# **NEXTIRS**

# DAILY EDITORIAL ANALYSIS

**TOPIC** 

**BRIDGING INDIA'S NUMERACY GAP** 

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# **BRIDGING INDIA'S NUMERACY GAP**

### **Context**

• The persistent learning gap in Foundational Literacy and Numeracy (FLN) that threatens the broader educational reform agenda under **National Education Policy (NEP) 2020.** 

### About the Foundational Literacy and Numeracy (FLN)

- It refers to the ability of children to read with understanding and perform basic mathematical operations.
- These skills are considered essential for all future learning and personal development.
  - Literacy: Reading fluently with comprehension, writing coherently, and expressing ideas.
  - **Numeracy**: Understanding numbers, performing basic operations, and applying math in daily life.
- FLN development **typically targets children aged 3 to 8 years** (by Grade 3), a critical window for cognitive growth.
- The National Education Policy (NEP) 2020 declared FLN as the highest priority, leading to the launch of the NIPUN Bharat Mission:
  - NIPUN Bharat (2021): Aims to achieve universal FLN for all children in Grades 1–3 by 2026–27.
  - **Diksha Platform:** Offers digital resources for FLN, including teacher training and learning materials.
  - **NISHTHA FLN:** A capacity-building program for educators to improve delivery of foundational learning.
  - **EAC-PM Report:** Highlights the long-term benefits of early FLN interventions and tracks state-level progress.

### **Concerns & Issues Surrounding FLN**

- Numeracy-Literacy Divide: According to the Annual State of Education Report (ASER) 2024, while
  48.7% of Class 5 students can read fluently, only 30.7% can solve a basic division problem a striking
  18 percentage-point gap.
  - No state in India reports higher numeracy than literacy outcomes.
  - It indicates that while children may read words, they struggle to 'read numbers'.
  - It underscores the need for **targeted interventions in numeracy** the missing link in India's foundational learning framework.
- Hierarchical Nature of Mathematics: The root of the numeracy problem lies in the cumulative and hierarchical nature of mathematics.
  - In language, partial understanding can still enable progress.
  - In mathematics, missing a basic concept such as **place value** can make later topics like **addition**, **fractions**, **or decimals** incomprehensible.
  - Traditional syllabus-driven teaching, which progresses irrespective of students' conceptual readiness, deepens this problem.
- Real-World Disconnect: Evidence from the Abdul Latif Jameel Poverty Action Lab (J-PAL) highlights another dimension:
  - Students who score well in classroom math assessments often fail to apply this knowledge in real-life contexts, such as making market calculations.
  - Conversely, children who handle real transactions (e.g., in family shops) often cannot translate those experiences into formal math problems.
  - This **two-way disconnect** points to the urgent need for **integrated learning** that connects classroom mathematics with everyday problem-solving.
- **High Failure Rates & Drop Out:** Students weak in basic numeracy struggle in **mathematics** and **science**, leading to **high failure rates** in board exams.
  - Many adolescents **drop out** of school before Class 10, not due to lack of interest, but because instruction becomes incomprehensible.



• It creates a **cycle of fear and disengagement**, closing off access to higher education and employability pathways.

### **Way Forward: Toward a Multi-Pronged Response**

- Extend FLN Beyond Early Grades: Limiting foundational interventions to Class 3 is insufficient. With nearly 70% of Class 5 and over 50% of Class 8 students unable to perform basic division (ASER 2024), interventions must extend up to Class 8.
  - Evidence from **Dadra and Nagar Haveli and Daman and Diu**, where FLN efforts were expanded into middle grades, shows **notable improvement in outcomes** (Parakh Rashtriya Survekshan 2024).
- Introduce FLN+ Skills: The next phase should move beyond basic skills to FLN+ including fractions, decimals, percentages, ratios, and integers. These are essential not just for board exams but also for functional literacy and life skills.

### FLN+ Approach

- It builds on the **goals of the National Education Policy (NEP) 2020** and the **NIPUN Bharat Mission**, which aim to ensure that every child attains foundational skills by Grade 3.
- Key Components of the FLN+ Model:
  - Strengthening middle-grade support: Interventions should not stop at Grade 3. Students in Grades 4 and 5 need continued scaffolding to consolidate their numeracy skills.
  - Contextualizing math in everyday life: Making math relatable through real-world applications—like budgeting, measurements, and local problem-solving—can enhance engagement and retention.
  - **Teacher empowerment:** Equipping teachers with diagnostic tools, training in differentiated instruction, and access to peer learning networks is essential for effective delivery.
- Rethink Pedagogy: Child-friendly, activity-based learning methods proven effective in early grades should be adapted for upper primary levels. Teaching must respond to students' actual learning levels, not rigid curricula.
- Connect Learning With Life: Mathematics should be taught through context-rich problems that reflect real-world scenarios. Embedding literacy and numeracy in everyday life enhances both relevance and retention.

### Conclusion

- India's numeracy challenge is **deep**, **systemic**, **and urgent**. It stems from the layered nature of mathematics and is perpetuated by traditional teaching practices that leave many learners behind.
  - The consequences poor performance, dropouts, and inequity threaten the very goals of the NEP 2020.
- The **NIPUN Bharat Mission** has demonstrated that **focused, evidence-based interventions** can improve foundational learning at scale.
  - The next step must be to extend these gains into upper primary and embed FLN+ numeracy as a national priority.
- It is a **social and economic necessity** along with an academic imperative that directly influences India's human capital, equity, and future growth.

## **Daily Mains Practice Question**

[Q] Discuss the key challenges contributing to India's numeracy gap and evaluate the effectiveness of current government initiatives like NIPUN Bharat in addressing these issues.

Source: TH