Foundational Literacy and Numeracy

Prof. Anup Kumar Rajput
Department of Elementary Education
NCERT
Foundational Literacy and Numeracy

Recognizing the primacy of Early Education

An urgent and necessary pre-requisite to learning
### Need of FLN

#### Class 3

<table>
<thead>
<tr>
<th>Number of schools sampled</th>
<th>Number of students sampled</th>
<th>Number of teachers sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>41,059</td>
<td>6,561,133</td>
<td>83,536</td>
</tr>
</tbody>
</table>

- **67% Language**
  - Average Performance of Students
- **63% Mathematics**
  - Average Performance of Students
- **64% EVS**
  - Average Performance of Students

#### Class 5

<table>
<thead>
<tr>
<th>Number of schools sampled</th>
<th>Number of students sampled</th>
<th>Number of teachers sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>41,120</td>
<td>6,966,686</td>
<td>87,585</td>
</tr>
</tbody>
</table>

- **58% Language**
  - Average Performance of Students
- **53% Mathematics**
  - Average Performance of Students
- **56% EVS**
  - Average Performance of Students

#### Notes

- **Low learning levels**
- **Increased drop-out rate**
- **Inappropriate language and mathematical skills**
Universal FLN - Objectives

- Making learners competent in doing meaningful reading and writing by the time they enter grade 3.

- Developing the basic understanding and competencies related to numeracy and its related concepts among young learners till grade 2.

- Developing skills among the learners to amalgamate their outside school experiences in their classroom learning to attain foundational literacy and numeracy in a better way.
Curricular Expectations

MATHEMATICAL THINKING
- Numeracy
- Number sense
- Spatial understanding

PEDAGOGY (should include play-way and experiential ACTIVITIES)

RESOURCES Locally developed as per National Guidelines

FORMATIVE ASSESSMENT

ADAPTIVE ASSESSMENT
- Reading with comprehension
- Writing with understanding
- Speaking with coherent thought

Curriculum Development
Foundational Literacy

- **Reading**
  - For joy
  - Reading is comprehension

- **Listening and Speaking**
  - with comprehension

- **Writing**
  - reflects child’s experiences
  - Writing for various purposes
Foundational Numeracy

Competent in Counting

Understanding about Numberness

Development of Number sense

Development of Mathematical Thinking

Application Basic Operations on Numbers for problem solving
Numeracy and Mathematical understanding

- Pre-number Concepts
- Spatial understanding – space, size, position
- Visualisation
- Number Sense
- Mathematical Vocabulary
**ELPS Approach**

**E** – Experience with physical objects/भौतिक वस्तुओं के साथ अनुभव

**L** – spoken Language that describes the experience/ बोली जाने वाली भाषा जो अनुभव का वर्णन करती है

**P** – pictures that represent the experience/चित्र जो प्रतिनिधित्व करते हैं

**S** – written symbols that generalize the experience/लिखित प्रतीक जो अनुभव का सामान्यीकरण करते हैं
Integration of literacy and numeracy

Mathematical Terminology as a part of daily language

Use of language in understanding mathematical ideas

Language for disposition of mathematical thinking

Communication – Language

Precise Communication – Language with mathematical ideas
SPM – School Preparation Module
Preparatory Class or ‘BALVATIKA’

Module

- 3 months play-based learning for all Grade 1 students.
  "Balvatika"

Elements of SPM
- Activities and workbooks around
  - Sounds,
  - words,
  - Alphabets,
  - Colors, Shapes and Numbers involving collaborations with peers and parents.

Material
- To be developed by NCERT & SCERT

Where?
- Stand alone Anganwadis
- Anganwadis co-located with schools
- Pre-primary schools
- Standalone pre-schools
Health and Nutrition

Regular health check-ups and health card.

Boosting mental and physical health

Energizing Breakfast in addition to mid-day meal.
National Book Promotion Policy

Setting up of School and Public Libraries in remote areas

Digital Libraries for all

Workbooks and activity material

National Book Promotion Policy

To ensure the availability, accessibility, quality and readership of books.

Resources

• By Schools
• By community
• By local Government

• DIKSHA
• e-pathshala
• NROER

• Learning Kit
• Play-based material
Peer Tutoring

All viable methods will be explored to support teachers in the mission of attaining universal FLN.

- One-to-one peer tutoring is extremely effective for learning not just for the learner but also for the tutor.
- It can be taken as a voluntary and joyful activity for fellow students under the supervision of trained teacher.
- Every literate member of the community could commit to teaching one student how to read, it would change the county’s landscape very quickly.
National Repository of Open Resources

Energised textbooks with QR code
Assessment

Purpose of Assessment

- Learning outcomes
  Assessment is joyful and integrated to pedagogy

Adaptive Assessment
Formative Assessment
School Based Assessment
Action Points

- Curriculum Revamping
- Universal Foundational Literacy and Numeracy
- Pedagogical Innovations
- Restructuring of Teacher Education Programs
- Revisiting Assessments
- Administrative Support
Implementation of Universal FLN

Setting up of National Mission by MHRD

Team

To be prepared by State/UT governments

Universal FLN by 2025

Highest Priority to Universal FLN
Thank you

You can contact me at
anupncert@yahoo.co.in
9868255775