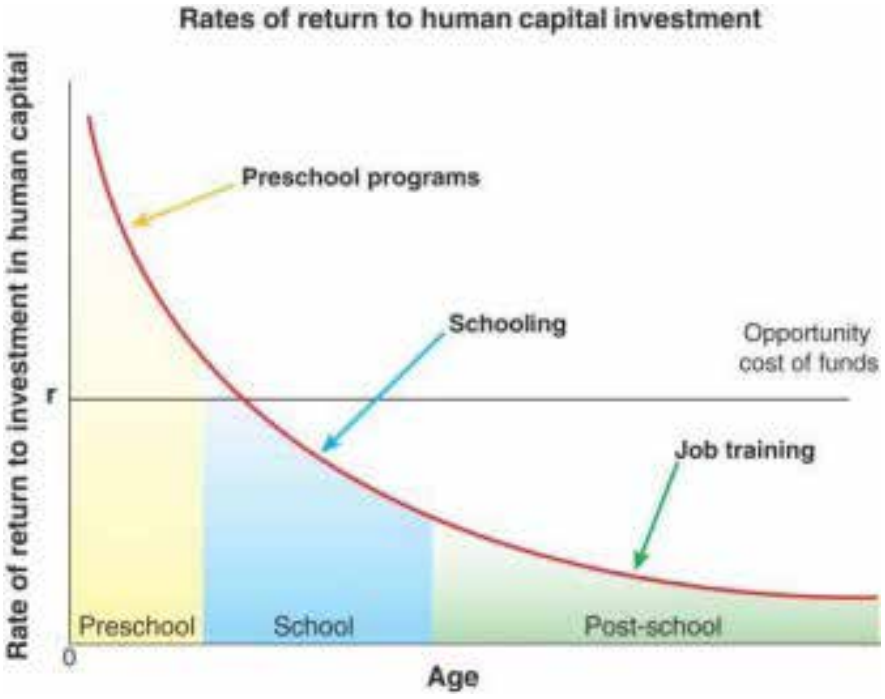


Figure 1

Source: Heckman, J.J. (2006). Skill formation and the economics of investing in disadvantaged children. Science, Vol, 312. https://jenni.uchicago.edu/papers/Heckman_Science_v312_2006.pdf

Three rigorous studies of early childhood programmes, all of which showed sizable returns to the participants and to the public, ranging from USD3.2 3 to USD 9.20 for every dollar invested.[23]

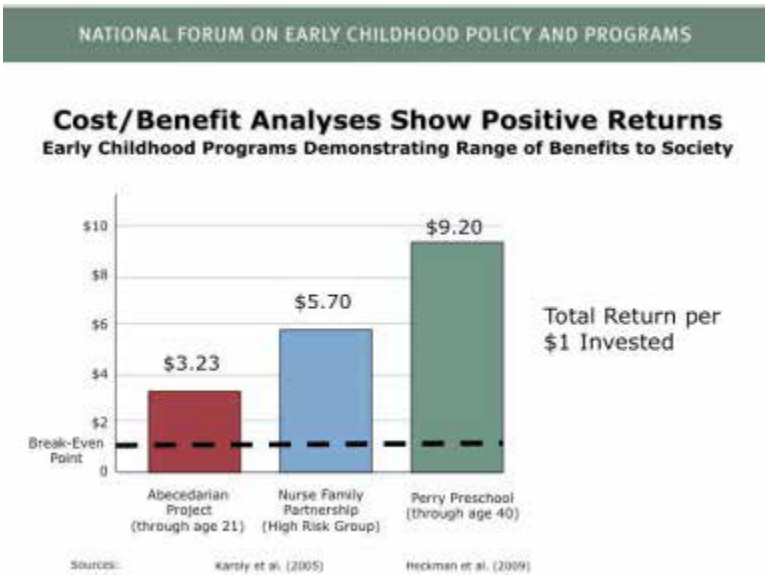


Figure 2

Source: Center on the Developing Child. Harvard University. (2007). Early childhood program effectiveness. Accessed at https://46y5eh11fh-gw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp- content/uploads/2015/05/inbrief-programs-update-1

Other studies have also cited similar figures for return on investment on early childhood care and education. An annual rate of return, adjusted for inflation, of between 7% and 18% was estimated for early childhood education. This was reported by a longitudinal study that began 1985, and found that every dollar invested in early childhood education resulted in a roughly seven dollars return on investment.[24]

Glossary of Terms

1. Anganwadi –A childcare centre that provides health, education, and nutrition services to children less than six years, mothers, and adolescents throughout the country; set up under the Integrated Child Development Services (ICDS) scheme.
2. Balanced approach – An approach to literacy pedagogy, that balances explicit instruction for decoding (see below) and learning the script through meaning-making (see below) of the text encountered.
3. Balvatika –A one-year preparatory class before Grade 1 for children aged 5 - 6 years; it can be in an Anganwadi, a pre-school, primary school, or any other configuration.
4. Balwadi –A pre-school set up under a scheme of the Central Social Welfare Board to provide integrated education, health, and care for families and communities in remote areas throughout the country; could be set up by non-governmental bodies.
5. Basic education – This refers to the Gandhian proposal of a school curriculum centred around productive work under conditions approximating real-life situations, leading to holistic development, and learning; also known as Nai Talim.
6. Care – A behaviour expressing interest or concern towards something or someone; any activity that attempts to establish, maintain, and improve good relationships between people.
7. Cognitive – Any mental activity relating to or involving the processes of thinking and reasoning.
8. Competencies – These are learning achievement that are observable and can be assessed systematically.
9. Concepts of print (or Print awareness) – This is an awareness of how printed texts work. This includes, among many things, the knowledge of what books are for, and an awareness of what direction the text is read in the printed form, and a knowledge of other mechanics of writing such as space between words and punctuation marks.
10. Creche – A place where young children are cared for during the day while their parents do something else, especially work.
11. Curricular goals – These are statements that give directions to curriculum development and implementation.
12. Decoding – This is a key skill for learning to read. It is the ability to make the appropriate connection between the letters in the script and the sounds in the language. This ability is necessary to sound out full words that are presented in a written form.
13. Developmental delay – This refers to a delay in the growth of a child according to the norms for children of that age group. Delays can be in motor function, language and speech, cognitive skills, social functions, and so on.
14. Developmental outcomes – Behaviours that are results of the process of growth and maturation.
15. Domains of development – The areas of growth and progress, namely, physical, emotional, social, cognitive, and language acquisition.
16. Early Childhood Care and Education – The care and education of children from birth to eight years.

17. Early Language – Language learning in the first few years of a child's life where there is interest and emphasis in acquiring oral skills, practising pronunciation, intonation, and the joy of learning new sounds, words, and language rules.
18. Emergent Literacy – The early stage of learning where children engage with reading and writing before these skills are introduced to them formally in a school.
19. Emergent Numeracy - The early stage of learning where children engage with basic number concepts and computation skills before these are introduced to them formally in a school.
20. Emotional intelligence – The ability to understand and manage one's own and others' emotions and respond positively to social norms.
21. Encoding – The skill or ability to use the understanding of the relationship between sounds and symbols in a script, to write letters, words, and sentences from thought or language heard.
22. Experiential learning – The process of teaching and learning through doing activities, through experiences approximating real-life situations.
23. Fine Motor skills – The ability to use the smaller muscles of the hands and wrists to make precise movements.
24. Foundational literacy and numeracy – (FLN) – It is a child's ability to read basic written or textual material and solve basic maths problems such as addition and subtraction.
25. Foundational stage – The stage of schooling for children aged 3 - 8 years.
26. Free play – Child-led, child-directed play in a stimulating environment developed by the teacher.
27. Free writing – A form of writing activity where an author writes spontaneously and continuously without worrying about form, grammar, and style.
28. Guided play – Child-led, teacher-supported play, with guidance from the teacher.
29. Holistic development – The development of intellectual, social, physical, ethical, and emotional capacities in an individual.
30. Holistic Progress Card – The record of a child's learning and progress in all domains of learning achievement and development.
31. Home language – The language(s) spoken amongst members in the home of the child.
32. Hypothesis – An idea that is suggested as the possible explanation for something but has not yet been found to be true or correct.
33. Inclusion – The act of including; ensuring that each child has an equitable opportunity to participate in all school and classroom processes regardless of their individual learning differences.
34. Integral education – A system of education intended to guide children in finding themselves and achieving their true potential through use of the mother tongue and connecting any new knowledge to the context that child is already a part of.
35. Integrated learning – A holistic approach to learning, focusing on the inter-relatedness of all curricular areas.
36. Learning achievements – This is the extent of progress towards attainment of learning outcomes and associated competencies in any domain.

37. Learning outcomes – These are statements summarising the knowledge, skills, attitudes, and values that all children must possess and demonstrate upon the completion of a learning experience or sequence of learning experiences.
38. Learning trajectories – This is the developmental path to attain competencies.
39. Mathematical understanding – This understanding entails knowing and making sense of the meaning and connotation of mathematical knowledge.
40. Meaning making – In the context of language and literacy development, it is an active engagement of the listener/reader to comprehend the meaning of what is being heard or what is being read.
41. Multilingualism – It is the knowledge and active use of many languages other than the home language for communication in teaching and learning contexts.
42. One-to-one correspondence – A skill in younger children involving the counting of each object in a set, wherein the counting is done only once with one count per object.
43. Phonics – A method of teaching decoding letters with matching sounds.
44. Phonological awareness – The ability to identify and distinguish sounds in a spoken word.
45. Positive learning habits – These are habits of learning that enable children to engage actively in formal learning environments like a school classroom.
46. Pre-literacy – These are early reading-readiness behaviours and skills that enable a child to develop successful reading abilities later.
47. Pre-numeracy – These are early number-readiness behaviours and skills of counting, identifying numbers, comparing quantities that enable a child to develop successful computation abilities later.
48. Preparatory stage – The stage for children aged 8-11 years; for Grades 3-5
49. Pre-school – A school providing education for children aged 6 years and under
50. Safety – It is the assessment of risk, and active protection of individuals from harm, danger, or injury.
51. Scaffolding – This is a specific and structured form of support provided to help children learn a particular concept.
52. School language – The language spoken in school amongst its members.
53. School preparedness – The readiness of children entering school with a willingness/openness to engage in and benefit from early learning experiences; also known as school readiness.
54. Self-care – Behaviours enacted in interest or concern towards one's own health, wellbeing, and growth.
55. Separation anxiety – Intense or prolonged fear that something bad will happen during separation from parents or any other attached person.
56. Spatial skills – The mental ability to visualise and manipulate objects, shapes, and locations.
57. Stimulation – This refers to simple activities such as playing, reading, and singing with children that improve young children's ability to think, communicate, and connect with others.

58. Structured play – Teacher-led play in which children participate actively.
59. Subitizing – The ability to perceive accurately the number of things in a set without counting. This is typically for small number of items.
60. Synaptic connections – These are spatial links between neurons (nerve cells that transmit nerve impulses) to enable learning and memory.
61. Total Physical Response – (TPR) - A method of teaching language or vocabulary by using physical movement to go along with or react to verbal input.
62. Vocabulary – It is knowing a body of words and the meaning of those words. In the context of language and literacy development, vocabulary also indicates the set of words that the child understands.
63. Whole language approach – A philosophy and method of teaching languages where a particular language is taught more wholly in experiential and social ways, and not taught in parts (phonological structures, grammar, and vocabulary) to be put together after.

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National Focus Groups for the NCF

State Focus Groups for the NCF

SCERTs and State Departments of Education

Large number Teachers, Civil Society Organizations, Schools, and over 1.3 lakhs other stakeholders who participated in online survey for the NCF

Participants of the District level consultations

Members of the Review Committee

All names in alphabetical order of last name within groups, other than Chairperson

Wide and Inclusive Process for Development of the National Curriculum Framework

The National Steering Committee (NSC) for the NCF, along with the Ministry of Education, and the NCERT, designed a large-scale, inclusive, and iterative process for the development of the NCF. This process benefited from the diverse and vibrant educational landscape of our country.

The process started with the States and Union Territories (UTs) setting up State Focus Groups which together had over 4000 experts, to write Positions Papers on 25 themes relevant to the development of the NCF. More than 500 papers were submitted by 32 States and UTs.

25 National Focus Groups were also formed to develop Position Papers on these 25 themes with an integrated national outlook.

District Institutes of Education and Training (DIETs) from across the country submitted more than 1550 District Consultation Reports (DCR). A mobile survey was launched to get inputs from Teachers and Educationists - 1,31,00 participants shared their views.

Alongside, consultation meetings were organized with various Ministries of Government of India to understand their vision and how education is important to realising their vision. NGOs, and other institutions working on the ground, shared their experiences and suggestions. Seminars were conducted in universities .to get suggestions from scholars on their expectations from school education. Open consultations were organized with various groups of teachers, parents, and students. The Digital Survey for National Curriculum (DiSaNC) was launched to get inputs from citizens of India, through 100 questions in various categories, so far over 10 lakh interested citizens, including parents and students have given their inputs.

The NSC designed a well-structured process to analyse and synthesize all the inputs received and to arrive at the NCF.

Thus, this NCF is the output of this deeply inclusive process that involved Teachers, parents, relevant government departments in the states, administrators, schools, NGOs working in education and allied areas, educationists and scholars from various fields, and other citizens of India.

Version 1.0

Updates will continue to be made to this document as it is integrated with and incorporated into the full National Curriculum Framework for School Education

In every epoch of humankind, knowledge represents the sum of what is created by all previous generations, to which the present generation adds its own.

The motif of the Mobius strip symbolizes the perpetual, developing and live nature of knowledge - that which has no beginning and that which has no end.

This Policy envisages creation, transmission, use and dissemination of knowledge as a part of this continuum.

- NEP 2020

National Curriculum Framework for Foundational Stage

2022