



FOUNDATIONAL LITERACY AND NUMERACY



NIPUN BHARAT

निपुण भारत

NATIONAL INITIATIVE FOR PROFICIENCIE IN
READING WITH UNDERSTANDING AND NUMERACY



निपुण भारत का सपना
सब बच्चे समझे भाषा और गणना

NEP, 2020: augmenting student learning outcomes through FLN

Recognizing the importance of early learning, the National Education Policy 2020 states that “Our highest priority must be to achieve universal foundational literacy and numeracy (FLN) in primary school and beyond by 2025. The rest of the policy will be largely irrelevant for such a large portion of our students if this most basic learning (reading, writing, and arithmetic at the foundational level) is not first achieved.”

Launching a National Mission on Foundational Literacy and Numeracy

Making foundational learning the highest priority for the country



Achieving universal FLN in primary schools by 2026-27

The highest priority of school education will be “Universal acquisition of Foundational learning skills by Grade 3”

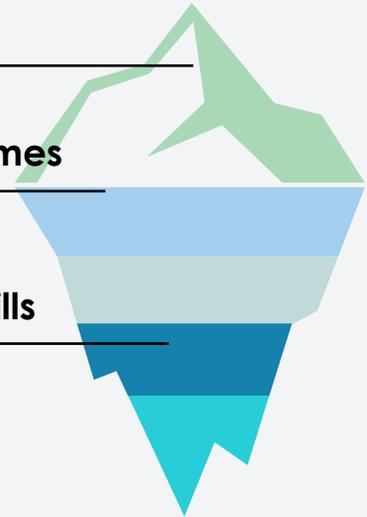
CHILDREN WHO FALL BEHIND, GET LEFT BEHIND

Grade 3 is the inflection point by which children are expected to “learn to read” so that they can “read to learn” after that.

Higher order learning

Better learning Outcomes

Foundational Skills



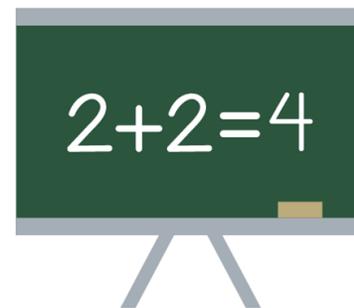
The Education system aims to achieve Foundational Literacy and Numeracy by 2026-27, where, by Grade 3 every child can.....



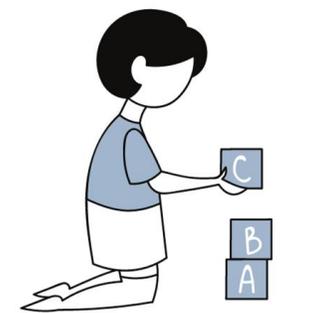
Read with
Comprehension



Write



Basic Mathematical
Operations



Learn basic life skills

What is Foundational Literacy and Numeracy?





FOUNDATIONAL LANGUAGE AND LITERACY

The pre-existing knowledge of language helps in building literacy skills in languages. The key components in Foundational Language and Literacy are:



Oral Language Development

Includes improved listening comprehension; oral vocabulary and extended conversation skills. The experiences in oral language are important for developing skills of reading and writing.



Decoding

Involves deciphering written words based on understanding the relationship between symbols and their sounds



Reading Fluency

Refers to the ability to read a text with accuracy, speed (automaticity), expression (prosody), and comprehension that allows children to make meaning from the text. Many children recognise aksharas, but read them laboriously, one-by-one.



Reading Comprehension

Involves constructing meaning from a text and thinking critically about it. This domain covers the competencies of understanding texts and retrieving information from them, as well as interpreting texts.



Writing

This domain includes the competencies of writing *aksharas* and words as well as writing for expression



FOUNDATIONAL NUMERACY

Foundational Numeracy means the ability to reason and to apply simple numerical concepts in daily life problem solving. The major aspects and components of early mathematics are:



Pre-number concepts

Count and understand the number system



Numbers and operations on numbers

Learn conventions needed for mastery of Mathematical techniques such as the use of a base ten system to represent numbers



Shapes and Spatial Understanding

Perform simple computations in her/his own way up to three-digit numbers and apply these to their day to life activities in different contexts



Measurement

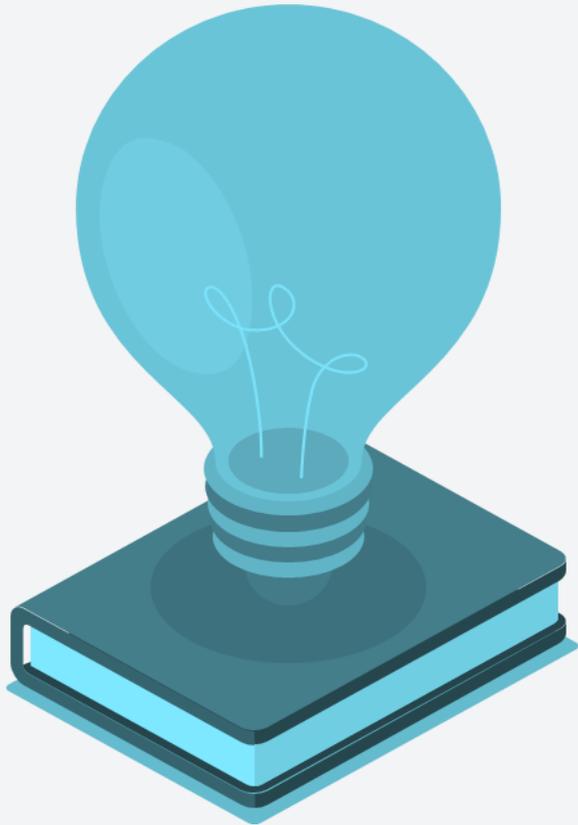
Understand and use standard algorithms to perform operations of addition, subtraction, multiplication and division on numbers up to three digits



Data Handling

Identify and extend simple patterns starting from repeating shapes to patterns in numbers, interpret simple data/information in his/her daily life activities

National Mission: NIPUN BHARAT Vision



The vision of the Mission is to create an enabling environment to ensure universal acquisition of foundational literacy and numeracy, so that by 2026-27 every child achieves the desired learning competencies in reading, writing and numeracy at the end of Grade III and not later than Grade V.

National Mission: OBJECTIVES of the Mission

The programme will be implemented in the mission mode, with the use and strengthening of the existing mainstream structures. The Department of School Education and Literacy, Ministry of Education (MoE) will be the implementing agency at the national level and will be headed by a Mission Director:

2 To enable children to become motivated, independent, and engaged readers and writers with comprehension possessing sustainable reading and writing skills.

3 To make children understand the reasoning in the domains of number, measurement, and shapes; and enable them to become independent in problem solving by way of numeracy and spatial understanding skills.

1 To ensure an inclusive classroom environment by incorporating play, discovery, and activity-based pedagogies, linking it to the daily life situations of the children and formal inclusion of children's home languages.

4 To ensure availability and effective usage of high-quality and culturally responsive teaching learning material in children's familiar/home/mother language(s).

5 To focus on continuous capacity building of teachers, head teachers, academic resource persons and education administrators.

6 To actively engage with all stakeholders i.e., Teachers, Parents, Students and Community, policy makers for building a strong foundation of lifelong learning.

7 To ensure assessment 'as, of and for' learning through portfolios, group and collaborative work, project work, quizzes, role plays, games, oral presentations, short tests, etc.

8 To ensure tracking of learning levels of all students.

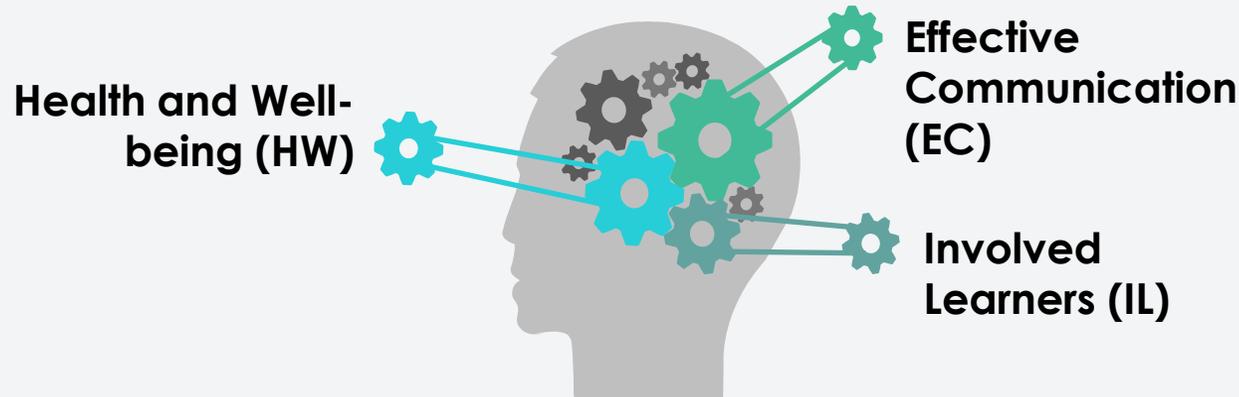


Academic approaches

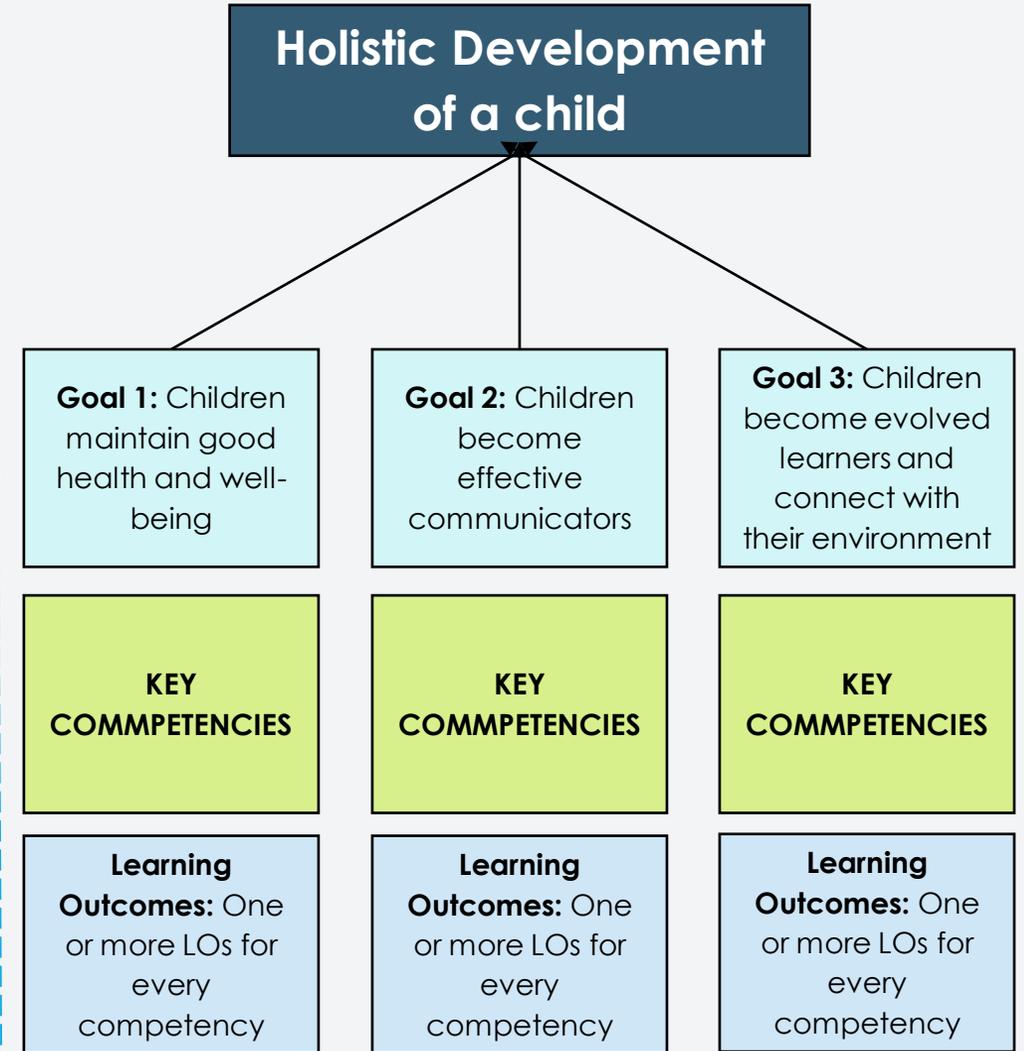


The Learning outcomes for Foundational learning have been divided into 3 Developmental goals

The Learning outcomes for Foundational learning have been divided into 3 three developmental goals: Goal 1-HW (Health and Wellbeing), Goal 2-EC (Effective Communicators), Goal 3-IL (Involved Learners). Key competencies of each goal have also been identified.



- The developmental goals have been further divided into six levels corresponding to the 3 years of ECCE followed by 3 years of schooling.
- Each learning outcome has been given a number/code for easy identification and referencing. It is important to understand that these numbers are not hierarchical, but these experiences can be provided simultaneously in an integrated way.



Lakshyas: Learning Goals of the Mission

The National Mission will declare the overall national targets in achieving learning outcomes, including year wise outcomes to be achieved by the year 2026-27 by each State/UT. The overall literacy and numeracy targets to achieve the objectives of the Mission are set in the form of Lakshya or Targets for Foundational Literacy and Numeracy starting from the Balvatika.



- Recognises letters and corresponding sounds
- Reads simple words comprising of at least 2 to 3 alphabets.

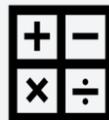


- Recognizes and reads numerals up to 10.
- Arranges numbers/objects/shapes /occurrence of events in a sequence

Balvatika



- Reads small sentences consisting of at least 4-5 simple words in an age appropriate unknown text.

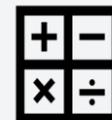


- Read and write numbers up to 99
- Perform simple addition and subtraction

Grade 1



- Read with meaning
- 45-60 words per minute



- Read and write numbers up to 999
- Subtract numbers up to 99

Grade 2



- Read with meaning
- at least 60 words per minute



- Read and write numbers up to 9999
- Solve simple multiplication problems

Grade 3

Learning Assessments

Assessment is vital to track children's progress in a continuous and comprehensive manner using multiple techniques of assessment. It aims at early identification of learning gaps at each foundational stage i.e., at FYL-1, FYL-2, FYL-3, FYL-4, FYL-5 and FYL-6 including children with special needs so that there can be possibilities of early intervention through referral to specialists.

A holistic and purposive assessment is vital to track children's progress by using different techniques to help the stakeholders to:



School Based Assessment (SBA)
SBA at the foundational stage should be stress-free and largely through qualitative observation based on performance of the child in a multitude of experiences and activities

Large-scale standardised assessment
Large scale assessment data at the State, National or the International level focuses on the 'System' and describes the educational health of the nation, state or district.

Assessment during the foundational learning can be broadly categorized into two major areas, namely

Pedagogy for creating an inclusive classroom



- Emphasis on Child Centred Pedagogy
- Emphasis on interactive classroom including authentic, appropriate, and accessible toys and materials.
- Toy-based pedagogy
- Activity based/ experiential learning
- Play based
- Art-integrated/sport-integrated
- Story-telling-based
- ICT-integrated learning

Contextualisation materials keeping in view the linguistic and social diversity of each State/UT

Empowering Teachers

In view of the challenges of in-service teacher training across the different stages of school education, NCERT has designed an innovative integrated programme of teacher training, now, popularly known as **NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement)**



NISHTHA
ONLINE

INTEGRATED TEACHER TRAINING
FOR CHANGE
SAMAGRA SHIKSHA

- 01** Specific Teacher Training Modules focusing on FL&N will be designed through NISHTHA
- 02** FLN-NISHTHA modules will specifically contain a module on bridging the language barrier and teaching in mother tongue/regional language/home language.
- 03** FLN-NISHTHA will contain a specific module on peer learning and how parents can be utilized as volunteers in the schools.



Expanding the scope and use of DIKSHA for FLN

Using DIKSHA to enable Student Learning: range from explanation videos, interactive assessment items, worksheets, reading materials, etc. will be available



LITERACY CONTENT

- 01 Read Along –digital read-along material.
- 02 Reading Comprehension
- 03 Grammar Question Bank
- 04 Children’s literature- local lore and folk tales

NUMERACY CONTENT

- 01 Explanation Video Type
- 02 Short videos clarifying misconceptions
- 03 Real World Example Videos
- 04 Assessment Banks

Using DIKSHA to enable Teacher Professional Development

Various teacher training resources including:

- Training modules
- Supportive materials for the training sessions, like hand-outs, videos, reading resources,
- Teaching-learning materials
- Instructional strategies, teacher handbook, activity booklets etc. will also be made available.



School Preparation Module

85% of a child's brain develops before the age of 6



NEP-2020 has recommended the development of '**3-month play-based 'school preparation module'** for all Grade 1 Students' by the NCERT, as an interim measure to ensure that all children are school ready till universal provisioning of quality preschool education is achieved.

- A School Preparation Module (SPM) is essentially around **12 weeks** of developmentally appropriate instruction at the **beginning of Class 1** designed to bolster a child's pre-literacy, pre-numeracy, cognitive and social skills.



- It is expected that this module would consist of the activities and workbooks around the learning of alphabets, sounds, words, colours, shapes, and numbers, and involving collaborations with peers and parents.

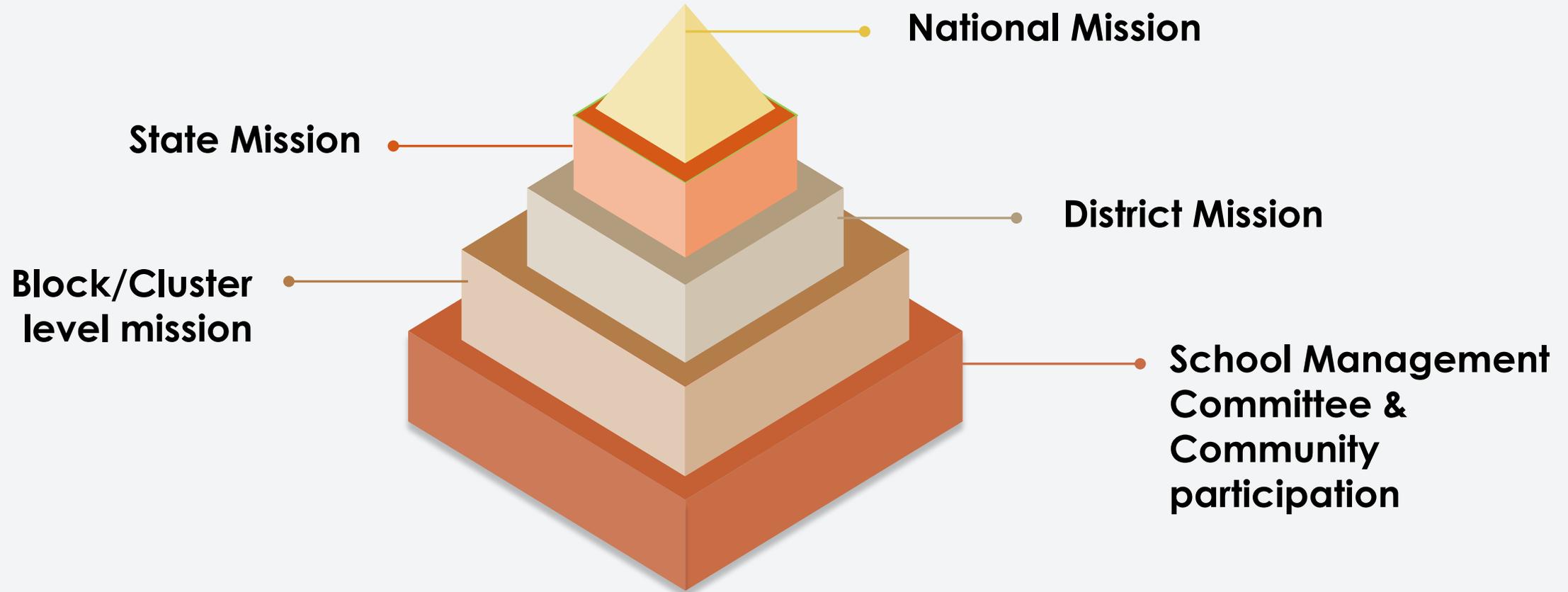
Accordingly, the NCERT has developed 3 Months Play Based 'School Preparation Module' that can be adapted or adopted by States and UTs as per their need

Administrative Approaches



National Mission: Implementation Mechanism

A **five-tier** Implementation mechanism for the Mission will be set up at the NATIONAL-STATE-DISTRICT-BLOCK-SCHOOL level



Role of various Stakeholders & Institutions in the Mission



Role of States/UTs

States and UTs have a critical role to play to achieve the goal of foundational literacy and numeracy by 2025-26, in mission mode. The following activities would need to be ensured:



Creating multi-year Action plans to achieve their respective FLN targets.

Contextualise the National Mission by preparing state specific Stage-wise Action Plan based on gaps identified in NAS.

Ensure availability of adequate number of Teachers in each school at each grade from pre-primary to grade 3 and extensive capacity building of teachers for implementing FLN in mission mode.

Mapping of database of each child enrolled in foundational grades.

Identify a pool of mentors to render academic support to teachers.

Ensuring delivery of textbooks and uniforms to students before the start of academic session.

School/public libraries will be made integral part of teaching learning process.

Training of SMC members, awareness drives for parents and community to make them understand the desired level of learning outcome.

“It takes a village to raise a child”

- A successful mission to improve foundational learning of all children in our country cannot be envisaged without an active role played by several Institutions, Teachers, Parents, Community, Local Bodies, etc.
- Each stakeholder plays a valuable role in the mission



Community Involvement

Organise various activities supported by teacher & Aanganwadi sevika/sahayika i.e.

- School readiness melas
 - Gunotsava/ Pravashotsav for children and their mothers:
 - Reading, quiz competitions, awards and recognitions
-

Local Bodies/Panchayats

This will encourage children and ensure community involvement.

- Undertake Baseline analysis as prescribed by the State to identify struggling learners and status school/class wise.
- Ensuring 100% enrolment of all children in the Panchayat in schools at appropriate levels.
- Ensuring ZERO drop out and NO out of school children.
- Ensuring all children in foundational years achieve basic minimum proficiency in Literacy and Numeracy.
- Connecting volunteer parents to schools to help the school achieve the FLN goals.

Monitoring and Information Technology Framework

- **The Mission at the National level, State Level and district level will monitor Mission activities through IT based solutions which shall include field level child wise monitoring.**
- The monitoring framework proposed will essentially be of two types:
 - Annual Monitoring Surveys and
 - Concurrent Monitoring.
- Further, the priorities for FLN are stated in the goals and these can be achieved by leveraging the existing building blocks such as DIKSHA and UDISE+, which may be enhanced by leveraging open-source tools and solutions for registries and identities while at the same time following the principles and standards set down by NDEAR, as per the following:

NDEAR institutional framework led by MoE may identify the areas where standards, specifications and policies need to be put in place in order to achieve the above-mentioned policy goals.

The framework and architecture for the FLN Data collection and measurement should enable automatic data collection and collation from multiple sources and at different frequencies and levels without need for special collection drives, pulling of data from different systems, synchronization, manual uploading etc.

Impact of FLN mission

Emphasis on Activity-based learning. A conducive learning environment to improve the quality of education.

Assessment to be based on learning outcomes

Improvement in transition rate of primary to upper-primary



Since almost every child attends early grades, therefore, focus on that stage will also benefit the socio-economic disadvantaged group thus ensuring access to equitable and inclusive quality education

It will enable children to keep them in class thereby reducing the numbers of dropouts

Intensive capacity building of teachers to make them empowered and provide greater autonomy for choosing the pedagogy



- Children to achieve steeper learning trajectory which may have positive impacts on later life outcomes and employment.
- FLN will ensure holistic development of the child by focusing on different domains of development
 - Physical and motor development
 - Socio-emotional development
 - Literacy and numeracy development
 - Cognitive development
 - Life skills etc.

Thank you!

