## FOUNDATIONAL LITERACY AND NUMERACY REPORT

Sifc institute for competitiveness

Supported by





The report represents independent research by Institute for Competitiveness. The Institute for Competitiveness would like to thank United States Agency for International Development (USAID) and Room to Read for providing financial support towards the research on Foundational Literacy and Numeracy.

#### Authors

#### **Amit Kapoor**

Honorary Chairman, Institute for Competitiveness and Lecturer, Stanford University

#### Natalia Chakma

Researcher, Institute for Competitiveness

#### Sheen Zutshi

Research Manager, Institute for Competitiveness

**Thanks to Room to Read team:** Sourav Banerjee (Country Director), Saktibrata Sen (Program Director) and Bhagya Lakshmi Balaji (Associate Director) for reviewing the document and sharing insights.

#### **Designed by**





## Content

Preface by Bibek Debroy	05
Message by Amit Kapoor	06
Executive Summary	07
Introduction: Foundational Literacy and Numeracy	10
Foundational Learning Program: NIPUN Bharat Mission	14
Current State of Foundational Learning and Numeracy (FLN)	17
Relationship between Foundational Learning and Literacy Development	19
Redefining and Revisiting Language: Why?	22
Fundamental Concepts of Reading acquisition for Children	28
Assessment: Challenges and Advantages	31
Mapping of Foundational Learning Concepts with NAS and FLS	39
Instruction: Challenges and Advantages	42
Various State-led Initiatives to Foundational Learning	47
Nutrition and Education must go hand in hand	55
Digital Learning and Foundational Learning	57
What is the Index on Foundational Learning?	60
Foundational Literacy and Numeracy – Country Level Analysis	71
Recommendations	86
Way Forward	99
Scorecards	100
Methodology	137

### Foreword

#### **Dr. Bibek Debroy**

Chairman, Economic Advisory Council to the Prime Minister Government of India



विवेक देवराय BIBEK DEBROY



ाज़ादी<sub>का</sub> अमत महोत्सव अध्यक्ष प्रधानमंत्री की आर्थिक सलाहकार परिषद भारत सरकार Chairman Economic Advisory Council to the Prime Minister Government of India

This is the Second Report IFC has done on the State of Foundational hiteracy and Numeracy. Education is a continuum. For India to perform better on developmental aspirations, both health and educational indicators need to improve and both have taken a knock because of the pandemic. Within that continuum of education, foundational learning (interpreted as under-10) is the most important link in the chain, since it provides the base for subsequent achievements.

This is not the first study to point out that literacy and numeracy performance ought to be better. The ranking and index are functions of the indicators used and one can quibble about both omission and commission. But the point is that the study identifies the gaps and highlights significant variations among States. While there are Union government interventions, foundational learning is primarily a State subject. To that end, there is also a listing of best practices in States. Studies like these also help to identify incremental improvements over time. IFc should be complimented for bringing out this report. Bibek Debroy.

2nd garmony 2023



#### Dr. Amit Kapoor

#### Honorary Chairman, Institute for Competitiveness Lecturer, Stanford University

Every child embarks on a journey through education to acquire new knowledge and abilities that will enable them to evolve into human capital for economic progress. Focus on Literacy and numeracy serves as a solid foundation for the early education of every child because it further prepares them to sustain themselves in society.

Language is the first step towards learning to read and becoming literate. Children's early foundational years are critical because they acquire the fundamentals of reading and mathematics throughout these years, which impacts their learning outcomes in the long run. Against this backdrop, continuous assessment on foundational learning and numeracy is crucial.

The Institute for Competitiveness is pleased to release the second edition of the Foundational literacy and numeracy (FLN) report, mandated by the Economic Advisory Council to the Prime Minister (EAC-PM). It is a data-oriented report that continues to build an understanding of the overall state of Foundational Learning and identify bottlenecks for each state/UT. The index continues to act as a benchmark in assessing the performance of states and union territories and promoting peer-to-peer learning to enhance their respective performances.

India is committed to achieving NIPUN Bharat, an initiative which emphasizes especially on foundational learning. Recently, the Government of India increased the budget for Samagra Shiksha by 20 per cent. Along with this, the state governments are also working in partnership with public/private organisations towards attaining universal foundational learning for every child.

I am thankful to the team of Room to Read for their continuous insights in the preparation of the report. I hope the report can continue to help States/UTs formulate policies and devise goal-oriented strategies to pave the way in their collective journey to achieve the universal FLN as a nation by 2026-27.

(Amit Kapoor)

## **Executive summary**

Literacy defines human civilization, whereas language defines humanity. The development and acquisition of literacy are built on language. There is a close relationship between language and an individual's sense of belonging, i.e., identity.

Language plays a crucial role in shaping the identity of individuals as it determines how individuals interact with each other in the global world. At the same time, numerous issues related to acquiring literacy skills have become a significant concern. Moreover, the estimate number of individuals having literacy problems, the figure goes up to more than one billion people worldwide, which is grievous. As Kofi Annan said, "For everyone, everywhere, literacy is, along with education in general, a basic human right. Literacy is, finally, the road to human progress and the means through which every man, woman and child can realize his or her full potential." Therefore, achieving universal foundational literacy and numeracy has to be a high priority to strengthen an individual's ability.

Prime Minister Narendra Modi also emphasized on the importance of language and heritage during his speech on the occasion of 75th Independence Day. He said, "**Our education**, the education system, the education tradition has a great role in preparing the youth, who are possessed with skill and ability, and who have the spirit to do something for the country. Today the country also has a new National Education Policy to meet the needs of the 21st century. Now our children will neither stop due to lack of skills nor will they be bound by language barriers. Language is the instrument of the fight against poverty in the new National Education Policy. This new National Education Policy is also going to be a great tool to fight against poverty in a way. The basis of winning the war against poverty is also the education, prestige and importance of the vernacular language."

The second edition of State of Foundational Literacy and Numeracy specifically highlights language as an important aspect and how vital it is in acquiring early literacy. Language is a fundamental tool and medium through which communication takes place, without language no civilization would survive. Similarly, language is the backbone of education. When the children are beginning to read and write, it is crucial for them to comprehend the instruction which is communicated by means of a language and that should be in a language they understand.

Early foundational years are incredibly significant for children because they learn the basics of reading and numeracy in these years. The importance of foundational learning arises from the fact that it has long-term implications on the child's life. When the children are not able to read, write and understand a simple text, they also struggle to learn anything else in their schools. As a result, they are likely to repeat and drop out of school. This further leads to poor health outcomes, high youth unemployment and acute levels of poverty.



# **'NEARLY TWO-THIRDS OF 10 YEARS OLD ARE UNABLE TO READ AND UNDERSTAND A SIMPLE TEXT.'**

With the covid pandemic situation, the learning loss worsened, and every child across the world has fallen behind in their learning. Therefore, there is an urgent need to focus on improving the learning outcomes by developing and strategizing appropriate measures.

To counterbalance the learning loss and learning outcomes, better methods of assessment and instruction needs to be implemented. The recent Foundational Learning Study 2022 was an exceptional attempt to assess foundational learning performance of grade 3 students on a wide range of literacy skills and, also because it was conducted in 20 different languages. The survey has been a very comprehensive study as it recognizes the linguistic diversity of the country. The Index on Foundational Literacy and Numeracy supports in establishing an understanding of the overall state of Foundational Learning across children aged below ten years in Indian States and Union territories. It provides 36 different indicators across five key domains: Educational Infrastructure, Access to Education, Basic Health, Learning outcomes and Governance. The methodology adopted to assign weights in the index is Principal component analysis (PCA). States were categorised into different tiers based on the level of development in every state across India to help in developing better analysis. Furthermore, the states have been classified based on their children population, i.e., the ones aged ten years and below.

The multi-linguistic diversity poses unique challenges in teaching and learning characteristics; however, with appropriate methods, the gap can be overcome. A commonly faced challenge is many children in the country receive instruction in languages they do not understand or familiar with, which ultimately leads to learning gaps in their understanding of basic knowledge. Therefore, various assessments pertaining to the linguistic system (includes phonology, vocabulary/lexicon, and syntax) the orthographic system (includes symbols and mapping principles) and the writing mechanisms have been recommended along with language-specific approaches for the medium of instruction while teaching. Assessments formats on language and literacy must be developed with extreme sensitivity and appropriateness, also considering the regional languages and geographical specificities. The journey towards achieving foundational literacy and numeracy by 2026-27 is achievable with continuous and persistent efforts and required interventions regardless of the barriers. Because every child needs and deserves the opportunity that foundational learning brings.



# 01

Introduction: Foundational Literacy and Numeracy

The world is experiencing a deep learning crisis. Globally, learning loss has become a major issue as it includes academic as well as cognitive, social, communication and interpersonal skills. The COVID-19 pandemic, followed by school closures, led to more learning loss resulting in a long-term impact on children's schooling and learning.

Between 2019 and 2022, in low and middle-income countries, the share of children aged ten years who cannot read, write and understand simple text has increased from 57% to 70%.



The current generation of the world is at the risk of \$17 trillion in lifetime earnings due to school closures, which is equivalent to 14% of the global GDP (UNICEF). The rise in educational disparity brought about by the pandemic makes it more challenging for teachers to assist most kids, especially the most marginalised. Recovering from the children's learning loss during the pandemic requires more effort than simply reopening the classrooms. To address the learning gaps, students need extensive help, teachers require access to adequate training and resources, and appropriate course of action need to be formulated. Besides, the foundational years between 0 and 6 are critical to every child because a child's lost years can never come back.



Unfortunately, in India, because of school closures, around

#### 250 million students were affected.

However, the journey towards overcoming this difference is not impossible; by adopting suitable innovation and agency demonstrated by teachers, collaborating with parents and using experiments with technology, the learning loss can be mitigated. Many state governments have initiated the creation of a conducive environment for educating children in their foundational years. Recently India launched Vidyanjali 2.0, an online platform to directly connect volunteers with the school of their choice and help accelerate the learning recovery. The initiative aims at strengthening schools through community and private sector interventions across the country. These measures will further lead to achieving Sustainable Development Goal 4, which aims to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. Overall, improving the learning outcomes needs to be an utmost priority considering the current state of foundation learning.

A life with dignity, health, and opportunities depends on the ability to read, do simple math, and interact socially, which is why universal foundational education holds an enormous value in the growth and development of an individual. It is an integral first step in ensuring that all children and young adults have access to more sophisticated knowledge and abilities. For instance, children will find it difficult to learn anything else in school if they can't read and comprehend a simple text. As a result, they end up failing a grade and repeating it. Therefore, early literacy is a sign of a nation's educational system's effectiveness. Failure to guarantee fundamental education for all will have a negative impact on health outcomes, youth unemployment, and poverty levels on a national scale. Also, early differences in outcomes expand over time. Hence, securing early foundational education for everyone is crucial because it serves as a foundation for advancement in education, society, and the economy.



Literacy is a key foundational skill for today's world. Whether digitally or in print, we are reading all the time. Literacy practices are socially constructed and culturally contextual, yet a global concern, with inputs from cognitive neuroscience. Foundational literacy and numeracy are fundamental building blocks to achieving a greater guality of life and personal well-being during the later years. Yet so many children do not have an understanding of basic foundational education. Basic reading, writing, and performing arithmetic provide a foundation for high-order thinking because metacognitive abilities help the learner to reflect and evaluate problems, form logical arguments and understand different perspectives. When children learn to write and read, they acquire phonological awareness about letters, syntactic knowledge and wisdom about words and learn to express their thoughts. The learner needs intuitive and explicit guidance from teachers, parents and peers to foster comprehension, and this skill further helps in understanding the meaning of a text. Hence, without foundational education, the children will not obtain the human capital they need to enhance their careers, become engaged citizens, and contribute to the economy after they leave school.

Language is a critical determinant of foundational learning because a learner's competence and growth depend on how they are taught and instructed using language as a means of communication. Because of the country's cultural and linguistic diversity, and with a population of more than one billion, it becomes a challenge to integrate languages spoken by every child in the classrooms, which leads to holding back their learning process, especially the ones who are living in poverty. This also means that a vast majority of the children are learning literacy and numeracy skills in languages that are different from their mother tongue or home language. Thus, the country needs to emphasize the development of better tools or methods in instructing and assessing literacy skills because both are a gateway to improving the learning outcomes of the children. At the national level, the Government of India launched NIPUN Bharat on 5th July 2021 to speed up the achievement of universal foundational literacy and numeracy. Furthermore, to assess the learning outcomes of children, the National Achievement Survey (NAS) and Foundational Learning Study (FLS) are being conducted by the government. Similarly, state governments have introduced various programmes to improve learning outcomes and bridge the learning gaps caused by the pandemic, followed by public and private partner collaborations with the state governments in accelerating the implementation process of foundational education.

Additionally, the recent budget allocation towards the Samagra Shiksha mission increased by almost 20 per cent, from



Samagra Shiksha is an overarching, centrally sponsored mission covering primary and secondary education, foundational literacy and numeracy. The goal of universal foundational literacy and numeracy by 2026-27 is achievable, considering the rigorous and constant efforts of the government.

# 02

Foundational learning Program: NIPUN Bharat mission

Foundational learning programs, in general, help reduce the number of school dropouts and repetition and further improve the children's learning outcomes. A strong foundation during the early years has a long-term impact on the child's development and wellbeing. Foundational learning is core to a child's future; as the term implies, it develops and builds the primary education that a child requires to prosper in life. The child should be able to read and write with understanding and perform operations with numbers. Accomplishing universal Foundational Literacy and Numeracy (FLN) is a significant element in improving the education system of India. Therefore, to expedite the process, the Government of India initiated NIPUN Bharat mission.

National Initiative for Proficiency in Reading with **Understanding and Numeracy (NIPUN) envisions** creating an enabling and inclusive environment for children by the end of 2026-27 so that every child in the country achieves the desired foundational literacy and numeracy by the time the child completes Grade 3 i.e., children between 3 to 9 years. NIPUN Bharat mission focuses on making the foundational learning experience of the children not only inclusive but also holistic, enjoyable and engaging. By the end of the foundational years, the child should be able to understand, reason, and independently solve problems. It aims at integrating children belonging to marginalised communities and first-generation children of families who do not have access to basic learning. Simultaneously, learning gaps are being identified with credible reasons. NIPUN Bharat and FLN are driven by National Educational Policy (NEP) 2020, and both strive to achieve learning outcomes rigorously.



National Council of Educational Research and Training (NCERT) is responsible for developing a vigorous module that will facilitate learning materials, well-defined learning outcomes, capacity building of teachers/academic staff, and efficient assessment tools and methods. Every Anganwadi Centre and foundational grades have to follow the given framework to secure a swift progression from preschool to Grade 1.

The mission has been launched on a priority basis under the Samagra Shiksha scheme to ensure quality and inclusive education for all. The budget for the mission is funded through the Samagra Shiksha scheme, and every state is responsible for making action plans and attaining their respective FLN target by identifying and working with various public-private partners. The mission will integrate the daily life situations of children through discovery, plays and activity-based teachings. It prioritizes giving special importance to including the children's home languages or mother tongues during the foundational years. It will ensure periodic assessment from time to time through activities like group and project work, guizzes, presentations, games, etc. The initiative will also ensure the effective use of teaching materials in the child's familiar/home/mother language. The framework promotes strengthening the concept of multilingualism, the use of heterogeneous teaching and learning materials, and incorporates pedagogy and modules embedded in the Indian languages, art, culture and heritage. Furthermore, equipping the child to address issues of the contemporary world with indigenous knowledge, awareness and experience.

# 03

Current state of Foundational Learning and Literacy

#### 01

Children need to acquire skills in foundational literacy and numeracy by the end of Grade 3, implying they should be able to read with understanding and solve basic math problems. However, in the contemporary world, in many countries, most children cannot interpret basic words and perform simple operations with numbers.

#### • 02

According to a World Bank assessment, in India, around 50% of the children lack foundational learning, and by the time they reach grade 5, it becomes difficult for them to grasp the teaching and learn as per the grade level. With the help of NIPUN and NEP 2020, serious efforts are made to bridge the gap and realise the goal of universal FLN by 2026-27. 03

The world was already struggling with a learning crisis in the foundational years of the children, and with the pandemic, the situation became worse. The pandemic lockdown led to children not being able to learn in the classrooms, which is key to a child's growth and development at an early age. In India, 92% of students lost at least one specific language ability and 82% lost at least one specific mathematic ability from the previous year. (UNICEF, 2022)

04

Appropriate procedures need to be taken to improve the capacity building of teachers, better funding for teaching materials and resources with a focus on foundational education to prepare the children with building blocks for all kinds of educational wisdom and skills. Moreover, community-driven approaches and parent engagement in the process would lead to better results where ownership is encouraged among the people.

# Relationship between foundational learning and literacy development

Literacy, in simple words, is the ability to read and write. Literate behaviour incorporates being able to write and perform analytical acts or other creative things and simultaneously having specific knowledge and skills in particular subject matter like mathematics, history, science, etc.

The main aim of the education system is to ensure literacy for all, and foundational learning is the base on which literacy development depends. According to the United Nations, Educational, Scientific, and Cultural Organisation (UNESCO) (2015), literacy is essential for a better life not only because of the ability to read and write but also because it would help to eradicate poverty, reduce child mortality, maintain peace and stability across the world. Various factors influence literacy development, and orthography is a significant one. For example, Englishspeaking children take about two years of formal instruction to become proficient in decoding and while for European orthographies like Spanish, French, etc., they take one year to be proficient.



Readin writte meanin must from t

1) (A Torolly (All word West

To be able to read at an effective speed, it is important to have the necessary skills, including decoding, blending, understanding the meaning of the words, understanding the sentence structure etc. Trying to get to the nuanced layers of meaning that a text harbour is a unique human feat. This needs to be painstakingly learnt through both explicit instruction and a variety of enriching exposure to language and books. Independent readership is about an active engagement with meaning, where the text becomes a dynamic space. Hence, for a reader, it becomes very important to do both simultaneously - 'read' the text and engage with the nuanced possible different meanings hidden within the text.

Children must learn the code their culture uses to represent speech as a collection of visual symbols in order to learn to read. Thus, the process of matching unique visual symbols to sound units, i.e., phonology, is at the core of learning to read. Learning to read and write begins during the first five years of a child because the biological, cognitive and social precursors get established during those years. Children's health and sensory systems are among the most essential preconditions for reading because the window for developing abilities like language is relatively rapid during early years.

Reading is the process of understanding speech written down, and the goal is to gain access to meaning (Ziegler and Goswani, 2005). The reader must construct meaning from what is read, i.e., from the text, the script.

The ability to learn to read and write depends on the child's developmental milestones as they relate to age. Children's understanding of the world gets broader and decontextualized as they grow older because of the early years of brain development. Despite being systematic, this process varies from child to child due to variations in impacts from both biological and environmental factors. Throughout the first few years of life, as children comprehend and produce their first iconic and then graphical representation, they gradually learn the ability to use symbols. Moreover, a child's development is influenced by a variety of aspects of their upbringing, which include maternal mental and physical health (during pregnancy), housing conditions, temperament, diet, and emotional stress and support.

Literacy, thus, is an ability to read with an effective speed (called fluency) and with extraction and construction of meaning from the text being read (called comprehension) 'we are what we read'. And that means three pillars of literacy, namely orality in a language that children are learning to read, orthographic exposure in the script of language and exposure to a variety of interesting reading material – need to be spirally intertwined to ensure a comprehensive literacy experience for children in the classroom. This becomes a fundamental predictor of success in learning in the later years.

# **Bedefining and revisiting Language: Why?**

As per the Eighth Schedule of the Indian Constitution, the country has 22 official languages; however, there are more languages beyond these 22 languages. stopped. Shetty was happy

Thank you, you have been kind. to suward where for four here

The their nest with so it said "I want the medle

It is important to note that in the last 50 years, India has lost over 220 languages, which means not enough attention is paid to preserving and taking care of the languages. Additionally, 197 languages have been listed as 'endangered' by UNESCO. Mostly, these are the languages which do not have a script. Furthermore, the 22 languages of the Eight Schedule of the Constitution of India are facing various challenges with respect to teaching and learning.

Additionally, 197 languages have been listed as 'endangered' by UNESCO.

#### There is a severe lack of skilled language teachers, regardless of the measures being taken in the country.

All the Indian languages, even the ones which are not mentioned in the Eighth Schedule, need to be gradually, diligently integrated and emphasized in the Indian education system. Teaching and learning complement each other. Both of them need to be accommodated at every level of education, starting from foundational literacy and numeracy. For the purpose of keeping language relevant and vigorous, there needs to be a constant effort in terms of updating the contents of textbooks, notebooks, vocabularies, dictionaries, novels, etc. and translating valuable materials from world languages. In this regard, India has been slightly slow in creating such learning and print materials to keep language learning more engaging and interesting. Secondly, there is a severe lack of skilled language teachers, regardless of the measures being taken in the country. This is more challenging in the context of teaching children who belong to linguistic minority groups. The teaching methods need to be improved; there has to be more focus on the ability to interact and converse in the specific language and not only on the literature and grammar of the language.

Moreover, it is estimated that 25 per cent of primary school children in India face a moderate to severe learning disadvantage as a consequence of the fact that the language used at school is not their home language (World Bank, 2021). Especially children belonging to communities whose languages are lost or endangered are in a vulnerable state. Firstly, due to the medium of language used in the classrooms during their foundational years and secondly, because of their socioeconomic conditions.

25%

primary school children in India face a moderate to severe learning disadvantage

#### DISCOURSE: IMPORTANCE OF LANGUAGE IN ACHIEVING UNIVERSAL FOUNDATIONAL LEARNING

Language development and metalinguistic abilities need to be drawn upon when a child learns to read. When children start to learn to read, it is also crucial for them to acquire refined understandings of the forces beyond the individual words and pictures which lead them to the meaning of the text.

These include characteristics of words, sentences, paragraphs, and text structures, along with various kinds of thinking devices to hold all of them together.



For children to become mature readers and writers, the perception of language as an object of awareness in itself needs to be changed because language is like a glass through which the child looks at the surrounding world (Downing, 1979). These changes must be guided by the metalinguistic (language or thought about language) insight that language brings along with it. Therefore, learning to treat language as a thought object in and of itself is essential to developing literacy at all levels.

Children with healthy neurological systems who are nurtured by caring parents in a speech community naturally pick up that community's spoken language, thereby displaying abilities in the areas of phonology, morphology, syntax, semantics, pragmatics, and vocabulary. Additionally, from birth, infants have the ability to differentiate all sounds of any human language, and in a very short time, they are able to grasp their native language or mother tongue. Knowing and understanding a language neither requires a conscious awareness of the other systems which are involved in that particular language, nor does it involve communicating the components of principles of the systems. Typically, during the preschool years, metalinguistic insights into language domains appear in every child, and vocabulary development is rapid. Also, the children, while they are transitioning from preschool to adulthood, learn the pragmatics of their native language in terms of how to use the language effectively in social contexts.

Throughout the history of civilization, language and humans have always been interconnected. No society can operate or function without language as the medium of communication. In the education sector, language is a pre-requisite to attaining literacy skills and knowledge. During the foundational years, learning in the home language/local language helps the children in improving their cognitive skills and solving problems. Home language can be defined as the language which is the same as the mother tongue or spoken by the local communities. However, in the context of multilingual families, there could be a home language spoken by other family members which is different from the mother tongue or the language spoken by the community. Children learn and acquire the core skills more effectively if they are taught in their home language or local language. Hence, they need to be taught in a language they understand.

#### However, in many countries across the world

# 

# 40% of the children are not taught in the languages they speak and understand on a regular basis.

Therefore, many children, especially the ones belonging to disadvantaged groups are unable to acquire basic foundational learning. These groups include children living in urban slums, children with disabilities, refugees, girls, children from ethnic and linguistic minorities, etc.

'Speaking a language that is not spoken in the classroom frequently holds back a child's learning, especially for those living in poverty. At least six years of mother tongue instruction is needed to reduce learning gaps for minority language speakers.'(UNESCO, 2016) In order to reduce the impact on the learning outcomes, it is important to impart teaching in the most effective language, which will ensure the learner's growth in the desired manner.



With a growing population of 1.3 billion people, India as a country is incredibly heterogenous in various ways in terms of culture, language, traditions, ethnicity and religion. Many scholars have characterised India as a socio-linguistic giant, and multilingualism is the soul of the giant. Because of the linguistic diversity of the country, India's journey towards multilingualism becomes very extraordinary and challenging. Multilingualism has been a natural phenomenon and has existed since the beginning of the country's history. Maintenance and existence of diversity have been part of the Indian tradition and culture. The languages were spread by reciprocal interactions with local languages and gave birth to new languages, further strengthening and enriching the multilingual base of India. Education can be an intrinsic instrument in preserving the languages spoken in the country.

NEP 2020 takes a very pragmatic approach to encourage multilingualism and the ability of language in teaching and learning. Clause 4.11 of the policy clearly states that young children can learn the concepts more quickly in their mother tongue. Home or local language must be emphasized as the medium of instruction at least till grade 5, preferably till Grade 8 and beyond. It has to be ensured that home or local language is taught as a language as far as possible. Besides, it is very easy for young learners to grasp the concepts more quickly if communicated in their home language or mother tongue. When a learner's mother tongue or home language is used as a medium of instruction, it improves the status of language in society and accelerates the learning process during the foundational years.

Multilingualism is very widespread in the education domain across the world. Although it is a source of valuable asset in preparing children to thrive and adapt to distinct cultures in their later years, however, it is also one of the prime reasons for education inequalities around the world. Therefore, the primary focus needs to be on improving the learning outcomes and strengthening the foundational learning of the children, especially in the low-income communities of the country. There are many factors required to take into account when figuring out how to improve literacy scores. One of the most important problems that remain unsolved, however, is what languages should be taught, how to teach them, and when to teach them.



In order to implement, assess, and scale reading programmes in the developing world, more effort and research are required in terms of building knowledge on how to design literacy programs which will significantly improve foundational learning in a multilingual setting.



In consideration of the linguistic diversity of the country, the three-language formula was initiated in the National Education Policy of 1968 and has been continued since then. Initially, the formula emphasized an English-Hindi language approach, along with a modern Indian language, but with the recent National Education Policy 2020, there is more flexibility in the formula because 'no specific language will be imposed on any state.' The objective of the formula is to create multilingual individuals, which will enable learning languages of different regions and achieving national unity.



The respective states or regions and the students can choose two native Indian languages out of the three languages. A child has more synaptic connections as compared to an adult, meaning that they have the capability to captivate the concepts better and faster. This formula can be used as an advantage to develop foundational abilities of reading, writing, and operating with numbers and encourage multilingualism.



Additionally, amidst globalisation, proficiency in more than one language improves and facilitates interpersonal and social communication, broadens intellectual knowledge, and encourages recognition and tolerance for diverse cultures. As per India's federal system and diversity, no regional language should be considered supreme over the other language.

The next section of the report will shed light on some of the key concepts that are very fundamental and integral in the process of literacy acquisition.

# **O6 Fundamental concepts of Reading Acquisition for children**

Reading comprehension is an essential element of reading skills and is defined as the ability to understand the meaning of a text after reading it.

#### **READING ACQUISITION IN CHILDREN**

#### Language Comprehension

Background Knowledge (facts, concept, etc.)

Vocabulary Knowledge (breadth, precision, links, etc.)

Language Structure (syntax, semantics, etc.)

Verbal Reasoning (inference, metaphor, etc.)

Literacy Knowledge (print concepts, genres, etc.)

#### **Word Recognition**

Phonological Awareness (syllabus, phonemes, etc.)

**Decoding (and Spelling)** (alphabetic principle, lettersound correspondences)

Sight Recognition of familiar words



Source: Scarborough, H. 2001. Connecting early language and literacy to later reading (dis) abilities: Evidence, theory, and practice. Pp. 97-110 in S. B. Neuman & D. K. Dickinson (Eds.) Handbook of Early Literacy. NY: Guilford Press.

The first step in becoming literate requires acquiring the system for mapping between symbols and sounds (Ziegler and Goswani, 2005). When this method is mastered, children can access thousands of words that are already in their spoken lexicons. The process of learning and using these mappings can be defined as phonological recoding. During the foundational years, the child gradually starts to read instruction with welldeveloped language skills, which is a foundation for reading acquisition and obtaining emergent literacy. Reading needs understanding of language's phonological elements as well as the relationships between written and spoken language. Children that succeed in learning to read make context-dependent phonological links to letters, including letter names, during their early foundational years.



These connections enable productive reading. Phonological recoding, which aids the children in acquiring good quality representation, is a key mechanism for this. It is commonly believed that phonological recoding is a prerequisite for learning to read. Simultaneously, the children gain and develop fluency because they are able to identify the words while reading. When children gain literacy in reading, they rapidly develop automatic word identification processes as well. Automaticity is gained through practice in some or other form at consistent inputoutput mappings that include persistent retrievals of word forms and meanings from print.

Reading comprehension is that broad umbrella under which all skills and sub-skills of reading gradually evolve. Reading comprehension is not only the end goal of reading but often the very premise that holds together an effort to learn to read. A retrieval of facts or simple information is where reading comprehension can be first seen, but a gradually more inferential or elaborate understanding of a text needs to emerge.  $\bigcirc 7$ 

## Assessment: Challenges and advantages

A variety of early skills and knowledge contribute to literacy acquisition. The use of assessments has tremendous potential in showcasing profiles on the strengths and weaknesses of the children, which is essential considering the current situation of learning loss. And accordingly, suitable measures can be taken to improve the outcomes.



Assessments are integral tools/methods in addressing and evaluating the status of foundational learning among children. Since, many languages are widespread in the country, conducting fair and appropriate literacy-based assessments becomes a significant challenge. Numerous parameters need to be considered for measuring the foundational skills and knowledge of the learners.

Firstly	Secondly	Additionally	Lastly
The characteristics of the language used for literacy education because they determine how quickly literacy is acquired and what skill set is relevant for well-designed assessments. Because so many communities in the country speak a variety of languages, it is crucial to comprehend the differences in the children's proficiency in their home, community, and school languages in order to meet their literacy and broader academic needs.	Young learners' socio- cultural, socio-economic, and linguistic circumstances are vital because they individually affect the learning possibilities available to them and may contribute to test results.	Children's success on a specific assignment may also be a reflection of how much exposure they have had to the culture of testing and how comfortable they are with assessment formats.	The assessors need to consider the psychometric suitability of each tool that is used to evaluate a particular set of skills and knowledge domains, particularly in light of the diverse goals that drive the assessment as it yields reliable and valid results.

It is also vital to consider whether certain assessment forms have been introduced to children in the classroom through instructional practices. For instance, the legitimacy of narrative writing evaluations is constrained by the lack of creative writing activities, and children find it challenging to reply to inferential questions when the only emphasis is on verbatim responses from provided texts. This means unfamiliar test formats not only undervalue children's "actual" abilities but also cast doubt on the reliability of the evaluations. Sensitivity in test design reduces the likelihood of unfair penalties for test performance.

#### 7.1 WHAT IS FOUNDATIONAL LEARNING STUDY (FLS) 2022?

#### **About FLS**

India has been conducting National Achievement Survey (NAS) since 2001, the findings have helped in identifying learning gaps and establishing interventions in education policies, teaching practices and learnings over the years. On September 2022, Foundational learning study (FLS) 2022 was launched. The report is an extensive first-of-a-kind study and an exemplary attempt that focuses on establishing insights into the current status of foundational literacy and numeracy in the country. The study has been conducted by the Ministry of Education, National Council of Educational research and Training (NCERT), and supported by UNICEF, India.

#### **Objective of the FLS study**

- To provide valid and reliable data about the performance of Grade 3 students on the learning outcomes being achieved.
- The study will accommodate in developing a baseline for the NIPUN Bharat mission over the period.

#### Assessment

The study assessed the learning of more than

# 

**86,000 Grade 3 students in 20 different languages** across 10,000 schools in the country.

#### Assessment

- The study sample includes state government, private recognised, government-aided, and central government schools.
- The languages assessed are Assamese, Bengali, Bodo, English, Garo, Gujarati, Hindi, Kannada, Khasi, Konkani, Malayalam, Manipuri, Marathi, Mizo, Nepali, Odia, Punjabi, Tamil, Telugu, Urdu respectively. The overall study aims to establish reading proficiency benchmarks for fluency and comprehension for each language and proficiency benchmarks for numeracy.
- The FLS study is a school-based performance assessment that comprised a selected sample of students from Grade 3.
  Each student was tested one-on-one and had to respond orally to a set of questions.



#### 7.2 WHAT IS THE GLOBAL PROFICIENCY FRAMEWORK?

Setting a benchmark for Oral Reading Fluency (ORF) with Comprehension is essential because it enables worldwide reporting on the achievement of learning objectives. The Global Proficiency Framework (GPF) for Reading serves as the foundation for the process of benchmarking. GPF was designed over the course of a lengthy process with the help of competent curriculum and reading experts, as well as psychometricians from various nations and circumstances. The Global Performance Framework for Reading outlines the nation's common expectations for students reading performance. It was developed based on the curriculum and assessment frameworks of many countries worldwide.

'The Global Proficiency Framework for Reading defines the global minimum proficiency levels that learners are expected to demonstrate at the end of each grade level, from grades one to nine. It comprises four Global Proficiency Levels (GPLs) and detailed Global Proficiency Descriptors (GPDs) for each level. The Levels are Below Partially Meets (BPM), Partially Meets (PM), Meets (M), and Exceeds (E) global minimum proficiency.' (FLS 2022)

Global Proficiency levels	Definition of the levels
Below Partially Meets (BPM)	Learners <b>lack the most basic</b> knowledge and skills. As a result, they generally cannot complete the most basic grade-level tasks.
Partially Meets (PM)	Learners have <b>limited</b> knowledge and skills. As a result, they can partially complete basic grade-level tasks.
Meets (M)	Learners have developed <b>sufficient</b> knowledge and skill. As a result, they can successfully complete the most basic grade-level tasks.
Exceeds (E) global minimum proficiency	Learners have developed <b>superior</b> knowledge and skill. As a result, they can complete complex grade- level tasks.

#### 7.3 LEARNING OUTCOMES (FLS 2022)

In this section, the findings of the FLS 2022 learning outcomes of literacy and numeracy are evaluated. For Literacy, various foundational literacy skills, including phonological awareness, decoding, oral language comprehension, reading comprehension and oral reading fluency (ORF) with comprehension, were assessed in the study. Similarly, for foundational numeracy, number operations, number identification and comparison, fractions, multiplication and division facts, patterns, measurement, and data handling were part of the assessment. The country has been undertaking significant efforts in addressing the issue of learning outcomes, and the assessments are praiseworthy initiatives.

#### Literacy

Overall, Punjabi language has the best performance with 51% of the students exceeding global proficiency level and 6% students in below partially global proficiency level. On the other hand, Tamil language has the lowest performance with only 9% students exceeding global proficiency level and 48% students in below partially global proficiency level.

Only two languages i.e., Telugu and Mizo have more than 30% students who meet global proficiency level while on the other hand 30% students in six languages exceeds global minimum proficiency level namely Punjabi, Bengali, Mizo, Odia, English and Manipuri. Out of the 20 languages, Tamil, Konkani, Assamese and Bodo language respectively have the poorest performance with more than 30% of the students falling under the category of below partially global proficiency level. Similarly, Khasi, Urdu and Nepali language have more than 40% students who partially meet global minimum proficiency level. Therefore, more efforts and measures are required to improve the learning outcomes and help the students in meeting minimum global proficiency level.


National Assessment		GPF
Global Partially Meets Benchmark <b>30</b>	****	<b>20%</b> Below Partially Meets Global Minimum Proficiency
Global Meets Benchmark 50	**************************************	<b>35%</b> Below Meets Global Minimum Proficiency
Global Exceeds Benchmark <b>80</b>	**************************************	<b>30%</b> Meets Global Minimum Proficiency
100	****	<b>15%</b> Exceeds Global Minimum Proficiency



# 7.4 NUMERACY

42% of the students surveyed across India meet the global minimum proficiency, and 37% partially meet the global minimum proficiency level in mathematics, meaning most students fall under the category of partially meeting the global minimum proficiency and global minimum proficiency. Only one state, i.e., Lakshadweep, meets the global minimum proficiency out of all the states of India. Therefore, more efforts are required to bring the children under the category of meeting and exceeding the global minimum proficiency level for numeracy.

Jharkhand (55%), Daman Diu & Dadra Nagar Haveli (52%), Tripura (50%) have the highest percentage of students who meet the global minimum proficiency. Overall, out of all the states and UTs in India, 8 states (Arunachal Pradesh, Chandigarh, Goa, Gujarat, Madhya Pradesh, Nagaland, Sikkim, and Tamil Nadu) and 2 UTs (Andaman & Nicobar and Ladakh) partially meets the global minimum proficiency. In addition, Bihar has the highest number of students who exceeds minimum global proficiency all over the country i.e., 18 per cent followed by Karnataka, Odisha and Puducherry.

The percentage of girl student's performance in numeracy are low as compared to the boys meaning the girls are at a greater disadvantage in terms of numeracy.



# 80

Mapping of foundational learning concepts with NAS and FLS

Sl.no	Reading Concepts	National Assessment Survey (NAS)				Foundational Learning Study (FLS)
		Grade 3	Grade 5	Grade 8	Grade 10	Grade 3
1	Language Comprehension					
1a.	Background Knowledge					
1b.	Vocabulary Knowledge					
1c.	Language Structures		<b>~</b>	$\checkmark$	$\checkmark$	$\checkmark$
1d.	Verbal Reasoning	>	<b>~</b>	$\checkmark$	$\checkmark$	$\checkmark$
1e.	Literacy Knowledge	$\checkmark$		$\checkmark$		
2	Word Recognition					
2a.	Phonological Awareness	~			>	~
2b.	Decoding (and Spelling)	$\checkmark$			~	$\checkmark$
2c.	Sight Recognition	$\checkmark$				

National Assessment Survey (NAS), compared to Foundational Learning Study (FLS), measures more parameters on reading concepts. Although FLS is a first step towards assessing foundational learning by incorporating the aspect of language in the assessment, however more parameters must be included into the survey to achieve better learning outcomes.

## FINDINGS OF THE MAPPING

### NATIONAL ASSESSMENT SURVEY (NAS)

# Grade 3

phonological

are assessed.

and sight recognition



Verbal reasoning, Language structures literacy knowledge, and verbal reasoning are assessed. awareness, decoding

# Grade 8

Language structures, verbal reasoning, and literacy knowledge are assessed.



Language structures, verbal reasoning, phonological awareness, and decoding are assessed.

### FOUNDATIONAL LEARNING STUDY (FLS)



Phonological awareness, decoding, language structures, and verbal reasoning are assessed.

Notes: The reading rope of Scarborough's have been mapped with NAS and FLS indicators to demonstrate whether all the required concepts for becoming a skilled reader have been assessed. The findings of the mapping indicate there is more potential for better and greater outcomes if the scope and sample of the survey is increased. This includes integrating all the necessary concepts in the assessments/surveys.

# 09

# Instruction: Challenges and Advantages

# **CHALLENGES AND ADVANTAGES**

Due to the multi-linguistic landscape of the country, some learners receive literacy instruction in their mother tongue or home language while for others it could be their second or third language which they are learning to read and speak. Additionally, in primary schools, the teachers are unable to utilize culturally relevant oral practices for an engaging teaching programme. For example, recitation is typically a sing-song exercise with little focus on the rhythm or the meaning. An emaciated kind of literacy education is one that emphasizes decoding text over reading with comprehension and writing mechanics over the ability to communicate ideas verbally or to negotiate and construct meaning because most of the teachers lack this understanding leading to serious consequences i.e., poor learning outcomes. This further obstructs writing and reading comprehension achievement among children.

There is strong evidence that allowing children to "talk" enhances their oral language resources and leads to better reading outcomes as well as the development of higher order abilities. Therefore, opportunities for oral language practise need to take centre stage in the curriculum. However, it is uncommon to find a teacher that makes use of class time to educate students how to communicate, listen, and respond. Another challenge is to find or produce textbooks, workbooks, and other children-friendly resources in different languages. However, good material is also not enough to attain the necessary outcomes because along with it requires the leadership of a skilled teacher in improving the performance of the learners. A fundamental skill of teaching is to maintain a balance between reading, writing, speaking and listening instruction. Teaching insights are needed for both the implicit morpho-syntax details as well as the sound, symbol, and semantic domains. Simultaneously, classrooms and teaching learning materials need to be responsive with sensitivity.



# 9.1 ROLE OF ANGANWADI WORKERS

India is home to approximately 13.63 lakh Anganwadi centres which are operational and providing services for the wellbeing of the children. One of the components of the Integrated **Child Development Services** (ICDS) scheme focuses on providing foundational learning, i.e., preschool non-formal education, to the children in the age group between 3 to 6 years through the Anganwadi centres (AWCs) especially in the rural areas. The role of Anganwadi workers is critical in the child's cognitive, social and emotional development as they are the primary agents who ensure basic foundational learning of the children in the Anganwadi centres. Besides, as per research, 90% of brain development happens by age 5.

The responsibilities of the Anganwadi workers become more notable for children from underprivileged and marginalized communities because the AWCs can assist in neutralizing parental disadvantages and reducing educational inequalities in the country. These children remain highly exposed to low learning outcomes in literacy and numeracy due to their family's economic and social conditions. Other factors like gender, race and birthplace can also lead to large-scale disparity in children's capabilities and levels of exposure which can further result in poor learning outcomes.

The pursuit of foundational education entails that the Anganwadi workers are specifically trained in early childhood care and pedagogy, focusing on the child's holistic development, including early cognitive development through activity-based learning.

Foundational education lays a solid base for lifetime development and learning, as it prepares the child in equipping with the required skills and knowledge.



## 9.2 ROLE OF TEACHERS IN ACHIEVING FOUNDATIONAL LITERACY AND NUMERACY

Teachers are crucial to the success of the mission, and special emphasis will be given to the capacity building of teachers to ensure proper teaching methods are practiced in classrooms where the learner learns in a cheerful manner and grasps the essential knowledge.

Teachers must use various forms of evaluations that will assess the learner's comprehension, learning requirements, and academic improvement during a course or lesson.



Teachers should demonstrate how they read and write to the learner so that the learners can adopt the skills from their teachers.

Teachers are responsible and accountable for building up the learner's phonological recognition, sound discrimination, and visual understanding, which will help the learners to become better readers and writers. They must establish the foundation for mathematics by integrating various play and activity approaches to ensure the learner has a meaningful understanding. Continuous efforts are being made to train teachers. An integrated programme has been introduced, known as NISHTHA, to oversee the teacher's performance and support them in improving their skills. The programme focuses on developing training modules focused on FLN with the objective of bridging the language challenge and teaching in the home/regional/mother tongue language. The mission also assures the active engagement of all important stakeholders, which includes teachers, parents, students, and policymakers.

# **9.3 WHY QUALITY OF TEACHING IS CRUCIAL?**

Universal foundational learning extensively depends on the teaching quality. It is a complex process that combines coordinating and supervising numerous aspects in terms of instructing and educating the learners. This factor allows the learners to transform into their fullest potential and help in contributing to communities and national development.

Teaching is influenced by the personal attributes of teachers themselves, the learners, and the milieu of the school, making it more of an 'emergent' practice rather than the result of applying pedagogic principles.(UNESCO, 2021) The process moulds the learner's competency, their understanding and rationality, skills, wisdom, habits and identity. The teachers need to adapt a sustained strategy that enhances teaching over the long term, allowing the children to catch up with the learning gradually.

> However, a considerable share of teachers in India who teach in the pre-primary, primary and upper primary levels do not posses any academic degree from a college/university or a professional degree in basic teachers training. The percentage of under-qualified teachers are higher in the northeastern states as compared to the other parts of the country. Hence, improving quality of teaching should be a priority.

# 10

Various state-led initiatives to improve Foundational Learning Various capacity-building initiatives are introduced to accelerate the goal of acquiring universal FLN. The Government of Uttar Pradesh, on 21st July 2022, held a programme called 'UP Hai Taiyar - Readiness of Uttar Pradesh on the NIPUN Bharat Mission' to spread awareness and showcase preparedness in improving foundational learning for children studying in grades 1-3.

On 26<sup>th</sup> September 2022, Goa launched a book 'Vidya Pravesh' under NIPUN Bharat to improve the student's performance in Mathematics. Each state is undertaking innovative initiatives to achieve universal foundational learning by 2026-27.

The government of Tamil Nadu launched the 'Ennum Ezhuthum' mission to address the learning gaps of the students in their foundational years and primary education caused by the pandemic. The initiative would cover students of Grades 1 to Grade 3 and ensure universal foundational literacy and numeracy studying in government schools across the state. As part of the initiative, a handbook has been developed for the teachers on how to guide the students. Additionally, student workbooks have been prepared for three-learning levels, which will be provided to them.

On 16<sup>th</sup> May 2022, the Government of Karnataka initiated a holistic learning model called 'Kalika Chetarike', which aims to bridge the learning gaps caused by the COVID-19 pandemic and the overall academic loss due to various other cases. For the first three months, the model specifically focused on foundational learning; in the next three months, the model focused on improving the core competencies depending on the grade; and in the remaining year, the model will address the new academic syllabus. As part of the programme, the teachers are given training for two days. If the students progress in their current level, they will advance to the next level.

The Government of Uttarakhand launched the implementation process of NEP 2020 by initiating 'Bal Vatikas' at Anganwadi centres across the state to improve and strengthen the foundational learning and pre-primary education system. The Bal Vatikas will operate at 4,457 Anganwadi centres across the state and aspire to implement the NEP 2020 by 2030.

# **10.1 PUBLIC AND PRIVATE PARTNER COLLABORATION WITH STATE GOVERNMENT**

The Government of Maharashtra collaborated with the Khan Academy to develop new math content and advanced online resources in Marathi, which will improve mathematics learning outcomes from grades 1 to 10 in public schools of Maharashtra. The resources will enable the students to learn in their language. Additionally, the teachers will go through training to support the students in accessing and understanding the contents. The Maharashtra government had set up a PMU with Central Square Foundation (CSF) and Leadership for Equity (LFE) to accomplish the FLN mission.

On 8<sup>th</sup> March 2022, the Government of Bihar, in collaboration with Central Square Foundation (CSF), conducted a baseline study which aims to understand the extent of learning loss that happened due to school closures during the pandemic, the current level of foundational literacy and numeracy, and develop a baseline for students studying in Grade 3.

The Government of Jharkhand has launched the India Partnership for Early Learning (IPEL) project in collaboration with USAID, Room to Read and CARE India. The project aims to transform the delivery of foundational learning in all schools across the state and increase the percentage of students attaining minimum proficiencies in reading, writing and performing mathematics. It is being implemented in 137 districts, reaching out to 330,519 Anganwadi centres, 181,528 public primary schools and over 66.5 million children aged between 3 and 8 years.

The Government of Uttar Pradesh collaborated with Central Square Foundation (CSF) in supporting and developing Mission Prerna to achieve foundational education.

Haryana government associated with Central Square Foundation to establish a Project Management Unit in supporting the implementation of NIPUN Bharat mission in the state. The partnership facilitated the development of structured pedagogy materials, teachers' capacity building, and a tech-based monitoring system.



The Government of Punjab launched an initiative called 'Padho Punjab Padhao Punjab' to improve the learning outcome of the children in their foundational years. The programme included lesson plans, teaching and learning materials, student workbooks and assessments. CSF has been engaged with the Government in introducing innovations in the effectiveness of the implementation and monitoring process.

Central Square Foundation is working with SCERT and Samagra Shiksha office in Telangana to develop academic and governance initiatives to have better foundational learning outcomes.

In 2020, the Government of Madhya Pradesh, in collaboration with CSF, initiated 'Project Ankur' to drive and achieve foundational literacy and numeracy across the state. A 30-member group has been set up, which has been staffed by the Education Alliance, Room to Read, Central Square Foundation and Vikramshila Education Resource Society to support the planning and implementation of the project.

The Government of Odisha engaged with various academic partners to strengthen FLN, which includes the development of learning-teaching material and toolkits. Numerous project management units have been set across all the districts to improve foundational learning. Home learning mechanisms have been set up to reduce learning loss when schools were closed through the DIKSHA platform, and CSF's TicTacLearn videos in Odia were promoted.

The Government of Assam and CSF have partnered in many orientation and communication programs at the district and block levels that emphasize the importance of foundational learning.

Development Impact Bonds are innovative financial tools that can be used to mobilise capital at a large scale. Social Finance India organised the ground-breaking Haryana Early Literacy DIB (2019–2022), carried out by LLF in association with the Haryana government. To improve the learning outcomes of 164,000 students in grades 1 and 2, the DIB was implemented in 3,300 government schools throughout the seven districts of Haryana. The rewards were based on the results attained in this pay-for-success approach.

# **10.2 CASE STUDY - SCALING UP EARLY READING INTERVENTION (SERI), INDIA**

The design and implementation strategy of the SERI program was based on Room to Read's global literacy model that has been implemented across Asia and Africa in the past decade. In 2003, Room to Read started operating library programs in India and in 2009, literacy instruction became part of the programme. Since 2009, Room to read has implemented its literacy program with quasi-experimental impact evaluation that consistently demonstrated positive results. Furthermore, to scale up and strengthen these programs, Room to read agreed with USAID in 2015 to implement the program in government primary schools in four states, starting with Chhattisgarh and Uttarakhand in 2015 and ending with Madhya Pradesh and Uttar Pradesh In 2017. The agreement called for a five-year programme with the twin objectives of proving a robust model for enhancing early grade reading abilities in students attending government primary schools and proving a creative strategy for successfully scaling up the early-grade reading model within the public education system.



The programme was designed to be implemented in three stages, with a correspondingly gradual transfer of responsibilities to the state government.

- Room to Read first implemented the ("I do") phase that included literacy instruction and library programmes directly in a small number of government primary schools in chosen districts.
- Secondly, Room to Read assisted state governments in the partnership ("we do") phase in extending the model to all public schools in a block (subdistrict) or district.
- The model was then turned over to the state government for replication and scale-up in other regions of the state during the scale-up ("you do") phase.

The Learning at Scale research study was focused on the partnership ("we do") stage in Chhattisgarh. It was put into practice in one of the 28 districts of Chhattisgarh. The initiative included 500 schools, which were arranged in 64 clusters over four blocks. A similar initiative was run in Uttarakhand during that time, and two years later, it was also run in Madhya Pradesh and Uttar Pradesh.

## **PROGRAM MODEL OF SERI**

The direct implementation strategy employed in the demonstration phase served as the foundation for SERI's "we do" partnership concept. In the direct implementation model, literacy instruction was delivered by teachers using prepared lesson plans and a teachers' guide. Coaches frequently visited schools and observed and assisted the teachers. Additionally, libraries were set up in schools and storybooks written in the language of teaching were distributed.

**Materials** from the demonstration schools were reviewed and modified for partnership schools by a District Resource Group, a group of district officials created to offer technical support to the initiative. Materials included the following:

- Student workbooks in two parts: The first section consisted of 10 weeks of phonics-related tasks, and the second part was made up of decodable readers.
- A teachers' guide with scripted lesson plans.
- Books for children's libraries in schools. In the partnership approach, the government donated 300 books to each school; in the demonstration model, Room to Read provided 1,000 books per school.
- Letter cards.

#### **Teacher support**:

The Seri partnership program used a cascade model for training. Master trainers received twice-yearly, often three-day training sessions. When SERI started, the government had appointed master trainers in few states. In other states, master trainers were nominated from among teachers, block and cluster resource coordinators. To train instructors with a focus on applying new skills, master trainers were given training materials, presentation slides, and session plans. The number of trainings varied from state to state.





#### **Teaching support:**

The coaches who supported teachers in the partnership model were the cluster resource coordinators employed by the government. One cluster coordinator was responsible for 210–215 schools. Cluster resource coordinators initially worked alongside Room to Read's Literacy Facilitators, who built their capacity in school observation and coaching by involving them in joint school visits. On each school visit, they were also required to monitor the school library, observe a class, and talk to teachers about at least one area that needed improvement as part of the SERI programme. A monitoring form with details on library reading activities and book checkout was sent to cluster resource coordinators. Once each month, block resource coordinators and cluster coordinators met to talk about, among other things, their experiences helping teachers.

#### Pedagogical approach:

Room to Read used a thorough, evidence-based approach to literacy training in SERI. Three elements made up its pedagogical model - development of oral language, orthographic expertise, and exposure to text. The programme used a methodical strategy to foster a reading habit and improve reading comprehension. Development of oral language, phonological awareness, phonics, fluency, vocabulary, comprehension techniques, and writing were the main areas of instruction. A library and opportunities for individual reading served to supplement the instruction. In order to give children, the most comprehensive literacy experience possible, the goals were to explicitly teach them literacy skills and expose them to a variety of texts, including graded literature and decodable.

The results of the impact evaluation study conducted after two years of intervention in SERI demonstration schools showed that school children made 1.5 to 2 times greater progress than their comparison school counterparts on the various reading skills assessed. Additionally, the results from the SERI Program study suggest that the impact of the program was sustained even when it was scaled up across larger geographies.

# Nutrition and education must go hand in hand

Children need appropriate nutritious and safe food, safe drinking water; a healthy food environment; and adequate nutrition to prevent malnutrition. Health and nutritional values need to be introduced through early practice because habits can be easily changed at a young age. Knowledge about children's nutrition can be incorporated in schools, allowing children to realize the importance of good food and healthy eating habits and form them on their own from an early age. Malnutrition during early childhood can lead to lifelong developmental delays and disabilities, affecting child development and learning and adult productivity and earning. Malnutrition under five years of age includes both undernutrition (stunting and wasting) and micronutrient (deficiencies and overweight).

Foundational education highly depends on nutrition and health because the latter determines the child's potential to grow and prosper later. The children will sustain and contribute to the larger society if only they are healthy. Nutrition deficiency and lack of foundational learning during an early age can result in the loss of academic and developmental abilities leading to lifelong health and economic inequalities. Poshan Abhiyan, an overarching programme for the holistic nourishment of children and women, plays a vital role in ensuring the nutritional status of children between 0-6 years of age. Post-pandemic, after the humanitarian and health crisis, the central government merged various schemes like Scheme for Adolescent girls and Poshan Abhiyaan and re-aligned them as Saksham Anganwadi and Poshan 2.0 for increasing outcomes.



# 12

# Digital Learning and Foundational learning

The pandemic highlighted the digital divide across education caused by poor access or lack of affordability, or inadequate technology infrastructure (including internet connectivity and electricity) and devices (including computer and mobile devices). The divide also varies across demographics, geographies and communities. Having internet access at home has become very important and valuable to children so they can continue learning even when they cannot attend school. Hence, to bring greater equity in learning and address learning recovery, the internet needs to be accessible to everyone. In India, between 2020 to 2022, only 41.3% of schools had access to computers and 24.5% to the internet. In addition, students with disabilities face major challenges in acquiring foundational education due to poor peer and parent support.

According to a UNICEF report in 2022, countries with a higher internet access rate at home tend to have a higher share of children with foundational reading skills. Lack of internet access can be a massive hindrance to children in acquiring foundational learning. This issue needs attention because, with the pandemic, schools have been closed, and they had to shift to distance or remote learning, but some places, due to their geographic locations, do not have internet access. Therefore, children living in these locations who could not equip themselves with digital devices were the most affected. Distance or remote learning should include the distribution of paper-based materials or using computer/internet/mobile phones through which instructions can be conveyed to the learners. The pandemic has brought some urgency to the need to address the digital divide, given the reliance on remote learning while schools were closed. (UNICEF, 2022) Nevertheless, while developing digital learning materials, it is intrinsic to ensure they are accessible to all learners, particularly differently abled and marginalised groups.

To strengthen the concept of distant or remote learning, the Government of India launched 'DIKSHA' to provide quality ematerials to students in all the states/UTs. NISHTHA 3.0 Online has been developed on the DIKSHA portal to assist teachers in strengthening foundational learning. It comprises 12 modules broadly on FLN mission, numeracy and learning assessment, parents and community engagement, multilingual education, toy-based pedagogy, preparation module for Grade 1 children and Balvatika, competency-based education, understanding the learner, and school leadership.

DIKSHA also enables students/teachers with disabilities to access the website using innovations like screen readers. Digitally Accessible Information System (DAISY) and NIOS website have unique content for visually impaired people with hearing challenges. In these portals, 3,520 textbook-based ISL (Indian Sign Language) videos have been developed, out of which 597 are uploaded on DIKSHA. Moreover, a 10,000-word ISL dictionary and 3,474 audiobook chapters have been uploaded on DIKSHA.

# 13 What is the index on Foundational Learning?

One of the most significant challenges for India in education planning is to incorporate primary education into the formal education sector while retaining the distinctive elements of quality education for young children. Ensuring access to quality pre-primary and primary education is a crucial strategy for improving learning and education outcomes and the efficiency of education systems. Learning outcomes continue to remain low in India. The first step to improving future attempts is to understand why this problem exists.

Index on Foundational Learning presents a comprehensive evidence-backed view of factors driving India's low learning outcomes in early grades and outlines pathways for improvement. It goes far beyond teacher absenteeism and other factors, which, though critical, often narrows policy thinking and debate about the needs of this age group. It measures the core domains of education, health, and governance of children ten years and below and can help states identify areas that need to be addressed. Such an index will identify regional differences across states and assess the overall state of education for primary and pre-primary levels in India.

As States and UTs gear up to design and implement effective programs to raise learning outcomes, they must look at the evidence of breakdowns occurring in their systems. Policies and programs designed to tackle these critical challenges will have the greatest chance of improving learning outcomes for children in India.



# State of Foundational Learning

Framework



## **INDEX ON FOUNDATIONAL LEARNING**



# FRAMEWORK

Educational 译译 Infrastructure	<ul> <li>Percentage of schools with functional drinking water</li> <li>Percentage of schools with hand wash facility</li> <li>Percentage of schools with library facility</li> <li>Percentage of schools with medical checkups</li> <li>Percentage of schools with functional toilets</li> <li>Percentage of schools with functional computer facility</li> </ul>	<ul> <li>Percentage of schools with internet facility available</li> <li>Percentage of Schools with functional CWSN friendly toilet</li> <li>Percentage of schools with electricity connection</li> <li>Per 1000 distribution of households by distance from school having primary classes for each State/UT</li> </ul>
Access To Education	<ul> <li>Primary level schools per lakh population</li> <li>Percentage of teacher for primary level education</li> <li>Pupil Teacher Ratio (PTR) - Primary</li> <li>Percentage of enrollment of Children With Special Needs (CWSN) in primary</li> <li>Gross Enrollment ratio (GER) - Primary</li> </ul>	<ul> <li>Percentage of all minority group's enrolment to total enrolment - Primary</li> <li>Pre school education - Percentage</li> <li>Dropout Rate - Primary</li> <li>Adjusted(NER) - Primary level for girls</li> </ul>
Basic Health	<ul> <li>Percentage of fully immunized children in the age- group 0-5years</li> <li>Children under 5 years who are stunted (height-for- age)</li> </ul>	<ul> <li>Children under 5 years who are severely wasted</li> <li>Children under 5 years who are underweight</li> <li>IMR</li> <li>U5MR</li> </ul>
Learning Outcomes	<ul> <li>NAS Scores: class 3</li> <li>Language</li> <li>Mathematics</li> <li>Environmental Studies</li> <li>NAS scores: class 5</li> </ul>	<ul> <li>Language</li> <li>Mathematics</li> <li>Environmental Studies</li> <li>Transition Rate - Primary</li> <li>Gender Parity Index (GPI) - Primary</li> </ul>
Governance	<ul> <li>Expenditure on Education - As Ratio to Aggregate Expenditure</li> <li>Percentage to total expenditure on primary education for Govt schools</li> <li>Percentage of expenditure on teacher training (BE)</li> </ul>	<ul> <li>Percentage of total assistance to non govt primary schools</li> <li>Percentage of expenditure -Mid day meal state share</li> <li>Percentage to total expenditure on primary education under SSA revenue account</li> <li>Central fund utilization under poshan scheme</li> </ul>

Dimension	Rationale
Educational Infrastructure 译语	Educational infrastructure captures how well states are performing in improving suitable learning spaces in the school, as they are the essential elements to ensure education throughout children's lives. While learning is important, however, whether schools are structured and designed to provide basic amenities for the safety and comfort of children is equally important. Having a better-shared understanding of how the design of school infrastructure affects vocational learning outcomes is very useful for states. It will increase the efficiency of the resources invested in school infrastructure projects and lead to more effective cooperation between stakeholders involved in the development of school infrastructure.
Access to Education	The Access to Education component measures the fundamental element of a child's life, i.e. Early and Elementary education. To learn and grow is the basic requirement for a child as schools shape their lives from an early age as they spend up to the age of 18 years majority of their time away from home learning at schools. Elementary education is the first and most crucial step for every child towards becoming a human resource. They learn basic knowledge and are equipped with interpersonal, problem-solving and other essential life skills critical for well-rounded development. Along with teachers guiding the children academically, schools need to promote inclusive and equitable for all children, especially for children with special needs and belonging to minority groups. This dimension will help states better understand and meet the specific needs of all the children and teachers in elementary education, with positive impacts on vocational learning outcome.

Dimension	Rationale
Basic Health	A child's health is rooted in everyday life; it directly impacts learning outcomes for the children and future or realizing their true potential. It influences associated outcomes that shape their overall well-being. The health and education of a child go together. Thus, it becomes crucial to measure Basic Health as a part of the index. This component specifically talks about the health conditions of a child. It focuses on indicators that reflect how health can be a major part of an individual's participation in education throughout their lives. Health deficiencies like stunting and wasting impede physical development and learning abilities, thus preventing them from becoming functioning members of society. To realize the full potential in the future, a child needs to have nutritious food, timely immunization, and other services that impact a child's holistic growth and can have huge bearings on their productivity as an adult.
Learning Outcomes	Learning Outcomes includes those indicators that show the current levels of learning states have achieved with a focus on primary and pre-primary children. This Dimension can be used as a checkpoint to assess learning as it paints a picture of the many factors that lead to poor learning outcomes in the state. States making foundational learning a priority benefits the individual child and improves the learning levels of the country as a whole. This will help them achieve learning outcomes for all children in primary education, especially for children's reading, mathematical and numerical abilities, and essential life skills are crucial. Investing in early grades is also cost-effective as most of the learning takes place with groups of children - with the highest rate of economic return comes from the earliest investments in children.

Dimension	Rationale
Governance	The role of good governance in raising education provision is vital in the context of improving vocational learning programmes, and its implementation across states. The governance dimension tracks the budget credibility, transparency and assesses the effectiveness of public education investments by central and state governments. These indicators provide a starting point, drawing on existing data relevant to the education sector, which can be adopted to measure the role of governance in education systems across all states. However, the challenge of translating those allocations into functioning and effective education systems is a more challenging step.



# MAPPING OF SDG GOALS WITH INDEX ON FOUNDATIONAL LEARNING INDICATORS

SDG	PILLAR	INDICATORS
		Children under 5 years who are stunted
Hunger	Basic Health	Children under 5 years who are underweight Children under 5 years who are severely wasted
	Access to	Gross Enrollment Ration (GER) - Primary
	Education	Pupil Teacher Ration (PTR ) - Primary
		Percentage Of Schools With Drinking Water
	ality cation Educational Infrastructure	Percentage Of Schools With Hand Wash Facility
3 AND WELLBEING Quality		Percentage Of Schools With Library Facility
Education		Percentage Of Schools With Medical Checkups
		Percentage Of Schools With Functional Toilets
		Percentage Of Schools With Functional Computer Facility
		Percentage Of Schools With Internet Facility Available
		Percentage Of Schools With Functional CWSN Friendly Toilets
	ood Health and Coll being	Gender Parity Index (GPI) - Primary
2 TROOD COOD Health COOD Health COOD Health COOD Health Well-being		Percentage Of Fully Immunised Children In The Age Group 0-5 Years For Each State/UT
Their Sening	Basic Health	Under-five Mortality Rate (U5MR)

### **CATEGORY WISE RANKING – INDEX ON FOUNDATIONAL LEARNING**

Small State			
State	FLN Scores 2022	Category Rank 2022	
Punjab	64.19	1	
Kerala	58.42	2	
Goa	51.05	3	
Uttarakhand	46.57	4	
Himachal Pradesh	46.56	5	
Haryana	45.24	6	
Odisha	44.36	7	
Chhattisgarh	40.98	8	
Jharkhand	39.82	9	
Andhra Pradesh	39.02	10	
Telangana	34.38	11	

Union Territory			
UT	FLN Scores 2022	Category Rank 2022	
Puducherry	54.76	1	
Delhi	52.13	2	
Jammu & Kashmir	50.75	3	
Lakshadweep	49.26	4	
Chandigarh	48.53	5	
Andaman & Nicobar Islands	48.15	6	
Ladakh	38.46	7	

Note: Large states have above 10 million children Population aged ten years and below. Small states have below 10 million Population of age ten years and below. Northeast states and Union territories are two separate categories as they remain distinct from other states considering their geography. Also, it is in line with the view that the central government controls the development of Union territories and considers Northeast regions development imperative.

### **CATEGORY WISE RANKING – INDEX ON FOUNDATIONAL LEARNING**

Large State			
State	FLN Scores 2022	Category Rank 2022	
West Bengal	54.58	1	
Maharashtra	52.78	2	
Tamil Nadu	52.23	3	
Rajasthan	52.12	4	
Karnataka	44.91	5	
Gujarat	44.08	6	
Madhya Pradesh	42.43	7	
Bihar	40.96	8	
Uttar Pradesh	37.46	9	

North-Eastern			
State	FLN Scores 2022	Category Rank 2022	
Sikkim	56.75	1	
Mizoram	48.31	2	
Manipur	47.17	3	
Assam	46.15	4	
Tripura	39.77	5	
Arunachal Pradesh	35.82	6	
Nagaland	34.41	7	
Meghalaya	29.66	8	

Note: Large states have above 10 million children Population aged ten years and below. Small states have below 10 million Population of age ten years and below. Northeast states and Union territories are two separate categories as they remain distinct from other states considering their geography. Also, it is in line with the view that the central government controls the development of Union territories and considers Northeast regions development imperative.

# 14

Foundational Literacy and Numeracy – Country level Analysis

Overall India's average score is 44.48. Overall 18 out of 36 State/UTs have scored above country average in FLN index.

# **Category wise Scores**

Small State Category	Scores of states lie between	34.38 and 64.19
arge State Category	Scores of states lie between	<b>37.46</b> and <b>54.58</b>
North Eastern State Category	Scores of states lie between	<b>29.66</b> and <b>56.75</b>
Jnion Territory Category	Scores of states lie between	<b>38.46</b> and <b>54.76</b>

**Proactive efforts of states are needed across the following pillars :** Access to education (36.67) and Governance (21.73) as both the pillars have the lowest scores on index scores.


### VARIATION OF INDEX SCORES ACROSS ALL THE STATES AND UTS

- There appears to be a lack of consistency in states across different pillars. Many states have fared high in Educational Infrastructure. Most states and union territories have a below-par performance in Access to education, Learning outcomes and Governance.
- The variance not only showcases an overall score but also helps us to identify areas that should be regional priorities by providing scores for areas ranging from learning outcomes to good governance. Developmental issues are often unique to their regional location, and it, therefore, remains critical to address challenges based on their distinct properties.
- It can be observed that Punjab features as a positive outlier in index's pillar scores, thus demonstrating its robust performance in the area of education due to the state's emphasis on improving learning outcomes, education infrastructure and focus on the quality of education for all.

### The impact of Covid-19 has been observed across all states/UTs.





### ACCESS TO EDUCATION

### 01

**About 50% of states have scored above national average** i.e., 43.28 in access to education pillar. Most of the Union territories have scored low and below national average except for Delhi reflecting the need to assess the indicator's performance in the region.

### 02

In the large state category, **West Bengal** has scored the highest i.e., 67.75, it is the only state where more than 50 percent of the teacher are for primary education, for every 30 students there is one teacher. **Uttar Pradesh has the second highest** score in same category i.e., 51.65, it has the second highest percentage of teacher for primary education i.e., 39.38. At the same time, it also has the lowest primary schools per lakh of its children population with a dropout rate 2.2.

### 03

The variation in state's scores of this pillar showcases the **impact of pandemic led closures** on children's school education.

### 04

As per UDISE 2021 report, there was **postponement in enrollment** of pre-primary, grade 1 and Children With Special Needs (CWSN) due to COVID-19.

### 05

Access to Education

16.26

77.17

**Most states lag in the enrolment** of CWSN except for Lakshadweep (2.27 per cent ) and Kerala (2 per cent), which had the highest percentage across all states/UTs.

### 06

It has been observed that **dropout rates have increased in north-eastern states** the most. Manipur has the highest dropout rate for primary grade in the country i.e., 8.6. It is closely followed by other NE states; 8.3 in Arunachal Pradesh and 8.1 in Mizoram.

The Right of Children to Free and Compulsory Education (RTE) Act, 2009 has laid down that PTR for primary schools should be 30:1.<sup>1</sup> Overall states have satisfactory PTR except for Bihar(57)and Delhi (33).

74

1. https://pib.gov.in/newsite/PrintRelease.aspx?relid=158326

### **EDUCATIONAL INFRASTRUCTURE**

This pillar has most of the UDISE parameters for the year 2021 when most of the schools were shut down due to covid-19 which affected at least 250 million students in the country<sup>2.</sup>

02

19 states have scored above national average 67.12 in the educational infrastructure pillar.

Punjab has scored the highest i.e. 97.98 in Small State category and is closely followed by Delhi with a score of 95.52 in union territory.

04

In Large state category, Tamil Nadu has scored 84.99. In the north-eastern category, only Sikkim has scored 75.53 which is above national average. Other north-east states have scored low on all parameters of relative to Sikkim .

05

In particular performance of Meghalaya is concerning as it has scored the lowest i.e. 3.01. This is because it has the lowest percentage of schools with functional drinking facilities, library facilities, schools with internet facilities and electricity connection. Therefore concrete efforts are required to strengthen the education infrastructure in the region.



2. The impact of COVID-19 on school education and the ro - KPMG India (home.kpmg)



### **BASIC HEALTH**

The pillar Basic health assesses health parameters of children under the age of 5 years that play a major role later in individual's participation in education throughout their lives. Its national average is 51.63.

50 per cent of states/UTs have scored above national average. Puducherry has scored the highest i.e., 92.35 in UT category. It is closely followed by Kerala (79.25) and Sikkim (79.09) in Small state and North-eastern category.

All states have scored below national average in the large state category, except for Tamil Nadu and West Bengal. Uttar Pradesh (19.44) and Bihar (12.58) have the lowest scores. It has been further observed that both the states have the highest percentage of stunted children, infant mortality rate and U5MR across the country.

)4 It or In

It is also important to look at how performance of the states on the key parameters have evolved from NFHS 4 i.e., 2014. In the next sub section, we explore change in key parameters: U5MR, Stunting and Underweight children across the country.



## 05

Multiple factors affect a child's overall development, but nutrition is one of the significant factors that impact a child's brain development. The deficiency of nutrients among early children places them at elevated risk of physical and mental impairment and death. Its impact becomes apparent only through later year gains for the child in the academic, cognitive, and social context.

## 06

NFHS survey provides us with real-time evidence-based data to understand the challenges around malnutrition for children under 5 years, which further have bearing on early childhood education. This age bracket is a critical window for a child, with their need for nutrition and stimulation to affect cognitive enhancement at its peak. The nutritional needs of children have been prioritized by SDG Goal 2: Zero hunger which focuses on ensuring access to safe, nutritious, and sufficient food for all.

## 07

As per NFHS-5 (2019-21), Stunting for children under 5 years have improved as compared with NFHS-4 (2015-16) as it has reduced from 38.4% to 35.5% for India. India's SDG target for reduction of percentage of children who are stunted is 6 by 2030. However, states are way behind of this goal.

## Following states in figure have reduced stunting over the last 5 years the most:

Selected states have reduced stunting by more than 6 points over the last 5 years



■ Percentage of Children under 5 years who are stunted (height for age) NFHS 4

Percentage of Children under 5 years who are stunted (height for age) NFHS 5

### **LEARNING OUTCOMES**

15 out of 36 states/UTs have scored above national average of learning outcomes i.e., 44.78. Scores under this pillar reflect how overall country has performed in NAS 2021 survey which was held during November 2021, when most of the schools started recovering from the learning loss accrued due to pandemic.

In the Small state category, Punjab has scored 96.36 which is the highest across all states. The state's high score can be attributed to its best performance in all subjects of NAS 2021 scores for grade 3 and grade 5 across country.

In Large state category, Rajasthan and Madhya Pradesh have scored 77.93 and 64.14 respectively. Whereas in Union Territory category Chandigarh leads with a score of 68.74.

04

In North-eastern category, only 2 states have scored above national average i.e., Manipur (59.61) and Assam (59.27).



This pillar also evaluates states on other parameter such as Gender Parity Index(GPI) and Transition rate. Most of the states have shown satisfactory performance across both parameters.

A GPI between 0.97 and 1.03 indicates parity between the genders. (UNESCO<sup>)3.</sup> Only 5 States i.e., Andhra Pradesh, Mizoram, Odisha, Punjab and Sikkim have GPI less than 1, out of which only Sikkim has the lowest GPI i.e., 0.93.



3. https://learningportal.iiep.unesco.org/e n/glossary/gender-parity-index-gpi

### NAS 2021 VS 2017 : BEYOND ABSOLUTE SCORES

NAS survey is a powerful tool to assess learning profile across India at state and district level. This survey uses IRT models which is considered a best practice for large scale assessment surveys like PISA. It is mathematical model used to link a student's probability of responding correctly to a particular item, thus taking care of the two main factors, i.e., the student's level of ability and the item's level of difficulty to analyze test scores. This also facilitates comparison of different cycles of NAS survey. Therefore, it is also important to look at the delta change of NAS scores to assess the real impact of survey which will also indicate whether states have improved their performance from 2017.

It has been observed that Punjab is the only state which has shown improvement in mean scores across all subjects for grade 3 and 5 from 2017 by more than 20 points. It is noted that there is an overall drop in scores of mathematics for all states and UTs except Punjab in both grade 3 and 5 reflecting students would take time to recover from learning loss due to pandemic. It is further observed that grade 3 and 5 NAS scores have dipped for most of the states .

In Grade 3, drop by more than 35 points has been observed in Karnataka, Andhra Pradesh, Telangana and Uttarakhand in all subjects. The states (including Kerala) have also shown big drop in scores of grade 5, especially in mathematics by more than 50 points from 2017.

This reflects the need to assist students to recover from learning loss in their foundational years of education. It should be a priority for aforementioned states and other states alike. There is an urgency to scale up solutions that not only address these gaps in learning outcomes but, at the same time, its opportunity for states/UTs to mandate appropriate learning environments for all, especially for children from vulnerable and marginalized backgrounds.



### DIFFERENCE IN STATE'S PERFORMANCE OF GRADE 3 ACROSS FLS 2022 & NAS 2021

To deep dive into understanding how NAS learning outcomes results have shaped, here the comparative performance of students for selected states of grade 3 has been evaluated in tables below. The comparison does showcase mixed performance states when it comes to global benchmarking the learning outcomes in both of these surveys.

FLS has evaluated 20 languages but for comparison we have taken English as it was surveyed in most of the states. The percentage of students who did exceed global proficiency in English have been taken from FLS 2022, whereas percentage of student's performance at advanced level for language has been taken from NAS 2021 for grade 3. Lower percentage of students in both the criteria have been observed.\*

Survey	FLS 2022	NAS 2021	
State	Percentage of students who Exceeds global proficiency in English	Percentage of student's performance in advanced level in Language	
Punjab	47	26	Scored high both
Kerala	39	19	on FLS and NAS
Sikkim	34	14	
Rajasthan	27	18	Scored low on
Chandigarh	25	17	NAS compared to FLS
Telangana	25	6	
Uttarakhand	52	10	Scorod high on
Delhi	42	9	FLS compared to
Jharkhand	40	10	NAS
Karnataka	33	13	
Himachal Pradesh	27	11	
Madhya Pradesh	26	13	
Puducherry	15	13	

Note : Comparison must be done with caution since the sample size and survey scores of both surveys differ and are directly not comparable to each other.

### GOVERNANCE

### 0]

The governance pillar captures budget allocated, transparency and effectiveness of implementation of targeted schemes across states. This pillar has the lowest national average across all categories i.e., 21.73. 16 out of 36 states/UTs have scored above national average in governance pillar.

### 02

Bihar has scored the highest in large state category. Whereas in North-East category, Sikkim leads with a score of 38.51.

### 03

Central fund utilization under POSHAN scheme has been observed high for the following states: Maharashtra (13.45 per cent), Bihar (9.32 per cent) and Gujarat (7.29 per cent).

### 04

The centrally sponsored scheme provides one hot cooked meal in Government and Government – aided schools. 7.37 crore children under 6 months to 6 years are covered under POSHAN scheme. It aims to reduce malnutrition in the country in a phased manner, through a life cycle approach, by adopting a synergized and result oriented approach.<sup>4</sup>

### 04

Governance

46.44

0.92

Delhi is the only state with the highest expenditure on education - as ratio to Aggregate Expenditure i.e., 22.8 which has also reflected in its performance as it has scored 36.48, which is highest in UT category. It is closely followed by Assam and Bihar with 18.6 and 18.1 per cent respectively.

### 05

It is noted that Andaman & Nicobar Island and Tripura are the only states which incurred more than 30 per cent share of budget on mid day meal.

### 07

For further in-depth analysis of governance across states, there is a need to monitor recent budgetary allocations and policy measures of states/UTs especially in backdrop of pandemic. This would help in assessing governance outcomes better in future iteration.

4. https://pib.gov.in/PressReleasePage.aspx?PRID=1784143

### **DISTANCE FROM THE FRONTIER (DTF) - SCORES**

This section captures the progress of states on foundational learning. It enables them to assess their position, i.e., how close/far they are from their targets. We compare the FLN score 2021 with the FLN score 2020 by calculating their distance from the frontier (DTF).

The difference between a region's best and actual performance based on the specific paradigm is defined as DTF(s). The lower the DTF, the closer the state is to be the best. For example, if a state's FLN score in 2021 is 40, its DTF will be 60 since 100 is the frontier. And if its FLN score rises to, say, 45, its DTF increases to 55, indicating that the state has moved 5 points closer to the frontier.

The goal is to calculate the increase in DTF from 2020 to 2021. Except for the NFHS indicators, all framework indicators were available annually. The section attempts to gain insights from the available UDISE and other parameters driving FLN scores.

As the section progresses, it will be clear that the majority of the States/UTs experienced a decline in their learning outcomes pillar compared to the other pillars.

States/UTs have performed relatively high on educational infrastructure. However, states must recognize that while investment or improvement in educational infrastructure is essential, focusing solely on them will not result in improved learning outcomes. Especially in the backdrop of learning loss experienced by children due to the pandemic.

Finally, it is critical to recognize that the road to improved foundational learning skills is not an overnight process; concerted efforts are required to address the learning crisis, including systemic approaches to improve learning for all children; reaping the benefits of education will take years.



### **DISTANCE FROM THE FRONTIER (DTF) – LEARNING OUTCOMES PILLAR**

The snapshot on country's position in table 1 on learning outcomes concur that effectively across all grades learning outcomes have declined. This has been duly-noted in previous sections as well. Separate DTF analysis on this pillar reveals that only Punjab has improved on learning outcomes by 8.35 points, reflecting the extent of the country's learning loss due to the COVID-19 pandemic. Children's foundational years of education necessitate an immediate coordinated effort on the part of teachers, schools, parents, state governments, and other key stakeholders. This would ensure that the children who are the most at risk of not acquiring foundational learning skills are prioritized, with a focus on learning recovery.

	Table 1 - National Mean –Learning outcomes Scores out of 500					
National Achievement Survey (NAS)	Grade 3		Grade 5			
	Language	Maths	EVS	Language	Maths	EVS
2021	323	306	307	309	284	283
2017	336	321	321	319	310	310
Percentage Change	3.87	4.67	4.36	3.13	8.39	8.71



### **DISTANCE FROM THE FRONTIER (DTF) - SCORES**

DTF scores have been calculated based on three pillars except for learning outcomes.

The analysis of states/UTs on the rest of the pillars reflects that 14 states out of 36 states/UTs have improved their DTF scores significantly between range of 0.32 and 15.97 as given in table 1.1.

Bihar and Arunachal Pradesh have moved towards frontier by more than 14 points. These states have improved on indicators of access to education and governance pillar.

In contrast, Puducherry, Haryana, Lakshadweep, Uttar Pradesh, Goa, Kerala, Delhi, Dadra and Nagar Haveli & Daman and Diu have moved away from frontier by 10-23 points.

Puducherry and Haryana have moved away from the frontier by 23 and 20 points, respectively. The fall in their scores is due to indicators of access to education such as NER, Adjusted NER and percentage of CWSN which have fallen; PTR has marginally increased. And out of two, Haryana has also seen a rise in dropouts, i.e., 2.

#### Table 1.1

State/Uts	DTF 2020-21	DTF 2019-20	DTF
Bihar	43.44	59.41	15.97
Arunachal Pradesh	65.21	79.91	14.70
Uttarakhand	33.27	42.35	9.09
Tripura	50.90	59.32	8.42
Andaman and Nicobar Islands	52.96	58.57	5.61
Odisha	42.90	48.36	5.46
Sikkim	32.15	37.21	5.05
Gujarat	46.01	50.64	4.63
Assam	31.44	35.48	4.04
Ladakh	60.73	63.97	3.24
Telangana	53.36	56.29	2.94
Jammu and Kashmir	44.24	46.70	2.46
Maharashtra	32.38	33.15	0.76
Madhya Pradesh	52.25	52.56	0.32

### IS THERE ANY RELATIONSHIP BETWEEN SOCIAL PROGRESS PILLAR - ACCESS TO BASIC KNOWLEDGE AND FLN INDEX SCORES ?

The Social Progress Index (SPI) is explicitly focused on non-economic aspects of national performance. It alludes to three broad elements of social progress, which we refer to as dimensions: Basic Human Needs, Foundations of well-being, and Opportunity.

- Access to Basic Knowledge is one of the most important aspects of foundations of well-being. The component's evaluation considers variables related to a child's education, which is critical for maintaining the foundations in place for long-term social progress.
- On a personal level, an educated person can make wise decisions about their health, nutrition, and welfare, directly affecting their quality of life.
- There is a positive correlation between Access to Basic Knowledge and Foundational Learning and Numeracy scores.



- The model has an R-squared value of 0.44, i.e., only 44.% of the changes in SPI – Access to Basic Knowledge component scores can be explained by FLN index scores.
- For e.g., Punjab ranks above in both the index. Whereas Meghalaya, Dadra and Nagar Haveli and Daman and Diu, Jharkhand and Bihar have scored the lowest on both the index.

# 15 Recommendations



### IMPROVE PERIODICITY OF NAS & SAMPLE SIZE OF FLS FOR CONTINUOUS ASSESSMENT OF LEARNING OUTCOMES

NAS 2021 survey has rightly expanded upon appropriate data for evaluation and monitoring of learning outcomes. NAS 2017 was based on the data collected from approximately 1,10,000 schools, 2,70,000 teachers and 22,000,00 students. Whereas the latest survey is based on the data collected from approximately 1,18,274 schools, 5,26,824 teachers and 34,01,158 students. Clearly the sample size of students has been increased. A comprehensive education management information system that evaluates well-defined administrative and pedagogical indicators to assess learning outcomes better.



• In addition to this, the FLS 2022 survey is the right step to look at newer ways of collecting appropriate data to measure the learning outcomes and thereby ensure data-driven policy for maximized impact. It is important to increase the frequency of such surveys. It would be critical to ensure that data collected from the field should be appropriate enough to be used by the states to design their plans, and data collected from the states should have the push to influence policy at the Centre. Under FLS 2022 survey approx. 86,000 grade 3 students from 10,000 schools were covered. The sample size needs to improve. Simultaneously, it will be important to have data on the teachers that help schools focus on improving their classroom practices and make well-informed decisions.



### DISAGGREGATED DATA FOR LEARNING OUTCOMES ACROSS ALL AGE LEVELS OF SCHOOL EDUCATION WITH A RENEWED FOCUS ON FLN:

 In addition to appropriate data related to evaluation, monitoring the data at disaggregated level would need to be embedded within the system with welldefined outcome-based indicators on pedagogical framework and education across India. A database capturing a holistic story of learning outcomes within a country at state and district level. FLS 2022 was conducted for 10 districts, perhaps its coverage for all districts could be improved over the next years. It can lead to improved access to education and formulating better policies for students with an aim of improved learning outcomes.

This is also in line with the **Commitment to Action on Foundational Learning** i.e., ensure all children, including the most marginalized, develop foundational <u>learning to</u> realize their full potential and

participate in society.(UNICEF)



## C

### LANGUAGE FOCUSED INSTRUCTIONAL APPROACH

### A language-focused instructional approach

backed by meaningful interpersonal interactions between the teacher and the child is very useful for teaching learners how to read and write, and it is particularly useful for children from demographically diverse homes. A literacy programme that specifically covers orality, orthographic expertise building, and exposure to a variety of texts within classroom instruction time, can then create sustained literacy gains. Considering the emerging trends of multilingual contexts, early reading programmes must also be mindful of the student's psychosocial needs, including their home cultures and language(s) they are learning, and opportunities they have to hear and use it outside of the classroom. It becomes a particularly effective educational strategy for learners who are learning the language for the first time or who have limited family support for tutoring. A basic requirement for an engaging language and meaning-focused approach and literacy instruction is to ensure a safe and secure classroom environment that facilitates interaction between students, teachers, and the world of language.



## **Capacity building of teachers**

'The purpose of education is to make good human beings with skill and expertise. Enlightened human beings can be created by teachers. Changes in the education policy is a major way to provide the nation better students, professionals and better human being'

- PM Narendra Modi

Role of teachers is crucial in child's development. Focus on capacity building and availability of teachers is needed because they play a major role in imparting knowledge to the learners. The foundational education depends on the teaching methods and how the students are taught. There needs to be special attention in the rural areas, the districts with a higher percentage of marginalized communities, mostly scheduled caste and tribe populations, and the north-eastern region. The government needs to make significant efforts in identifying and recruiting language teachers from every community, so teachers are available for students with different mother tongues. Simultaneously, the working conditions of the schools of these areas, including basic amenities, libraries, and technology access, need to be improved.

Source: PM delivers inaugural address at the Higher Education Conclave (https://pib.gov.in/Pressreleaseshare.aspx?PRID=1644095)



### MEDIUM OF INSTRUCTION SHOULD BE IN A LANGUAGE THE CHILD UNDERSTANDS

## The medium of instruction during the foundational years should be in a language the child is familiar with or understands.

Teaching or conveying instructions in a language the child is unfamiliar with can be an obstruction and put the child at a disadvantage in learning the basic foundation. Better learning outcomes can be achieved for children if foundational learning programmes take into account needs of both mother language and second language learner.



- A strong foundational programme for first-time literacy instruction (in first language) should draw on and/or develop the child's strong oral skills, create a print-rich environment to spark the child's interest in the written word, start with sorting, pattern-spotting, and drawing activities rather than activities directly related to print instruction, and validate and connect experiences from home and school.
- In contrast, the second-time literacy instruction (in second/third language) can concentrate on a different set of ideas. The suggestion is that various aspects of foundational programmes are transferable from one language to another. For example, the understanding that printed language goes in a given direction, that blank spaces distinguish between distinct words, that specific symbols denote the conclusion of an idea, various symbols can be combined to create new sounds, etc. Growing evidence from research studies on the alphabetic languages supports the idea that welldeveloped foundation skills in one language can easily be transferred to learning to read in a second or third language. However, in the context of Indian languages, there are currently no such cross-linguistic studies capturing transfer from one language to another and this could be explored through research.



### HOME LEARNING IS EFFECTIVE WITH ACCESSIBLE DIGITAL TECHNOLOGY

Home learning is effective for foundational learning. It can drastically improve the foundational education of a child, and parents contribute to creating an enabling environment at home because the child spends most of the time at home. Verbal environments influence and make learning a language more effective and smooth. Effective measures and solutions must be developed that require minimum parental effort and allow children to learn, especially for working parents. In addition, the capacity building of parents has to be addressed and taken into account. For instance, in Turkey, evaluations of an intensive parenting intervention that combined home training for mothers with either a centrebased or custodial day care program showed a strong correlation between mothers' participation in the programme and children's scores on cognitive assessments. Bolivia also has a similar programme comprising workshops for parents on health, hygiene and development with a skill-based literacy program and home visits that showed positive results.

**Improving Internet penetration across India**: The world is shifting towards digital technology, especially since the covid pandemic situation, so the internet needs to be accessible to every child. The children should be provided with devices that enable them to continue their education through remote learning. Particularly in geographically rugged terrains, efforts must be made to connect every region with a good network. There needs to be an emphasis on including children from every community regardless of their socio-economic conditions so that no child is excluded from the learning process. At the same time, all the schools must have internet access.





### ASSESSMENT FRAMEWORK FOR LANGUAGE AND LITERACY ACQUISITION

The assessment framework for literacy and language skills has a strong psychometric approach and accounts for the unique orthography, and psycholinguistic properties of the language in a way that the sample skill set is crucial to the concurrent relationships with and predictive of future literacy outcomes.

The framework helps in determining domainrelated specific skills that need to be assessed and has immense potential to enhance teaching-learning processes or whether the assessment design requires further research.

The equity and sensitivity of assessments to demographic diversity, for instance, the socioeconomic aspect, home languages, sociocontextual factors like access to literacy resources, and classroom practices, are very important considerations in the use of testing tools because contextual realities may deprive many young learners of opportunities to learn and consolidate their emergent and early literacy skills. Various assessments include –

### **Picture-vocabulary tasks:**

The former is assessed through picture identification tasks, such as identifying the picture from multiple choices that match the target word, while the latter can be evaluated via picture naming tasks, for example, to provide a label for the target picture. The most common techniques for assessing spoken language proficiency are picture identification and picture naming activities. Although this method covers a very small portion of oral language, it can significantly help the children in learning about the nouns and verbs that may be illustrated in a straightforward and understandable way.

### Word definition tasks:

This method helps in measuring the vocabulary depth of the child, in contrast to the picture-vocabulary tests, which measure vocabulary breadth. Further, improves their cognitive and linguistic skills. Children's responses can be evaluated using coding schemes, but this also presents a barrier for the examiners because they must accurately record running responses in order to code them later or grade the oral responses as they are given in real-time. Therefore, ensuring inter-rater reliability is crucial when grading the responses of the children.

### Sentence repetition tasks:

This is an innovative and simple way to evaluate language processing mechanisms where children repeat word by word a sentence which is spoken aloud by the examiner. It is a very promising approach for assessing oral language because of its wide sampling of the language domain, especially in the context of second language learning. The majority of sentence repetition exercises use a word-by-word coding system and cover a variety of sentence forms. This includes evaluating the precision with which children produce the word stem as well as any inflections that change the word's meaning to capture the desired event semantics, such as who-did-whatto-whom.

## *Listening comprehension tasks* :

In order to assess oral language proficiency that is beyond the level of single word meanings and sentences, listening comprehension exercises in particular are well suited for beginning readers. Multiplechoice questions with written, spoken, or visual options can be used to elicit comprehension of recently heard materials. Especially for young learners, pictorial formats aids in lowering cognitive load and reducing rating errors when grading oral responses in real-time. At the same time, challenges related to multilingual and dialects contexts persists. For instance, when examiners are not from the same language background as the children they are assessing. Therefore, the tasks needs to be developed and assessed with extensive sensitivity and appropriateness.

## Phonological processing tasks:

Phonological processing is the ability to separate and manipulate the sounds of a language. The tasks include blending of units, finding or creating rhymes, parsing or segmenting units, identifying words that start and end with the target sound, and replacing or deleting the first, last or middle unit. However, more research is required on comprehensive phonological processing to critically examine whether the phonological skills being tested by different people have similar specificities and if the tasks can be interchanged.



### **Emergent literacy tasks:**

The term 'concepts about print' refers to children's knowledge of print norms, its uses and functions. These includes being able to understand book orientation, print directionality, and the meanings which are conveyed via prints. For example, the child should know the meaning of a question mark or comma on a book, show how the finger should move while reading from a book, which way to read from a book, etc. Time-bound shared book reading interactions are extremely effective at eliciting concepts about print and other emergent literacy tasks.

### Reading comprehension tasks:

These assessments typically are in the form of responses that are based on passages that are either read aloud or silently by the learner. Questions may bring out factual data, inferences, or a summary of the text that was read. The assessment method can be through multiple-choice with verbal or visual format, that can prompt a written or spoken response, or can ask the learners to narrate a story.

### Writing assessments:

Writing skills for the youngest learners can be assessed using scribbles, drawings, or made-up spellings in response to a prompt. Children's emergent writings can be elicited by many prompts, such as reading aloud a short narrative and asking the child to illustrate and write about it. Dictation, a commonly used assessment in classrooms helps in assessing the spelling attainment of the learners.

Language and literacy assessments must take into account variances caused by regional languages and diversity. Assessments on symbol knowledge need to consider the wide variety of letters/alphabets beyond the basic understanding of vowels, consonants with the inherent vowel, and consonants with vowel ligatures. Comprehensive reporting of text elements linked to syntax and semantics will improve assessments based on reading passages, such as listening comprehension and reading comprehension. Additionally, the use of multiple assessment formats will help create a skill profile for the learner that is more comprehensive. Monitoring the test development process and demonstration of psychometric properties are imperative and essential components of a strong assessment framework



### LEARNING FROM PEERS AND ADOPTING BEST PRACTICES

- The index's second edition continues to serve as a guideline for evaluating the performance of the states and union territories and encouraging peer-to-peer learning to raise individual performances. In the spirit of corporative federalism, it is essential to constantly assess each region's status on foundational learning and numeracy. This will help to foster peer-to-peer learning.
- For instance, NAS 2021 findings have revealed that • pandemic induced a negative impact on the learning outcomes of all regions. The findings highlighted that Punjab had the highest learning outcomes across the country for grade 3 and 5. Also, it is the only state in which learning outcomes have improved from 2017. Punjab's turnaround performance is a result of its continuous to efforts separate the system of public education into three dimensions: Access, Quality and Monitoring & Evaluation. (Implementing **Deeper Learning and 21st Century Education Reforms).** Through a revamped and streamlined state education system, the main objective of the reform (the "impact") was to give Punjabi children access to high-quality education. It accomplished this by resulting in three key outcomes:

## Greater access to schools for school-aged children.



Improved quality of education being imparted in public schools.



Robust monitoring & evaluation mechanisms for evidence-informed service delivery and improved accountability, embedded in each layer of the system.



Punjab has improved learning outcomes of students since 2017 through **Padho Punjab Padhao Punjab (PPPP)** 

Programme. The learning levels target to be achieved for different subjects in classes I to V are determined every year by the Department of School Education. Overall there is an urgency for states to scale up solutions to address these gaps in learning outcomes especially in the backdrop of learning loss.

### TRACKING FLN SPECIFIC OUTCOMES

Disaggregated data for FLN outcomes across grade below primary level, with a renewed emphasis on FLN. Currently, many of the indicators taken up for constructing the FLN Index are related to primary education. Therefore, appropriate data related to FLN outcome-based indicators must be embedded and evaluated within the states/UTs education system with a well-defined pedagogical framework. These indicators would include the following:

PILLARS	INDICATORS THAT CAN BE ADDED	INDICATORS THAT CAN BE MEASURED
For access to education:	<ul> <li>Percentage of out of school children</li> <li>Percentage of single teacher schools</li> <li>Percentage of habitations with primary schools within 1 km</li> <li>Percentage of schools with pre-school sections or co-located anganwadis</li> </ul>	<ul> <li>Percentage of schools with dedicated grade 1/2 teacher</li> <li>Percentage of schools with trained FLN teacher</li> </ul>
屋面 留留 Educational Infrastructure	- Student Classroom ratio (SCR) at Primary - Percentage of schools with multigrade teaching (i.e., < 1 teacher/grade)	<ul> <li>Percentage of schools having FLN materials apart from textbook</li> <li>Percentage of schools having FLN teacher guide</li> <li>Percentage of schools with print rich grade 1/2 classroom</li> </ul>
Learning outcomes	<ul> <li>Intra-class variation/ standard deviation of scores</li> <li>Percentage of zero scores</li> <li>State level assessment scores - grade 2/3</li> </ul>	-
Governance	<ul> <li>Percentage of teacher vacancy</li> <li>Percentage of academic monitors (BRC/CRC) in position</li> </ul>	<ul> <li>Average no of monitoring visits per school</li> <li>Average no of days of teacher training on FLN</li> </ul>

### WAY FORWARD

This report demonstrates essential methods and best practices that must be adopted to strengthen children's learning outcomes in multilingual environments with a critical focus on language. Two factors determine the learning process and literacy development in children, explicitly teaching and appropriate assessments, both facilitated by language. Therefore, the language system critically supports a child's ability to communicate, understand and express as the child starts learning to read and write. Since language is the primary source of communication, more research should be conducted on "what language to be used for teaching in multilingual countries' and 'how they should be taught' during the foundational years of children. At present, improving learning outcomes is the main objective, and for this to happen, our queries should stress 'how early literacy programs can work better' and 'why does an early literacy program work or not work ' because this will decide what kind of programmes works and yields the desired result. Adding to this, the capacity building of teachers and Anganwadi workers can significantly catalyse children's learning process because, during the foundational years, they interact with children the most after the parents.

Therefore, it is crucial to put education research and learning science at the top of our agenda as we work to enhance learning outcomes and establish education curriculum and policy framework while battling the learning crisis that engulfs many low-income communities throughout the developing globe, especially in the post-pandemic situation.



# **16** Scorecard

### Andaman and **Nicobar Islands**

Index on foundational learning

State of FLN:

48.15

मिदि



Educational Infrastructure	76.79	
Schools with Electricity connection (%)	89.86	•
Schools with functional computer facility (%)	55.25	•
Schools with functional CWSN friendly toilet (%)	22.06	•
Schools with functional drinking water (%)	100.00	•
Schools with functional toilets (%)	100.00	•
Schools with hand wash facility (%)	100.00	•
Schools with internet facility available (%)	31.38	•
Schools with library facility (%)	99.44	•
Schools with medical checkups (%)	71.08	•
Households 1 km from school having primary classes	0.00	•

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

76.79	Basic Health	66.62	•
89.86 •	Stunted Children (under 5 years) %	90.57	•
55.25 •	Fully immunised children under 5years (%)	53.78	•
22.06	Infant Mortality rate	59.13	•
22.00	Severely wasted Children (under 5 years) %	70.93	•
100.00 •	Under 5 mortality rate	59.03	•
100.00 •	Underweight children (under 5 years)	61.13	•
100.00 •			
31.38 🔸	Learning Outcomes	44.14	
99.44 •			
71.08 •	Gender Parity Index (GPI)	63.16	•
0.00 •	NAS Class 3 - EVS	43.86	•
	NAS Class 3 - Language	50.77	•
	NAS Class 3 - Mathematics	26.87	•
	NAS Class 5 - EVS	46.00	•
22.40	NAS Class 5 - Language	48.15	•
	NAS Class 5 - Mathematics	29.63	•
19.28 😑	Transition Rate - Primary	95.50	•
0.00 •			
20.85 •	Governance	30.81	
73.26 •			
29.04 🔸	Central fund utilization under Poshan	100.00	•
0.00 🔸	Expenditure on Education - As Ratio to AE	0.00	•
100.00	Expenditure on primary education for Govt schools (%)	46.83	•
28.88	Expenditure on primary education under SSA (%)	45.45	•
	Expenditure on teacher training (%)	45.45	•
	Mid day meal State expenditure (%)	46.83	•

### **Andhra Pradesh**

Index on foundational learning 39.02 State of FLN:



Educational Infrastructure	61.95
Schools with Electricity connection (%)	02 <i>1</i> 7
Schools with functional computer	26.92
facility (%)	20.03
Schools with functional CWSN friendly toilet (%)	6.04
Schools with functional drinking water (%)	80.06
Schools with functional toilets (%)	20.51
Schools with hand wash facility (%)	81.46
Schools with internet facility available (%)	20.70
Schools with library facility (%)	88.74
Schools with medical checkups (%)	84.42
Households 1 km from school having primary classes	100.00

#### **Access to Education**

Primary level schools per lakh population	34.38 •
Adjusted(NER) - Primary level for girls	33.83 •
Children With Special Needs (CWSN) (%)	33.52 •
Dropout Rate - Primary	100.00 •
Minority group's enrolment (%) - Primary	6.91 🔸
NER Enrollment ratio (NER) - Primary	51.39 🔸
Pre school education - Percentage	21.96 🖕
Pupil Teacher Ratio (PTR) - Primary	60.00 •
Teacher for Primary level education (%)	55.49 •

- Overperforming | Performing within expected range
- Underperforming

東京

C

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

38.25 🔴

	Basic Health	46.07 -
	Stunted Children (under 5 years) %	57.74 •
	Fully immunised children under 5years (%)	40.81 •
	Infant Mortality rate	39.88 •
	Severely wasted Children (under 5 years) %	56.98 •
	Under 5 mortality rate	41.14 •
	Underweight children (under 5 years)	40.28 •
	Learning Outcomes	30.56 🗕
	Gender Parity Index (GPI)	26.32 •
	NAS Class 3 - EVS	36.84 😐
	NAS Class 3 - Language	32.31 •
	NAS Class 3 - Mathematics	38.81 •
	NAS Class 5 - EVS	20.00 •
	NAS Class 5 - Language	16.67 😐
	NAS Class 5 - Mathematics	24.07 •
	Transition Rate - Primary	95.50 •
E	Governance	18.25 🗕
	Central fund utilization under Poshan	4.38 •
	Expenditure on Education - As Ratio to AE	51.75 •
	Expenditure on primary education for Govt schools (%)	1.45 •
	Expenditure on primary education under SSA (%)	0.00 •
	Expenditure on teacher training (%)	0.00 •
	Mid day meal State expenditure (%)	1.45 😐

### **Arunachal Pradesh**

Index on foundational learning
State of FLN: **35.82** 



Educational Infrastructure	22.35
Schools with Electricity connection (%)	43.51
Schools with functional computer facility (%)	13.86
Schools with functional CWSN friendly toilet (%)	3.98
Schools with functional drinking water (%)	41.16
Schools with functional toilets (%)	7.08
Schools with hand wash facility (%)	8.09
Schools with internet facility available (%)	5.52
Schools with library facility (%)	33.14
Schools with medical checkups (%)	32.03
Households 1 km from school having primary classes	0.00

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

मिदि

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

50.05 •

48.32 • 100.00 • 34.32 • 3.49 • 39.86 • 100.00 • 12.41 • 88.00 • 35.22 •

Basic Health	65.33	
Stunted Children (under 5 years) %	69.81	•
Fully immunised children under 5years (%)	18.92	•
Infant Mortality rate	74.40	•
Severely wasted Children (under 5 years) %	51.16	•
Under 5 mortality rate	68.56	•
Underweight children (under 5 years)	90.46	•
Learning Outcomes	21.39	•
Gender Parity Index (GPI)	52.63	•
NAS Class 3 - EVS	15.79	•
NAS Class 3 - Language	13.85	•
NAS Class 3 - Mathematics	7.46	•
NAS Class 5 - EVS	22.00	•
NAS Class 5 - Language	27.78	•
NAS Class 5 - Mathematics	11.11	•
 Transition Rate - Primary	100.00	•
Governance	19.97	
 Central fund utilization under Poshan	0.00	•
Expenditure on Education - As Ratio to AE	43.42	•
Expenditure on primary education for Govt schools (%)	0.00	•
Expenditure on primary education under SSA (%)	31.62	•
Expenditure on teacher training (%)	31.62	•
Mid day meal State expenditure (%)	0.00	•

### **Assam**

Index on foundational learning State of FLN: **46.15** 



<u>」</u> 留留	Educational Infrastructure
	Schools with Electricity connection (%)
	Schools with functional computer facility (%)
	Schools with functional CWSN friendly toilet (%)
	Schools with functional drinking water (%)
	Schools with functional toilets (%)

Schools with hand wash facility (%)
Schools with internet facility available (%)
Schools with library facility (%)
Schools with medical checkups (%)
Households 1 km from school having primary classes

#### Access to Education

Primary level schools per lakh population	45.44 •
Adjusted(NER) - Primary level for girls	100.00 •
Children With Special Needs (CWSN) (%)	39.53 •
Dropout Rate - Primary	61.63 •
Minority group's enrolment (%) - Primary	45.53 🔸
NER Enrollment ratio (NER) - Primary	100.00 •
Pre school education - Percentage	8.83 🖕
Pupil Teacher Ratio (PTR) - Primary	72.00 •
Teacher for Primary level education (%)	62.04 •

- Overperforming | Performing within expected range
- Underperforming

C

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

50.25	•	Basic Health	32.49	•
47.13	•	Stunted Children (under 5 years) %	42.26	•
0.00	•	Fully immunised children under 5years (%)	22.97	•
15.41		Infant Mortality rate	36.71	•
13.41		Severely wasted Children (under 5 years) %	20.93	•
82.91	•	Under 5 mortality rate	34.62	•
39.24	•	Underweight children (under 5 years)	28.98	•
79.06	•			
2.22	•	Learning Outcomes	59.27	
81.53	•	Gender Parity Index (GPI)	63.16	•
50.46	•	NAS Class 3 - EVS	63.16	•
84.07	•	NAS Class 3 - Language	53.38	•
		NAS Class 3 - Mathematics	62.69	•
		NAS Class 5 - EVS	62.00	•
57.80		NAS Class 5 - Language	50.00	•
		NAS Class 5 - Mathematics	53.70	•
45.44	•	Transition Rate - Primary	88.50	•
100.00	•			
39.53	•	Governance	30.97	•
61.63	•			
45.53	•	Central fund utilization under Poshan	1.60	•
100.00	•	Expenditure on Education - As Ratio to AE	81.58	•
8.83	•	Expenditure on primary education for Govt schools (%)	78.83	•
62.04	•	Expenditure on primary education under SSA (%)	1.58	•
		Expenditure on teacher training (%)	1.58	•

Mid day meal State expenditure (%)

78.83 •

### **Bihar**

Index on foundational learning
State of FLN: • 40.96



Educational Infrastructure	57.00	
Schools with Electricity connection (%)	82.20	
Schools with functional computer facility (%)	0.42	
Schools with functional CWSN friendly toilet (%)	12.51	
Schools with functional drinking water (%)	98.98	
Schools with functional toilets (%)	97.82	
Schools with hand wash facility (%)	77.78	
Schools with internet facility available (%)	4.89	
Schools with library facility (%)	54.12	
Schools with medical checkups (%)	16.01	
Households 1 km from school having primary classes	97.72	

### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

मिदि

Ŕ

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

57.00	Basic Health	12.58	•
82.20	Stunted Children (under 5 years) %	13.58	•
0.42	• Fully immunised children under 5years (%)	35.41	•
10 51	Infant Mortality rate	7.14	•
12.51	Severely wasted Children (under 5 years) %	24.42	•
98.98	Under 5 mortality rate	5.69	•
97.82	• Underweight children (under 5 years)	92.00	•
77.78	•		
4.89	Learning Outcomes	40.05	•
54.12	•		
16.01	Gender Parity Index (GPI)	47.37	•
97.72	NAS Class 3 - EVS	42.11	•
	NAS Class 3 - Language	41.54	•
	NAS Class 3 - Mathematics	47.76	•
	NAS Class 5 - EVS	4000	•
48.71	<ul> <li>NAS Class 5 - Language</li> </ul>	37.04	•
	NAS Class 5 - Mathematics	38.89	•
9.44	<ul> <li>Transition Rate - Primary</li> </ul>	0.00	•
92.48	•		
19.45	• Governance	46.44	
100.00	•		
13.14	Central fund utilization under Poshan	5.46	•
81.98	• Expenditure on Education - As Ratio to AE	79.39	
25.78 0.00	<ul> <li>Expenditure on primary education for</li> <li>Govt schools (%)</li> </ul>	34.29	•
42.23	• Expenditure on primary education under SSA (%)	0.00	•
	Expenditure on teacher training (%)	0.00	•
	Mid day meal State expenditure (%)	34.29	

## Chandigarh

Index on foundational learning 48.53 State of FLN:



Educational Infrastructure	90.03
Schools with Electricity connection (%)	100.00
Schools with functional computer facility (%)	98.99
Schools with functional CWSN friendly toilet (%)	67.46
Schools with functional drinking water (%)	100.00
Schools with functional toilets (%)	100.00
Schools with hand wash facility (%)	100.00
Schools with internet facility available (%)	100.00
Schools with library facility (%)	97.97
Schools with medical checkups (%)	55.80
Households 1 km from school having primary classes	0.00

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

<u></u> (学) (学)

C

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

90.03 •	Basic Health	66.72 🗕
100.00 •	Stunted Children (under 5 years) %	80.00
98.99 •	Fully immunised children under 5years (%)	62.16 •
67.46	Infant Mortality rate	48.29 •
07.40	Severely wasted Children (under 5 years) %	90.00 •
100.00 •	Under 5 mortality rate	47.83 •
100.00 •	Underweight children (under 5 years)	72.08
100.00 •		
100.00 •	Learning Outcomes	68.74 ●
97.97 •		
55.80 •	Gender Parity Index (GPI)	100.00 •
0.00 •	NAS Class 3 - EVS	63.16 •
	NAS Class 3 - Language	69.23 •
	NAS Class 3 - Mathematics	58.21 •
	NAS Class 5 - EVS	66.00 •
16.26 ●	NAS Class 5 - Language	75.93 •
	NAS Class 5 - Mathematics	61.11 •
0.00 •	Transition Rate - Primary	100.00 •
34.59 •		
41.90 •	Governance	0.92 🔴
100.00 •		
12.30 🔸	Central fund utilization under Poshan	0.00 •
19.82 😐	Expenditure on Education - As Ratio to AE	0.00 •
13.37 • 62.00 •	Expenditure on primary education for Govt schools (%)	0.00
0.00 •	Expenditure on primary education under SSA (%)	3.16 •
	Expenditure on teacher training (%)	3.16 •
	Mid day meal State expenditure (%)	0.00 •

## Chhattisgarh

Index on foundational learning 40.98 State of FLN:



Educational Infrastructure	81.48	
Schools with Electricity connection (%)	92.38	•
Schools with functional computer facility (%)	77.34	•
Schools with functional CWSN friendly toilet (%)	73.74	•
Schools with functional drinking water (%)	95.25	•
Schools with functional toilets (%)	96.97	•
Schools with hand wash facility (%)	95.35	•
Schools with internet facility available (%)	10.35	•
Schools with library facility (%)	96.48	•
Schools with medical checkups (%)	63.44	•
Households 1 km from school having primary classes	93.90	•

### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

日本

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

47.24 ●

37.90 • 73.31 • 58.19 • 90.70 • 0.00 • 71.69 🖕 9.31 • 74.00 • 63.44 •

	Basic Health	32.17 •
Stu	unted Children (under 5 years) %	44.91 •
Fu	lly immunised children under 5ye	ars (%) 58.92 •
Inf	ant Mortality rate	12.10 •
Se	verely wasted Children (under 5 y	rears) % 39.53 •
Un	der 5 mortality rate	15.72 •
Un	derweight children (under 5 year	s) 34.28 •
	Learning Outcomes	19.92 ●
G	ender Parity Index (GPI)	36.84 •
Ν	IAS Class 3 - EVS	21.05 •
Ν	IAS Class 3 - Language	16.92 •
Ν	IAS Class 3 - Mathematics	16.42 •
N	IAS Class 5 - EVS	18.00 •
N	IAS Class 5 - Language	18.52 •
N	IAS Class 5 - Mathematics	7.41 •
Т	ransition Rate - Primary	80.50 •
	Governance	24.09 🔴
Ce	ntral fund utilization under Posha	in 6.92 •
Exp	penditure on Education - As Ratic	o to AE 79.39 •
Exi Go	penditure on primary education f vvt schools (%)	or 76.37 •
Exp un	penditure on primary education der SSA (%)	3.56 •
Exp	penditure on teacher training (%)	3.56 •
Mi	d day meal State expenditure (%)	76.37 •

### Dadar & Nagar Haveli & Daman and Diu

Index on foundational learning

State of FLN:

33.28



Educational Infrastructure	85.91	
Schools with Electricity connection (%)	100.00	•
Schools with functional computer facility (%)	86.69	•
Schools with functional CWSN friendly toilet (%)	78.59	•
Schools with functional drinking water (%)	100.00	•
Schools with functional toilets (%)	100.00	•
Schools with hand wash facility (%)	100.00	•
Schools with internet facility available (%)	34.78	•
Schools with library facility (%)	99.02	•
Schools with medical checkups (%)	70.63	•
Households 1 km from school having primary classes	0.00	•

#### **Access to Education**

Primary level schools per lakh population	
Adjusted(NER) - Primary level for girls	
Children With Special Needs (CWSN) (%)	
Dropout Rate - Primary	
Minority group's enrolment (%) - Primary	
NER Enrollment ratio (NER) - Primary	
Pre school education - Percentage	
Pupil Teacher Ratio (PTR) - Primary	
Teacher for Primary level education (%)	

- Overperforming | Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

27.53 ●

9.84 • 33.46 • 70.95 • 58.14 • 4.05 • 33.91 🖕 7.16 58.00 • 29.22 •

	Basic Health	43.05 🧧
	Stunted Children (under 5 years) %	26.79 •
	Fully immunised children under 5years (%)	100.00 •
	Infant Mortality rate	36.90 •
	Severely wasted Children (under 5 years) %	76.74 •
	Under 5 mortality rate	38.13 🔸
	Underweight children (under 5 years)	8.13
	Learning Outcomes	7.34 •
	Gender Parity Index (GPI)	68.42 •
	NAS Class 3 - EVS	14.67 •
	NAS Class 3 - Language	4.78
	NAS Class 3 - Mathematics	5.78 •
	NAS Class 5 - EVS	0.00
	NAS Class 5 - Language	10.20 •
	NAS Class 5 - Mathematics	3.70 •
	Transition Rate - Primary	86.00 •
۲ <u>E</u>	Governance	2.56 🔴
	Central fund utilization under Poshan	0.00
	Expenditure on Education - As Ratio to AE	0.00 •
	Expenditure on primary education for Govt schools (%)	99.22 •
	Expenditure on primary education under SSA (%)	0.00
	Expenditure on teacher training (%)	0.00 •
	Mid day meal State expenditure (%)	99.22 •
### Delhi

# Index on foundational learning State of FLN: • 52.13



#### Educational Infrastructure

Schools with Electricity connection (%)	100.00	•
Schools with functional computer facility (%)	100.00	•
Schools with functional CWSN friendly toilet (%)	99.58	•
Schools with functional drinking water (%)	100.00	•
Schools with functional toilets (%)	100.00	•
Schools with hand wash facility (%)	100.00	•
Schools with internet facility available (%)	88.99	•
Schools with library facility (%)	100.00	•
Schools with medical checkups (%)	62.32	•
Households 1 km from school having primary classes	94.11	•

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming 🔴 Performing within expected range
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

95.52 •

44.16 🔴

5.15 • 100.00 • 13.80 • 100.00 • 16.28 • 100.00 • 43.68 • 48.00 • 28.62 •

Ŷ	Basic Health	57.12	•
	Stunted Children (under 5 years) %	58.87	•
	Fully immunised children under 5years (%)	48.92	•
	Infant Mortality rate	51.39	•
	Severely wasted Children (under 5 years) %	69.77	•
	Under 5 mortality rate	48.83	•
	Underweight children (under 5 years)	67.84	•
	Learning Outcomes	27.37	•
	Gender Parity Index (GPI)	68.42	•
	NAS Class 3 - EVS	19.30	•
	NAS Class 3 - Language	18.46	•
	NAS Class 3 - Mathematics	14.93	•
	NAS Class 5 - EVS	28.00	•
	NAS Class 5 - Language	35.19	•
	NAS Class 5 - Mathematics	20.37	•
	Transition Rate - Primary	82.50	•
í.	Governance	36.48	•
	Central fund utilization under Poshan	6.61	•
	Expenditure on Education - As Ratio to AE	100.00	•
	Expenditure on primary education for Govt schools (%)	9.72	•
	Expenditure on primary education under SSA (%)	30.83	•
	Expenditure on teacher training (%)	30.83	•
	Mid day meal State expenditure (%)	9.72	•

### Goa

# Index on foundational learning State of FLN: **51.05**



Educational Infrastructure	76.13	
Schools with Electricity connection (%)	100.00	•
Schools with functional computer facility (%)	42.87	•
Schools with functional CWSN friendly toilet (%)	1.70	•
Schools with functional drinking water (%)	100.00	•
Schools with functional toilets (%)	100.00	•
Schools with hand wash facility (%)	100.00	•
Schools with internet facility available (%)	37.17	•
Schools with library facility (%)	98.98	•
Schools with medical checkups (%)	75.09	•
Households 1 km from school having primary classes	0.00	•

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming
   Performing within expected range
- Underperforming

南南

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

5.13	• Basic Health	71.53	•
00.00	• Stunted Children (under 5 y	ears) % 78.11	•
42.87	• Fully immunised children un	der 5years (%) 64.86	•
1 70	Infant Mortality rate	88.89	•
1.70	Severely wasted Children (u	nder 5 years) % 39.53	; •
0.00	• Under 5 mortality rate	82.27	•
.00	Underweight children (unde	r 5 years) 60.07	•
00	•		
17	• Learning Outcom	es 47.19	) 🔴
.98	•		
)9	Gender Parity Index (GPI)	63.16	•
0	<ul> <li>NAS Class 3 - EVS</li> </ul>	57.89	•
	NAS Class 3 - Language	56.92	•
	NAS Class 3 - Mathematics	40.30	•
	NAS Class 5 - EVS	36.00	•
2	NAS Class 5 - Language	50.00	•
	NAS Class 5 - Mathematics	22.22	٠
5	<ul> <li>Transition Rate - Primary</li> </ul>	99.00	٠
1	•		
21	• Governance	20.20	
6	•		
92	• Central fund utilization under	er Poshan 0.00	•
.85	• Expenditure on Education -	As Ratio to AE 57.46	•
.80	• Expenditure on primary edu	cation for 41.00	•
00	• Govt schools (%)	41.00	Ē
5.95	• Expenditure on primary edu under SSA (%)	cation 13.83	•

Expenditure on teacher training (%)13.83Mid day meal State expenditure (%)41.00

### **Gujarat**

Index on foundational learning 44.08 State of FLN:



#### **Educational Infrastructure**

Schools with Electricity connection (%)	99.92 •
Schools with functional computer facility (%)	91.25 •
Schools with functional CWSN friendly toilet (%)	31.12 •
Schools with functional drinking water (%)	99.93 •
Schools with functional toilets (%)	96.68 •
Schools with hand wash facility (%)	94.02 •
Schools with internet facility available (%)	76.17 •
Schools with library facility (%)	95.11 •
Schools with medical checkups (%)	30.18 •
Households 1 km from school having primary classes	91.62 •

#### **Access to Education**

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

83.11 •	Basic Health	27.45
99.92 •	Stunted Children (under 5 years) %	28.30 •
91.25 •	Fully immunised children under 5years (%)	49.73 🔸
21 12	Infant Mortality rate	38.10 •
51.12	Severely wasted Children (under 5 years) %	3.49
99.93 •	Under 5 mortality rate	37.12 •
96.68 •	Underweight children (under 5 years)	4.59 •
94.02 •		
76.17 •	Learning Outcomes	55.73 ●
95.11 •		
30.18 •	Gender Parity Index (GPI)	63.16
91.62 •	NAS Class 3 - EVS	03.10
	NAS Class 3 - Language	56 72
	NAS Class 5 - FVS	54.00
28 10	NAS Class 5 - Language	40.74
20.10	NAS Class 5 - Mathematics	46.30
7.06 •	Transition Rate - Primary	93.00 •
71.05 •		
23.36 •	Governance	26.02 🔴
88.37 •		
7.69 🔸	Central fund utilization under Poshan	7.42 🔸
49.32 😐	Expenditure on Education - As Ratio to AE	56.14 😐
16.47 •	Expenditure on primary education for Govt schools (%)	92.16 •
13.45	Expenditure on primary education under SSA (%)	8.30 •
	Expenditure on teacher training (%)	8.30 •
e	Mid day meal State expenditure (%)	92.16

### Haryana

Index on foundational learning
State of FLN: • 45.24



### Educational Infrastructure

Schools with Electricity connection (%)	98.62 •
Schools with functional computer facility (%)	46.56 •
Schools with functional CWSN friendly toilet (%)	39.87 •
Schools with functional drinking water (%)	98.95 •
Schools with functional toilets (%)	96.12 •
Schools with hand wash facility (%)	98.75 •
Schools with internet facility available (%)	42.99 🖕
Schools with library facility (%)	95.76 •
Schools with medical checkups (%)	50.54 😐
Households 1 km from school having primary classes	98.55 •

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming 🔶 Performing within expected range
- Underperforming

F

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

79.48 •

30.05 •

12.30 • 72.18 • 8.99 • 75.58 • 9.98 • 46.63 • 9.31 • 66.00 • 29.69 •

Basic Health	54.92	•
Stunted Children (under 5 years) %	71.70	•
Fully immunised children under 5years (%)	51.35	•
Infant Mortality rate	33.93	•
Severely wasted Children (under 5 years) %	75.58	•
Under 5 mortality rate	35.28	•
Underweight children (under 5 years)	68.90	•
Learning Outcomes	44.47	•
Gender Parity Index (GPI)	36.84	•
NAS Class 3 - EVS	40.35	•
NAS Class 3 - Language	38.46	•
NAS Class 3 - Mathematics	40.30	•
NAS Class 5 - EVS	46.00	•
NAS Class 5 - Language	50.00	•
NAS Class 5 - Mathematics	44.44	•
Transition Rate - Primary	85.50	•
Governance	17.27	•
Central fund utilization under Poshan	5.81	•
Expenditure on Education - As Ratio to AE	59.21	•
Expenditure on primary education for Govt schools (%)	84.55	•
Expenditure on primary education under SSA (%)	0.00	•
Expenditure on teacher training (%)	0.00	•
Mid day meal State expenditure (%)	84.55	•

### **Himachal Pradesh**

Index on foundational learning
State of FLN: • 46.56



Educational Infrastructure	72.40	
Schools with Electricity connection (%)	97.55	
Schools with functional computer facility (%)	23.59	•
Schools with functional CWSN friendly toilet (%)	21.45	
Schools with functional drinking water (%)	99.70	)
Schools with functional toilets (%)	97.41	)
Schools with hand wash facility (%)	98.75	•
Schools with internet facility available (%)	20.27	•
Schools with library facility (%)	94.34	•
Schools with medical checkups (%)	39.92	•
Households 1 km from school having primary classes	76.84	•

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming 🔶 Performing within expected range
- Underperforming

東京

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

72.40 🗕	Basic Health	56.57	•
97.55 •	Stunted Children (under 5 years) %	59.25	•
23.59 •	Fully immunised children under 5years (%)	84.86	•
2145	Infant Mortality rate	49.21	•
21.15	Severely wasted Children (under 5 years) %	46.51	•
99.70 •	Under 5 mortality rate	51.67	•
97.41 •	Underweight children (under 5 years)	54.77	•
98.75 •			
20.27 🖕	Learning Outcomes	36.66	•
94.34 •	Conder Derity Indey (CDI)	40.11	
39.92 🔸		42.11	
76.84 •	NAS Class 3 - Levs	40.00	
	NAS Class 3 - Mathematics	35.82	•
	NAS Class 5 - EVS	30.00	•
47.28	NAS Class 5 - Language	35.19	•
	NAS Class 5 - Mathematics	14.81	•
71.54 •	Transition Rate - Primary	88.50	•
100.00 •			
11.16 🗕	Governance	19.89	
77.91 🔸			
0.17 •	Central fund utilization under Poshan	0.42	•
75.92 😐	Expenditure on Education - As Ratio to AE	75.44	•
2.15 • 84.00 •	Expenditure on primary education for Govt schools (%)	88.44	•
42.20 •	Expenditure on primary education under SSA (%)	0.00	•
	Expenditure on teacher training (%)	0.00	•
	Mid day meal State expenditure (%)	88.44	•

#### Jammu and Kashmir

Index on foundational learning 50.75 State of FLN: 



Educational Infrastructure	55.23	•
Schools with Electricity connection (%)	64.80	•
Schools with functional computer facility (%)	16.47	•
Schools with functional CWSN friendly toilet (%)	1.40	•
Schools with functional drinking water (%)	91.71	•
Schools with functional toilets (%)	65.61	•
Schools with hand wash facility (%)	93.47	•
Schools with internet facility available (%)	9.18	•
Schools with library facility (%)	62.86	•
Schools with medical checkups (%)	31.72	•
Households 1 km from school having primary classes	89.35	•

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming | Performing within expected range
- Underperforming

<u>」</u> 留留

í S

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

55.23	Basic Health	63.93	•
64.80	• Stunted Children (under 5 years) %	73.96	•
16.47	• Fully immunised children under 5years (%)	76.49	•
1.40	Infant Mortality rate	67.66	•
1.40	Severely wasted Children (under 5 years) %	13.95	•
91.71	• Under 5 mortality rate	69.06	•
65.61	<ul> <li>Underweight children (under 5 years)</li> </ul>	70.67	•
93.47	•		
9.18	• Learning Outcomes	62.86	
62.86	Gender Parity Index (GPI)	17 27	
31.72	NAS Class 3 - EVS	47.37 57.89	
89.35	• NAS Class 3 - Language	66.15	•
	NAS Class 3 - Mathematics	56.72	•
	NAS Class 5 - EVS	74.00	•
42.05	NAS Class 5 - Language	70.37	•
	NAS Class 5 - Mathematics	57.41	•
47.96	<ul> <li>Transition Rate - Primary</li> </ul>	63.50	•
79.32	•		
39.02	• Governance	29.68	
48.84	•		
63.92	Central fund utilization under Poshan	1.73	•
45.80	• Expenditure on Education - As Ratio to AE	63.60	•
19.81 84.00	<ul> <li>Expenditure on primary education for Govt schools (%)</li> </ul>	0.00	•
36.37	<ul> <li>Expenditure on primary education under SSA (%)</li> </ul>	0.00	•
	Expenditure on teacher training (%)	0.00	•
	Mid day meal State expenditure (%)	0.00	•

### **Jharkhand**

Index on foundational learning 39.82 State of FLN:



Educational Infrastructure	70.71
Schools with Electricity connection (%)	92.93
Schools with functional computer facility (%)	73.94
Schools with functional CWSN friendly toilet (%)	1.38
Schools with functional drinking water (%)	93.47
Schools with functional toilets (%)	90.57
Schools with hand wash facility (%)	84.04
Schools with internet facility available (%)	30.22
Schools with library facility (%)	92.02
Schools with medical checkups (%)	22.75
Households 1 km from school having primary classes	99.38

estional Infractories

日本

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming | Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

70.71 😐	Basic Health	23.50	•
92.93 •	Stunted Children (under 5 years) %	26.04	•
73.94 •	Fully immunised children under 5years (%)	43.24	•
138	Infant Mortality rate	24.80	•
1.50	Severely wasted Children (under 5 years) %	20.93	•
93.47 📍	Under 5 mortality rate	24.08	•
90.57 •	Underweight children (under 5 years)	5.65	•
84.04 🖕			
30.22 🖕	Learning Outcomes	34.63	•
92.02 •			
22.75 •	Gender Parity Index (GPI)	36.84	•
99.38 •	NAS Class 3 - EVS	38.60	•
	NAS Class 3 - Language	36.92	•
	NAS Class 3 - Mathematics	35.82	•
	NAS Class 5 - EVS	36.00	•
44.45 🔴	NAS Class 5 - Language	33.33	•
	NAS Class 5 - Mathematics	25.93	•
20.50 •	Transition Rate - Primary	34.50	•
89.85 •			
23.70 •	Governance	25.79	•
59.30 🔸			
15.44 🔸	Central fund utilization under Poshan	17.23	•
81.15 🔸	Expenditure on Education - As Ratio to AE	65.35	•
39.62	Expenditure on primary education for Govt schools (%)	72.45	•
42.54	Expenditure on primary education under SSA (%)	13.44	•
	Expenditure on teacher training (%)	13.44	•
	Mid day meal State expenditure (%)	72.45	•

### Karnataka

Index on foundational learning
State of FLN: • 44.91



	) (	ducational Infrastructure
1990 Barrier (1990)		

Schools with Electricity connection (%)	98.62 •
Schools with functional computer facility (%)	38.41 •
Schools with functional CWSN friendly toilet (%)	13.72 •
Schools with functional drinking water (%)	96.18 •
Schools with functional toilets (%)	96.68 •
Schools with hand wash facility (%)	79.47 🔸
Schools with internet facility available (%)	21.99 🖕
Schools with library facility (%)	94.21 •
Schools with medical checkups (%)	60.28 •
Households 1 km from school having primary classes	96.17 •

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming
   Performing within expected range
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

72.73 🔴

41.59 🔴

15.64 • 100.00 • 29.09 • 87.21 • 15.96 • 92.96 • 67.54 • 72.00 • 17.90 •

Basic Health	44.77	
Stunted Children (under 5 years) %	41.89	,
Fully immunised children under 5years (%	%) 70.81 •	,
Infant Mortality rate	49.60	,
Severely wasted Children (under 5 years)	% 29.07 •	,
Under 5 mortality rate	50.67 •	,
Underweight children (under 5 years)	28.62	)
Learning Outcomes	48.26	
Gender Parity Index (GPI)	36.84 •	
NAS Class 3 - EVS	52.63 🔴	
NAS Class 3 - Language	50.77 •	
NAS Class 3 - Mathematics	50.75 •	
NAS Class 5 - EVS	36.00 •	
NAS Class 5 - Language	50.00 •	
NAS Class 5 - Mathematics	42.59 •	
Transition Rate - Primary	90.00 •	
Governance	17.21 🛑	I
Central fund utilization under Poshan	0.00	
Expenditure on Education - As Ratio to A	E 51.75 •	
Expenditure on primary education for Govt schools (%)	0.00	
Expenditure on primary education under SSA (%)	7.91 •	
Expenditure on teacher training (%)	7.91 •	
Mid day meal State expenditure (%)	0.00 •	

### **Kerala**

Index on foundational learning 58.42 State of FLN:



Educational Infrastructure	87.36
Schools with Electricity connection (%)	99.18
Schools with functional computer facility (%)	95.40
Schools with functional CWSN friendly toilet (%)	20.5
Schools with functional drinking water (%)	99.07
Schools with functional toilets (%)	98.38
Schools with hand wash facility (%)	98.04
Schools with internet facility available (%)	90.99
Schools with library facility (%)	97.30
Schools with medical checkups (%)	75.08
Households 1 km from school having primary classes	55.43

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

Stunted Children (under 5 years) % 8 Fully immunised children under 5years (%) 0 Infant Mortality rate 5 🔸 Severely wasted Children (under 5 years) % 1 • Under 5 mortality rate Underweight children (under 5 years) 8 4 🔹 **Learning Outcomes** 9 🖕 0 • Gender Parity Index (GPI) 8 • NAS Class 3 - EVS 3 🔸 NAS Class 3 - Language NAS Class 3 - Mathematics

NAS Class 3 - Mathematics	61.19 •
NAS Class 5 - EVS	46.00 •
NAS Class 5 - Language	51.85 •
NAS Class 5 - Mathematics	31.48 •
Transition Rate - Primary	100.00 •
Governance	18.86 🛑
Central fund utilization under Poshan	9.52 •
Expenditure on Education - As Ratio to AE	59.21 🔸
Expenditure on primary education for Govt schools (%)	32.34
Expenditure on primary education under SSA (%)	6.72 •
Expenditure on teacher training (%)	6.72 •

79.25 •

87.17 •

53.78

91.27 •

59.30 •

91.30 •

75.27 •

57.80 •

36.84 •

71.93 •

80.00 •

Mid day meal State expenditure (%) 32.34 •

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

48.85 •

8.75 • 87.22 • 86.86 • 100.00 • 49.28 • 72.60 0.00 60.00 • 26.48 •

日本

### Ladakh

Index on foundational learning
State of FLN: **38.46** 



#### Educational Infrastructure

Schools with Electricity connection (%)	85.35 •
Schools with functional computer facility (%)	23.82 •
Schools with functional CWSN friendly toilet (%)	27.87 •
Schools with functional drinking water (%)	82.86 •
Schools with functional toilets (%)	86.61 •
Schools with hand wash facility (%)	31.12 🖕
Schools with internet facility available (%)	55.35 •
Schools with library facility (%)	91.61 🔸
Schools with medical checkups (%)	20.96 •
Households 1 km from school having primary classes	0.00 •

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming
   Performing within expected range
- Underperforming

58.47 •

#### Basic

	Stunted Children (under 5 years) %	60.38	•
	Fully immunised children under 5years (%)	81.89	•
	Infant Mortality rate	60.32	•
	Severely wasted Children (under 5 years) $\%$	20.93	٠
	Under 5 mortality rate	50.67	•
	Underweight children (under 5 years)	72.79	•
1			

58.06

Learning Outcomes	37.84 (	
Gender Parity Index (GPI)	73.68	
NAS Class 3 - EVS	29.82	
NAS Class 3 - Language	29.23	
NAS Class 3 - Mathematics	16.42	
NAS Class 5 - EVS	50.00	
NAS Class 5 - Language	44.44	
NAS Class 5 - Mathematics	33.33	
Transition Rate - Primary	85.00	

Governance		12.08	•
Central fund utilization under Posha	n	0.00	•
Expenditure on Education - As Ratio	to AE	63.60	•
Expenditure on primary education for Govt schools (%)	or	0.00	•
Expenditure on primary education under SSA (%)		0.00	•
Expenditure on teacher training (%)		0.00	•
Mid day meal State expenditure (%)		0.00	•

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

25.84

51.21 • 4.89 • 39.09 • 52.33 • 93.39 • 1.33 • 74.70 • 94.00 • 24.97 •

### Lakshadweep

Index on foundational learning 49.26 State of FLN:



Educational Infrastructure
Schools with Electricity connection (%)
Schools with functional computer facility (%)

facility (%)		
Schools with functional CWSN friendly toilet (%)	24.82	•
Schools with functional drinking water (%)	100.00	•
Schools with functional toilets (%)	100.00	•
Schools with hand wash facility (%)	100.00	•
Schools with internet facility available (%)	95.63	•
Schools with library facility (%)	100.00	•
Schools with medical checkups (%)	100.00	•
Households 1 km from school having primary classes	0.00	•

#### **Access to Education**

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming | Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

90.27	Basic Health	70.98	•
100.00	Stunted Children (under 5 years) %	54.72	•
100.00	Fully immunised children under 5years (%)	76.22	•
2/1.82	Infant Mortality rate	92.00	•
24.02	Severely wasted Children (under 5 years) %	25.58	•
100.00	Under 5 mortality rate	94.00	•
100.00	Underweight children (under 5 years)	53.71	•
100.00			
95.63	Learning Outcomes	39.98	•
100.00	Overdag Desite Index (ODI)	50.40	
100.00	Gender Parity Index (GPI)	52.63	•
0.00	NAS Class 3 - EVS	43.01	
	NAS Class 3 - Mathematics	38.81	•
	NAS Class 5 - EVS	32.00	•
42.64	NAS Class 5 - Language	27.78	•
	NAS Class 5 - Mathematics	33.33	•
9.54	Transition Rate - Primary	100.00	•
25.19			
100.00	Governance	2.40	
100.00			
100.00	Central fund utilization under Poshan	0.00	•
34.32	Expenditure on Education - As Ratio to AE	0.00	•
23.39	Expenditure on primary education for Govt schools (%)	100.00	•
45.56	Expenditure on primary education under SSA (%)	0.00	•
	Expenditure on teacher training (%)	0.00	•
e	Mid day meal State expenditure (%)	100.00	•

### Madhya Pradesh

Index on foundational learning 42.43 State of FLN:



Educational Infrastructure	59.37
Schools with Electricity connection (%)	66.00
Schools with functional computer facility (%)	3.00
Schools with functional CWSN friendly toilet (%)	4.68
Schools with functional drinking water (%)	89.95
Schools with functional toilets (%)	93.20
Schools with hand wash facility (%)	86.99
Schools with internet facility available (%)	11.51
Schools with library facility (%)	92.66
Schools with medical checkups (%)	17.12
Households 1 km from school having primary classes	98.55

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

59.37 🔴	Basic Health	32.51
66.00 •	Stunted Children (under 5 years) %	40.75 •
3.00 •	Fully immunised children under 5ye	ars (%) 51.89 🔸
4.60	Infant Mortality rate	18.06 •
4.68 -	Severely wasted Children (under 5 y	ears) % 51.16 •
89.95 •	Under 5 mortality rate	17.73
93.20 •	Underweight children (under 5 years	5) 28.27 •
86.99 🖕		
11.51 🖕	Learning Outcomes	64.14
92.66 •	Gender Parity Index (GPI)	36.84
17.12 •	NAS Class 3 - EVS	68.42
98.55 •	NAS Class 3 - Language	63.08
	NAS Class 3 - Mathematics	64.18
	NAS Class 5 - EVS	74.00
32.32 🗧	NAS Class 5 - Language	57.41 •
	NAS Class 5 - Mathematics	62.96
25.70 •	Transition Rate - Primary	82.50 •
40.98 •		
26.90 🔸	Governance	23.79 🔴
84.88 🔸		
2.94 🔸	Central fund utilization under Posha	n 0.00 •
38.64 🔸	Expenditure on Education - As Ratio	to AE 69.30 •
66.11 •	Expenditure on primary education for Govt schools (%)	or 95.13 •
43.82	Expenditure on primary education under SSA (%)	0.40
	Expenditure on teacher training (%)	0.40 •
	Mid day meal State expenditure (%)	95.13

### **Maharashtra**

Index on foundational learning 52.78 State of FLN:



Educational Infrastructure	79.84
Schools with Electricity connection (%)	93.89
Schools with functional computer facility (%)	68.46
Schools with functional CWSN friendly toilet (%)	46.81
Schools with functional drinking water (%)	96.56
Schools with functional toilets (%)	86.85
Schools with hand wash facility (%)	96.87
Schools with internet facility available (%)	34.59
Schools with library facility (%)	96.96
Schools with medical checkups (%)	61.04
Households 1 km from school having primary classes	92.76

#### **Access to Education**

日本

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

Overperforming Performing within expected range



**Basic Health** 

50.37 🔴

18.27 • 100.00 •

58.00 • 88.37 • 16.13 • 88.58 • 58.00 •

64.00 • 34.45 •

, AR			
	Stunted Children (under 5 years) %	42.64	•
	Fully immunised children under 5years (%)	42.16	•
	Infant Mortality rate	53.97	•
	Severely wasted Children (under 5 years) %	5.60	•
	Under 5 mortality rate	53.18	•
	Underweight children (under 5 years)	17.31	•
	Learning Outcomes	62.15	•
	Gender Parity Index (GPI)	52.63	•
	NAS Class 3 - EVS	68.42	•
	NAS Class 3 - Language	66.15	•
	NAS Class 3 - Mathematics	65.67	•
	NAS Class 5 - EVS	62.00	•
	NAS Class 5 - Language	59.26	•
	NAS Class 5 - Mathematics	46.30	•
	Transition Rate - Primary	93.50	•
	Governance	34.27	•
	Central fund utilization under Poshan	0.00	•
	Expenditure on Education - As Ratio to AE	67.98	•
	Expenditure on primary education for Govt schools (%)	0.00	•
	Expenditure on primary education under SSA (%)	13.83	•

37.25

Expenditure on teacher training (%) 13.83 • Mid day meal State expenditure (%) 0.00 •

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

### Manipur

Index on foundational learning
State of FLN: • 47.17



Educational Infrastructure	40.95
Schools with Electricity connection (%)	55.24
Schools with functional computer facility (%)	21.35
Schools with functional CWSN friendly toilet (%)	5.19
Schools with functional drinking water (%)	94.34
Schools with functional toilets (%)	27.59
Schools with hand wash facility (%)	74.35
Schools with internet facility available (%)	13.00
Schools with library facility (%)	13.20
Schools with medical checkups (%)	41.19
Households 1 km from school having primary classes	0.00

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

Overperforming 🔴 Performing within expected range

Underperforming

Stunted Children (under 5 years) % 4 🔸 Fully immunised children under 5years (%) 5 🔸 Infant Mortality rate 9 🔸 Severely wasted Children (under 5 years) % 4 • Under 5 mortality rate Underweight children (under 5 years) 9 🔸 5 🔸 **Learning Outcomes** 0 🔸 0 • Gender Parity Index (GPI) 9 😐 NAS Class 3 - EVS 0 • NAS Class 3 - Language NAS Class 3 - Mathematics NAS Class 5 - EVS 53.22 NAS Class 5 - Language

NAS Class 5 - Mathematics

Transition Rate - Primary

Governance	14.45	•
Central fund utilization under Poshan	0.81	•
Expenditure on Education - As Ratio to AE	46.93	•
Expenditure on primary education for Govt schools (%)	82.82	•
Expenditure on primary education under SSA (%)	0.00	•
Expenditure on teacher training (%)	0.00	•
Mid day meal State expenditure (%)	82.82	•

67.62 •

87.17 •

29.46

50.40 •

87.21 •

49.83 •

97.88

59.61

57.89

68.42 •

64.62 •

56.72 •

56.00 •

68.52 •

44.44 •

52.50 •

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

35.44 •

100.00 • 33.44 • 0.00 • 52.42 • 100.00 • 72.79 • 88.00 • 38.46 •

### Meghalaya

Index on foundational learning 29.66 State of FLN:



Educational Infrastructure	3.01
Schools with Electricity connection (%)	0.00 •
Schools with functional computer facility (%)	0.71 •
Schools with functional CWSN friendly toilet (%)	0.00 •
Schools with functional drinking water (%)	0.00
Schools with functional toilets (%)	0.00 •
Schools with hand wash facility (%)	0.00 •
Schools with internet facility available (%)	0.00 •
Schools with library facility (%)	0.00 •
Schools with medical checkups (%)	33.02 •
Households 1 km from school having primary classes	0.00 •

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

3.01 🔸	Basic Health	32.78	•
0.00	Stunted Children (under 5 years) %	2.80	•
0.71 •	Fully immunised children under 5years (%)	15.95	•
0.00	Infant Mortality rate	35.91	•
0.00	Severely wasted Children (under 5 years) $\%$	72.09	•
0.00 •	Under 5 mortality rate	33.11	•
0.00 •	Underweight children (under 5 years)	50.88	•
0.00 🖕			
0.00 •	Learning Outcomes	19.31	•
0.00 •			
33.02 •	Gender Parity Index (GPI)	52.63	•
0.00 •	NAS Class 3 - EVS	26.32	•
	NAS Class 3 - Language	20.00	•
	NAS Class 3 - Mathematics	10.45	•
	NAS Class 5 - EVS	10.00	•
77.17 •	NAS Class 5 - Language	16.67	•
	NAS Class 5 - Mathematics	0.00	•
100.00	Transition Rate - Primary	100.00	•
100.00 •			
14.99 🔸	Governance	16.05	
13.95 •			
83.78 •	Central fund utilization under Poshan	0.00	
100.00 •	Expenditure on Education - As Ratio to AE	67.98	
10.26 • 74.00 •	Expenditure on primary education for Govt schools (%)	39.72	
80.72 •	Expenditure on primary education under SSA (%)	0.00	
	Expenditure on teacher training (%)	0.00	
•	Mid day meal State expenditure (%)	39 72	

### Mizoram

Index on foundational learning
State of FLN: • 48.31



Educational Infrastructure

Schools with Electricity connection (%)	78.84 😐
Schools with functional computer facility (%)	42.00
Schools with functional CWSN friendly toilet (%)	16.04 •
Schools with functional drinking water (%)	83.99 📍
Schools with functional toilets (%)	82.48
Schools with hand wash facility (%)	58.41 🖕
Schools with internet facility available (%)	5.12 🖕
Schools with library facility (%)	78.78 •
Schools with medical checkups (%)	39.31 •
Households 1 km from school having primary classes	0.00 •

#### Access to Education

S,

Primary level schools per lakh population			
Adjusted(NER) - Primary level for girls			
Children With Special Needs (CWSN) (%)			
Dropout Rate - Primary			
Minority group's enrolment (%) - Primary			
NER Enrollment ratio (NER) - Primary			
Pre school education - Percentage			
Pupil Teacher Ratio (PTR) - Primary			
Teacher for Primary level education (%)			

- Overperforming
   Performing within expected range
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

56.66 •	Basic Health	66.16	•
78.84 •	Stunted Children (under 5 years) %	66.42	•
42.00 •	Fully immunised children under 5years (%)	39.46	•
16.04	Infant Mortality rate	57.74	•
10.04	Severely wasted Children (under 5 years) %	69.77	•
83.99 📍	Under 5 mortality rate	59.87	•
82.48 •	Underweight children (under 5 years)	10.00	•
58.41 🖕			
5.12 🖕	Learning Outcomes	41.26	•
78.78 •			_
39.31 •	Gender Parity Index (GPI)	31.58	•
0.00 •	NAS Class 3 - EVS	57.69	
	NAS Class 3 - Language	04.0Z	
	NAS Class 5 - FVS	20.00	
60 29 🗖	NAS Class 5 - Language	31.48	•
00.27	NAS Class 5 - Mathematics	14.81	•
53.64 •	Transition Rate - Primary	100.00	•
100.00 •			
56.34 •	Governance	17.18	•
5.81 •			
97.75 •	Central fund utilization under Poshan	0.02	•
100.00 •	Expenditure on Education - As Ratio to AE	72.37	•
12.89 •	Expenditure on primary education for Govt schools (%)	91.83	•
47.07	Expenditure on primary education under SSA (%)	0.00	•
	Expenditure on teacher training (%)	0.00	•
e	Mid day meal State expenditure (%)	91 83	•

### Nagaland

Index on foundational learning
State of FLN: **34.41** 



Educational Infrastructure	37.48
Schools with Electricity connection (%)	62.55
Schools with functional computer facility (%)	35.49
Schools with functional CWSN friendly toilet (%)	2.42
Schools with functional drinking water (%)	38.10
Schools with functional toilets (%)	68.45
Schools with hand wash facility (%)	29.49
Schools with internet facility available (%)	13.24
Schools with library facility (%)	48.35
Schools with medical checkups (%)	27.26
Households 1 km from school having primary classes	0.00

#### Access to Education

日本

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming 🔶 Performing within expected range
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

33.91 🔴

20.88 • 50.00 • 11.67 • 31.40 • 84.64 • 47.10 • 36.04 • 90.00 • 37.87 •

	Basic Health	42.11 •
	Stunted Children (under 5 years) %	52.08
	Fully immunised children under 5year	rs (%) 0.00 •
	Infant Mortality rate	53.57 •
	Severely wasted Children (under 5 yea	ars) % 34.88 •
	Under 5 mortality rate	44.82 •
	Underweight children (under 5 years)	49.82 •
	Learning Outcomes	36.33 鱼
	Gender Parity Index (GPI)	63.16
	NAS Class 3 - EVS	45.61 😐
	NAS Class 3 - Language	44.62 •
	NAS Class 3 - Mathematics	29.85 •
	NAS Class 5 - EVS	28.00 •
	NAS Class 5 - Language	38.89 •
	NAS Class 5 - Mathematics	9.26
	Transition Rate - Primary	80.50 •
	Governance	22.22
*******	Central fund utilization under Poshan	0.00 •
	Expenditure on Education - As Ratio t	o AE 55.70 🔸
	Expenditure on primary education for Govt schools (%)	80.80
	Expenditure on primary education under SSA (%)	0.00 •
	Expenditure on teacher training (%)	0.00 •
	Mid day meal State expenditure (%)	80.80

### Odisha

Index on foundational learning
State of FLN: • 44.36



Educational Infrastructure	63.26	•
Schools with Electricity connection (%)	75.26	•
Schools with functional computer facility (%)	6.31	•
Schools with functional CWSN friendly toilet (%)	58.79	•
Schools with functional drinking water (%)	94.18	•
Schools with functional toilets (%)	84.34	•
Schools with hand wash facility (%)	92.50	•
Schools with internet facility available (%)	3.09	•
Schools with library facility (%)	90.36	•
Schools with medical checkups (%)	0.00	•
Households 1 km from school having primary classes	96.28	•

#### Access to Education

Primary level schools per lakh population			
Adjusted(NER) - Primary level for girls			
Children With Special Needs (CWSN) (%)			
Dropout Rate - Primary			
Minority group's enrolment (%) - Primary			
NER Enrollment ratio (NER) - Primary			
Pre school education - Percentage			
Pupil Teacher Ratio (PTR) - Primary			
Teacher for Primary level education (%)			

- Overperforming
   Performing within expected range
- Underperforming

日本

C

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

42.74 🔴

26.91 • 100.00 • 50.24 • 100.00 • 2.37 • 63.85 • 24.11 • 82.00 • 41.26 •

N.	Basic Health	47.50	•
	Stunted Children (under 5 years) %	58.49	•
	Fully immunised children under 5years (%)	88.11	•
	Infant Mortality rate	27.98	•
	Severely wasted Children (under 5 years) %	55.81	•
	Under 5 mortality rate	31.27	•
	Underweight children (under 5 years)	39.93	•
	Learning Outcomes	52.07	•
	Gender Parity Index (GPI)	31.58	•
	NAS Class 3 - EVS	56.14	•
	NAS Class 3 - Language	61.54	•
	NAS Class 3 - Mathematics	61.19	•
	NAS Class 5 - EVS	44.00	•
	NAS Class 5 - Language	37.04	•
	NAS Class 5 - Mathematics	51.85	•
	Transition Rate - Primary	85.00	•
E	Governance	16.21	•
	Central fund utilization under Poshan	0.90	•
	Expenditure on Education - As Ratio to AE	55.70	•
	Expenditure on primary education for Govt schools (%)	89.97	•
	Expenditure on primary education under SSA (%)	0.00	•
	Expenditure on teacher training (%)	0.00	•
	Mid day meal State expenditure (%)	89.97	•

### **Puducherry**

Index on foundational learning 54.76 State of FLN:



Educational	Infrastructure

Schools with Electricity connection (%)	1(
Schools with functional computer facility (%)	0
Schools with functional CWSN friendly toilet (%)	3
Schools with functional drinking water (%)	1(
Schools with functional toilets (%)	10
Schools with hand wash facility (%)	0
Schools with internet facility available (%)	0
Schools with library facility (%)	10
Schools with medical checkups (%)	8
Households 1 km from school having primary classes	

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

92.35 Stunted Children (under 5 years) % 89.00 • 00.00 Fully immunised children under 5years (%) 93.11 • 85.95 Infant Mortality rate 94.25 36.08 • Severely wasted Children (under 5 years) % 83.72 • 00.00 93.48 • Under 5 mortality rate Underweight children (under 5 years) 00.00 90.81 99.18 • **Learning Outcomes** 99.61 61.59 • 00.00 Gender Parity Index (GPI) 47.37 • 83.40 • 66.67 • NAS Class 3 - EVS 0.00 • NAS Class 3 - Language 63.08 • NAS Class 3 - Mathematics 56.72 • NAS Class 5 - EVS 60.00 • 20.91 NAS Class 5 - Language 64.81 • NAS Class 5 - Mathematics 53.70 • 7.06 • Transition Rate - Primary 98.50 • 33.46 • 9.59 Governance 14.47 • 100.00 • 9.97 🔴

Central fund utilization under Poshan	0.00	•
Expenditure on Education - As Ratio to AE	46.05	•
Expenditure on primary education for Govt schools (%)	3.12	•
Expenditure on primary education under SSA (%)	0.00	•
Expenditure on teacher training (%)	0.00	•
Mid day meal State expenditure (%)	3.12	•

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

16.15 54.65 78.00 • 22.44 •

89.35

### Punjab

Index on foundational learning
State of FLN: • 64.19



Educational Infrastructure	97.98	
Schools with Electricity connection (%)	100.00	•
Schools with functional computer	98.59	•
Schools with functional CWSN friendly toilet (%)	100.00	•
Schools with functional drinking water (%)	100.00	•
Schools with functional toilets (%)	100.00	•
Schools with hand wash facility (%)	100.00	•
Schools with internet facility available (%)	96.63	•
Schools with library facility (%)	100.00	•
Schools with medical checkups (%)	83.83	•
Households 1 km from school having primary classes	93.80	•

#### Access to Education

<u></u> (学) (学)

S,

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

97.98	•	Basic Health	64.65	•
100.00	•	Stunted Children (under 5 years) %	83.02	•
98.59	•	Fully immunised children under 5years (%)	49.46	•
100.00		Infant Mortality rate	44.44	•
100.00	•	Severely wasted Children (under 5 years) %	83.72	•
100.00	•	Under 5 mortality rate	45.32	•
100.00	•	Underweight children (under 5 years)	85.16	•
100.00	•			
96.63	•	Learning Outcomes	96 36	
100.00	•		20.00	
83.83	•	Gender Parity Index (GPI)	31.58	•
03.80		NAS Class 3 - EVS	89.34	•
95.00	•	NAS Class 3 - Language	92.50	•
		NAS Class 3 - Mathematics	94.76	•
		NAS Class 5 - EVS	87.00	•
49.53		NAS Class 5 - Language	85.67	•
		NAS Class 5 - Mathematics	91.50	•
21.19	•	Transition Rate - Primary	100.00	•
100.00	•			
43.86	•	Governance	12.41	•
100.00	•			
54.02	•	Central fund utilization under Poshan	6.23	•
100.00	•	Expenditure on Education - As Ratio to AE	43.86	•
16.95 66.00	•	Expenditure on primary education for Govt schools (%)	77.22	•
31.14	•	Expenditure on primary education under SSA (%)	0.00	•
		Expenditure on teacher training (%)	0.00	•
		Mid day meal State expenditure (%)	77.22	•

### Rajasthan

Index on foundational learning 52.12 State of FLN:



日本	Educational Infrastructure

Schools with Electricity connection (%)	
Schools with functional computer facility (%)	
Schools with functional CWSN friendly toilet (%)	
Schools with functional drinking water (%)	
Schools with functional toilets (%)	
Schools with hand wash facility (%)	
Schools with internet facility available (%)	
Schools with library facility (%)	
Schools with medical checkups (%)	
Households 1 km from school having primary classes	

#### **Access to Education**

C

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

63.61 😐	Basic Health	46.03	•
80.08 •	Stunted Children (under 5 years) %	55.47	•
36.88 •	Fully immunised children under 5years (%)	60.81	•
17.08	Infant Mortality rate	39.88	•
17.00	Severely wasted Children (under 5 years) %	38.37	•
86.59 📍	Under 5 mortality rate	37.12	•
72.13 •	Underweight children (under 5 years)	47.35	•
94.23 •			
37.70 🖕	Learning Outcomes	77.93	
71.48 •	Over des Derits Jades (ODI)	17.07	
26.66 •	Gender Parity Index (GPI)	47.37	•
96.48 •	NAS Class 3 - EVS	76.93	
	NAS Class 3 - Mathematics	79.10	
	NAS Class 5 - EVS	88.00	•
32.81	NAS Class 5 - Language	75.93	•
	NAS Class 5 - Mathematics	81.48	•
15.88 🔸	Transition Rate - Primary	77.00	•
83.46 •			
9.49 🔸	Governance	40.22	•
88.37 •			
8.37 🔸	Central fund utilization under Poshan	8.52	•
67.01 😐	Expenditure on Education - As Ratio to AE	77.63	•
19.57 • 62.00 •	Expenditure on primary education for Govt schools (%)	2.94	•
16.60	Expenditure on primary education under SSA (%)	0.00	•
	Expenditure on teacher training (%)	0.00	•
e	Mid day meal State expenditure (%)	2.94	•

### **Sikkim**

Index on foundational learning
State of FLN: • 56.75



Educational Infrastructure
Schools with Electricity connection (%)
Schools with functional computer facility (%)

Schools with functional CWSN friendly toilet (%)
Schools with functional drinking water (%)
Schools with functional toilets (%)
Schools with hand wash facility (%)
Schools with internet facility available (%)
Schools with library facility (%)
Schools with medical checkups (%)
Households 1 km from school having primary classes

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Overperforming Performing within expected range
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

75.53 •	Basic Health	79.09	•
98.96 •	Stunted Children (under 5 years) %	91.32	•
74.12 •	Fully immunised children under 5years (%)	61.35	•
852	Infant Mortality rate	77.78	•
0.52	Severely wasted Children (under 5 years) %	50.00	•
99.47 •	Under 5 mortality rate	81.27	•
99.35 •	Underweight children (under 5 years)	98.59	•
94.72 •			
18.01 🖕	Learning Outcomes	40.48	•
88.56 •			_
75.48 •	Gender Parity Index (GPI)	0.00	•
0.00 •	NAS Class 3 - EVS	56.14	•
	NAS Class 3 - Language	63.08	•
		38.81	
E0 12 <b>.</b>	NAS Class 5 - Language	32.00 46.30	
50.15 -	NAS Class 5 - Mathematics	40.30	
53.08 •	Transition Rate - Primary	72.50	•
55.64 •			
73.00	Governance	38.51	•
86.05 •			
35.10 •	Central fund utilization under Poshan	0.42	•
58.17 😐	Expenditure on Education - As Ratio to AE	71.93	•
96.66	Expenditure on primary education for Govt schools (%)	72.27	•
44.13	Expenditure on primary education under SSA (%)	100.00	•
	Expenditure on teacher training (%)	100.00	•
e	Mid day meal State expenditure (%)	72.27	•

### **Tamil Nadu**

Index on foundational learning
State of FLN: **52.23** 



Educational Infrastructure
Schools with Electricity connection (%)
Schools with functional computer facility (%)
Schools with functional CWSN friendly toilet (%)
Schools with functional drinking water (%)

Schools with functional toilets (%)	
Schools with hand wash facility (%)	
Schools with internet facility available (%)	
Schools with library facility (%)	
Schools with medical checkups (%)	
Households 1 km from school having primary classes	

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

84.99

100.00

72.71 30.59

100.00 100.00 29.72 99.99 94.33 88.83

45.22

22.09 100.00 51.72 93.02 10.61 55.83 58.47 74.00 41.29

Basic Health	69.86	
Stunted Children (under 5 years) 9	6 81.13	•
Fully immunised children under 5	vears (%) 84.59	•
Infant Mortality rate	63.10	•
Severely wasted Children (under 5	years) % 62.79	•
Under 5 mortality rate	62.71	•
Underweight children (under 5 yea	ars) 67.14	•
Learning Outcomes	40.46	•
Gender Parity Index (GPI)	42.11	•
NAS Class 3 - EVS	47.37	•
NAS Class 3 - Language	46.15	•
NAS Class 3 - Mathematics	47.76	•
NAS Class 5 - EVS	34.00	•
NAS Class 5 - Language	24.07	•
NAS Class 5 - Mathematics	31.48	•
Transition Rate - Primary	86.00	•
Governance	20.61	•
Central fund utilization under Pos	han 0.00	•
Expenditure on Education - As Rat	io to AE 53.51	•
Expenditure on primary education Govt schools (%)	for 71.17	•
Expenditure on primary education under SSA (%)	0.00	•
Expenditure on teacher training (%	6) 0.00	•
Mid day meal State expenditure (9	6) 71.17	•

### Telangana

Index on foundational learning
State of FLN: **34.38** 



Educational Infrastructure	62.49
Schools with Electricity connection (%)	92.22 •
Schools with functional computer facility (%)	27.56 •
Schools with functional CWSN friendly toilet (%)	3.85 •
Schools with functional drinking water (%)	88.07 •
Schools with functional toilets (%)	33.62 •
Schools with hand wash facility (%)	82.34 🖕
Schools with internet facility available (%)	19.49 🖕
Schools with library facility (%)	90.58 •
Schools with medical checkups (%)	64.98 •
Households 1 km from school having primary classes	96.07 •

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming e Performing within expected range
- Underperforming

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

62.49 😐	Basic Health	45.03	•
92.22 •	Stunted Children (under 5 years) %	50.57	•
27.56 •	Fully immunised children under 5years (%)	57.30	•
3.85	Infant Mortality rate	47.62	•
5.05	Severely wasted Children (under 5 years) %	27.91	•
88.07 •	Under 5 mortality rate	50.84	•
33.62 •	Underweight children (under 5 years)	32.51	•
82.34 😐			
19.49 🖕	Learning Outcomes	10.69	•
90.58 •	Condex Desity Jaday (CDI)	10.11	
64.98 •	Gender Parity Index (GPI)	42.11	•
96.07 •		0.//	
	NAS Class 3 - Language	0.15	
		8.90	
41.07		1 05	
41.8/ 🛑	NAS Class 5 - Language	1.00	
24.35 •	Transition Rate - Primary	100.00	•
100.00		100.00	
17.42	Governance	11.85	
100.00 •			
14.70 🔸	Central fund utilization under Poshan	0.00	
84.73 😐	Expenditure on Education - As Ratio to AE	25.88	
34.84 • 74.00 •	Expenditure on primary education for Govt schools (%)	9.00	
25.18	Expenditure on primary education under SSA (%)	0.00	
	Expenditure on teacher training (%)	0.00	
	Mid day meal State expenditure (%)	9.00	

### Tripura

Index on foundational learning
State of FLN: **39.77** 



Educational Infrastructure	39.40
Schools with Electricity connection (%)	25.89 •
Schools with functional computer facility (%)	7.93 •
Schools with functional CWSN friendly toilet (%)	5.29 •
Schools with functional drinking water (%)	56.52 •
Schools with functional toilets (%)	31.96 •
Schools with hand wash facility (%)	75.50
Schools with internet facility available (%)	1.25 🖕
Schools with library facility (%)	60.32 •
Schools with medical checkups (%)	76.20 •
Households 1 km from school having primary classes	0.00 •

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming 🔶 Performing within expected range
- Underperforming

मिदि

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

49.36 🔴

31.09 • 100.00 • 12.30 • 51.16 • 15.00 •

100.00 • 56.09 • 78.00 • 41.10 •

Ŵ	Basic Health	39.07	•
	Stunted Children (under 5 years) %	53.58	•
	Fully immunised children under 5years (%)	31.35	•
	Infant Mortality rate	25.40	•
	Severely wasted Children (under 5 years) %	41.86	•
	Under 5 mortality rate	27.59	•
	Underweight children (under 5 years)	54.42	•
	Learning Outcomes	34.59	•
	Gender Parity Index (GPI)	57.89	•
	NAS Class 3 - EVS	35.09	•
	NAS Class 3 - Language	35.38	•
	NAS Class 3 - Mathematics	29.85	•
	NAS Class 5 - EVS	34.00	•
	NAS Class 5 - Language	35.19	•
	NAS Class 5 - Mathematics	24.07	•
	Transition Rate - Primary	56.50	•
	Governance	36.45	•
	Central fund utilization under Poshan	71.97	•
	Expenditure on Education - As Ratio to AE	59.65	•
	Expenditure on primary education for Govt schools (%)	0.00	•
	Expenditure on primary education under SSA (%)	43.87	•
	Expenditure on teacher training (%)	43.87	•
	Mid day meal State expenditure (%)	0.00	•

### **Uttar Pradesh**

Index on foundational learning
State of FLN: **37.46** 



Educational Infrastructure

Schools with Electricity connection (%)	75.87
Schools with functional computer facility (%)	7.46
Schools with functional CWSN friendly toilet (%)	16.51
Schools with functional drinking water	(%) 93.37
Schools with functional toilets (%)	90.49
Schools with hand wash facility (%)	86.01 🧉
Schools with internet facility available	(%) 11.34
Schools with library facility (%)	73.46
Schools with medical checkups (%)	25.24
Households 1 km from school having primary classes	98.55 •

#### Access to Education

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming
   Performing within expected range
- Underperforming

60.38	•	Basic Health	19.44
75.87	•	Stunted Children (under 5 years) %	25.66
7.46	•	Fully immunised children under 5years (%)	31.62
16 51	•	Infant Mortality rate	2.80
10.01		Severely wasted Children (under 5 years) %	41.86
93.37	•	Under 5 mortality rate	4.30
90.49	•	Underweight children (under 5 years)	31.45
86.01	•		
11.34	•	Learning Outcomes	36.64
73.46	•	Gender Parity Index (GPI)	63.16
25.24	•	NAS Class 3 - EVS	40.35
98.55	•	NAS Class 3 - Language	36.92
		NAS Class 3 - Mathematics	38.81
		NAS Class 5 - EVS	38.00
51.65		NAS Class 5 - Language	31.48
		NAS Class 5 - Mathematics	29.63
18.42	•	Transition Rate - Primary	16.00
100.00	•		
33.64	•	Governance	19.17

	Governance	19.17	•
· · · · · ·			
	Central fund utilization under Poshan	0.23	•
	Expenditure on Education - As Ratio to AE	54.82	•
	Expenditure on primary education for Govt schools (%)	0.04	•
	Expenditure on primary education under SSA (%)	0.00	•
	Expenditure on teacher training (%)	0.00	•
	Mid day meal State expenditure (%)	0.04	•

**Strength and Weakness** are relative to 10 regions of similar population: Odisha, Assam, Karnataka, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand

 74.42

 15.30

 76.09

 20.53

 56.00

 72.23

### **Uttarakhand**

Index on foundational learning 46.57 State of FLN:



Educational Infrastructure

Schools with Electricity connection (%)	86.35	•
Schools with functional computer facility (%)	29.34	•
Schools with functional CWSN friendly toilet (%)	2.76	•
Schools with functional drinking water (%)	85.01	•
Schools with functional toilets (%)	80.58	•
Schools with hand wash facility (%)	92.53	•
Schools with internet facility available (%)	14.70	•
Schools with library facility (%)	88.00	•
Schools with medical checkups (%)	44.97	•
Households 1 km from school having primary classes	86.56	•

#### Access to Education

21

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming | Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka,	Telangana, Chhattisgarh,
Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand	

64.71 🔴

64.71	•	Basic Health	51.95	•
86.35	•	Stunted Children (under 5 years) %	73.58	•
29.34	•	Fully immunised children under 5years (%)	61.89	•
2 76		Infant Mortality rate	22.42	•
2.10		Severely wasted Children (under 5 years) %	72.09	•
85.01	•	Under 5 mortality rate	23.75	•
80.58	•	Underweight children (under 5 years)	70.67	•
92.53	•			
14.70	•	Learning Outcomes	33.97	•
88.00	•			
44.97	•	Gender Parity Index (GPI)	52.63	•
86.56	•	NAS Class 3 - EVS	33.33	•
00.00		NAS Class 3 - Language	32.31	•
		NAS Class 3 - Mathematics	28.36	٠
		NAS Class 5 - EVS	36.00	•
55.32	•	NAS Class 5 - Language	35.19	•
		NAS Class 5 - Mathematics	24.07	•
49.69	•	Transition Rate - Primary	65.50	•
100.00	•			
0.00	•	Governance	26.88	
80.23	•			
17.57	•	Central fund utilization under Poshan	4.48	•
99.11	•	Expenditure on Education - As Ratio to AE	75.88	•
77.57 78.00	•	Expenditure on primary education for Govt schools (%)	89.77	•
49.36	•	Expenditure on primary education under SSA (%)	0.00	•
		Expenditure on teacher training (%)	0.00	•
		Mid day meal State expenditure (%)	89.77	•

### West Bengal

Index on foundational learning 54.58 State of FLN:



	Educational Infrastructure
All shares and shares a	

Schools with Electricity connection (%)	95.70 •
Schools with functional computer facility (%)	2.28 •
Schools with functional CWSN friendly toilet (%)	27.83 •
Schools with functional drinking water (%)	99.03 •
Schools with functional toilets (%)	99.72 •
Schools with hand wash facility (%)	95.98 •
Schools with internet facility available (%)	7.08 🖕
Schools with library facility (%)	84.46 •
Schools with medical checkups (%)	53.12 •
Households 1 km from school having primary classes	96.79 •

#### Access to Education

C

Primary level schools per lakh population
Adjusted(NER) - Primary level for girls
Children With Special Needs (CWSN) (%)
Dropout Rate - Primary
Minority group's enrolment (%) - Primary
NER Enrollment ratio (NER) - Primary
Pre school education - Percentage
Pupil Teacher Ratio (PTR) - Primary
Teacher for Primary level education (%)

- Overperforming Performing within expected range
- Underperforming

Strength and Weakness are relative to 10 regions of similar population: Odisha, Assam, Karnataka,	Telangana, Chhattisgarh,
Tamil Nadu, Kerala, Haryana, Gujarat Jharkhand	

70.13 🔴

70.13	•	Basic Health	52.15	•
95.70	•	Stunted Children (under 5 years) %	47.92	•
2.28	•	Fully immunised children under 5years (%)	80.81	•
27.83		Infant Mortality rate	56.35	•
21.00		Severely wasted Children (under 5 years) %	44.19	•
99.03	•	Under 5 mortality rate	57.53	•
99.72	•	Underweight children (under 5 years)	31.10	•
95.98	•	-		
7.08	•	Learning Outcomes	60.41	
84.46	•	Gender Parity Index (GPI)	36.84	•
53.12	•	NAS Class 3 - EVS	64.91	•
96.79	•	NAS Class 3 - Language	72.31	•
		NAS Class 3 - Mathematics	61.19	•
		NAS Class 5 - EVS	64.00	•
67.75		NAS Class 5 - Language	61.11	•
		NAS Class 5 - Mathematics	48.15	•
35.36	•	Transition Rate - Primary	54.50	•
100.00	•			
34.28	•	Governance	22.49	•
100.00	•			
31.28	•	Central fund utilization under Poshan	17.25	•
100.00	•	Expenditure on Education - As Ratio to AE	67.98	•
46.30 54.00	•	Expenditure on primary education for Govt schools (%)	0.06	•
100.00	•	Expenditure on primary education under SSA (%)	15.81	•
		Expenditure on teacher training (%)	15.81	•
	1	Mid day meal State expenditure (%)	0.06	•

# **17** Methodology

Standardized data is essential for running accurate analysis. The process allows one to compare scores between different types of variables.

### **17.1 STANDARDIZATION AND EVALUATING THE FIT**

Standardized data is essential for running accurate analysis. The process allows one to compare scores between different types of variables.

For Principal Component Analysis (PCA), the output can only be interpreted correctly when first data has been centered around their means. Standardization solves the problem by making indicators unitless as it rescales them with a mean of zero and a standard deviation of one.

The indicator selection process entails including the indicators that describe the concept of the Dimension in the best possible way and are conceptually linked to each other. In this process, the indicators that are statistically incompatible are removed.

The Index on Foundational Learning involves evaluating the fit between the individual indicators. To determine how closely indicators describe the component, we calculate Cronbach's alpha for each component in **Table 2**.

#### Table 2

<b>二.</b> 常席				
Educational	Access to	Basic	Learning	<b>Governance</b>
Infrastructure	Education	Health	outcomes	Alpha Values:
Alpha Values:	Alpha Values:	Alpha Values:	Alpha Values:	0.6169
<b>0.9136</b>	<b>0.6793</b>	<b>0.8744</b>	<b>0.9169</b>	

In 1951, Lee Cronbach developed Alpha to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1 (Tavakol and Dennick, 2011). Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. An applied practitioner's rule of thumb is that the alpha value should be above 0.7 for any logical grouping of variables (Cortina, 1993).

It has been observed that Cronbach's alpha values are less than 0.7. We acknowledge this short-coming, but it is important to include these indicators as they reflect the underlying idea of the Pillar in the best possible manner.

Source : Exploratory factor analysis: A five-step guide for novices. Australasian Journal of Paramedicine (Williams et., 2010).

### **17.2 AGGREGATION**

Index on Foundational Learning is based on two elements i.e., indicators, and dimensions. The Principal Component Analysis (PCA) for calculating the weights of indicators within a component.

After calculating each component, the goodness of fit is evaluated using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The KMO index ranges from 0 to 1, as a rule of thumb, KMO scores should be above 0.5 (Williams, et al., 2010). The results of this analysis are shown in the **Table 3**.

#### Table 3



The KMO values are well above the set standards for most of the components.

### **17.3 DATA SOURCE**

## Access to Education



#### Educational Infrastructure

Indicators	Source	Year
Primary level schools per lakh population	UDISE+	2020-21
Percentage of Teacher for Primary level education	UDISE+	2020-21
Pupil Teacher Ratio (PTR) - Primary	UDISE+	2020-21
Percentage of enrollment of Children With Special Needs (CWSN) in primary	UDISE+	2020-21
Gross Enrolment ratio (GER) - Primary	UDISE+	2020-21
Percentage of all minority group's enrolment to total enrolment - Primary	UDISE+	2020-21
Pre school education - Percentage	NFHS-5	2019-20
Dropout Rate - Primary	UDISE+	2020-21
Adjusted(NER) - Primary level for girls	UDISE+	2020-21
Indicators	Source	Year
Percentage of schools with functional drinking water	UDISE+	2020-21
Percentage of schools with hand wash facility	UDISE+	2020-21
Percentage of schools with library facility	UDISE+	2020-21
Percentage of schools with medical checkups	UDISE+	2020-21
Percentage of schools with functional toilets	UDISE+	2020-21
Percentage of schools with functional computer facility	UDISE+	2020-21
Percentage of schools with internet facility available	UDISE+	2020-21
Percentage of Schools with functional CWSN friendly toilet	UDISE+	2020-21
Percentage of schools with Electricity connection	UDISE+	2020-21
Per 1000 distribution of households by distance from school having primary classes for each State/UT	NSSO 75th	2017-18



#### Educational Infrastructure

Indicators	Source	Year	
Percentage of fully immunised children in the age-group 0-5years	NFHS-5	2019-20	
Children under 5 years who are stunted (height-for-age)	NFHS-5	2019-20	
Children under 5 years who are severely wasted	NFHS-5	2019-20	
Children under 5 years who are underweight	NFHS-5	2019-20	
IMR	NFHS-5	2019-20	
U5MR	NFHS-5	2019-20	
Indicators	Source	Year	
NAS Scores: class 3			
Language	ΝΙΔΟ	2021	
Mathematics	NAS		
Environmental Studies			
NAS scores: class 5			
Language	NIAS	2021	
Mathematics	NAS		
Environmental Studies			
Transition Rate - Primary	UDISE+	2020-21	
Gender Parity Index (GPI) - Primary	UDISE+	2020-21	

### Educational Infrastructure

Indicators	Source	Year
Expenditure on Education - As Ratio to Aggregate Expenditure	Budget analysis 2018-20	2021-2022
Percentage to total expenditure on primary education for Govt schools	Budget analysis 2018-20	2019-20
Percentage of expenditure on teacher training (BE)	Budget analysis 2018-20	2019-20
Percentage of total assistance to non govt primary schools	Budget analysis 2018-20	2019-20
Percentage of expenditure -Mid day meal state share	Budget analysis 2018-20	2019-20
Percentage to total expenditure on primary education under SSA revenue account	Budget analysis 2018-20	2019-20
Central fund utilization under poshan scheme	PIB	as on 31st March 2021
Expenditure on Education - As Ratio to Aggregate Expenditure	Budget analysis 2018-20	2021-2022
Percentage to total expenditure on primary education for Govt schools	Budget analysis 2018-20	2019-20
Percentage of expenditure on teacher training (BE)	Budget analysis 2018-20	2019-20

### **17.4 DTF - LEARNING OUTCOMES**

State/Uts	LO-20	LO-21	DTF LO-20	DTF LO-21	DTF	State/Uts	LO-20	LO-21	DTF LO-20	DTF LO-21	DTF
Punjab	91.65	100.00	8.35	0.00	8.35	Sikkim	88.68	29.45	11.32	70.55	-59.23
Rajasthan	98.64	73.33	1.36	26.67	-25.31	Himachal Pradesh	94.19	32.21	5.81	67.79	-61.98
Chandigarh	100.00	73.90	0.00	26.10	-26.10	Nagaland	93.46	30.74	6.54	69.26	-62.72
Puducherry	91.34	62.32	8.66	37.68	-29.02	Delhi	89.39	20.54	10.61	79.46	-68.85
Maharashtra	94.80	62.16	5.20	37.84	-32.64	Arunachal Pradesh	87.80	18.32	12.20	81.68	-69.48
Madhya Pradesh	92.57	59.26	7.43	40.74	-33.31	Andhra Pradesh	98.56	26.55	1.44	73.45	-72.01
Jammu and Kashmir	91.60	52.76	8.40	47.24	-38.84	Tripura	92.70	20.55	7.30	79.45	-72.14
Assam	97.48	57.66	2.52	42.34	-39.82	Meghalaya	90.36	16.86	9.64	83.14	-73.50
Gujarat	95.76	55.65	4.24	44.35	-40.12	Uttarakhand	96.70	22.07	3.30	77.93	-74.63
Kerala	99.85	59.47	0.15	40.53	-40.38	Uttar Pradesh	88.12	10.92	11.88	89.08	-77.21
Goa	92.41	48.39	7.59	51.61	-44.02	Jharkhand	93.30	12.69	6.70	87.31	-80.61
Odisha	92.15	47.54	7.85	52.46	-44.61	Bihar	89.63	8.92	10.37	91.08	-80.71
West Bengal	94.00	47.45	6.00	52.55	-46.55	Chhattisgarh	91.75	10.31	8.25	89.69	-81.44
Manipur	93.98	47.14	6.02	52.86	-46.83	Telangana	94.58	6.58	5.42	93.42	-88.01
Lakshadweep	87.60	39.74	12.40	60.26	-47.86	Dadra and Nagar					
Mizoram	92.69	41.29	7.31	58.71	-51.40	Diu	94.13	0.00	5.87	100.00	-94.13
Haryana	91.43	38.41	8.57	61.59	-53.02						
Karnataka Andaman and	99.92	44.88	0.08	55.12	-55.04						
Nicobar Islands	98.21	43.14	1.79	56.86	-55.07						
Tamil Nadu	92.69	35.65	7.31	64.35	-57.04						

### **17.5 BEST CASE AND WORST CASE SCENARIOS - DTF SCORES**

Indicators	Best Value - Utopia	Worst Value - Dystopia
Percentage of schools with functional drinking water	100	50
Percentage of schools with hand wash facility	100	50
Percentage of schools with library facility	100	50
Percentage of schools with medical checkups	100	60
Percentage of schools with functional toilets	100	70
Percentage of schools with functional computer facility	100	50
Percentage of schools with internet facility available	100	50
Percentage of Schools with functional CWSN friendly toilet	100	5
Percentage of schools with Electricity connection	100	50
Primary level schools per lakh population	2695.222	16.155
Percentage of Teacher for Primary level education	50	10
Pupil Teacher Ratio (PTR) - Primary	-30	-6
Percentage of enrollment of Children With Special Needs (CWSN)	5	2
NER Enrollment ratio (NER) - Primary	100	60
Percentage of all minority group's enrolment to total enrolment - Primary	50	30
Dropout Rate - Primary	0	-4
Adjusted(NER) - Primary level for girls	100	70
NAS Class 3 - Language	500	300
NAS Class 3 - Mathematics	500	300
NAS Class 3 - EVS	500	300
NAS Class 5 - Language	500	300
NAS Class 5 - Mathematics	500	300
NAS Class 5 - EVS	500	300
Transition Rate - Primary	100	75
Gender Parity Index (GPI)	1.95	0.9
Expenditure on Education - As Ratio to Aggregate Expenditure	30	5
Percentage to total expenditure on primary education for Govt schools	60	10
Percentage of expenditure on teacher training (BE)	48.37	0
Percentage of expenditure -Mid day meal state share	40	0
Percentage to total expenditure on primary education under SSA revenue account	30.83	0
Central fund utilization under poshan scheme	100	50
## **17.6 WEIGHTAGES OF INDICATORS**

# Access to Education



#### Educational Infrastructure

Indicators	Weightage
Primary level schools per lakh population	0.153222
Percentage of Teacher for Primary level education	0.175343
Pupil Teacher Ratio (PTR) - Primary	0.084344
Percentage of enrollment of Children With Special Needs (CWSN) in primary	0.078872
Gross Enrolment ratio (GER) - Primary	0.167822
Percentage of all minority group's enrolment to total enrolment - Primary	0.096345
Pre school education - Percentage	0.090091
Dropout Rate - Primary	0.004944
Adjusted(NER) - Primary level for girls	0.149018
Indicators	Weightage
Percentage of schools with functional drinking water	0.117298
Percentage of schools with hand wash facility	0.114831
Percentage of schools with library facility	0.121158
Percentage of schools with medical checkups	0.074018
Percentage of schools with functional toilets	0.11326
Percentage of schools with functional computer facility	0.108201
Percentage of schools with internet facility available	0.098897
Percentage of Schools with functional CWSN friendly toilet	0.089938
Percentage of schools with Electricity connection	0.124879
Per 1000 distribution of households by distance from school having primary classes for each State/UT	0.037519





### Learning Outcomes



#### Governance

Indicators	Weightage
Percentage of fully immunised children in the age-group 0-5years	0.1024
Children under 5 years who are stunted (height-for-age)	0.2334
Children under 5 years who are severely wasted	0.1734
Children under 5 years who are underweight	0.2328
IMR	0.0751
U5MR	0.1795
Indicators	Weightage
NAS Scores : Grade 3 Language	0.1516
NAS Scores : Grade 3 Mathematics	0.153195
NAS Scores : Grade 3 EVS	0.154024
NAS Scores : Grade 5 Language	0.152206
NAS Scores : Grade 5 Mathematics	0.149494
NAS Scores : Grade 5 Environmental Studies	0.153306
Transition Rate - Primary	0.041134
Gender Parity Index (GPI) - Primary	0.045041
NAS Scores : Grade 3 Language	0.1516
NAS Scores : Grade 3 Mathematics	0.153195
Indicators	Weightage
Expenditure on Education - As Ratio to Aggregate Expenditure	0.201355
Percentage to total expenditure on primary education for Govt schools	0.190326
Percentage of expenditure on teacher training (BE)	0.217311
Percentage of expenditure -Mid day meal state share	0.150659
Percentage to total expenditure on primary education under SSA revenue account	0.065196
Central fund utilization under poshan scheme	0.175153

## REFERENCES

- Griffin, P. (1998) Preventing reading difficulties in young children. National Research Council. Washington, DC: The National Academies Press.
- Nakamura, P. Hoop, T.D. (2014) Facilitating reading acquisition in multilingual environments in India (FRAME India). American Institutes for Research.
- Ziegler, J. Goswani, U. (2005) Reading Acquisition, Developmental Dyslexia, and Skilled Reading Across Languages: A Psycholinguistic Grain Size Theory. Vol. 131, No. 1, pp. 3-29.
- Handbook of Literacy in Akshara Orthography (2019).
- Gupta, A. (2022) Global and local discourses in India's policies for early childhood education: policy borrowing and local realities. Comparative Education. Vol 58, No. 3, pp. 364-382.
- Ball et al. (2014) Literacy and Numeracy Skills among Children in Developing Countries.
- Biseth, H. (2009) Multilingualism and Education for Democracy.
- Srivastava, A. K. (2007) Multilingualism and School Education in India: Special Features, Problems and Prospects. Multilingualism in India. Delhi: Orient Longman Private Limited. pp. 37–53.
- Scarborough, H. (2001) Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. pp. 97–110.
- World Bank (2021) Loud and Clear: Effective Language of Instruction Policies For Learning. A World Bank Policy Approach Paper.
- UNESCO (2016) If you don't understand, how can you learn? Global Education Monitoring Report. Policy paper 24.
- Sarangapani et al. (2021) No Teacher, No Class: State of Education Report for India 2021. UNESCO.
- UNICEF (2022) Are children really learning? Exploring foundational skills in the midst of a learning crisis.
- UNICEF (2020) The development of Nutrition, for Every Child: UNICEF Nutrition Strategy 2020–2030.
- World Economic Forum. UNICEF. Yuwaah. (2022) Education 4.0 India: Insight Report.
- UNESCO. UNICEF. World Bank (2021) The state of the Global education crisis: A path to recovery.
- Foundational learning study. (2022) National Report on benchmarking for Oral Reading and Fluency with Reading Comprehension and Numeracy.
- National Council of Educational Research and Training (2022). National Curriculum Framework for Foundational Learning.
- https://www.thehindu.com/news/national/literacy-numeracy-mission-deadline-pushed-back-two-years/article35136526.ece
- https://www.hindustantimes.com/cities/lucknow-news/parentteacher-interaction-will-improve-children-s-learning-u-p-minister-101663523356774.html
- https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/jul/doc20217531.pdf
- https://timesofindia.indiatimes.com/city/goa/shortage-of-qualified-maths-teachers-in-goa-edu-director/articleshow/94383693.cms
- https://www.hindustantimes.com/cities/lucknow-news/nipun-bharat-mission-to-strengthen-students-foundational-learning-101658430320447.html



- · https://www.worldbank.org/en/topic/education/brief/commitment-to-action-on-foundational-learning
- https://blogs.worldbank.org/education/language-instruction-matters-learning-foundational-skills
- https://www.indiatoday.in/education-today/featurephilia/story/pros-and-cons-of-the-three-language-formula-in-govt-aided-schools-1736304-2020-10-29
- https://www.business-standard.com/article/education/nep-2020-why-learning-in-mother-tongue-is-effective-but-hard-to-implement-120081200399\_1.html
- https://www.thehindu.com/news/cities/chennai/cm-launches-ennum-ezhuthum-mission/article65523522.ece
- https://www.telegraphindia.com/edugraph/news/jharkhand-government-to-address-kids-learning-needs-with-help-of-usaid-and-care-india/cid/1860584
- https://indianexpress.com/article/education/post-pandemic-learning-loss-among-students-significant-study-8085797/
- https://indianexpress.com/article/cities/bangalore/karnataka-reopening-govt-schools-teachers-train-for-learning-recovery-program-7905824/
- https://economictimes.indiatimes.com/news/india/uttarakhand-becomes-first-state-to-implement-nep-at-pre-primary-level/articleshow/92832000.cms
- https://economictimes.indiatimes.com/small-biz/sme-sector/maharashtra-partners-with-khan-academy-to-improve-math-learning-outcomes-in-govt-schools/articleshow/90347820.cms
- https://timesofindia.indiatimes.com/blogs/voices/why-we-should-prioritise-rebranding-anganwadis-as-centers-of-learning/
- https://www.hindustantimes.com/analysis/india-s-students-have-poor-learning-levels-can-foundational-education-help-them/story-7g7N9eCXPBzh3IFWjTAaRO.html
- https://www.unicef.org/press-releases/learning-loss-must-be-recovered-avoid-long-term-damage-childrens-wellbeing-and
- https://www.indiatoday.in/education-today/featurephilia/story/how-to-cover-the-learning-loss-among-children-post-covid-19-2008091-2022-10-04
- https://www.indiatoday.in/education-today/featurephilia/story/nutrition-and-education-why-schools-must-teach-the-value-of-nutrition-to-children-1997484-2022-09-07
- https://pib.gov.in/PressReleasePage.aspx?PRID=1867948
- https://www.unicef.org/india/stories/nutritious-beginnings-ensure-healthier-and-happier-children
- https://www.centralsquarefoundation.org/articles/back-to-base-insights-and-learnings-from-the-fln-baseline-study-in-bihar
- https://idronline.org/article/education/budget-2022-hits-and-misses-for-primary-education/
- https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=1849885
- https://en.unesco.org/sites/default/files/inclusive\_school\_reopening\_-\_supporting\_marginalised\_children\_during\_school\_re.\_.pdf
- https://www.education.gov.in/shikshakparv/docs/Foundational\_Literacy\_Numeracy\_background\_note.pdf
- https://languageandlearningfoundation.org/haryana-development-impact-bond/
- https://www.hindustantimes.com/cities/lucknow-news/nipun-bharat-mission-to-strengthen-students-foundational-learning-101658430320447.html



Institute for Competitiveness, India is the Indian knot in the global network of the Institute for Strategy and Competitiveness at Harvard Business School. Institute for Competitiveness, India is an international initiative centered in India, dedicated to enlarging and purposeful disseminating of the body of research and knowledge on competition and strategy, as pioneered over the last 25 years by Professor Michael Porter of the Institute for Strategy and Competitiveness at Harvard Business School. Institute for Competitiveness, India conducts & supports indigenous research; offers academic & executive courses; provides advisory services to the Corporate & the Governments and organises events. The institute studies competition and its implications for company strategy; the competitiveness of nations, regions & cities and thus generate guidelines for businesses and those in governance; and suggests & provides solutions for socio-economic problems.

www.competitiveness.in