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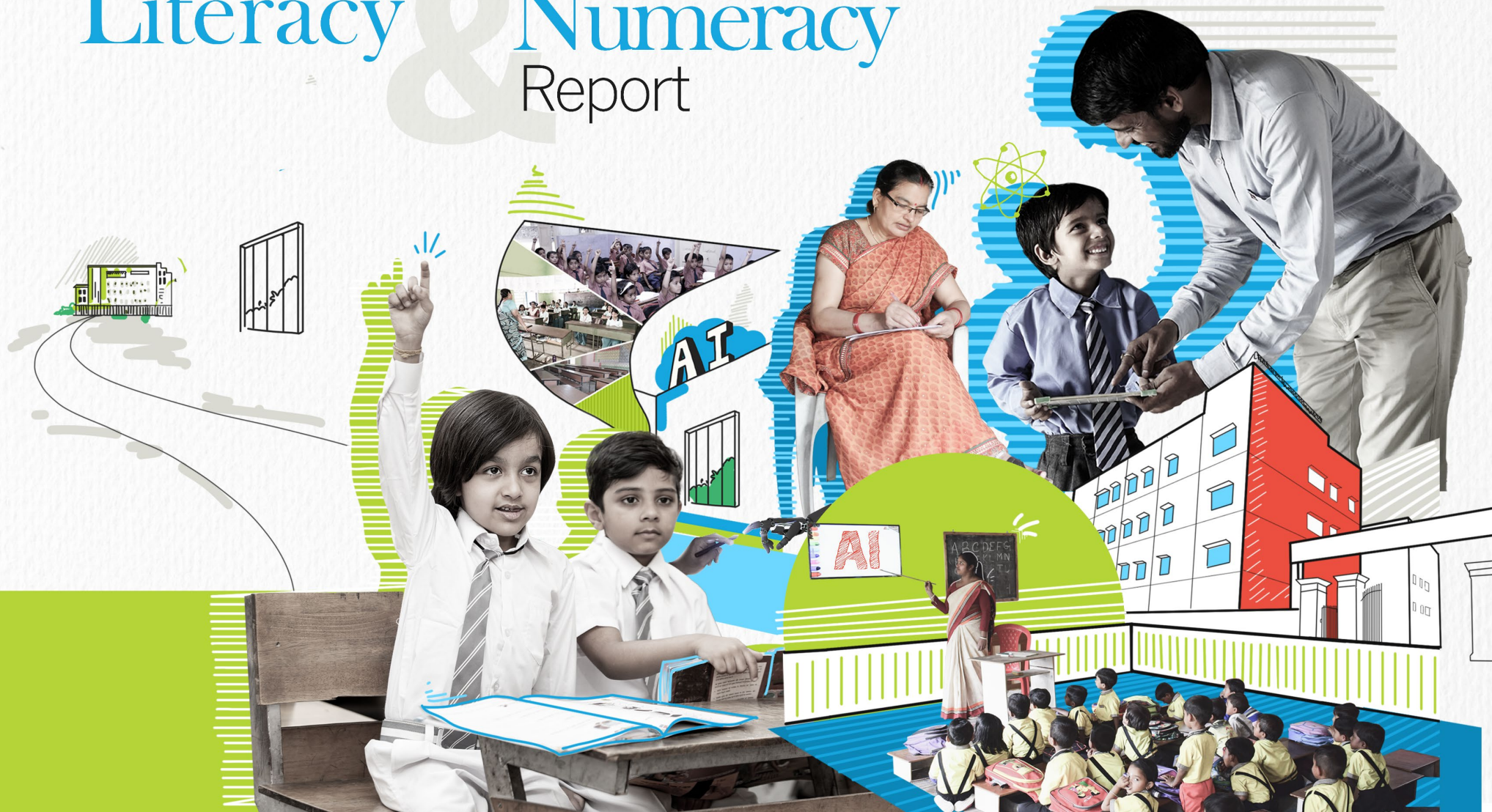
Foundational Literacy & Numeracy Report



Supported by

The report represents independent research by Institute for Competitiveness. The Institute for Competitiveness would like to thank Room to Read and USAID for providing financial support towards the research on Foundational Literacy and Numeracy.

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

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Foundational learning is an integral part of a child's educational journey, equipping them with the high-order skills and knowledge needed to make meaningful contributions to society. These foundational skills not only pave the way for future learning but also have a significant impact on an individual's overall quality of life and well-being.

Recent observations have indicated an alarming decline in learning outcomes, particularly in the aftermath of the pandemic. The effectiveness of these outcomes is closely tied to government-led programs and initiatives. Therefore, to elevate foundational education, it is imperative that we recognize and rectify the prevailing gaps that impede the learning journey. Successful implementation of initiatives must be executed with precision and unwavering consistency to ensure their enduring impact. Achieving this objective demands substantial investments that amplify our prospects of achieving considerable outcomes.

With great delight, the Institute for Competitiveness presents the eagerly anticipated third edition of the Foundational Literacy and Numeracy (FLN) report. This report is data-centric and designed to deepen our comprehension of the overarching landscape of Foundational Learning while highlighting the barriers faced by each state and union territory. It serves as a benchmark against which we measure their performance by delving into themes related to implementation science, convergence of artificial intelligence in foundational education and capacity building. Thereby encouraging a collective effort to elevate educational standards across the nation.

I extend my heartfelt gratitude to USAID and Room to Read for their unwavering support and valuable contributions throughout the report's preparation. It is my sincere aspiration that this report will serve as an enduring resource, empowering states and union territories to enhance policies and strategies. In the spirit of collective ambition, I trust that this report will illuminate the path forward in our shared mission to attain universal Foundational Literacy and Numeracy (FLN) across the nation by the year 2026-27. Together, we can aspire to greater heights and work harmoniously toward achieving this goal.

(Amit Kapoor)

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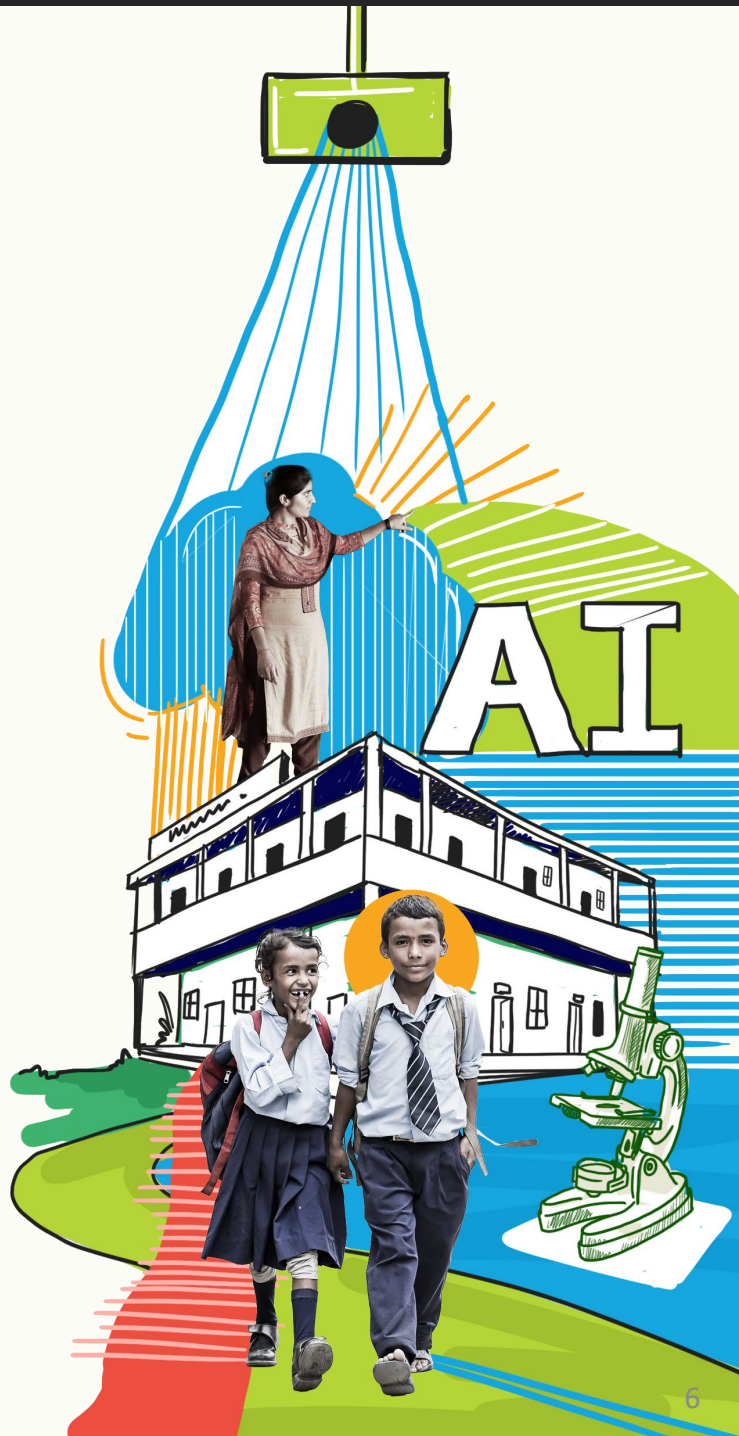
Executive summary

As Maria Montessori said

> **The goal of early childhood education is to activate a child's natural desire to learn'**, by ensuring engaging and meaningful learning experiences.

Children should have basic reading comprehension and mathematics skills, by the end of Grade 2. However, many children around the world still lack these skills even after they transition to Grade 3. The third iteration of the report on foundational learning emphasizes the importance of evidence-based curriculum designs, interventions, and practices in improving learning outcomes. All these factors have one aspect in common – the process and quality of implementation. It determines the success and failure of any programme, initiative, practice or intervention. Therefore, it is extremely significant to first study the programs that have research evidence supporting their effectiveness and then put them into action. It is not about validating a program as evidence-based but rather understanding how evidence-based or evidence-informed practices are adapted and applied in real-world settings. Implementation science plays a crucial role in bridging the gap between scientific research and practical implementation, ensuring initiatives related to early care and education achieve their intended positive effects on target populations.

The NIPUN Bharat aims to achieve universal foundational literacy and numeracy by 2026-27, a goal that has been accelerated by the global pandemic. The report also delves into the dialogue surrounding literacy and Artificial Intelligence (AI), which has gained prominence in recent times. AI can help teachers provide guidance on suitable learning resources and organize evaluation procedures, enhancing student learning. However, teachers must possess the necessary skills and knowledge to use AI and digital tools effectively. To achieve this objective, extensive capacity-building and professional development programs must be conducted to equip teachers with the necessary proficiency. The report further emphasizes the importance of training teachers in enabling blended teaching approaches. Failure to take immediate measures could have detrimental consequences for both children and the country.



01 Introduction

As highlighted in the previous edition, learning outcomes have witnessed an alarming decline worldwide, especially after the covid-19 pandemic. Currently, in India, there are approximately 35 per cent of children who spend several years of primary schooling by navigating complex gaps between home and school languages[1]

[1] https://indianexpress.com/article/opinion/columns/why-duration-of-early-literacy-and-numeracy-programmes-must-be-increased-8912196/

Additionally, most children come from marginalised socio-economic backgrounds in their first grades. Hence, there is an urgent need to emphasize improving learning outcomes among children aged (0-9 years) because learning gaps widen with time if left unaddressed. Foundational education is an integral and indispensable part of a child's learning process. It lays the basic foundation through which children can acquire the skills and competencies they require for all kinds of learning throughout their lives. To prepare today's generation for future demands, it's crucial to integrate the expansion of educational opportunities with a focus on improving learning quality. This approach nurtures cognitive, creative, and emotional growth, facilitating knowledge acquisition, skills, and values. It encourages responsible, engaged, and productive individuals who can contribute meaningfully to society.

Expanding access to foundational education while maintaining a high standard of quality must be emphasized.

The quality of foundational education is comprised of several essential components, including

- Available resources
- Supportive communities
- Well-prepared teachers
- Engaged families
- Effective curriculum

However, there is a potential challenge in terms of when educational systems focus solely on expanding access without concurrently ensuring quality; it can lead to educational inequalities. In other words, if efforts are made to enroll more children in their foundational years without ensuring adequate quality of education, it can result in a situation where some children receive poor education while they have access to education. This further widens the gap in educational outcomes among the children. Both access and quality of education must be a priority.

Various factors determine the education and learning process of children, which includes addressing and resolving issues related to teachers, ensuring that in-service training and continuous professional development to promote child-centered pedagogical approaches, fostering high-level quality of curriculum delivery such as 21st century skills and promoting innovation in education systems, teaching and learning – as well as building resilience in schools and promoting regional standards for protective learning environments in emergencies (UNICEF).

For instance, when implementing initiatives or programmes, several crucial components come into play, including the allocation of adequate budgetary resources, the training of teachers, the efficient utilization of available resources, and more. The aspect of improving learning outcomes is immensely dependent on evidence-based curriculum, interventions, and practices. Extensive attention and research activities have been dedicated to creating evidence-based practices and programs all aimed at improving outcomes for children in their foundational years.

Despite ongoing efforts to reduce the gap between scientific research and practical implementation, such as spreading, translating, encouraging, mandating, and offering incentives for the adoption of these evidence-based programs, these endeavours have not consistently succeeded in getting these proven programs widely adopted and put into practice (Fixsen et al., 2013). In essence, this highlights the persistent challenge of translating research findings into everyday practical settings for the benefit of children. The need for the development of more efficient approaches to implementation practice, science, and policy is essential. Ensuring equity and excellence by providing quality education to the children is the most fundamental objective of any government must enhance its information management systems for managing education (UNICEF). The emphasis of this effort must be on gathering, examining, and disseminating data and evidence-based research on the factors that contribute to learning outcomes.

To facilitate recovery and expedite the process of learning, prompt efforts need to be taken to enroll every child in school and ensure their consistent attendance, with a specific focus on children from marginalized communities and children with disabilities. Furthermore, it is a pre-condition for teachers to deliver instruction and teaching as per their current proficiency level while ensuring they have access to necessary resources and support. In addition, there should be a collective focus on prioritizing the well-being of both teachers and students in terms of health, nutrition, and psycho-social aspects. As the country is progressing toward a more digitally enabled environment, it becomes critical for teachers to be trained in digital skills along with pedagogical abilities. These skills would enable them to effectively teach in remote, online, and blended modes of instruction, irrespective of whether they are in high, low, or no-tech environments, with the ultimate goal of securing resilience in times of crisis since they are key facilitators in the entire process of educating children (UNICEF). Rigorous efforts must be taken to ensure connectivity and digital infrastructure everywhere, even in rural and geographically remote areas.

To effectively enhance foundational education, it is important to acknowledge and address the existing gaps that obstruct the learning process. Achieving this goal requires substantial investments that would increase the possibility of getting the best results. Furthermore, Foundational Learning programs must be implemented in an effective and consistent manner so they can be sustained over a period of time. A well-planned and strategic approach that ensures the children's access to foundational learning and quality of education is the key to setting a strong foundation for their future learning and development.

02
Defining Implementation

A rising corpus of research has highlighted the significance of implementation in improving the outcomes among children during their foundational years. For decades, researchers have brought out a large array of evidence-based programmes and practices (EBPs) for use in education. However, having these evidence-based programs and practices isn't sufficient to make considerable improvements within systems. Making a positive change requires conscious and focused efforts from professionals and practitioners.

"Implementation is defined as a specified set of activities designed to put into practice an activity or program of known dimensions" (Fixsen et al., 2005). In simple words, implementing means to make something happen by a well-defined plan or procedure.

The process of implementation has to be purposeful in the sense that when something is being put into action, it is done with a clear reason or goal in mind. The action should be implemented in a manner wherein an independent observer is able to determine the activities being taken and understand their strengths. When thinking about implementation the observer must be aware of two sets of activities (intervention-level activity and implementation-level activity) and two sets of outcomes (intervention outcomes and implementation outcomes) (Fixsen et al., 2005). The former includes activities related to what is being put into action (intervention) and how the implementation of the activities is being carried out, while the latter involves what the intervention achieves or achieved and how well the implementation process is happening or has happened. The activities of implementation can assist practitioners to become skilled and committed in using innovations, simultaneously help other organisations in supporting their innovative evidence-based practices. Nevertheless, implementation is an ongoing process from conception to execution rather than a one-time action. Kitson et al., (1998) summarize that successful implementation in its simplest form requires that the evidence is high, the context receptive to change, and the change supported by appropriate facilitation.

The role of implementation is critical in making any intervention or innovation work effectively. Using a well-defined and planned implementation approach has a significant impact on how well the intervention or innovation works in practical situations. It further highlights the importance of not just having good ideas (innovations) but also having a thoughtful and effective plan to make them work in practice.

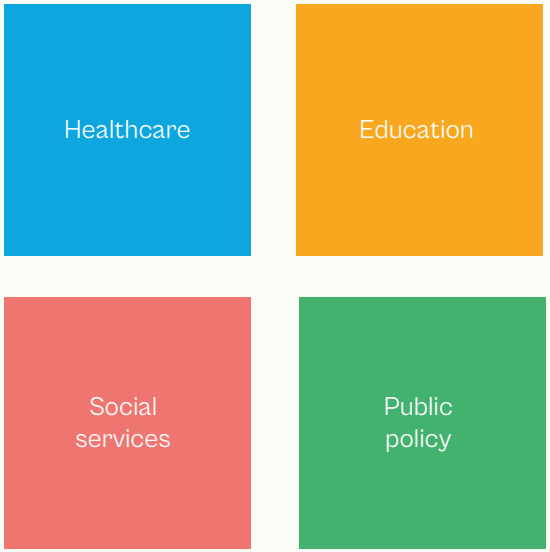
There is a recognized issue with translating research findings successfully into practice in education, and the emerging field of implementation science offers strategies to address this problem, helping educators and project leaders achieve better results in the classroom. "Implementation is now recognized as the link between science and service and is studied in its own right. Evaluations of successful efforts to make full and effective use of innovations to benefit citizens and society have led to rapid expansion of implementation science" (Fixsen et al., 2015). According to Durlak and Dupre (2008), successful implementation can result in programs being 3 to 12 times more effective, and they concluded that "there is credible and extensive empirical evidence that the level of implementation affects programs outcomes".

03

Turning Knowledge into Practice: Implementation Science

The concept of implementation science has developed rapidly over the years and has been successful in establishing a framework that accumulates a variety of implications on desired outcomes. These frameworks act as maps in providing guidance to ensure the activities are done effectively and contribute to formulating meaningful hypothesis.

The growth of implementation science has been fueled by studying and analyzing initiatives that effectively leverage the full potential of social scientific discoveries to create significant benefits for both society and its inhabitants. The interest in implementation science has grown alongside the emphasis on evidence-based innovations, particularly in fields such as



The growth is rooted in a need to bridge the gap between research and practice, ensuring that effective interventions and policies are actually put into action and yield the desired outcomes. It has become evident that innovations in the field of human services cannot be self-implemented, they require a specific approach.

"The science of implementation is the study of the process of implementing programs and practices that research evidence suggesting they are worth replicating. It is not the act of validating a program as evidence-based; instead, implementation science is the study if how a practice that is evidence-based or evidence-informed gets translated to different contexts in the real world" (Martinez-Beck, 2013).

Various factors associated with effective implementation are pivotal to make sure that when programmes, interventions, or activities are backed by evidence, they happen the way they have been visioned. This is key to ensuring successful implementation and making them sustainable over time in practice and policy. Research has demonstrated that fidelity to evidence-based models is related to outcomes and, further, that the process of implementation is related to fidelity (Fixsen et al., 2001). During the process of implementing model practices, adaptability is crucial as it ensures fidelity and functioning in specific communities.

Yet, at times, it is not clear as to what kind of adaptations are suitable and how fidelity can be compromised to the program's models leading to poor outcomes. Even though there are various challenges, adaptability is a prerequisite when implementing FLN programmes.

Due to the complexity of the implementation process, it can be argued that implementation science must capture the iterative and nonlinear nature of the various implementation components (Franks and Schroeder, 2013). This approach to empirical investigation is different from the traditional research method that proves the effectiveness of evidence-based practices (EBPs). Normally, this involves tests with randomly chosen groups and measuring how participants do before and after the program. While putting a program into action, there are many direct activities like training and making sure the program is done as planned. There are also supportive activities like using data to make decisions, continuous monitoring fidelity to improve, and organizational policies to ensure good quality of implementation. Implementation science should not only adhere to the program plan but also consider the organization and system's functioning to ensure effective program implementation and continuous improvement.

The benefit of a science that can account for a variety of components operating within a systemic framework is a more dynamic and individualized approach to service delivery and increases the likelihood of sustainability and high-quality outcomes (Franks and Schroeder, 2013).

Over the past few years, there has been a notable rise in research endeavors and scholarly works centered around the subject of implementation. Nevertheless, it is observed that the domain of implementation, when juxtaposed with other areas of research, remains in its nascent stages and shows a relatively narrow scope. Owing to its emergent status, the discipline of implementation science has seen limited formulation of frameworks that adequately encapsulate the intricate and fluid characteristics inherent to the process of implementation. Therefore, various systematic and literature reviews have been conducted on themes of implementation science. A review carried out by Franks and Schroeder (2013) identified a few key domains that establish the core fundamentals of implementation science.

Firstly,

evaluating readiness and capability stands as a critical consideration. Numerous scholars delving into the evolving realm of implementation highlight the significance of evaluating the potential for alteration and the appropriateness of incorporating evidence-based and model programs within community-centered contexts. Consequently, a crucial preliminary phase in the implementation procedure includes conducting a methodical assessment, frequently targeting the preparedness to execute distinct components and facets of the designated model. This step is taken prior to committing additional resources to initiate a prospective resource-intensive implementation endeavor.

Secondly,

implementation methodologies follow a sequential, step-by-step progression, ensuring clarity and buy-in for all involved in the program's establishment and sustainability. Both agency or community leadership play a crucial role in furnishing substantial backing and aid, encouraging a conducive environment for the implementation process. To accomplish a transformation in practices, it is imperative that personnel and frontline workers showcase a robust engagement in the procedure, thereby deriving value from training and the transfer of knowledge.

Thirdly,

what many people may consider the most active phase of the implementation process is what in the field is referred to as “installation” or “adoption” (Fixsen et al., 2005). This process includes knowledge transmission accompanied by the acquisition of proficiencies via a structured regimen of training, mentoring, and technical guidance. Predominant implementation models generally assert that this phase necessitates a substantial allocation of time and effort prior to the commencement of actual service delivery.

Lastly,

the most important is assessing outcomes and conducting fidelity monitoring in the process. Organizations undergoing the adoption of a framework frequently encounter the necessity to not only transform practices and cultivate skills but also to establish comprehensive data systems, enabling the collection, analysis, and interpretation of diverse data forms. Model programs must also be monitored to ensure that they are being delivered with fidelity and resulting in expected outcomes (Franks and Schroeder, 2013). This would further lead to improving the quality of the model programmes with timely feedback, and the outcomes can be sustained over a long period.

Strategies for Effective Implementation: **Unveiling Best Practices**

Implementation strategies encompass methodologies to address the intricacies inherent in diverse service systems and practice environments, they also provide detailed accounts of tangible actions undertaken during the implementation process. Implementation strategies are systematic intervention processes to adopt and integrate evidence-based interventions or practices into usual services (R. Lyon, n.d). They are developed with the intent of enhancing implementation outcomes and service outcomes. The former pertains to the consequences arising from the employment of an implementation strategy upon the new intervention, practice, or service, while the latter alludes to the influence exerted by the new intervention, practice, or service upon individuals, targeted groups, or systemic entities. The dichotomy between research and practical application has been challenged in the domain of implementation.

This has unfolded two distinct strategies, both facilitating reciprocal interactions that yield advantages for research and practice. ***They can be classified as either "top-down" or "bottom-up" approaches in nature.***

According to Best et al., (2008), top-down approach can be defined as new interventions diffused from a central authority (such as government bodies or program initiators) to localized contexts or sites. This approach is commonly employed by governmental bodies and non-governmental organizations (NGOs) to improve the quality, accessibility, and cost-effectiveness of services rendered to clientele or users. Nonetheless, potential drawbacks of the top-down approach become evident when it fails to address the distinctive demands and concerns at the local level. In such cases, it can trigger opposing forces among local entities if perceived as a challenge to their professional independence (Palinkas and Soydan, 2012).

Contrasting this, a bottom-up or decentralized methodology signifies that new interventions originate with individuals and stakeholders at the community level thereby encouraging a heightened sense of ownership (Ogden and Fixsen, 2014). Although employing bottom-up approaches can increase the probability of fostering dedication within practitioners, but there exists a potential for diminishing the likelihood of the intervention's faithful compliance in practical application.

The findings of research support the combination of top-down and bottom-up strategies in a manner that facilitates bidirectional flow within the "knowledge to action" process. The approach would ensure a seamless flow of information and insights between theoretical knowledge and practical application, leading to better outcomes. This comprises the fusion of "evidence-based practice" with "practice-based evidence." According to Ogden and Fixsen (2014), effective implementation depends on achieving a balance between the two.

This means that effective leadership from the top-down and support from the organizational systems are necessary to empower the bottom-up practices and transformative changes within the organization. In essence, this approach recognizes the importance of both top-level guidance and grassroots initiatives in driving successful implementation. The idea is to strike a balance between these approaches to ensure that they complement each other and contribute to the overall effectiveness of the implementation process. A more developed and detailed method for analyzing implementation is communicated through frameworks specifically designed for implementation. The subsequent section discusses implementation frameworks which play a crucial role in providing a structured understanding of the various factors that have been identified as influential in bridging the science-to-service gaps. These frameworks help organize and interpret an extensive list of variables that have an impact on successfully translating scientific knowledge into effective services.

Enhancing Implementation Strategies Through **Conceptual Frameworks**

A framework stands as a pivotal instrument aiding educational institutions in the application of implementation science to strengthen FLN programs. Implementation frameworks provide structure and arrangement for the key variables that must be taken into account when introducing new programs and practices.

A comprehensive conceptual model should by definition summarize current empirical knowledge and include clearly defined constructs, a measurement model for these key constructs, and an analytical model hypothesizing links among measured constructs (ICEBeRG, 2006; Ogden and Fixsen, 2014).

It advocates for a holistic and dynamic representation, wherein theoretical knowledge is informed by real-world observations, thoroughly elucidated, rigorously assessed, and cogently interconnected. By adhering to these principles, relevant stakeholders can create models that are highly valuable and strong in their theoretical foundations. As a result, these models can contribute to a deeper and more detailed understanding of the complex and intricate aspects of implementation.

As per an evaluation undertaken by Meyers et al. (2012), some of the areas that are found common in most implementation frameworks are assessment strategies which include the assessment of needs and resources; decisions concerning potential adaptations regarding the extent to which a program or practice should be modified or adjusted to better suit the context or needs of a particular setting; strategies aimed at building and improving capacity, including garnering explicit endorsement from crucial stakeholders and cultivating a conducive community, recruiting and retaining competent personnel, and furnishing effective preparatory training; the establishment of an implementation framework entailing specific teams with a distinct comprehensive plan and; sustained support strategies through constant technical aid, coaching, supervision, ongoing evaluation of the processes, and mechanisms for constructive feedback. The process of grouping important factors that influence implementation success attains coherence when they are integrated into conceptual frameworks, each resonating with a shared theme. Through this integration, the seemingly disparate elements appear to have a logical structure and meaningful interrelation. By converging around common themes, these factors gain a sense of interconnectedness, thus augmenting their potential to inform the overarching implementation process. This approach to categorization facilitates a integrated understanding of the multifaceted considerations inherent to implementation endeavors, ultimately culminating in a more systematic and effective approach to the programme implementation.

While developing a conceptual implementation framework, three aspects must be taken into account – the importance of WHAT the intervention is about prior to making it operational, HOW these interventions are supported in practice, and WHO is responsible for carrying out the implementation (Fixsen et al. 2005)

The initial phase

underlines the critical significance of comprehending the fundamental nature of the intervention before embarking on its practical application. This involves a dual evaluation process conducted by both researchers and implementers, each with distinct objectives and parameters. In this context, researchers engage in the robustness of evaluations conducted on evidence-based programs. This appraisal seeks to ascertain the methodological rigor applied in these evaluations, encompassing the reliability of data collection, analysis, and the overall research design. This evaluative procedure is crucial in gauging the credibility and validity of the evidence upon which the intervention rests, thereby informing the potential efficacy and practicality of its implementation. While the implementers are tasked with evaluating the clarity and precision with which the practice is outlined and translated into actionable steps.

Secondly,

The concept of "implementation drivers" encapsulates a multifaceted array of factors that collectively arrange the successful implementation of interventions. Among these drivers, several pivotal components emerge that are instrumental in producing effective implementation. The core constituents include the development of staff competencies, organizational adaptations to align with the intervention's goals, and the significant role of leadership. These drivers outline how the interventions are supported when applied practically.

Lastly,

The famework explains the critical factor of who carries out the process of implementation. Fixsen et al., (2005) termed the individuals as ‘purveyors’ who play an important role in making substantial changes in practices. They are referred to as change agents, facilitators, or implementation teams, who possess a deep understanding of the intricacies encapsulated within the implementation drivers and stages. They are actively engaged in the process, aiming to realize the predetermined objectives.

Figure 1 by Houghton Mifflin Harcourt (HMH) is a framework that summarises the implementation of an evidence-based early literacy program in five steps, which might be useful for improving the learning outcomes in the Indian context. Summative assessment can provide better insights into what students have learned overall against norm- or criterion-referenced performance levels that rigorous research has found to be the most important contributors to overall reading proficiency. Foundational Learning Study (FLS) 2022, is a good initiative which can provide robust data if the scope and sample of the study is expanded.

Source: https://www.hmhco.com/

Securing Sustained Programmes to **Ensure Long-term Continuity**

A significant challenge faced by the majority of evidence-based programs and practices arises when the delivery of services deviates from the intended parameters of the original model, resulting in reduced dosage, decreased intensity, and compromised quality. This pertains to the phenomenon of program drift or program dilution (Ogden and Fixsen, 2014). The endeavor to ensure the continuation of the program's integrity across time, intervention sites, and successive generations of practitioners poses a formidable challenge that confronts not only program developers and purveyors but also the practitioners themselves. Sustaining the integrity of the program presents a multidimensional challenge. It necessitates a concerted effort to uphold the fidelity of program implementation, ensuring that interventions are administered in alignment with the original model's specifications. Overcoming this challenge demands a collective commitment from all the stakeholders involved. Moreover, sustaining program's effectiveness calls for a delicate balance between adaptation to local contexts and the preservation of core program components. By addressing this challenge collaboratively, stakeholders can certainly bridge the gap between theory and practice, thereby forging a sustainable pathway for an impactful programme implementation with positive outcomes.

The landscape of programs and service delivery sites is susceptible to shifts in both internal and external contexts. For instance, such shifts include changes in personnel and leadership, modifications in funding streams and program requisites, the emergence of new social challenges, and fluctuations in collaborative partnerships. Furthermore, the transitory nature of political alignments and the transient engagement of funding partners in specific causes contribute to the dynamic nature of the implementation ecosystem. A viable approach to surmount the challenge of sustaining program continuity involves encouraging implementation capacity, particularly through the establishment of dedicated implementation teams (Ogden and Fixsen, 2014). These teams contribute to the creation of "self-sustaining implementation sites" or "multi-allegiance centers" (Fixsen et al., 2013). These entities play a crucial role in ensuring continued support for implementation by furnishing essential components like training, coaching, facilitative administration and fidelity assessments.

Notably, these sites extend their scope beyond mere maintenance, as they not only provide constant support for existing programs but also accommodate the assimilation of new programs and practices into their existing framework.

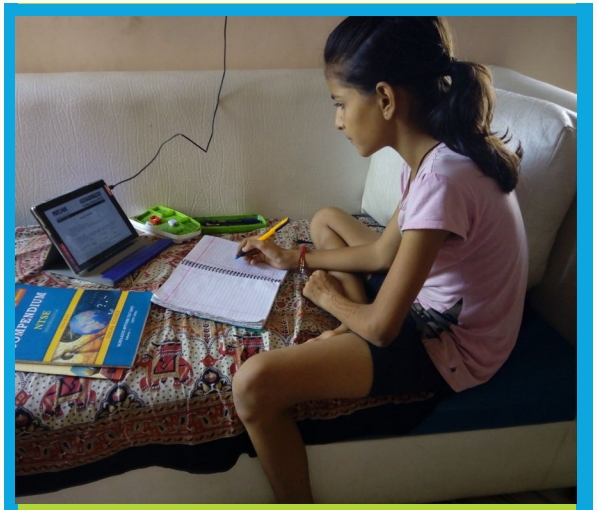
The notion of "self-sustaining implementation sites" or "multi-allegiance centers" (Ogden and Fixsen, 2014) offers a strategic approach to avoid or reduce the challenges posed by shifting contexts, and thereby promoting the continuity of support for programs while facilitating the integration of new initiatives. This approach stands as a reflection of the adaptability and proactive nature required to ensure the long-term effectiveness of programs in the face of evolving circumstances. According to Fixsen and other researchers, it is imperative to institute an ongoing regimen of systematic monitoring and feedback mechanisms. It is advocated to effectively capture the dynamic fluctuations that have been noted in the degrees of implementation support as well as the outcomes of interventions in the long-run. Evidence suggests that levels of support provided for the implementation of interventions, as well as the resultant outcomes of these interventions, are subject to nuanced changes as time progresses. In this context, the role of implementation teams assumes significance as advocates for sustainability.

The field of implementation science is growing rapidly. In education, especially in the years of foundational learning where both time and resources are limited, putting the programmes/interventions into practice can make a huge difference. This can be the deciding factor between programmes that make long-term changes and those that don't work. Implementation is a process that requires time and involves various steps, from its planning to ensuring how to fit into the existing services, followed by necessary capacity building and regular assessments. Therefore, it is requisite that every stakeholder involved in the process works collectively to make the new practices work and last. The next section of the report will shed light on the discourse of literacy and Artificial Intelligence which has become a matter of discussion in recent years and has drawn considerable interest, particularly after the pandemic.

04

Can Artificial Intelligence (AI) And Literacy Work Together?

Debates on the integration of AI and literacy have garnered significant attention, especially in the wake of the pandemic, characterized by the prevalence of remote learning and the extensive utilisation of digital tools. Nonetheless, they are at an evolving and exploratory stage.



Literacy can be simply understood as the ability to read and write. However, in the contemporary world, the emergence of the use of digital technology in every field has generated the necessity for universal 'digital literacy,' demanding competencies from every individual.

However, this focus on AI literacy remains relatively underexplored within the domain of foundational education. Limited research endeavors have been directed towards exploring AI literacy among children aged 3 to 8 years in foundational education settings when compared to other age cohorts. This can be attributed to the fact that the formulation of AI-focused curriculum for young children has only taken shape in recent times. Hence, there is a need for comprehensive investigations and research that substantiate the viability and efficacy of AI literacy education within the field of foundational education.

McCarthy (2017) defined artificial intelligence as the discipline concerned with creating intelligent machines through scientific and engineering principles. It is attributed to the development of smart machines capable of solving various types of problems using methods like understanding human language, neural networks, and learning from data (Mondal, 2020). In the education domain, AI's transformative potential is evident in terms of assisting the teachers in preparing the students for their learning progress and achievements, providing recommendations for learning materials, and automating the assessment process.

Importance of **Having AI Literacy**

One of the aims of AI literacy education for primary schools is to familiarize children with the basic concepts of AI/computer science (Ng et al., 2021).

Consequently, there exists a pedagogical urgency to equip students with the perception to cautiously use AI technologies while also developing their ability to distinguish ethical from unethical AI-related practices. As such, to combine AI and literacy, AI literacy means having the essential abilities that individuals need to live, learn and work in the digital world through AI-driven technologies, and should be taught at the K-12 level of education (Steinbauer et al., 2021).

As the world is rapidly transitioning towards a digitally enabled environment; therefore, children's exposure to AI learning tools is something that is inevitable in the future. In this regard, the least that can be done is to introduce and equip the parents, teachers and educators on the nuances of AI education.

Children must be equipped with the capability to comprehend, apply, and assess AI with deliberate guidance, which will encourage interdisciplinary learning. Without such purposeful guidance, their independent and unstructured exploration of AI-enabled technologies or toys would be insufficient for acquiring AI literacy (Yang, 2022). In simpler terms, they cannot understand the functioning of AI-powered devices without effective instruction from teachers/educators (Williams et al., 2019). For instance, whenever a child is handed over a smartphone device, they often lack the means to independently engage with these computational objects or explore them without external guidance. Evidence also indicates that children are capable of understanding the basic operations of AI when they are presented with learning opportunities that are age-appropriate and connect with what they already know. However, there exists a concern that young children might struggle to have a meaningful understanding of AI technologies (Yang, 2022). Instead of doubting the capacity of children to learn about and engage with AI, it is essential to provide them with guidance. Appropriate efforts must be taken in a way that allows them to learn to ask questions and explore. Introducing AI in alignment with the child's age is essential.

Prospects of **AI in Education and Foundational Learning**

Learning to read and write begins during the first five years of a child as their biological, cognitive and social precursors get established during those years. In the educational domain, “Deep learning” stands for meaningful learning, in contrast to human surface and rote learning (Micheuz, 2020). It is a way of learning that goes beyond just memorizing facts. It involves using the brain to think deeply and critically. Instead of just remembering things, it includes analysing and connecting ideas, solving problems, and understanding things in a more meaningful way. This is an important aspect of foundational learning, and every child needs to achieve this ability. However, in the context of artificial intelligence (AI), "deep learning" constitutes a methodology that seeks to imitate the intricate cognitive processes akin to those of the human brain, particularly in its capacity to process extensive and complex datasets, thereby facilitating predictions and informed decision-making. This indicates that if technology/machines can mimic the thought process of the human brain, then there is a possibility that using or relying on these techniques without understanding the limitations can significantly obstruct the children’s natural thinking ability and process in the long term. Therefore, during the foundational years, children require continuous support and guidance from their teachers/parents, which cannot be replaced by AI tools. So, it’s crucial for children to learn to think and not become dependent on machines for learning.

Moreover, the acquisition of knowledge in AI represents a great pedagogical challenge for both experts and teachers and a cognitive challenge for students (Micheuz, 2020), especially for the ones in their foundational years. Numerous countries are dedicating substantial endeavours to advance the integration of artificial intelligence (AI) education within the primary and secondary education system (K-12) through the development of detailed curriculum designs and guidelines. Due to the rapid growth of AI, there is a need to understand how teachers can best leverage AI techniques for the academic success of their students (Casal-Otero et al., 2023). In a study by Zhai et al. (2021), it is advocated that teachers collaborate closely with AI specialists to effectively accommodate the gap between technical advancements and effective pedagogical practices.

05

Enhancing Teacher's Competencies through AI

Opportunities

Within the domain of foundational education, AI holds enormous potential to offer significant support to educators/teachers. It enables educators to harness predictive analytics to anticipate the trajectory of individual student's learning paths and their potential performance outcomes. This facilitates timely interventions and personalized guidance, allowing teachers to cater to the diverse needs of their students. It can also serve as an adept assistant in directing students toward appropriate learning resources. By analyzing individual preferences, learning styles, and historical performance data, AI-powered recommendation systems can provide with required suggestions. A pivotal aspect of the educational landscape that AI significantly impacts is the evaluation process.

Through the deployment of intelligent agent systems and chatbots, routine assessments can be automated, alleviating the burden of teachers and assisting them. If the AI application is used appropriately with diligence, the use of ***AI technologies can certainly contribute to enhancing the student's learning journeys, rendering their skills and competencies.***

The advent of the COVID-19 pandemic has instigated a noteworthy transition towards online and blended modes of teaching and learning. Teachers, in response, have endeavored to integrate new technologies within their instructional paradigms. Notably, artificial intelligence in education (AIED) technology has witnessed a surge in prominence amid the pandemic. Scholarly investigations have initiated dialogues pertaining to how AI is reshaping the educational landscape by alleviating teacher's workloads through the automation of certain administrative tasks, strengthening data analysis, and improving the realm of online instruction (Ng et al., 2023). Additionally, contemporary developments have ushered in AI-driven tools that pivot towards supporting educators, assisting them in identifying effective pedagogical approaches based on the student's learning data. These tools further facilitate the automation of logistical chores, the formulation of assessments, as well as the streamlining of grading and feedback processes, all of which collectively utilize the teacher's temporal resources and enhance overall efficiency (Chaudhury & kazim, 2022). Although some scholarly studies assert that AI technology possesses the capacity to significantly improve the student's learning experiences, propel knowledge assimilation, and invigorate learning motivation, but the effectiveness of these advantages remains subject to scrutiny if the issues of teacher's roles and competencies within this AI-infused landscape remain unaddressed. Thus, a compelling imperative emerges to contemplate the evolving contours of teachers' competencies in the context of AI integration.

Challenges

A significant aspect of the teacher's responsibilities revolves around the creation of purposeful learning environments, aiming to enhance the educational journey of students and amplify their capabilities. Regardless, there exists a potential scenario wherein teachers might not possess the requisite digital adeptness to effectively employ AI-driven educational applications for instructional purposes. This lack of technological familiarity includes challenges ranging from an inability to perform data analyses to the unfamiliarity with configuring algorithms for the automated generation of assignments and feedback via AI-powered tools (Seo et al., 2021).

Challenges in adapting to new technologies can be both in technical aspects as well as broader domains such as communication, collaboration, and multidisciplinary skills (Ng et al., 2023). In this view, various other challenges also exists in terms of misinterpretations of AI outputs, the potential of AI to provide misleading information, the inherent limitations of AI systems, and the surrounding ethical dilemmas underpinning different platforms (Ng et al., 2023). Insufficient funding, an underdeveloped AI curriculum, and a lack of tools or assessment methods can further escalate these challenges.

According to scholarly research, a prevalent consensus emphasizes the critical role of teacher education as a determining factor of student accomplishment, which can further contribute to societal and economic growth. For this purpose, the provision of instructional and theoretical frameworks serves as a pragmatic foundation, enabling teachers to identify and encourage AI-related proficiencies that can serve to assist in their pedagogical endeavors.

AI-driven platforms are revolutionizing instructional content creation and delivery, forcing teachers to adapt to new demands. Technical impediments can hinder high-quality content delivery and assessment. To prepare for AI-enhanced classrooms, teachers must acquire AI-related skills, enhance competencies, and align technological tools with their content and pedagogical expertise. Achieving this alignment mandates continuous professional development that consists of technical support, guidelines, and dedicated teacher's capacity building initiatives. Such measures are developed to prepare teachers adequately to minimize disparities, technical problems, and other hindrances that prevent AI systems from attaining their intended educational objectives (Ng et al., 2023).

Along with technical skills, encouraging a positive leadership attitude and an ethical mindset is most important for teachers engaging with AI in education. Several potential risks and conflicts have been identified, which include privacy concerns and excessive power controls due to misunderstandings or misleading outputs of AI systems (Seo et al., 2021). In this context, Seo et al. (2021) caution that AI-generated recommendations could be unreliable, exerting a detrimental influence on student's performance, especially if teachers excessively depend on AI-driven technologies for predicting and evaluating learning outcomes. Additionally, AI-driven platforms might occasionally misinterpret user inputs, leading to misguided suggestions, and at the same time, these platforms might be developed by specific groups of learners; as a result, they might not be applicable universally (Seo et al., 2021). Therefore, teachers must be well-versed in the ethical considerations and limitations underpinning AI-driven technologies. This understanding equips teachers to navigate the complex terrain of AI-driven education, ensuring its ethical use and maximizing its potential benefits while mitigating its associated challenges.

06

Key issues of teachers: The need to improve quality of teaching

Wide learning gaps are produced when foundational literacy and numeracy abilities are not attained. In terms of educational outcomes, as we all know, the country is experiencing a serious learning crisis. Immediate measures need to be taken to address the learning gap issue. A student's learning is highly influenced by the teachers and their quality of teaching.

For this to happen, the teachers also need to be equipped with adequate skillsets and knowledge. Teachers must possess the competence to provide students with a future society and economy where they are entrusted to become self-directed learners and continue to acquire knowledge throughout their lives. They undertake a critical role across various dimensions ranging from recognizing and nurturing the distinct growth of children to managing effective learning dynamics within the confines of the classroom. Broadly, they are also responsible for creating a comprehensive educational environment that corresponds to a "learning community" at the school level and promoting meaningful associations with the local community. However, teachers lack the required competencies and training, resulting in substandard teaching quality, especially in rural and geographically remote areas.

Bhowmik et al., (2022) in their study observed that while teachers recognize the significance of skill development, they exhibit hesitancy in implementing skill enhancement methods in practical settings. A considerable portion of the teachers agree that activities such as roleplay and storytelling are not employed within the classrooms. However, these activities hold substantial potential as instrumental tools for encouraging critical thinking among children.

Although NEP 2020 has rigorously emphasized the importance of play and activity-based learning during the first three years of the child's foundational learning, an adequate number of teachers consider play as separate from learning, which further indicates the lack of knowledge among teachers in integrating play into learning (Bhowmik et al., 2022). There is clear evidence of the need for capacity building in terms of curriculum design, practicing appropriate pedagogy and having the required knowledge/skillsets.

07

Empowering Teachers: Importance of Capacity Building

Preparing teachers to address the complexities of modern classrooms represents a multifaceted and dynamic process. According to OECD (2010), disrupting established patterns and adopting new practices necessitate continuous training and preparation, along with comprehensive support and capacity building.

Some of the primary reasons cited for not attending training modules include overlaps with work schedules, absence of incentives for engaging in professional development, etc. Simultaneously, there exists a potential for improvement in terms of development that is better targeted to meet the requirements of teachers and the methods used to give training opportunities with greater flexibility in terms of schedule. A crucial step in assisting teachers to establish their professional competencies along with integrating knowledge and abilities that will safeguard and promote student's emotional well-being and digital literacy is provided by the national curriculum and guidelines for teaching.

The continuous evolving demands placed upon teachers necessitate the acquisition of new proficiencies/skills and enhanced abilities. While the teachers require significant pedagogical training and ongoing professional development (OECD, 2019), several new measures and strategies have been formulated. They can be classified into two approaches – using appropriate curriculum and putting it into practice through attractive pedagogical approaches; and training and educating the teachers. Curriculum refers to the entirety of the organized experience of students in any institutional setting towards educational aims and objectives (NCF, 2023).

Teachers and educators need to have a thorough understanding of the curriculum framework to help the students have meaningful learning with the required skills and abilities. The foundational stage of children are critical years (0-8 years) as brain development takes place during these years. According to NEP 2020, "Early Childhood Care and Education (ECCE) consist of flexible, multi-faceted, multi-level, play-based, activity-based, and inquiry-based learning, comprising of alphabets, languages, numbers, counting, colours, shapes, indoor and outdoor play, puzzles and logical thinking, problem-solving, drawing, painting and other visual art, craft, drama and puppetry, music and movement. It also includes a focus on developing social capacities, sensitivity, good behaviour, courtesy, ethics, personal and public cleanliness, teamwork, and cooperation. The overall aim of ECCE will be to attain optimal outcomes in the domains of physical and motor development, cognitive development, socio-emotional-ethical development, cultural/artistic development, and the development of communication and early language, literacy, and numeracy." Pedagogical approaches exert a two-fold influence on the well-being and success of the students. Firstly, by how the learning content is delivered to the children.

According to Shiraj-Blatchford et al., (2002), an instructive play environment may be provided that involves the child and encourages their cognitive construction or co-construction. This setting is designed to facilitate the child's mental growth and encourage their cognitive development through interactive experiences within the context of play. It is a pre-requisite for teachers to first strategize the learning experiences of the highest quality with respect to the children's requirements and achievement, along with a diverse array of learning activities that facilitate their growth and development. Secondly, pedagogies help and encourage the children to develop distinct patterns of interest and talent.

The quality of teacher training and education is crucial, as even incorporating competencies like navigating diverse languages and cultures doesn't guarantee effectiveness. Improving planning and implementation is necessary to align training content with the actual needs of teachers.

Balancing Tradition and Technology: **Capacity Building with a Focus on Blended Mode of Learning**

Over the past twenty years, there has been a significant trend wherein the blended learning model has emerged as a robust alternative that extends beyond traditional pedagogical approaches. Especially in the aftermath of the COVID-19 pandemic, blended mode of learning has attracted a great deal of emphasis.

Blended learning can be defined as a learning strategy that combines the advantages of classroom or in-person learning and virtual learning. The pedagogy of a blended learning environment is "based on the assumption that there are inherent benefits in face-to-face interaction as well as the understanding that there are advantages to using online methods" (Clark and James, 2005).

It is crucial to note that the online element becomes a natural continuation of the learning that takes place in traditional classroom settings. It highlights that online activities are seamlessly built upon the foundation laid in physical classrooms. Blended learning transcends boundaries of location, time, and culture and has produced a number of improved opportunities for students and teachers (Vernadakis et al., 2020).

It aims to deliberately and effectively combine traditional and online learning in order to produce a new, distinct and unique method that has benefits of its own. However, there is a need to think about whether teachers/educators have the required skillsets or knowledge to use blended learning in their pedagogical practices.

Building capacity entails providing individuals, groups, and communities with more abilities and resources for bringing positive change. This step holds tremendous importance in the success of any programme/initiative. As per research by Hungwe and Dagada (2013), blended learning will not be successful if the teachers/educators involved fail to integrate "technological content knowledge" with "pedagogical knowledge". Teachers with experience in online and blended learning as a student are more likely to demonstrate more advanced uses of technology with their own students, have stronger valuations on the role of technology within learning, and have higher aspirations for leveraging technology to support transformed learning environments (Fullan, 2017). Additionally, most teachers find it challenging to effectively incorporate digital tools, information, and resources into their teaching practice.

Some requirements that include the fundamentals of building a teacher's competency and capacity are - having access to the appropriate tools, receiving guidance and assistance about how to utilize those tools, and working together with peers to continue the effort. More efforts must be put into prioritising teacher's professional development, which includes thorough training in improving their pedagogical practices along with the use of digital tools and technology.

NEP 2020 aims to provide inclusive and good-quality education to everyone, irrespective of their social and economic background. The policy has laid down a robust curriculum and pedagogical structure, with dedicated sections on the foundational education of children. Teachers play an instrumental role in putting the policy work into action. Without their role, the policy has no meaning. Therefore, significant measures need to be taken to equip teachers with the necessary skills and competencies, especially in digital technology. Every teacher must possess fundamental knowledge of how to utilize and take support from these tools to enhance the learning process of the children.

08

What is 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 as well as 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 UT's gear up to design and implement effective programs to raise learning outcomes, they must look at the evidence on 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.

TOTAL INDICATORS - 38

Framework

Educational Infrastructure
Percentage of schools with functional drinking water
Percentage of schools with hand wash facility
Percentage of schools with library facility
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 toilet
Percentage of schools with Electricity connection

Access to Education
Primary level schools per lakh population
Percentage of Teacher for Primary level education
Pupil Teacher Ratio (PTR) - Primary
Percentage of enrollment of Children With Special Needs (CWSN) in primary
Net Enrollment ratio (NER) - Primary
Percentage of all minority group's enrolment to total enrolment - Primary
Pre school education - Percentage
Dropout Rate - Primary
Adjusted (NER) - Primary level for girls
CWSN students get facilities from school
Ratio of Contractual teacher relative to Regular teacher

Framework

Basic Health
Percentage of fully immunized children in the age-group 0-5 years
Children under 5 years who are stunted (height-for-age)
Children under 5 years who are severely wasted
Children under 5 years who are underweight
IMR
U5MR

Learning Outcomes
NAS scores: class 3
Language
Mathematics
Environmental Studies
NAS scores: class 5
Language
Mathematics
Environmental Studies
Transition Rate - Primary
Gender Parity Index (GPI) - Primary
Percentage of states/UTs exceeding global proficiency level in numeracy
Language of instruction in school at the foundational stage is the same as the medium of instruction in the school

Governance
Expenditure on Education – As Ratio to Aggregate Expenditure
Percentage to total expenditure on primary education for Govt schools
Percentage of expenditure on teacher training (BE)
Percentage of total assistance to non govt primary schools
Percentage of expenditure – Mid day meal state share
Percentage to total expenditure on primary education under SSA revenue account
Central fund utilization under poshan scheme

Pillars	Rationale
 **Educational Infrastructure**	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.
 **Basic Health**	A child's health is rooted in everyday life; it directly impacts learning outcomes for the children and their 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 their 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.

Pillars	Rationale
Learning outcomes	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.
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 adapted 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.

Basic Health

09
Analysis

Category-wise Ranking – **Index on Foundational Learning**

Large States		
State	FLN Scores 2023	Category Rank 2023
West Bengal	59.49	1
Maharashtra	54.52	2
Tamil Nadu	52.83	3
Rajasthan	52.18	4
Karnataka	46.43	5
Gujarat	45.40	6
Madhya Pradesh	43.28	7
Uttar Pradesh	42.98	8
Bihar	41.66	9

Union Territories		
UT	FLN Scores 2023	Category Rank 2023
Puducherry	57.50	1
Delhi	53.00	2
Jammu and Kashmir	50.89	3
Chandigarh	49.75	4
Lakshadweep	49.72	5
Andaman & Nicobar Islands	47.90	6
Ladakh	40.69	7
Daman & Diu and Dadra & Nagar Haveli	35.14	8

Category-wise Ranking – **Index on Foundational Learning**

Small States		
State	FLN Scores 2023	Category Rank 2023
Punjab	62.31	1
Kerala	60.98	2
Goa	50.02	3
Haryana	48.30	4
Himachal Pradesh	47.91	5
Odisha	47.43	6
Uttarakhand	46.42	7
Jharkhand	45.85	8
Andhra Pradesh	44.03	9
Chhattisgarh	43.78	10
Telangana	34.43	11

North-Eastern States		
State	FLN scores 2023	Category rank 2023
Sikkim	58.07	1
Manipur	50.76	2
Assam	49.16	3
Mizoram	49.00	4
Nagaland	41.47	5
Tripura	36.76	6
Arunachal Pradesh	36.02	7
Meghalaya	31.36	8

Country Level **Analysis**

Overall, India's national average is 47.43. 20 out of 36 states/UTs have performed above the national average of the country in the FLN index.

Category-wise score

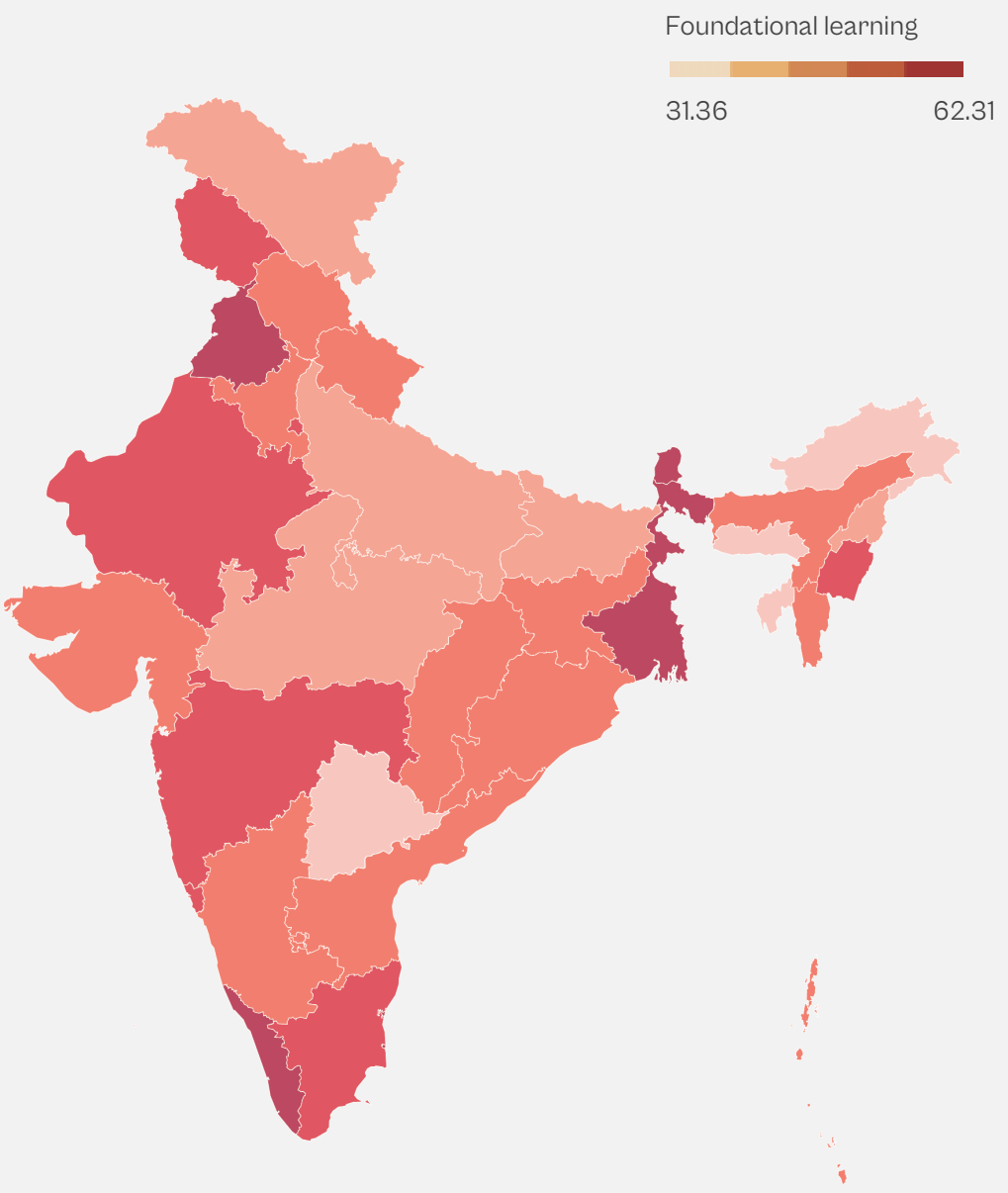
Large states category → Scores of the states lie between **41.66 to 59.49**

Small states category → Scores of the states lie between **34.43 to 62.31**

North-Eastern states category → Scores of the states lie between **58.07 to 31.36**

Union Territories category → Scores of the states lie between **57.50 to 35.14**

As per the analysis, efforts need to be increased and expanded in the following pillars –Governance (25.02)and Learning Outcomes (45.95) have scored the lowest in the FLN index.



Key Insights

- There appears to be a lack of consistency in states/UTs across different pillars. Educational Infrastructure (68), Basic Health (51.63), and Access to Education (46.54) have showcased considerable performance compared to the other pillars in the index. This indicates that most states/UTs have fared high with better educational infrastructure in schools. The scores of most states and UTs in governance and access to education pillars are below the national average of the overall FLN index scores.

- 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.

- Punjab features as a positive outlier in the index's pillar scores, thus demonstrating its robust performance in the domain of education due to the state's emphasis on improving learning outcomes, education infrastructure and focus on the quality of education for all. Extensive measures and efforts need to be taken in Meghalaya, Telangana, and Arunachal Pradesh, which have secured the lowest scores in the index.

- Throughout the country, states/UTs have witnessed a decline in their scores pertaining to the covid-19 pandemic which led to a huge learning loss.

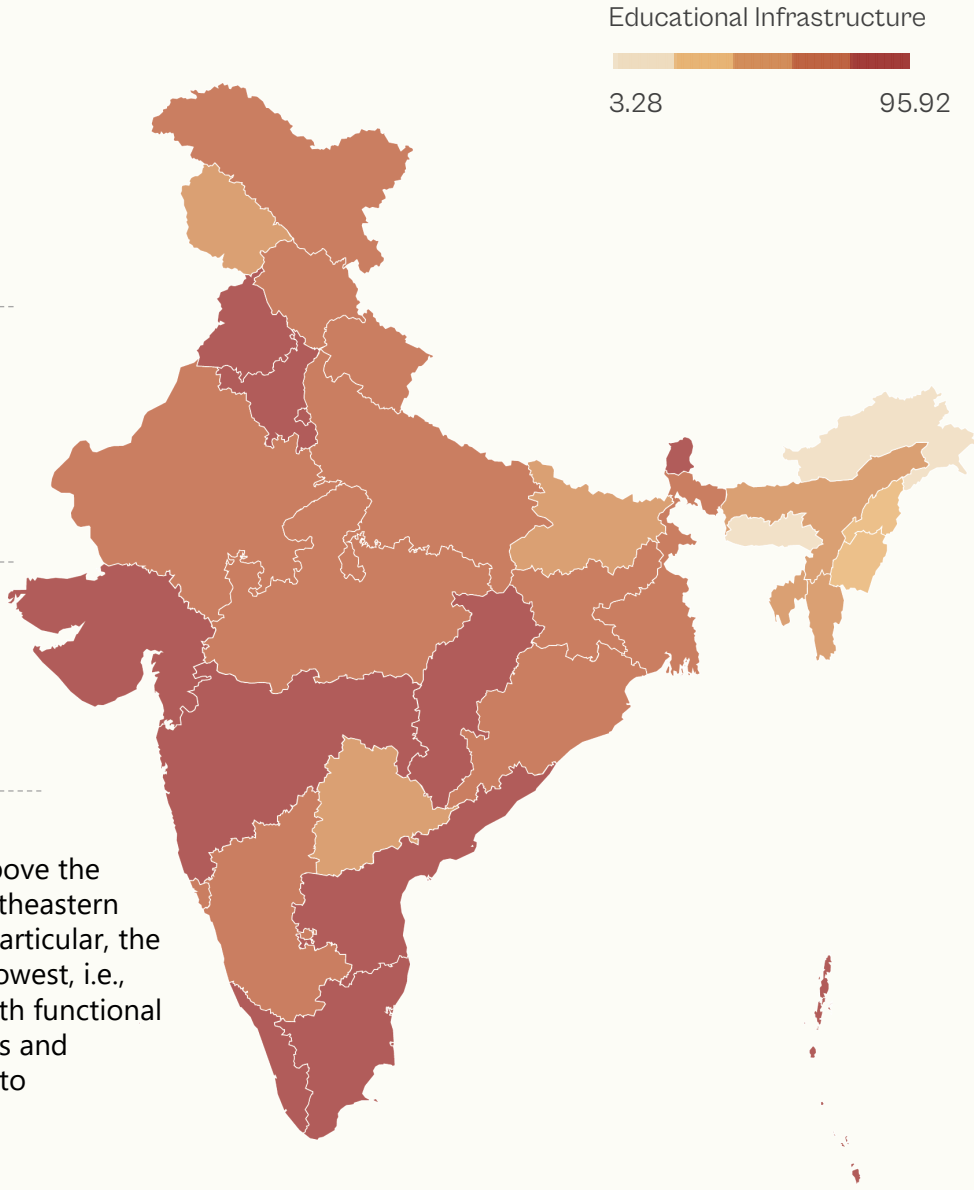
Educational Infrastructure

01 This pillar has most of the UDISE parameters for the year 2021-22. 20 states/UTs have scored above the national average i.e., 68 in the educational infrastructure pillar.

02 Overall, Lakshadweep scored the highest i.e., 95.92, followed by Delhi with a score of 94.14 and Daman Diu and Dadra & Nagar Haveli scored 90.75 under this pillar. It is observed that UTs have better educational infrastructure as compared to states.

03 In the large states category, Gujarat has achieved the highest score of 89.19 closely followed by Tamil Nadu with 84.82 scores. While among the small states category, Punjab showcased the highest score of 89.79.

04 In the north-eastern states category, only Sikkim has scored above the national average i.e., 77.91. On the contrary, the remaining northeastern states have scored low in all parameters relative to Sikkim. In particular, the performance of Meghalaya is concerning as it has scored the lowest, i.e., 3.28. 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 educational infrastructure in the region.

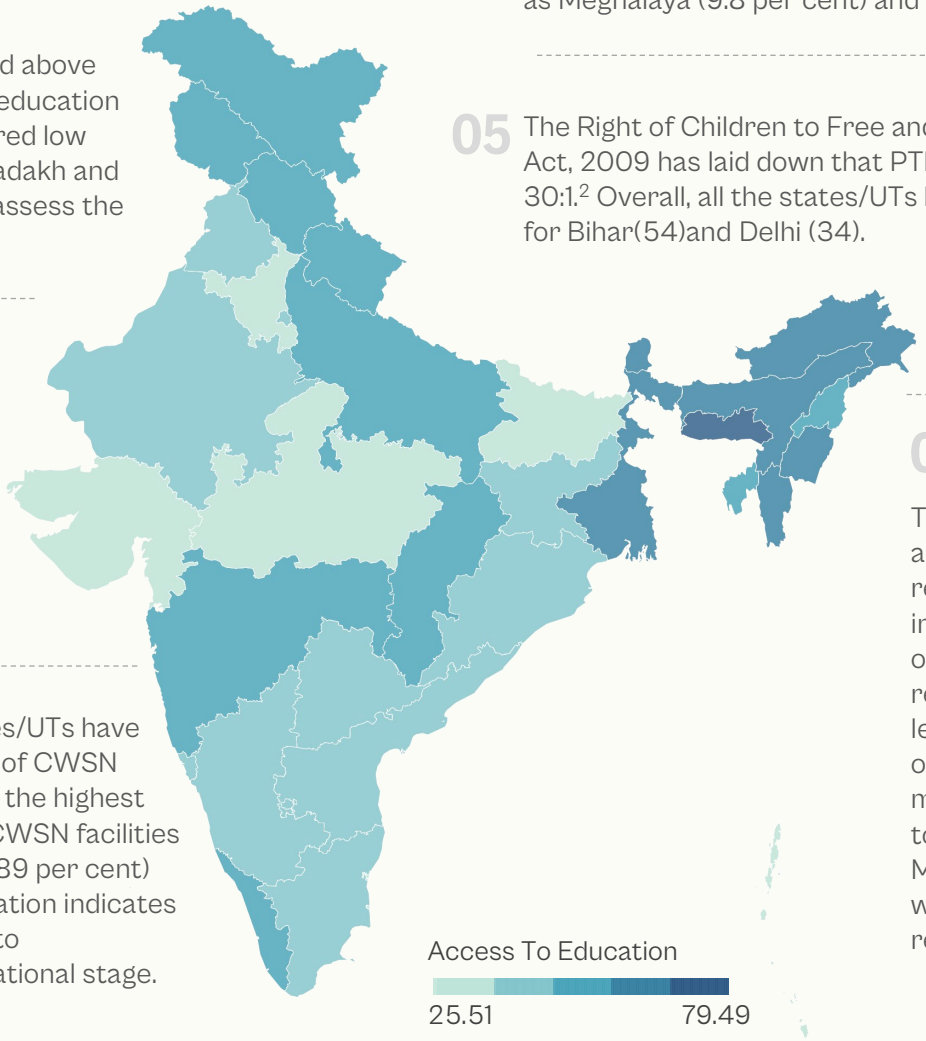


Access To **Education**

01 About 50 per cent of states/UTs have scored above the national average, i.e., 46.54 in access to education pillar. Most of the Union territories have scored low and below the national average except for Ladakh and Jammu and Kashmir, indicating the need to assess the indicator's performance in the region.

02 Among the large states category, West Bengal secured the highest score, i.e., 66.08, followed by Maharashtra, which has the second highest score in the same category, i.e., 47.61. Additionally, West Bengal is the only state where more than 50 per cent of the teachers are for primary education, which means that for every 30 students, there is one teacher.

03 Through all the categories, most of the states/UTs have demonstrated slow movement in enrolment of CWSN except for Odisha (2.18 per cent), which has the highest percentage. In terms of students receiving CWSN facilities from schools, Punjab (91 per cent) and Goa (89 per cent) showed the highest percentage. The observation indicates that states/UTs need to make more efforts to accommodate CWSN students in the foundational stage.



04 It has been observed that dropout rates have increased in northeastern states the most. Manipur has the highest dropout rate for primary grade in the country, i.e., 13.3 compared to 2020-21. The state is closely followed by other northeastern states such as Meghalaya (9.8 per cent) and Arunachal Pradesh (9.3 per cent).

05 The Right of Children to Free and Compulsory Education (RTE) Act, 2009 has laid down that PTR for primary schools should be 30:1.[2] Overall, all the states/UTs have satisfactory PTR except for Bihar(54)and Delhi (34).

06

The teacher's nature of appointment (contractual and regular) holds a significant importance in the learning process of students. More teachers must be regularised in schools to improve learning outcomes. As per observation, most states/UTs have more regular teachers as compared to contractual teachers, except in Mizoram and Arunachal Pradesh where tremendous efforts are required to regularise teachers.

[2] https://pib.gov.in/newsite/PrintRelease.aspx?relid=158326

Basic Health

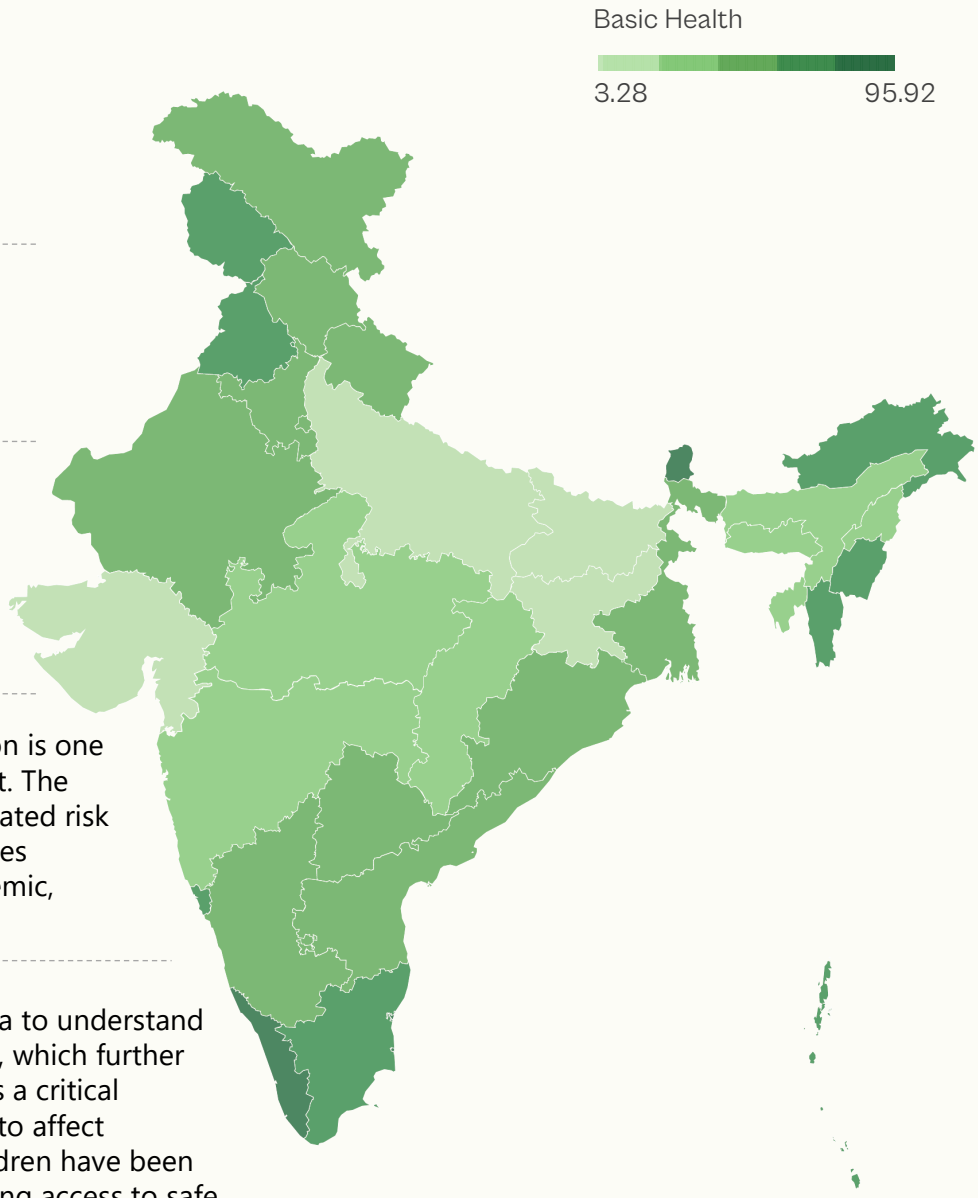
01 The pillar on basic health assesses health parameters of children under the age of 5 years that play a major role later in an individual's participation in education throughout their lives. Its national average is 51.63.

02 50 per cent of states/UTs have scored above the national average. Puducherry has scored the highest, i.e., 92.35 in the UT category. It is closely followed by Kerala(79.25) and Sikkim (79.09) in the small states and north-eastern states category.

03 All states have scored below the 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 states have the highest percentage of stunted children, infant mortality rate and U5MR across the country.

04 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.

05 The NFHS survey provides us with real-time evidence-based data to understand the challenges around malnutrition for children under five years, which further have a 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.



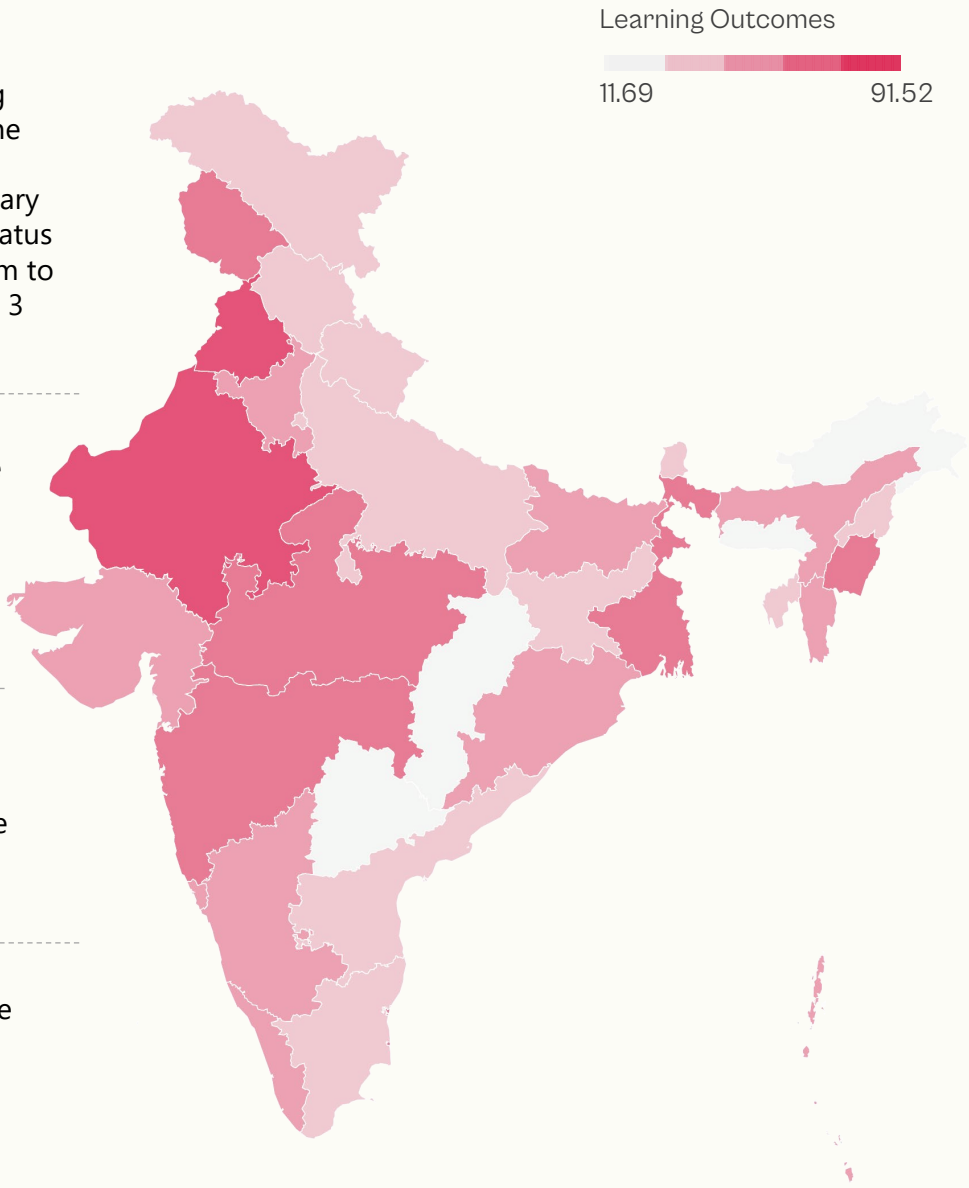
Learning Outcomes

01 Under this pillar, new indicators from the Foundational Learning Study (FLS) assessment have been introduced which measure the language and numeracy outcomes of the children belonging to Grade 3. FLS 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 with an aim to provide valid and reliable data about the performance of Grade 3 students on the learning outcomes being achieved[3].

02 16 out of 36 states/UTs have scored above the national average of learning outcomes i.e., 45.95. Scores of 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.

03 Across all the states/UTs, Punjab scored 91.52 which is the highest, followed by Rajasthan and Chandigarh with scores of 77.66 and 65.95 respectively. These three states/UTs are also the top performers in their respective categories i.e., small states, large states and Union Territories.

04 Under the category of north-eastern states, only two states have scored above the national average i.e., Manipur (60.12) and Assam (59.43).



[3] https://pib.gov.in/PressReleasePage.aspx?PRID=1809133

Learning Outcomes

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

06 A GPI between 0.97 and 1.03 indicates parity between the genders (UNESCO)[4]. Out of all the states/UTs, only Ladakh has a GPI of less than 0.97 i.e., 0.88. Apart from Ladakh, three other states have GPI less than 1 namely Kerala (0.99), Punjab (0.99), and Sikkim (0.94).

07 Bihar has the highest percentage of students who exceed global proficiency in numeracy i.e.,18 per cent, followed by West Bengal with 16 per cent students. In 20 out of 36 states/UTs, the percentage of students exceeding global proficiency is less than 10 per cent, with Chandigarh, Nagaland and Sikkim with the lowest percentage. Rigorous efforts need to be taken in these respective states/UTs.

08 In most states/UTs, the language of instruction in school at the foundational stage is the same as the medium of instruction in the school is more than 50 per cent. Except in one state (Jharkhand) and three UTs (Lakshadweep, Jammu and Kashmir, and Ladakh), it is less than 50 per cent.

[4] https://learningportal.iiep.unesco.org/en/glossary/gender-parity-index-gpi

Governance

- This pillar captures budget allocated, transparency and effectiveness of the implementation of targeted schemes across states. As compared to other pillars, governance has the lowest national average of 25.02. Only 13 out of 36 states/UTs have above national average under this pillar.

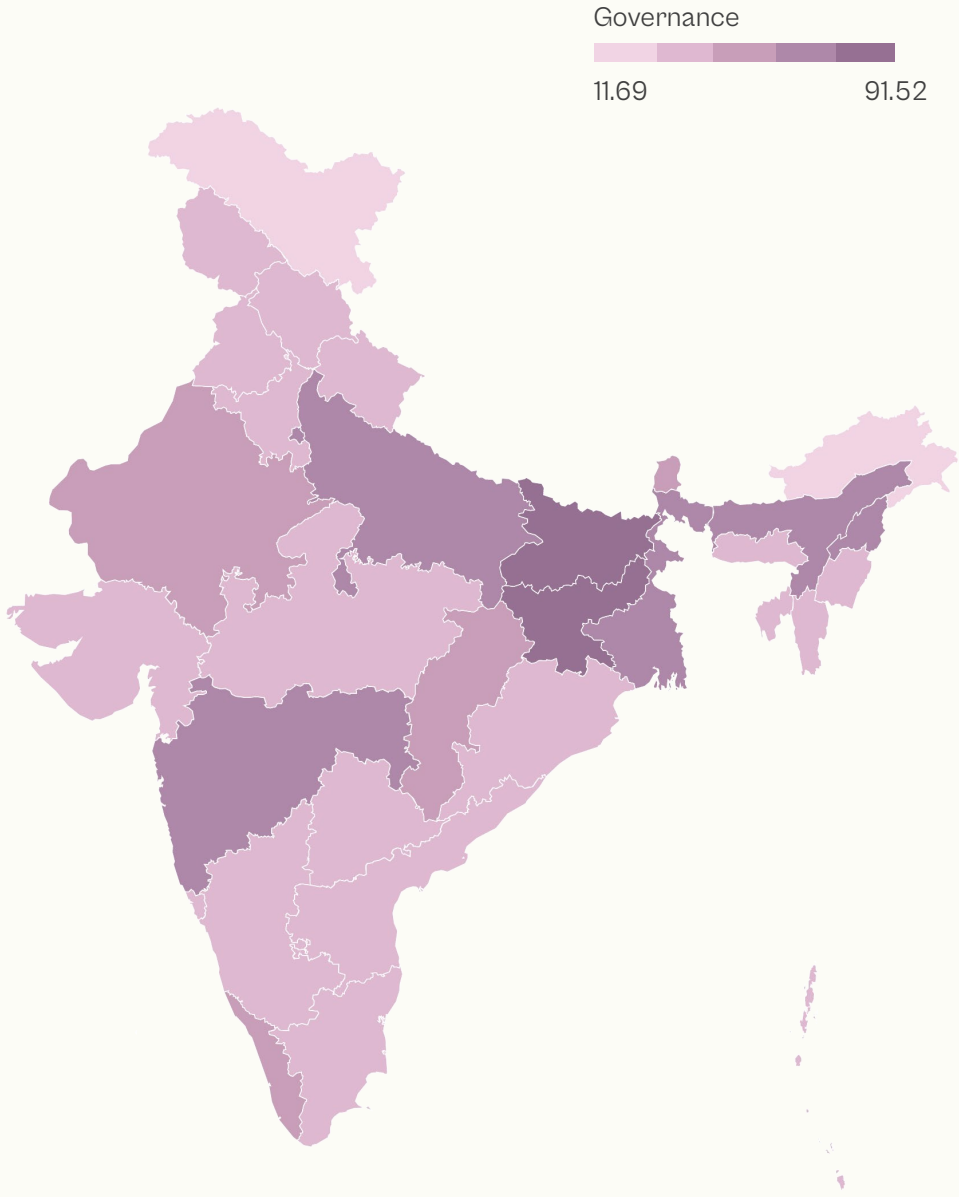
- Bihar has attained the highest score i.e., 61.52, which falls under the category of large state. Closely followed by Jharkhand with a score of 57.14, belonging to the small state category and Delhi with 46.25 score. While among the northeastern states, Assam leads with a score of 41.29.

- Central fund utilization under the POSHAN scheme has been observed to be high in the following states with 100 per cent utilization – Odisha, Nagaland, Meghalaya, and Mizoram. Among the Union territories category, Jammu and Kashmir utilized the highest expenditure on POSHAN scheme with 99.31 per cent.

- It is noted that West Bengal and Bihar were the states that have spent the highest expenditure on the mid-day meal scheme, with 7.56 and 6.59 per cent, respectively.

- Delhi is the only state with the highest expenditure on education – as ratio to Aggregate Expenditure i.e., 21.5 which has also been reflected in its performance as it scored 46.25, which is the highest in the UT category. It is closely followed by Bihar with 19 per cent and, Chhattisgarh and Uttarakhand with 17.5 per cent.

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

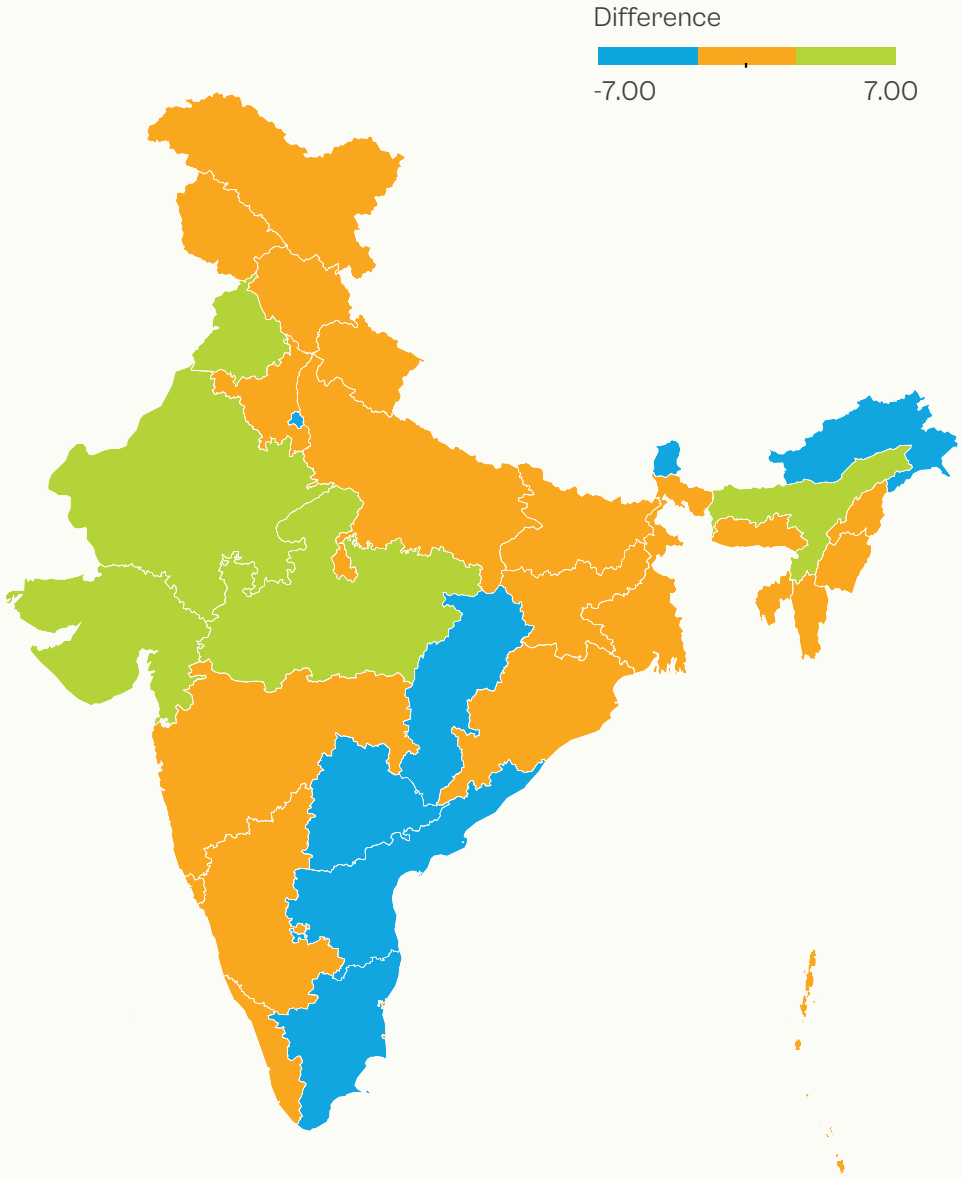


Evaluating States/UTS Foundational Learning:
A Comparative Analysis with and without Learning Level Assessment

01 The map represents the difference in the scores of states/UTs with and without the learning levels of the children. The observation shows contrasting insights across all the states. For instance, the states located in the western part of the country have better learning levels among children as compared to the other parts.

02 Particular emphasis should be directed towards states highlighted in yellow, as data suggests a level of indifference, indicating a need for greater improvements and comprehensive development of learning levels. On the other hand, states marked in blue require significant and immediate attention.

03 The rationale for this analysis comes from its ability to highlight the kind of data that is available to the public and how the existing data can be improved over time. Subsequently, this analysis can inform and guide the introduction of targeted intervention.



District-level **Analysis**

A distinct section dedicated to district-level analysis has been introduced in this iteration, aimed at assessing the performance of various districts across the nation. The indicators used in this analysis have been collected from the National Achievement Survey (NAS) of 2021, providing valuable insights into the state of teacher's capacity and training of teachers. These indicators evaluate - the percentage of teachers having adequate workspace, the percentage of teacher participation in professional development programs, and the percentage of teachers having instructional materials and supplies.

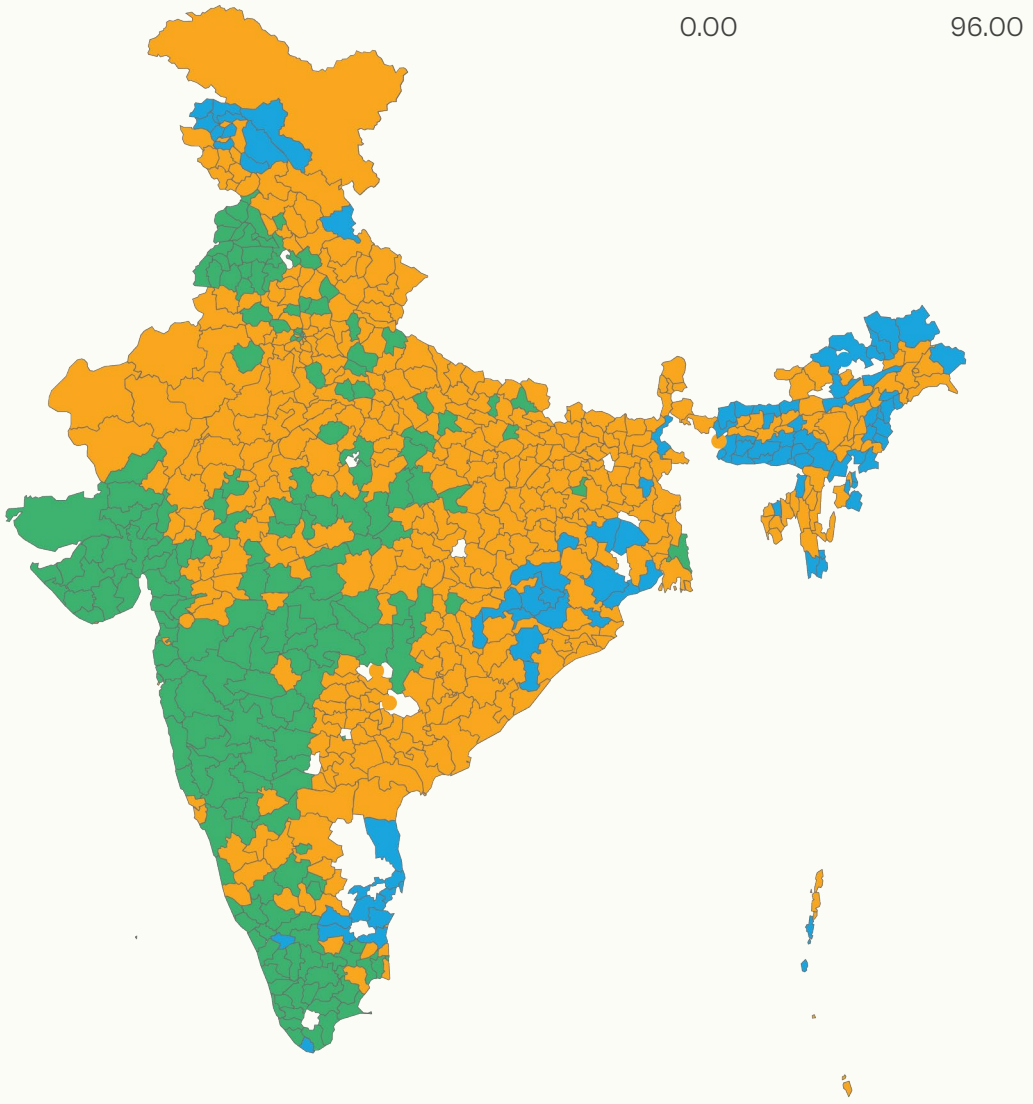
The district-level data reveals a widespread disparity pertaining to their geographical regions and the availability of resources. For instance, the northeastern region consistently exhibits subpar performance compared to other parts of the country when considering the assessed parameters.

Teachers having **Adequate Workspace**

01 Adequate workspace plays a significant role in enhancing the learning experience for both the students and the teachers. A conducive learning environment has deep impact on the overall well-being of both these stakeholders. Hence, every school must be equipped with suitable facilities and comfortable spaces, thereby ensuring that the learning process remains meaningful and effective.

02 There is wide-ranging variation in the availability of adequate workspace for teachers across different regions of the country. The districts in the western and southern parts of India, such as Gujarat, Maharashtra, and Madhya Pradesh, tend to offer more favourable learning environments, while districts in the northeastern states like Arunachal Pradesh, Meghalaya, Manipur, Nagaland, as well as in the eastern states like Odisha and West Bengal, often fall short in this regard.

03 Under this parameter, Moga and Patiala districts in Punjab, with 96 per cent and 94 per cent respectively, along with Rajkot district in Gujarat, at 90 per cent, stand out as the top performers.

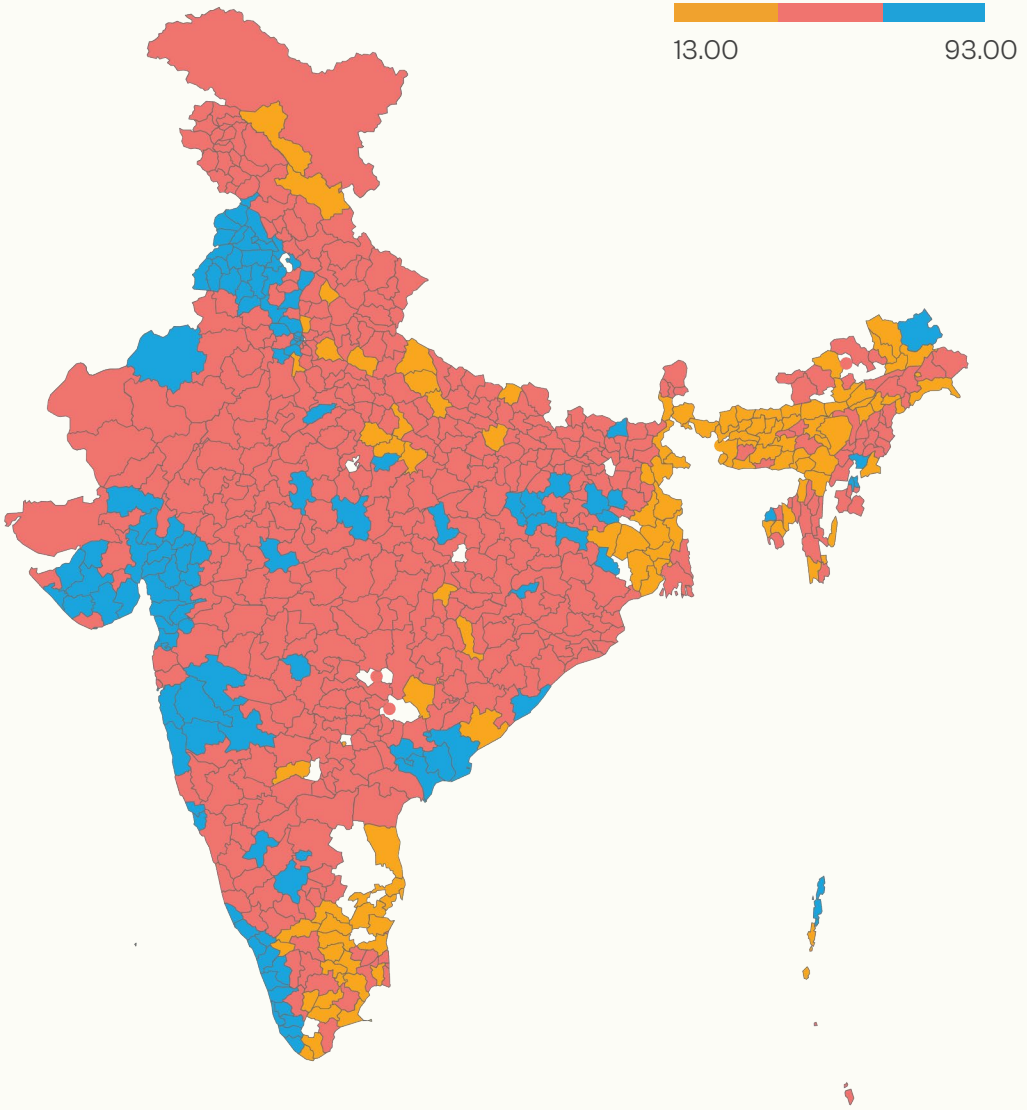


Teacher participation in **Professional Development Program**

01 Professional development and training programs for teachers are of utmost importance within the broader education system as they are the key facilitators driving the learning process. Without the guidance and support of teachers, education is incomplete. In order for the teachers to incorporate appropriate curriculums and pedagogical approaches, it is essential for them to be equipped with the needed skills and knowledge.

02 Among the top-performing districts under this indicator are those located in Punjab, specifically Mansa, Ferozepur, and Fatehgarh Sahib. While the districts that rank lowest in terms of conducting these initiatives are Bankura, Uttar Dinajpur, and Malda.

03 Majority of districts are currently implementing such programs at an average level. However, it is crucial to scale up the efforts and initiatives in districts that are lagging behind in order to bridge the existing gaps.

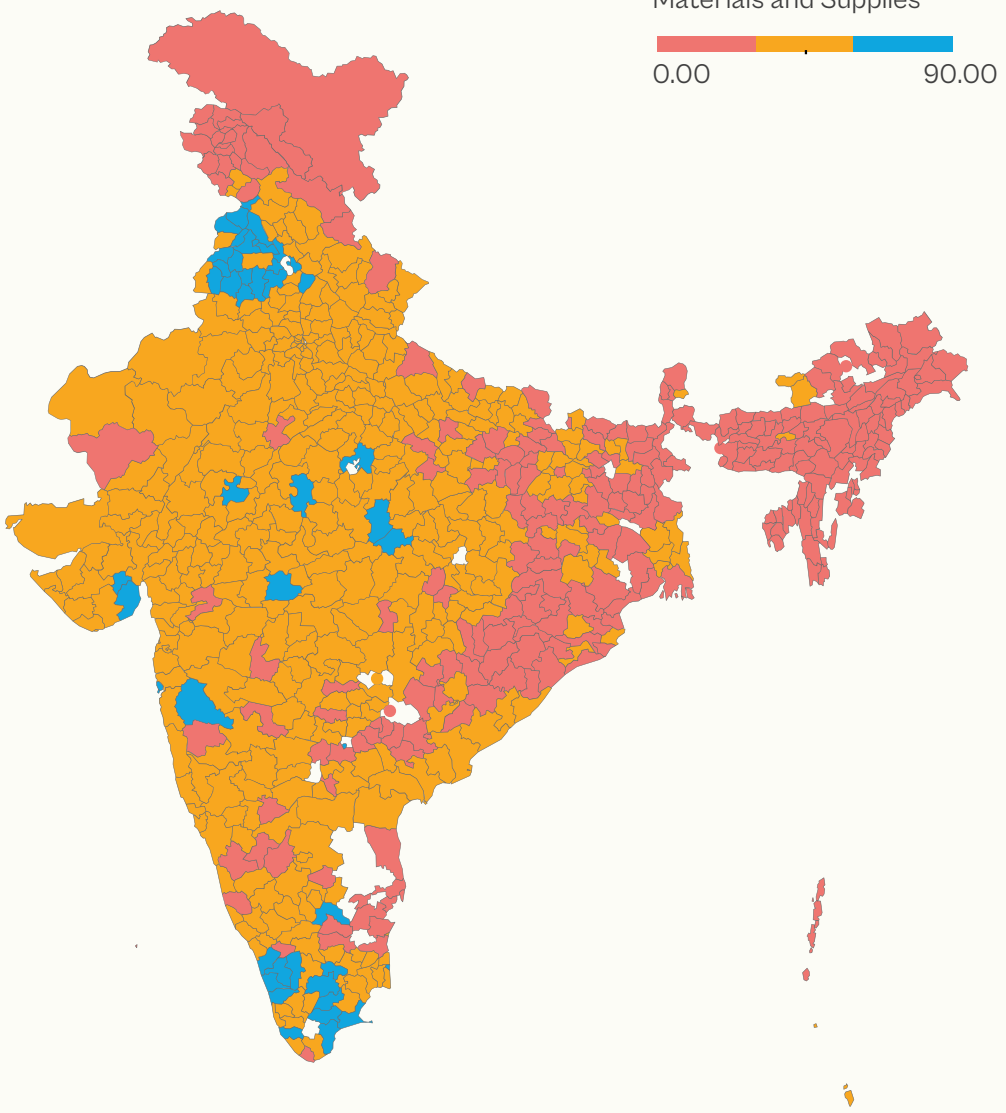


Teachers having **Adequate Instructional Materials and Supplies**

01 Educational and teaching resources are integral in shaping the children because a significant portion of their learning entirely depends on the quality of materials that are provided by the teachers.

02 The map illustrates a stark difference in terms of performance when considering this particular parameter. The eastern region, along with Jammu and Kashmir, as well as certain areas in Himachal Pradesh, exhibit notably low performance and a deficiency in the availability of adequate resources for teachers.

03 Consistently, districts in Punjab emerge as the top performers in this aspect, displaying exemplary performance. On the contrary, districts in the northeastern states lag behind, indicating a notable inadequacy under this indicator.



10 Way Forward

Proficiency in early language, literacy, and mathematics serves as the fundamental building blocks for subsequent educational accomplishment of children. These skills have a significant impact on how well children will perform in their later years of schooling, implying that a strong foundation is likely to lead them to better achievement. The current state of foundational literacy and numeracy is at a stage where a complete recovery of the learning loss can be achieved through well-designed and constructive measures. Firstly, developing well-defined programs that are based on evidence, followed by emphasizing their implementation with the required resources and clear lines of communication. The implementation process must be monitored and assessed on a regular basis to yield the desired outcomes. Secondly, the lack of digital competencies are a major obstacle for teachers in their teaching process, especially post-pandemic. Therefore, exceptional guidance and support must be provided to the teachers in equipping them with the required skills and training. Teachers emerge as primary figures in the education process, bearing the weight of immense significance upon their shoulders.

A crucial aspect involves conducting a thorough assessment of the current state of technology adoption within Indian schools before introducing AI-related curriculum. The assessment should include a detailed examination of the existing teaching methods and the challenges hindering the smooth integration of technology. These challenges could involve the need for better technological infrastructure or adjusting the curriculum itself. In this process, India's cultural context should be taken into account, which includes linguistic diversity, family structures, social norms, and financial constraints.

Understanding these contextual factors is crucial even if the AI curriculum has been successful in other parts of the world. In addition, Foundational Learning Study (FLS) assessment must be strengthened and continued as it has the potential to provide the needed insights on issues related to acquiring foundational skills and how new interventions can help children improve their learning. This is so because the National Achievement Survey (NAS) does not capture the actual outcomes of foundational learning as compared to FLS. FLS 2022 is a remarkable survey 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 is essential to ensure that data collected from the field is 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. To appropriate data related to evaluation, monitoring the data at a disaggregated level would need to be embedded within the system with well-defined outcome-based indicators on the pedagogical framework and education across India. A database capturing a holistic story of learning outcomes within a country at the state and district level is necessary. This would further lead to the deepening of FLN ranking because it depends on the availability of accurate data.

The nation, with its collective spirit, has enormous potential to usher in a wave of progression in improving learning outcomes. Paving the way for a transformative shift in foundational education holds the promise of a brighter dawn.

11

Scorecards

UNION TERRITORY

Andaman and Nicobar Islands

47.90 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 78.95

Percentage of schools with Electricity connection	90.44
Percentage of schools with functional computer facility	59.50
Percentage of Schools with functional CWSN friendly toilet	20.70
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	100.00
Percentage of schools with hand wash facility	100.00
Percentage of schools with internet facility available	40.28
Percentage of schools with library facility	99.34
Percentage of schools with medical checkups	61.79

ACCESS TO EDUCATION 35.85

Primary level schools per lakh population	18.01
Adjusted(NER)-Primary level for girls	00.0
CWSN students get facilities from school	86.81
Dropout Rate-Primary	3.01
NER Enrollment ratio (NER)-Primary	3.98
Percentage of all minority group's enrolment to total enrolment	28.04
Percentage of enrollment of Children With Special Needs (CWSN)	21.54
Percentage of Teacher for Primary level education	28.45
Preschool education. Percentage	100.0
Pupil Teacher Ratio (PTR)-Primary	89.36
Ratio of contractual teachers relative to regular teachers	83.23

LEARNING OUTCOMES 44.35

Gender Parity Index (GPI)	63.16
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	80.22
NAS Class 3-EVS	43.86
NAS Class 3-Language	50.77
NAS Class 3-Mathematics	26.87
NAS Class 5-EVS	46.00
NAS Class 5-Language	48.15
NAS Class 5-Mathematics	29.63
Percentage of states/UTs exceeding global proficiency level in numeracy	23.53
Transition Rate-Primary	95.50

BASIC HEALTH 66.62

Children under 5 years who are severely wasted	70.93
Children under 5 years who are stunted (height-for-age)	90.57
Children under 5 years who are underweight	61.13
IMR	59.13
Percentage of fully immunized children in the age-group 0.5 year	53.78
USMR	59.03

GOVERNANCE 13.71

Central fund utilization under Poshan scheme	0.95
Expenditure on Education-As Ratio to Aggregate Expenditure	0.00
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	94.17
Percentage to total expenditure on primary education for Government schools	90.81
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Sikkim, Ladakh, Lakshadweep, Dadra and Nagar Haveli & Daman and Diu, Chandigarh, Puducherry, Goa, Mizoram, Arunachal Pradesh, Nagaland

STATE

Andhra Pradesh

44.03 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 79.19

Percentage of schools with Electricity connection	97.34
Percentage of schools with functional computer facility	37.75
Percentage of Schools with functional CWSN friendly toilet	17.42
Percentage of schools with functional drinking water	98.33
Percentage of schools with functional toilets	92.52
Percentage of schools with hand wash facility	97.42
Percentage of schools with internet facility available	52.33
Percentage of schools with library facility	96.85
Percentage of schools with medical checkups	86.18

ACCESS TO EDUCATION 44.67

Primary level schools per lakh population	33.10
Adjusted(NER)-Primary level for girls	93.98
CWSN students get facilities from school	82.42
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	59.70
Percentage of all minority group's enrolment to total enrolment	5.88
Percentage of enrollment of Children With Special Needs (CWSN)	42.56
Percentage of Teacher for Primary level education	54.95
Preschool education. Percentage	21.96
Pupil Teacher Ratio (PTR)-Primary	61.70
Ratio of contractual teachers relative to regular teachers	95.21

LEARNING OUTCOMES 33.21

Gender Parity Index (GPI)	26.32
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	78.02
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
Percentage of states/UTs exceeding global proficiency level in numeracy	47.06
Transition Rate-Primary	95.50

BASIC HEALTH 46.07

Children under 5 years who are severely wasted	56.98
Children under 5 years who are stunted (height-for-age)	57.74
Children under 5 years who are underweight	40.28
IMR	39.88
Percentage of fully immunized children in the age-group 0.5 year	40.81
USMR	41.14

GOVERNANCE 17.01

Central fund utilization under Poshan scheme	40.17
Expenditure on Education-As Ratio to Aggregate Expenditure	0.00
Percentage of expenditure-Mid day meal state share	43.12
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	2.98
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

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

STATE

Arunachal Pradesh

36.02 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 21.49

Percentage of schools with Electricity connection	38.65
Percentage of schools with functional computer facility	19.00
Percentage of Schools with functional CWSN friendly toilet	3.59
Percentage of schools with functional drinking water	40.56
Percentage of schools with functional toilets	0.00
Percentage of schools with hand wash facility	11.76
Percentage of schools with internet facility available	15.31
Percentage of schools with library facility	27.82
Percentage of schools with medical checkups	25.55

ACCESS TO EDUCATION 59.67

Primary level schools per lakh population	46.95
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	73.63
Dropout Rate-Primary	69.92
NER Enrollment ratio (NER)-Primary	98.26
Percentage of all minority group's enrolment to total enrolment	38.97
Percentage of enrollment of Children With Special Needs (CWSN)	30.77
Percentage of Teacher for Primary level education	35.56
Preschool education. Percentage	12.41
Pupil Teacher Ratio (PTR)-Primary	89.36
Ratio of contractual teachers relative to regular teachers	31.14

LEARNING OUTCOMES 22.52

Gender Parity Index (GPI)	52.63
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	72.53
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
Percentage of states/UTs exceeding global proficiency level in numeracy	29.41
Transition Rate-Primary	100.00

BASIC HEALTH 65.33

Children under 5 years who are severely wasted	51.16
Children under 5 years who are stunted (height-for-age)	69.81
Children under 5 years who are underweight	90.46
IMR	74.40
Percentage of fully immunized children in the age-group 0.5 year	18.92
USMR	68.56

GOVERNANCE 11.08

Central fund utilization under Poshan scheme	2.43
Expenditure on Education-As Ratio to Aggregate Expenditure	50.23
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	0.00
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Mizoram, Goa, Nagaland, Puducherry, Chandigarh, Dadra and Nagar Haveli & Daman and Diu, Sikkim, Manipur, Andaman and Nicobar Islands, Ladakh

STATE

Assam

49.16 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 53.58

Percentage of schools with Electricity connection	66.93
Percentage of schools with functional computer facility	0.00
Percentage of Schools with functional CWSN friendly toilet	15.47
Percentage of schools with functional drinking water	83.89
Percentage of schools with functional toilets	48.43
Percentage of schools with hand wash facility	82.61
Percentage of schools with internet facility available	4.13
Percentage of schools with library facility	83.46
Percentage of schools with medical checkups	51.80

ACCESS TO EDUCATION 59.04

Primary level schools per lakh population	41.46
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	75.82
Dropout Rate-Primary	45.11
NER Enrollment ratio (NER)-Primary	100.00
Percentage of all minority group's enrolment to total enrolment	45.15
Percentage of enrollment of Children With Special Needs (CWSN)	38.46
Percentage of Teacher for Primary level education	61.60
Preschool education. Percentage	8.83
Pupil Teacher Ratio (PTR)-Primary	70.21
Ratio of contractual teachers relative to regular teachers	85.03

LEARNING OUTCOMES 59.43

Gender Parity Index (GPI)	63.16
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	92.31
NAS Class 3-EVS	63.16
NAS Class 3-Language	55.38
NAS Class 3-Mathematics	62.69
NAS Class 5-EVS	62.00
NAS Class 5-Language	50.00
NAS Class 5-Mathematics	53.70
Percentage of states/UTs exceeding global proficiency level in numeracy	41.18
Transition Rate-Primary	88.50

BASIC HEALTH 32.49

Children under 5 years who are severely wasted	20.93
Children under 5 years who are stunted (height-for-age)	42.26
Children under 5 years who are underweight	28.98
IMR	36.71
Percentage of fully immunized children in the age-group 0.5 year	22.97
USMR	34.62

GOVERNANCE 41.29

Central fund utilization under Poshan scheme	48.67
Expenditure on Education-As Ratio to Aggregate Expenditure	75.35
Percentage of expenditure-Mid day meal state share	14.95
Percentage of expenditure on teacher training (BE)	1.79
Percentage to total expenditure on primary education for Government schools	77.64
Percentage to total expenditure on primary education under SSA revenue account	48.19

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Odisha, Telangana, Jharkhand, Andhra Pradesh, Chhattisgarh, Kerala, Haryana, Punjab, Karnataka, Delhi

STATE

Bihar

41.66 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 54.37

Percentage of schools with Electricity connection	83.53
Percentage of schools with functional computer facility	2.39
Percentage of Schools with functional CWSN friendly toilet	11.89
Percentage of schools with functional drinking water	98.70
Percentage of schools with functional toilets	97.24
Percentage of schools with hand wash facility	78.10
Percentage of schools with internet facility available	3.47
Percentage of schools with library facility	51.97
Percentage of schools with medical checkups	0.00

ACCESS TO EDUCATION 33.26

Primary level schools per lakh population	9.16
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	74.73
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	82.59
Percentage of all minority group's enrolment to total enrolment	13.20
Percentage of enrollment of Children With Special Needs (CWSN)	28.72
Percentage of Teacher for Primary level education	43.03
Preschool education. Percentage	25.78
Pupil Teacher Ratio (PTR)-Primary	0.00
Ratio of contractual teachers relative to regular teachers	97.01

LEARNING OUTCOMES 46.57

Gender Parity Index (GPI)	47.37
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	78.02
NAS Class 3-EVS	42.11
NAS Class 3-Language	41.54
NAS Class 3-Mathematics	47.76
NAS Class 5-EVS	40.00
NAS Class 5-Language	37.04
NAS Class 5-Mathematics	38.89
Percentage of states/UTs exceeding global proficiency level in numeracy	100.00
Transition Rate-Primary	0.00

BASIC HEALTH 12.58

Children under 5 years who are severely wasted	24.42
Children under 5 years who are stunted (height-for-age)	13.58
Children under 5 years who are underweight	92.00
IMR	7.14
Percentage of fully immunized children in the age-group 0.5 year	35.41
USMR	5.69

GOVERNANCE 61.52

Central fund utilization under Poshan scheme	70.18
Expenditure on Education-As Ratio to Aggregate Expenditure	88.37
Percentage of expenditure-Mid day meal state share	65.61
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	46.40
Percentage to total expenditure on primary education under SSA revenue account	61.58

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Maharashtra, Madhya Pradesh, West Bengal, Rajasthan, Gujarat, Tamil Nadu, Uttar Pradesh, Karnataka, Andhra Pradesh, Jharkhand

UNION TERRITORY

Chandigarh

49.75 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 89.75

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	99.52
Percentage of Schools with functional CWSN friendly toilet	72.75
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	100.00
Percentage of schools with hand wash facility	100.00
Percentage of schools with internet facility available	98.59
Percentage of schools with library facility	97.77
Percentage of schools with medical checkups	15.80

ACCESS TO EDUCATION 25.51

Primary level schools per lakh population	0.00
Adjusted(NER)-Primary level for girls	52.51
CWSN students get facilities from school	92.31
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	35.57
Percentage of all minority group's enrolment to total enrolment	12.16
Percentage of enrollment of Children With Special Needs (CWSN)	37.44
Percentage of Teacher for Primary level education	0.00
Preschool education. Percentage	13.37
Pupil Teacher Ratio (PTR)-Primary	55.32
Ratio of contractual teachers relative to regular teachers	80.24

LEARNING OUTCOMES 65.95

Gender Parity Index (GPI)	100.00
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	80.22
NAS Class 3-EVS	63.16
NAS Class 3-Language	69.23
NAS Class 3-Mathematics	58.21
NAS Class 5-EVS	66.00
NAS Class 5-Language	75.93
NAS Class 5-Mathematics	61.11
Percentage of states/UTs exceeding global proficiency level in numeracy	0.00
Transition Rate-Primary	100.00

BASIC HEALTH 66.72

Children under 5 years who are severely wasted	90.00
Children under 5 years who are stunted (height-for-age)	80.00
Children under 5 years who are underweight	72.08
IMR	48.29
Percentage of fully immunized children in the age-group 0.5 year	62.16
USMR	47.83

GOVERNANCE 0.81

Central fund utilization under Poshan scheme	1.18
Expenditure on Education-As Ratio to Aggregate Expenditure	0.00
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	4.48
Percentage to total expenditure on primary education for Government schools	0.00
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Puducherry, Goa, Mizoram, Dadra and Nagar Haveli & Daman and Diu, Sikkim, Andaman and Nicobar Islands, Arunachal Pradesh, Ladakh, Lakshadweep, Nagaland

STATE

Chhattisgarh

43.78 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 82.07

Percentage of schools with Electricity connection	88.58
Percentage of schools with functional computer facility	79.45
Percentage of Schools with functional CWSN friendly toilet	66.19
Percentage of schools with functional drinking water	96.85
Percentage of schools with functional toilets	94.09
Percentage of schools with hand wash facility	97.10
Percentage of schools with internet facility available	31.27
Percentage of schools with library facility	97.64
Percentage of schools with medical checkups	59.81

ACCESS TO EDUCATION 47.76

Primary level schools per lakh population	36.46
Adjusted(NER)-Primary level for girls	74.25
CWSN students get facilities from school	84.62
Dropout Rate-Primary	6.02
NER Enrollment ratio (NER)-Primary	64.93
Percentage of all minority group's enrolment to total enrolment	0.00
Percentage of enrollment of Children With Special Needs (CWSN)	68.72
Percentage of Teacher for Primary level education	62.66
Preschool education. Percentage	9.31
Pupil Teacher Ratio (PTR)-Primary	70.21
Ratio of contractual teachers relative to regular teachers	94.61

LEARNING OUTCOMES 22.37

Gender Parity Index (GPI)	36.84
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	82.42
NAS Class 3-EVS	21.05
NAS Class 3-Language	16.92
NAS Class 3-Mathematics	16.42
NAS Class 5-EVS	18.00
NAS Class 5-Language	18.52
NAS Class 5-Mathematics	7.41
Percentage of states/UTs exceeding global proficiency level in numeracy	23.53
Transition Rate-Primary	80.50

BASIC HEALTH 32.17

Children under 5 years who are severely wasted	39.53
Children under 5 years who are stunted (height-for-age)	44.91
Children under 5 years who are underweight	34.28
IMR	12.10
Percentage of fully immunized children in the age-group 0.5 year	58.92
USMR	15.72

GOVERNANCE 34.52

Central fund utilization under Poshan scheme	16.71
Expenditure on Education-As Ratio to Aggregate Expenditure	81.40
Percentage of expenditure-Mid day meal state share	31.61
Percentage of expenditure on teacher training (BE)	4.04
Percentage to total expenditure on primary education for Government schools	81.53
Percentage to total expenditure on primary education under SSA revenue account	24.06

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Kerala, Telangana, Haryana, Punjab, Assam, Delhi, Odisha, Jammu and Kashmir, Jharkhand, Andhra Pradesh

UNION TERRITORY

Dadra and Nagar Haveli & Daman and Diu

35.14 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 90.75

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	86.74
Percentage of Schools with functional CWSN friendly toilet	84.22
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	100.00
Percentage of schools with hand wash facility	100.00
Percentage of schools with internet facility available	53.75
Percentage of schools with library facility	98.29
Percentage of schools with medical checkups	73.29

ACCESS TO EDUCATION 28.55

Primary level schools per lakh population	7.92
Adjusted(NER)-Primary level for girls	55.18
CWSN students get facilities from school	84.62
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	49.75
Percentage of all minority group's enrolment to total enrolment	3.61
Percentage of enrollment of Children With Special Needs (CWSN)	28.72
Percentage of Teacher for Primary level education	21.04
Preschool education. Percentage	7.16
Pupil Teacher Ratio (PTR)-Primary	51.06
Ratio of contractual teachers relative to regular teachers	65.87

LEARNING OUTCOMES 11.69

Gender Parity Index (GPI)	68.42
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	89.01
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
Percentage of states/UTs exceeding global proficiency level in numeracy	35.29
Transition Rate-Primary	86.00

BASIC HEALTH 43.05

Children under 5 years who are severely wasted	76.74
Children under 5 years who are stunted (height-for-age)	26.79
Children under 5 years who are underweight	8.13
IMR	36.90
Percentage of fully immunized children in the age-group 0.5 year	100.00
USMR	38.13

GOVERNANCE 1.68

Central fund utilization under Poshan scheme	1.76
Expenditure on Education-As Ratio to Aggregate Expenditure	0.00
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	98.54
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Sikkim, Andaman and Nicobar Islands, Chandigarh, Puducherry, Ladakh, Goa, Lakshadweep, Mizoram, Arunachal Pradesh, Nagaland

UNION TERRITORY

Delhi

53.00 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 94.14

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	100.00
Percentage of Schools with functional CWSN friendly toilet	100.00
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	100.00
Percentage of schools with hand wash facility	100.00
Percentage of schools with internet facility available	100.00
Percentage of schools with library facility	100.00
Percentage of schools with medical checkups	31.71

ACCESS TO EDUCATION 37.44

Primary level schools per lakh population	4.89
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	78.02
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	100.00
Percentage of all minority group's enrolment to total enrolment	16.08
Percentage of enrollment of Children With Special Needs (CWSN)	11.79
Percentage of Teacher for Primary level education	28.92
Preschool education. Percentage	36.04
Pupil Teacher Ratio (PTR)-Primary	42.55
Ratio of contractual teachers relative to regular teachers	92.22

LEARNING OUTCOMES 30.03

Gender Parity Index (GPI)	68.42
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	75.82
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
Percentage of states/UTs exceeding global proficiency level in numeracy	35.29
Transition Rate-Primary	82.50

BASIC HEALTH 57.12

Children under 5 years who are severely wasted	69.77
Children under 5 years who are stunted (height-for-age)	58.87
Children under 5 years who are underweight	67.84
IMR	51.39
Percentage of fully immunized children in the age-group 0.5 year	48.92
USMR	48.83

GOVERNANCE 46.25

Central fund utilization under Poshan scheme	5.83
Expenditure on Education-As Ratio to Aggregate Expenditure	100.00
Percentage of expenditure-Mid day meal state share	33.60
Percentage of expenditure on teacher training (BE)	39.01
Percentage to total expenditure on primary education for Government schools	11.90
Percentage to total expenditure on primary education under SSA revenue account	48.71

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Jammu and Kashmir, Uttarakhand, Punjab, Himachal Pradesh, Haryana, Kerala, Meghalaya, Tripura, Chhattisgarh, Manipur

STATE

Goa

50.02 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 74.60

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	45.52
Percentage of Schools with functional CWSN friendly toilet	4.30
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	100.00
Percentage of schools with hand wash facility	100.00
Percentage of schools with internet facility available	54.61
Percentage of schools with library facility	99.61
Percentage of schools with medical checkups	12.08

ACCESS TO EDUCATION 41.27

Primary level schools per lakh population	21.31
Adjusted(NER)-Primary level for girls	64.21
CWSN students get facilities from school	97.80
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	49.50
Percentage of all minority group's enrolment to total enrolment	26.29
Percentage of enrollment of Children With Special Needs (CWSN)	50.77
Percentage of Teacher for Primary level education	35.50
Preschool education. Percentage	43.68
Pupil Teacher Ratio (PTR)-Primary	59.57
Ratio of contractual teachers relative to regular teachers	91.62

LEARNING OUTCOMES 47.24

Gender Parity Index (GPI)	63.16
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	100.00
NAS Class 3-EVS	57.89
NAS Class 3-Language	56.92
NAS Class 3-Mathematics	40.30
NAS Class 5-EVS	36.00
NAS Class 5-Language	50.00
NAS Class 5-Mathematics	22.22
Percentage of states/UTs exceeding global proficiency level in numeracy	11.76
Transition Rate-Primary	99.00

BASIC HEALTH 71.53

Children under 5 years who are severely wasted	39.53
Children under 5 years who are stunted (height-for-age)	78.11
Children under 5 years who are underweight	60.07
IMR	88.89
Percentage of fully immunized children in the age-group 0.5 year	64.86
USMR	82.27

GOVERNANCE 15.47

Central fund utilization under Poshan scheme	0.57
Expenditure on Education-As Ratio to Aggregate Expenditure	59.53
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	17.04
Percentage to total expenditure on primary education for Government schools	41.06
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Puducherry, Mizoram, Chandigarh, Dadra and Nagar Haveli & Daman and Diu, Sikkim, Arunachal Pradesh, Andaman and Nicobar Islands, Ladakh, Lakshadweep, Nagaland

STATE

Gujarat

45.40 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 89.19

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	97.37
Percentage of Schools with functional CWSN friendly toilet	33.20
Percentage of schools with functional drinking water	99.81
Percentage of schools with functional toilets	96.46
Percentage of schools with hand wash facility	94.69
Percentage of schools with internet facility available	91.31
Percentage of schools with library facility	94.75
Percentage of schools with medical checkups	79.79

ACCESS TO EDUCATION 29.02

Primary level schools per lakh population	6.90
Adjusted(NER)-Primary level for girls	77.26
CWSN students get facilities from school	89.01
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	43.03
Percentage of all minority group's enrolment to total enrolment	7.63
Percentage of enrollment of Children With Special Needs (CWSN)	21.03
Percentage of Teacher for Primary level education	13.60
Preschool education. Percentage	14.80
Pupil Teacher Ratio (PTR)-Primary	51.06
Ratio of contractual teachers relative to regular teachers	94.61

LEARNING OUTCOMES 56.26

Gender Parity Index (GPI)	63.16
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	93.41
NAS Class 3-EVS	63.16
NAS Class 3-Language	61.54
NAS Class 3-Mathematics	56.72
NAS Class 5-EVS	54.00
NAS Class 5-Language	40.74
NAS Class 5-Mathematics	46.30
Percentage of states/UTs exceeding global proficiency level in numeracy	35.29
Transition Rate-Primary	93.00

BASIC HEALTH 27.45

Children under 5 years who are severely wasted	3.49
Children under 5 years who are stunted (height-for-age)	28.30
Children under 5 years who are underweight	4.59
IMR	38.10
Percentage of fully immunized children in the age-group 0.5 year	49.73
USMR	37.12

GOVERNANCE 25.09

Central fund utilization under Poshan scheme	50.50
Expenditure on Education-As Ratio to Aggregate Expenditure	62.33
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	6.28
Percentage to total expenditure on primary education for Government schools	95.01
Percentage to total expenditure on primary education under SSA revenue account	0.11

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Tamil Nadu, Karnataka, Andhra Pradesh, Jharkhand, Odisha, Rajasthan, West Bengal, Assam, Madhya Pradesh, Telangana

STATE

Haryana

48.30 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 83.53

Percentage of schools with Electricity connection	97.08
Percentage of schools with functional computer facility	89.96
Percentage of Schools with functional CWSN friendly toilet	41.29
Percentage of schools with functional drinking water	99.07
Percentage of schools with functional toilets	95.67
Percentage of schools with hand wash facility	99.19
Percentage of schools with internet facility available	47.01
Percentage of schools with library facility	96.19
Percentage of schools with medical checkups	56.56

ACCESS TO EDUCATION 34.67

Primary level schools per lakh population	11.80
Adjusted(NER)-Primary level for girls	88.96
CWSN students get facilities from school	87.91
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	55.22
Percentage of all minority group's enrolment to total enrolment	10.82
Percentage of enrollment of Children With Special Needs (CWSN)	9.74
Percentage of Teacher for Primary level education	29.63
Preschool education. Percentage	16.47
Pupil Teacher Ratio (PTR)-Primary	59.57
Ratio of contractual teachers relative to regular teachers	64.07

LEARNING OUTCOMES 45.47

Gender Parity Index (GPI)	36.84
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	82.42
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
Percentage of states/UTs exceeding global proficiency level in numeracy	29.41
Transition Rate-Primary	85.50

BASIC HEALTH 54.92

Children under 5 years who are severely wasted	75.58
Children under 5 years who are stunted (height-for-age)	71.70
Children under 5 years who are underweight	68.90
IMR	33.93
Percentage of fully immunized children in the age-group 0.5 year	51.35
USMR	35.28

GOVERNANCE 22.89

Central fund utilization under Poshan scheme	13.25
Expenditure on Education-As Ratio to Aggregate Expenditure	51.16
Percentage of expenditure-Mid day meal state share	30.29
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	86.17
Percentage to total expenditure on primary education under SSA revenue account	7.94

Overperforming
Performing within expected range
Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Kerala, Punjab, Chhattisgarh, Telangana, Assam, Delhi, Jammu and Kashmir, Uttarakhand, Odisha, Jharkhand

STATE

Himachal Pradesh

47.91 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 70.26

Percentage of schools with Electricity connection	97.08
Percentage of schools with functional computer facility	27.72
Percentage of Schools with functional CWSN friendly toilet	20.70
Percentage of schools with functional drinking water	99.63
Percentage of schools with functional toilets	96.85
Percentage of schools with hand wash facility	99.03
Percentage of schools with internet facility available	28.88
Percentage of schools with library facility	94.62
Percentage of schools with medical checkups	6.50

ACCESS TO EDUCATION 49.25

Primary level schools per lakh population	70.19
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	93.41
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	67.66
Percentage of all minority group's enrolment to total enrolment	0.31
Percentage of enrollment of Children With Special Needs (CWSN)	14.36
Percentage of Teacher for Primary level education	40.19
Preschool education. Percentage	9.31
Pupil Teacher Ratio (PTR)-Primary	80.85
Ratio of contractual teachers relative to regular teachers	82.04

LEARNING OUTCOMES 38.99

Gender Parity Index (GPI)	42.11
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	75.82
NAS Class 3-EVS	43.86
NAS Class 3-Language	44.62
NAS Class 3-Mathematics	35.82
NAS Class 5-EVS	30.00
NAS Class 5-Language	35.19
NAS Class 5-Mathematics	14.81
Percentage of states/UTs exceeding global proficiency level in numeracy	58.82
Transition Rate-Primary	88.50

BASIC HEALTH 56.57

Children under 5 years who are severely wasted	46.51
Children under 5 years who are stunted (height-for-age)	59.25
Children under 5 years who are underweight	54.77
IMR	49.21
Percentage of fully immunized children in the age-group 0.5 year	84.86
USMR	51.67

GOVERNANCE 24.49

Central fund utilization under Poshan scheme	17.64
Expenditure on Education-As Ratio to Aggregate Expenditure	76.74
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	22.87
Percentage to total expenditure on primary education for Government schools	87.66
Percentage to total expenditure on primary education under SSA revenue account	2.87

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Meghalaya, Tripura, Manipur, Nagaland, Arunachal Pradesh, Uttarakhand, Mizoram, Goa, Puducherry, Chandigarh

UNION TERRITORY

Jammu & Kashmir

50.89 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 54.89

Percentage of schools with Electricity connection	64.01
Percentage of schools with functional computer facility	19.47
Percentage of Schools with functional CWSN friendly toilet	1.64
Percentage of schools with functional drinking water	91.30
Percentage of schools with functional toilets	62.20
Percentage of schools with hand wash facility	94.04
Percentage of schools with internet facility available	23.67
Percentage of schools with library facility	63.52
Percentage of schools with medical checkups	29.85

ACCESS TO EDUCATION 55.51

Primary level schools per lakh population	49.82
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	93.41
Dropout Rate-Primary	30.08
NER Enrollment ratio (NER)-Primary	65.67
Percentage of all minority group's enrolment to total enrolment	65.05
Percentage of enrollment of Children With Special Needs (CWSN)	31.79
Percentage of Teacher for Primary level education	36.75
Preschool education. Percentage	2.15
Pupil Teacher Ratio (PTR)-Primary	82.98
Ratio of contractual teachers relative to regular teachers	91.02

LEARNING OUTCOMES 60.82

Gender Parity Index (GPI)	47.37
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	35.16
NAS Class 3-EVS	57.89
NAS Class 3-Language	66.15
NAS Class 3-Mathematics	56.72
NAS Class 5-EVS	74.00
NAS Class 5-Language	70.37
NAS Class 5-Mathematics	57.41
Percentage of states/UTs exceeding global proficiency level in numeracy	41.18
Transition Rate-Primary	63.50

BASIC HEALTH 63.93

Children under 5 years who are severely wasted	13.95
Children under 5 years who are stunted (height-for-age)	73.96
Children under 5 years who are underweight	70.67
IMR	67.66
Percentage of fully immunized children in the age-group 0.5 year	76.49
USMR	69.06

GOVERNANCE 19.29

Central fund utilization under Poshan scheme	20.96
Expenditure on Education-As Ratio to Aggregate Expenditure	65.12
Percentage of expenditure-Mid day meal state share	3.84
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	48.03
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Delhi, Uttarakhand, Himachal Pradesh,Punjab, Meghalaya, Haryana, Tripura, Kerala,Manipur, Nagaland

STATE

Jharkhand

45.85 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 69.40

Percentage of schools with Electricity connection	89.51
Percentage of schools with functional computer facility	78.49
Percentage of Schools with functional CWSN friendly toilet	2.46
Percentage of schools with functional drinking water	92.41
Percentage of schools with functional toilets	90.55
Percentage of schools with hand wash facility	86.31
Percentage of schools with internet facility available	31.92
Percentage of schools with library facility	91.99
Percentage of schools with medical checkups	16.84

ACCESS TO EDUCATION 41.98

Primary level schools per lakh population	19.84
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	80.22
Dropout Rate-Primary	13.53
NER Enrollment ratio (NER)-Primary	75.37
Percentage of all minority group's enrolment to total enrolment	15.26
Percentage of enrollment of Children With Special Needs (CWSN)	22.56
Percentage of Teacher for Primary level education	41.92
Preschool education. Percentage	19.81
Pupil Teacher Ratio (PTR)-Primary	53.19
Ratio of contractual teachers relative to regular teachers	61.08

LEARNING OUTCOMES 37.25

Gender Parity Index (GPI)	36.84
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	5.49
NAS Class 3-EVS	38.60
NAS Class 3-Language	36.92
NAS Class 3-Mathematics	35.82
NAS Class 5-EVS	36.00
NAS Class 5-Language	33.33
NAS Class 5-Mathematics	25.93
Percentage of states/UTs exceeding global proficiency level in numeracy	70.59
Transition Rate-Primary	34.50

BASIC HEALTH 23.50

Children under 5 years who are severely wasted	20.93
Children under 5 years who are stunted (height-for-age)	26.04
Children under 5 years who are underweight	5.65
IMR	24.80
Percentage of fully immunized children in the age-group 0.5 year	43.24
USMR	24.08

GOVERNANCE 57.14

Central fund utilization under Poshan scheme	12.51
Expenditure on Education-As Ratio to Aggregate Expenditure	63.26
Percentage of expenditure-Mid day meal state share	87.17
Percentage of expenditure on teacher training (BE)	14.80
Percentage to total expenditure on primary education for Government schools	66.29
Percentage to total expenditure on primary education under SSA revenue account	83.89

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Odisha, Andhra Pradesh, Assam, Telangana, Karnataka, Chhattisgarh, Kerala, Tamil Nadu, Haryana, Punjab

STATE

Karnataka

46.43 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 74.63

Percentage of schools with Electricity connection	98.14
Percentage of schools with functional computer facility	45.16
Percentage of Schools with functional CWSN friendly toilet	13.52
Percentage of schools with functional drinking water	96.30
Percentage of schools with functional toilets	95.67
Percentage of schools with hand wash facility	82.77
Percentage of schools with internet facility available	23.56
Percentage of schools with library facility	95.28
Percentage of schools with medical checkups	81.07

ACCESS TO EDUCATION 41.32

Primary level schools per lakh population	15.07
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	85.71
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	89.80
Percentage of all minority group's enrolment to total enrolment	16.49
Percentage of enrollment of Children With Special Needs (CWSN)	28.72
Percentage of Teacher for Primary level education	17.96
Preschool education. Percentage	39.62
Pupil Teacher Ratio (PTR)-Primary	65.96
Ratio of contractual teachers relative to regular teachers	98.20

LEARNING OUTCOMES 51.19

Gender Parity Index (GPI)	36.84
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	100.00
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
Percentage of states/UTs exceeding global proficiency level in numeracy	76.47
Transition Rate-Primary	90.00

BASIC HEALTH 44.77

Children under 5 years who are severely wasted	29.07
Children under 5 years who are stunted (height-for-age)	41.89
Children under 5 years who are underweight	28.62
IMR	49.60
Percentage of fully immunized children in the age-group 0.5 year	70.81
USMR	50.67

GOVERNANCE 20.26

Central fund utilization under Poshan scheme	30.25
Expenditure on Education-As Ratio to Aggregate Expenditure	54.42
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	9.42
Percentage to total expenditure on primary education for Government schools	0.00
Percentage to total expenditure on primary education under SSA revenue account	7.01

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Tamil Nadu, Gujarat, Andhra Pradesh, Jharkhand, Odisha, Assam, Telangana, Chhattisgarh, Rajasthan, Kerala

STATE

Kerala

60.98 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 88.14

Percentage of schools with Electricity connection	99.34
Percentage of schools with functional computer facility	97.85
Percentage of Schools with functional CWSN friendly toilet	21.93
Percentage of schools with functional drinking water	99.44
Percentage of schools with functional toilets	99.61
Percentage of schools with hand wash facility	98.71
Percentage of schools with internet facility available	94.79
Percentage of schools with library facility	97.90
Percentage of schools with medical checkups	62.83

ACCESS TO EDUCATION 47.15

Primary level schools per lakh population	8.35
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	86.81
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	66.92
Percentage of all minority group's enrolment to total enrolment	49.69
Percentage of enrollment of Children With Special Needs (CWSN)	87.18
Percentage of Teacher for Primary level education	27.61
Preschool education. Percentage	67.54
Pupil Teacher Ratio (PTR)-Primary	57.45
Ratio of contractual teachers relative to regular teachers	97.01

LEARNING OUTCOMES 57.67

Gender Parity Index (GPI)	36.84
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	85.71
NAS Class 3-EVS	71.93
NAS Class 3-Language	80.00
NAS Class 3-Mathematics	61.19
NAS Class 5-EVS	46.00
NAS Class 5-Language	51.85
NAS Class 5-Mathematics	31.48
Percentage of states/UTs exceeding global proficiency level in numeracy	47.06
Transition Rate-Primary	100.00

BASIC HEALTH 79.25

Children under 5 years who are severely wasted	59.30
Children under 5 years who are stunted (height-for-age)	87.17
Children under 5 years who are underweight	75.27
IMR	91.27
Percentage of fully immunized children in the age-group 0.5 year	53.78
USMR	91.30

GOVERNANCE 32.68

Central fund utilization under Poshan scheme	17.10
Expenditure on Education-As Ratio to Aggregate Expenditure	66.51
Percentage of expenditure-Mid day meal state share	59.92
Percentage of expenditure on teacher training (BE)	7.62
Percentage to total expenditure on primary education for Government schools	32.26
Percentage to total expenditure on primary education under SSA revenue account	4.70

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Haryana, Chhattisgarh, Punjab,Telangana, Assam, Delhi, Jammu and Kashmir, Odisha,Jharkhand, Uttarakhand

UNION TERRITORY

Ladakh

40.69 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 63.59

Percentage of schools with Electricity connection	89.64
Percentage of schools with functional computer facility	34.41
Percentage of Schools with functional CWSN friendly toilet	21.72
Percentage of schools with functional drinking water	84.63
Percentage of schools with functional toilets	92.13
Percentage of schools with hand wash facility	41.22
Percentage of schools with internet facility available	37.79
Percentage of schools with library facility	96.85
Percentage of schools with medical checkups	35.42

ACCESS TO EDUCATION 47.65

Primary level schools per lakh population	40.44
Adjusted(NER)-Primary level for girls	11.37
CWSN students get facilities from school	74.73
Dropout Rate-Primary	48.87
NER Enrollment ratio (NER)-Primary	0.00
Percentage of all minority group's enrolment to total enrolment	91.13
Percentage of enrollment of Children With Special Needs (CWSN)	79.49
Percentage of Teacher for Primary level education	23.69
Preschool education. Percentage	0.00
Pupil Teacher Ratio (PTR)-Primary	97.87
Ratio of contractual teachers relative to regular teachers	92.22

LEARNING OUTCOMES 32.79

Gender Parity Index (GPI)	73.68
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	34.07
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
Percentage of states/UTs exceeding global proficiency level in numeracy	52.94
Transition Rate-Primary	85.00

BASIC HEALTH 58.06

Children under 5 years who are severely wasted	20.93
Children under 5 years who are stunted (height-for-age)	60.38
Children under 5 years who are underweight	72.79
IMR	60.32
Percentage of fully immunized children in the age-group 0.5 year	81.89
USMR	50.67

GOVERNANCE 1.37

Central fund utilization under Poshan scheme	0.02
Expenditure on Education-As Ratio to Aggregate Expenditure	0.00
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	100.00
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Lakshadweep, Andaman and Nicobar Islands, Sikkim ,Dadra and Nagar Haveli & Daman and Diu, Chandigarh, Puducherry, Goa, Mizoram, Arunachal Pradesh, Nagaland

UNION TERRITORY

Lakshadweep

49.72 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 95.92

Percentage of schools with Electricity connection	100.00	●
Percentage of schools with functional computer facility	100.00	●
Percentage of Schools with functional CWSN friendly toilet	59.53	●
Percentage of schools with functional drinking water	100.00	●
Percentage of schools with functional toilets	100.00	●
Percentage of schools with hand wash facility	100.00	●
Percentage of schools with internet facility available	97.18	●
Percentage of schools with library facility	100.00	●
Percentage of schools with medical checkups	100.00	●

ACCESS TO EDUCATION 43.07

Primary level schools per lakh population	7.10	●
Adjusted(NER)-Primary level for girls	25.75	●
CWSN students get facilities from school	0.00	●
Dropout Rate-Primary	3.76	●
NER Enrollment ratio (NER)-Primary	37.31	●
Percentage of all minority group's enrolment to total enrolment	100.00	●
Percentage of enrollment of Children With Special Needs (CWSN)	82.56	●
Percentage of Teacher for Primary level education	43.62	●
Preschool education. Percentage	74.70	●
Pupil Teacher Ratio (PTR)-Primary	80.85	●
Ratio of contractual teachers relative to regular teachers	100.00	●

LEARNING OUTCOMES 37.11

Gender Parity Index (GPI)	52.63	●
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	0.00	●
NAS Class 3-EVS	45.61	●
NAS Class 3-Language	43.08	●
NAS Class 3-Mathematics	38.81	●
NAS Class 5-EVS	32.00	●
NAS Class 5-Language	27.78	●
NAS Class 5-Mathematics	33.33	●
Percentage of states/UTs exceeding global proficiency level in numeracy	17.65	●
Transition Rate-Primary	100.00	●

BASIC HEALTH 70.98

Children under 5 years who are severely wasted	25.58	●
Children under 5 years who are stunted (height-for-age)	54.72	●
Children under 5 years who are underweight	53.71	●
IMR	92.00	●
Percentage of fully immunized children in the age-group 0.5 year	76.22	●
USMR	94.00	●

GOVERNANCE 1.52

Central fund utilization under Poshan scheme	0.81	●
Expenditure on Education-As Ratio to Aggregate Expenditure	0.00	●
Percentage of expenditure-Mid day meal state share	0.00	●
Percentage of expenditure on teacher training (BE)	0.00	●
Percentage to total expenditure on primary education for Government schools	100.00	●
Percentage to total expenditure on primary education under SSA revenue account	0.00	●

● Overperforming
● Performing within expected range
● Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Ladakh, Andaman and Nicobar Islands, Sikkim, Dadra and Nagar Haveli & Daman and Diu, Chandigarh, Puducherry, Goa, Mizoram, Arunachal Pradesh, Nagaland

STATE

Madhya Pradesh

43.28 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 61.14

Percentage of schools with Electricity connection	66.53
Percentage of schools with functional computer facility	10.63
Percentage of Schools with functional CWSN friendly toilet	7.48
Percentage of schools with functional drinking water	89.26
Percentage of schools with functional toilets	91.73
Percentage of schools with hand wash facility	88.73
Percentage of schools with internet facility available	21.28
Percentage of schools with library facility	93.18
Percentage of schools with medical checkups	31.36

ACCESS TO EDUCATION 35.91

Primary level schools per lakh population	22.61
Adjusted(NER)-Primary level for girls	36.45
CWSN students get facilities from school	91.21
Dropout Rate-Primary	23.31
NER Enrollment ratio (NER)-Primary	26.12
Percentage of all minority group's enrolment to total enrolment	3.61
Percentage of enrollment of Children With Special Needs (CWSN)	32.82
Percentage of Teacher for Primary level education	39.11
Preschool education. Percentage	23.39
Pupil Teacher Ratio (PTR)-Primary	61.70
Ratio of contractual teachers relative to regular teachers	97.60

LEARNING OUTCOMES 63.15

Gender Parity Index (GPI)	36.84
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	89.01
NAS Class 3-EVS	68.42
NAS Class 3-Language	63.08
NAS Class 3-Mathematics	64.18
NAS Class 5-EVS	74.00
NAS Class 5-Language	57.41
NAS Class 5-Mathematics	62.96
Percentage of states/UTs exceeding global proficiency level in numeracy	29.41
Transition Rate-Primary	82.50

BASIC HEALTH 32.51

Children under 5 years who are severely wasted	51.16
Children under 5 years who are stunted (height-for-age)	40.75
Children under 5 years who are underweight	28.27
IMR	18.06
Percentage of fully immunized children in the age-group 0.5 year	51.89
USMR	17.73

GOVERNANCE 23.66

Central fund utilization under Poshan scheme	45.95
Expenditure on Education-As Ratio to Aggregate Expenditure	63.26
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.45
Percentage to total expenditure on primary education for Government schools	97.70
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: West Bengal, Rajasthan, Maharashtra, Gujarat, Tamil Nadu, Karnataka, Andhra Pradesh, Jharkhand, Odisha, Assam

STATE

Maharashtra

54.52 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 78.95

Percentage of schools with Electricity connection	80.88
Percentage of schools with functional computer facility	74.43
Percentage of Schools with functional CWSN friendly toilet	47.54
Percentage of schools with functional drinking water	96.30
Percentage of schools with functional toilets	86.22
Percentage of schools with hand wash facility	97.42
Percentage of schools with internet facility available	43.54
Percentage of schools with library facility	97.11
Percentage of schools with medical checkups	60.98

ACCESS TO EDUCATION 47.61

Primary level schools per lakh population	17.77
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	92.31
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	91.54
Percentage of all minority group's enrolment to total enrolment	16.08
Percentage of enrollment of Children With Special Needs (CWSN)	55.38
Percentage of Teacher for Primary level education	34.09
Preschool education. Percentage	66.11
Pupil Teacher Ratio (PTR)-Primary	61.70
Ratio of contractual teachers relative to regular teachers	94.61

LEARNING OUTCOMES 63.38

Gender Parity Index (GPI)	52.63
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	98.90
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
Percentage of states/UTs exceeding global proficiency level in numeracy	52.94
Transition Rate-Primary	93.50

BASIC HEALTH 37.25

Children under 5 years who are severely wasted	5.60
Children under 5 years who are stunted (height-for-age)	42.64
Children under 5 years who are underweight	17.31
IMR	53.97
Percentage of fully immunized children in the age-group 0.5 year	42.16
USMR	53.18

GOVERNANCE 45.41

Central fund utilization under Poshan scheme	100.00
Expenditure on Education-As Ratio to Aggregate Expenditure	66.98
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	91.03
Percentage to total expenditure on primary education for Government schools	0.00
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Madhya Pradesh, West Bengal, Rajasthan, Gujarat, Tamil Nadu, Karnataka, Bihar, Andhra Pradesh, Jharkhand, Odisha

STATE

Manipur

50.76 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 36.55

Percentage of schools with Electricity connection	39.58
Percentage of schools with functional computer facility	23.42
Percentage of Schools with functional CWSN friendly toilet	5.43
Percentage of schools with functional drinking water	97.04
Percentage of schools with functional toilets	33.07
Percentage of schools with hand wash facility	72.95
Percentage of schools with internet facility available	16.50
Percentage of schools with library facility	2.49
Percentage of schools with medical checkups	7.08

ACCESS TO EDUCATION 67.23

Primary level schools per lakh population	35.80
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	85.71
Dropout Rate-Primary	100.00
NER Enrollment ratio (NER)-Primary	100.00
Percentage of all minority group's enrolment to total enrolment	51.03
Percentage of enrollment of Children With Special Needs (CWSN)	41.03
Percentage of Teacher for Primary level education	38.42
Preschool education. Percentage	58.00
Pupil Teacher Ratio (PTR)-Primary	87.23
Ratio of contractual teachers relative to regular teachers	67.66

LEARNING OUTCOMES 60.12

Gender Parity Index (GPI)	57.89
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	70.33
NAS Class 3-EVS	68.42
NAS Class 3-Language	64.62
NAS Class 3-Mathematics	56.72
NAS Class 5-EVS	56.00
NAS Class 5-Language	68.52
NAS Class 5-Mathematics	44.44
Percentage of states/UTs exceeding global proficiency level in numeracy	58.82
Transition Rate-Primary	52.50

BASIC HEALTH 67.62

Children under 5 years who are severely wasted	87.21
Children under 5 years who are stunted (height-for-age)	87.17
Children under 5 years who are underweight	97.88
IMR	50.40
Percentage of fully immunized children in the age-group 0.5 year	29.46
USMR	49.83

GOVERNANCE 22.30

Central fund utilization under Poshan scheme	8.50
Expenditure on Education-As Ratio to Aggregate Expenditure	45.12
Percentage of expenditure-Mid day meal state share	4.10
Percentage of expenditure on teacher training (BE)	1.35
Percentage to total expenditure on primary education for Government schools	76.75
Percentage to total expenditure on primary education under SSA revenue account	37.93

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Tripura, Nagaland, Arunachal Pradesh, Meghalaya, Mizoram, Goa, Puducherry, Chandigarh, Dadra and Nagar Haveli & Daman and Diu, Sikkim

STATE

Meghalaya

31.36 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 3.28

Percentage of schools with Electricity connection	0.00
Percentage of schools with functional computer facility	1.79
Percentage of Schools with functional CWSN friendly toilet	0.00
Percentage of schools with functional drinking water	0.00
Percentage of schools with functional toilets	6.69
Percentage of schools with hand wash facility	0.00
Percentage of schools with internet facility available	9.77
Percentage of schools with library facility	0.00
Percentage of schools with medical checkups	17.31

ACCESS TO EDUCATION 79.49

Primary level schools per lakh population	100.00
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	76.92
Dropout Rate-Primary	73.68
NER Enrollment ratio (NER)-Primary	100.00
Percentage of all minority group's enrolment to total enrolment	80.52
Percentage of enrollment of Children With Special Needs (CWSN)	13.85
Percentage of Teacher for Primary level education	80.32
Preschool education. Percentage	72.79
Pupil Teacher Ratio (PTR)-Primary	72.34
Ratio of contractual teachers relative to regular teachers	41.92

LEARNING OUTCOMES 23.25

Gender Parity Index (GPI)	52.63
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	87.91
NAS Class 3-EVS	26.32
NAS Class 3-Language	20.00
NAS Class 3-Mathematics	10.45
NAS Class 5-EVS	10.00
NAS Class 5-Language	16.67
NAS Class 5-Mathematics	0.00
Percentage of states/UTs exceeding global proficiency level in numeracy	52.94
Transition Rate-Primary	100.00

BASIC HEALTH 32.78

Children under 5 years who are severely wasted	72.09
Children under 5 years who are stunted (height-for-age)	2.80
Children under 5 years who are underweight	50.88
IMR	35.91
Percentage of fully immunized children in the age-group 0.5 year	15.95
USMR	33.11

GOVERNANCE 18.02

Central fund utilization under Poshan scheme	11.61
Expenditure on Education-As Ratio to Aggregate Expenditure	72.09
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	39.97
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Tripura, Manipur, Himachal Pradesh, Nagaland, Arunachal Pradesh, Mizoram, Goa, Puducherry, Chandigarh, Dadra and Nagar Haveli & Daman and Diu

STATE

Mizoram

49.00 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 52.72

Percentage of schools with Electricity connection	72.91
Percentage of schools with functional computer facility	42.65
Percentage of Schools with functional CWSN friendly toilet	11.99
Percentage of schools with functional drinking water	81.85
Percentage of schools with functional toilets	69.69
Percentage of schools with hand wash facility	56.04
Percentage of schools with internet facility available	0.00
Percentage of schools with library facility	77.17
Percentage of schools with medical checkups	19.74

ACCESS TO EDUCATION 64.67

Primary level schools per lakh population	53.66
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	79.12
Dropout Rate-Primary	48.12
NER Enrollment ratio (NER)-Primary	100.00
Percentage of all minority group's enrolment to total enrolment	90.31
Percentage of enrollment of Children With Special Needs (CWSN)	48.72
Percentage of Teacher for Primary level education	45.84
Preschool education. Percentage	10.26
Pupil Teacher Ratio (PTR)-Primary	80.85
Ratio of contractual teachers relative to regular teachers	0.00

LEARNING OUTCOMES 43.62

Gender Parity Index (GPI)	31.58
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	70.33
NAS Class 3-EVS	57.89
NAS Class 3-Language	64.62
NAS Class 3-Mathematics	46.27
NAS Class 5-EVS	20.00
NAS Class 5-Language	31.48
NAS Class 5-Mathematics	14.81
Percentage of states/UTs exceeding global proficiency level in numeracy	64.71
Transition Rate-Primary	100.00

BASIC HEALTH 66.16

Children under 5 years who are severely wasted	69.77
Children under 5 years who are stunted (height-for-age)	66.42
Children under 5 years who are underweight	10.00
IMR	57.74
Percentage of fully immunized children in the age-group 0.5 year	39.46
USMR	59.87

GOVERNANCE 17.82

Central fund utilization under Poshan scheme	5.89
Expenditure on Education-As Ratio to Aggregate Expenditure	73.02
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	92.11
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Goa, Puducherry, Chandigarh, Arunachal Pradesh, Dadra and Nagar Haveli & Daman and Diu, Sikkim, Andaman and Nicobar Islands, Nagaland, Ladakh, Lakshadweep

STATE

Nagaland

41.47 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 35.39

Percentage of schools with Electricity connection	56.31
Percentage of schools with functional computer facility	45.04
Percentage of Schools with functional CWSN friendly toilet	2.25
Percentage of schools with functional drinking water	27.04
Percentage of schools with functional toilets	22.44
Percentage of schools with hand wash facility	36.39
Percentage of schools with internet facility available	46.69
Percentage of schools with library facility	63.65
Percentage of schools with medical checkups	2.67

ACCESS TO EDUCATION 52.30

Primary level schools per lakh population	21.15
Adjusted(NER)-Primary level for girls	77.93
CWSN students get facilities from school	78.02
Dropout Rate-Primary	37.59
NER Enrollment ratio (NER)-Primary	55.72
Percentage of all minority group's enrolment to total enrolment	84.33
Percentage of enrollment of Children With Special Needs (CWSN)	35.90
Percentage of Teacher for Primary level education	38.28
Preschool education. Percentage	12.89
Pupil Teacher Ratio (PTR)-Primary	91.49
Ratio of contractual teachers relative to regular teachers	86.83

LEARNING OUTCOMES 37.29

Gender Parity Index (GPI)	63.16
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	91.21
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
Percentage of states/UTs exceeding global proficiency level in numeracy	5.88
Transition Rate-Primary	80.50

BASIC HEALTH 42.11

Children under 5 years who are severely wasted	34.88
Children under 5 years who are stunted (height-for-age)	52.08
Children under 5 years who are underweight	49.82
IMR	53.57
Percentage of fully immunized children in the age-group 0.5 year	0.00
USMR	44.82

GOVERNANCE 40.28

Central fund utilization under Poshan scheme	12.04
Expenditure on Education-As Ratio to Aggregate Expenditure	62.33
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	72.82
Percentage to total expenditure on primary education under SSA revenue account	100.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Arunachal Pradesh, Manipur, Mizoram, Tripura, Goa, Puducherry, Chandigarh, Dadra and Nagar Haveli & Daman and Diu, Sikkim, Meghalaya

STATE

Odisha

47.43 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 65.20

Percentage of schools with Electricity connection	69.06
Percentage of schools with functional computer facility	10.99
Percentage of Schools with functional CWSN friendly toilet	51.95
Percentage of schools with functional drinking water	94.44
Percentage of schools with functional toilets	83.86
Percentage of schools with hand wash facility	94.69
Percentage of schools with internet facility available	7.60
Percentage of schools with library facility	93.04
Percentage of schools with medical checkups	33.10

ACCESS TO EDUCATION 46.88

Primary level schools per lakh population	25.45
Adjusted(NER)-Primary level for girls	91.30
CWSN students get facilities from school	89.01
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	56.47
Percentage of all minority group's enrolment to total enrolment	1.13
Percentage of enrollment of Children With Special Needs (CWSN)	100.00
Percentage of Teacher for Primary level education	40.23
Preschool education. Percentage	24.11
Pupil Teacher Ratio (PTR)-Primary	78.72
Ratio of contractual teachers relative to regular teachers	88.02

LEARNING OUTCOMES 54.91

Gender Parity Index (GPI)	31.58
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	94.51
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
Percentage of states/UTs exceeding global proficiency level in numeracy	76.47
Transition Rate-Primary	85.00

BASIC HEALTH 47.50

Children under 5 years who are severely wasted	55.81
Children under 5 years who are stunted (height-for-age)	58.49
Children under 5 years who are underweight	39.93
IMR	27.98
Percentage of fully immunized children in the age-group 0.5 year	88.11
USMR	31.27

GOVERNANCE 22.67

Central fund utilization under Poshan scheme	34.71
Expenditure on Education-As Ratio to Aggregate Expenditure	62.79
Percentage of expenditure-Mid day meal state share	6.61
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	93.34
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Jharkhand, Andhra Pradesh, Assam, Telangana, Chhattisgarh, Karnataka, Kerala, Haryana, Tamil Nadu, Punjab

UNION TERRITORY

Puducherry

57.50 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 90.46

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	98.33
Percentage of Schools with functional CWSN friendly toilet	34.53
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	100.00
Percentage of schools with hand wash facility	99.36
Percentage of schools with internet facility available	98.26
Percentage of schools with library facility	99.48
Percentage of schools with medical checkups	66.20

ACCESS TO EDUCATION 32.70

Primary level schools per lakh population	6.67
Adjusted(NER)-Primary level for girls	23.08
CWSN students get facilities from school	89.01
Dropout Rate-Primary	27.82
NER Enrollment ratio (NER)-Primary	5.72
Percentage of all minority group's enrolment to total enrolment	10.93
Percentage of enrollment of Children With Special Needs (CWSN)	26.15
Percentage of Teacher for Primary level education	24.06
Preschool education. Percentage	54.65
Pupil Teacher Ratio (PTR)-Primary	76.60
Ratio of contractual teachers relative to regular teachers	95.81

LEARNING OUTCOMES 61.77

Gender Parity Index (GPI)	47.37
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	65.93
NAS Class 3-EVS	66.67
NAS Class 3-Language	63.08
NAS Class 3-Mathematics	56.72
NAS Class 5-EVS	60.00
NAS Class 5-Language	64.81
NAS Class 5-Mathematics	53.70
Percentage of states/UTs exceeding global proficiency level in numeracy	76.47
Transition Rate-Primary	98.50

BASIC HEALTH 92.35

Children under 5 years who are severely wasted	83.72
Children under 5 years who are stunted (height-for-age)	89.00
Children under 5 years who are underweight	90.81
IMR	94.25
Percentage of fully immunized children in the age-group 0.5 year	85.95
USMR	93.48

GOVERNANCE 10.24

Central fund utilization under Poshan scheme	0.61
Expenditure on Education-As Ratio to Aggregate Expenditure	47.91
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	0.00
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Goa, Chandigarh, Mizoram, Dadra and Nagar Haveli & Daman and Diu, Sikkim, Arunachal Pradesh, Andaman and Nicobar Islands, Ladakh, Lakshadweep, Nagaland

STATE

Punjab

62.31 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 89.79

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	99.40
Percentage of Schools with functional CWSN friendly toilet	78.69
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	99.21
Percentage of schools with hand wash facility	100.00
Percentage of schools with internet facility available	55.81
Percentage of schools with library facility	99.48
Percentage of schools with medical checkups	52.61

ACCESS TO EDUCATION 46.10

Primary level schools per lakh population	20.29
Adjusted(NER)-Primary level for girls	91.30
CWSN students get facilities from school	100.00
Dropout Rate-Primary	9.77
NER Enrollment ratio (NER)-Primary	74.38
Percentage of all minority group's enrolment to total enrolment	49.59
Percentage of enrollment of Children With Special Needs (CWSN)	45.64
Percentage of Teacher for Primary level education	32.20
Preschool education. Percentage	16.95
Pupil Teacher Ratio (PTR)-Primary	59.57
Ratio of contractual teachers relative to regular teachers	80.24

LEARNING OUTCOMES 91.52

Gender Parity Index (GPI)	31.58
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	56.04
NAS Class 3-EVS	89.34
NAS Class 3-Language	92.50
NAS Class 3-Mathematics	94.76
NAS Class 5-EVS	87.00
NAS Class 5-Language	85.67
NAS Class 5-Mathematics	91.50
Percentage of states/UTs exceeding global proficiency level in numeracy	41.18
Transition Rate-Primary	100.00

BASIC HEALTH 64.65

Children under 5 years who are severely wasted	83.72
Children under 5 years who are stunted (height-for-age)	83.02
Children under 5 years who are underweight	85.16
IMR	44.44
Percentage of fully immunized children in the age-group 0.5 year	49.46
USMR	45.32

GOVERNANCE 19.49

Central fund utilization under Poshan scheme	0.07
Expenditure on Education-As Ratio to Aggregate Expenditure	50.23
Percentage of expenditure-Mid day meal state share	36.77
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	76.29
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Haryana, Kerala, Chhattisgarh, Telangana, Delhi, Jammu and Kashmir, Assam, Uttarakhand, Odisha, Jharkhand

STATE

Rajasthan

52.18 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 66.11

Percentage of schools with Electricity connection	82.34
Percentage of schools with functional computer facility	40.02
Percentage of Schools with functional CWSN friendly toilet	16.29
Percentage of schools with functional drinking water	86.11
Percentage of schools with functional toilets	75.20
Percentage of schools with hand wash facility	94.85
Percentage of schools with internet facility available	56.46
Percentage of schools with library facility	70.47
Percentage of schools with medical checkups	38.33

ACCESS TO EDUCATION 37.00

Primary level schools per lakh population	15.12
Adjusted(NER)-Primary level for girls	88.29
CWSN students get facilities from school	91.21
Dropout Rate-Primary	27.07
NER Enrollment ratio (NER)-Primary	60.45
Percentage of all minority group's enrolment to total enrolment	8.45
Percentage of enrollment of Children With Special Needs (CWSN)	9.23
Percentage of Teacher for Primary level education	16.76
Preschool education. Percentage	19.57
Pupil Teacher Ratio (PTR)-Primary	59.57
Ratio of contractual teachers relative to regular teachers	95.21

LEARNING OUTCOMES 77.55

Gender Parity Index (GPI)	47.37
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	87.91
NAS Class 3-EVS	78.95
NAS Class 3-Language	75.38
NAS Class 3-Mathematics	79.10
NAS Class 5-EVS	88.00
NAS Class 5-Language	75.93
NAS Class 5-Mathematics	81.48
Percentage of states/UTs exceeding global proficiency level in numeracy	58.82
Transition Rate-Primary	77.00

BASIC HEALTH 46.03

Children under 5 years who are severely wasted	38.37
Children under 5 years who are stunted (height-for-age)	55.47
Children under 5 years who are underweight	47.35
IMR	39.88
Percentage of fully immunized children in the age-group 0.5 year	60.81
USMR	37.12

GOVERNANCE 34.22

Central fund utilization under Poshan scheme	28.04
Expenditure on Education-As Ratio to Aggregate Expenditure	76.74
Percentage of expenditure-Mid day meal state share	58.86
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	2.99
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: West Bengal, Madhya Pradesh, Maharashtra, Gujarat, Tamil Nadu, Karnataka, Andhra Pradesh, Jharkhand, Odisha, Assam

STATE

Sikkim

58.07 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 77.91

Percentage of schools with Electricity connection	97.88
Percentage of schools with functional computer facility	86.38
Percentage of Schools with functional CWSN friendly toilet	11.48
Percentage of schools with functional drinking water	98.70
Percentage of schools with functional toilets	99.21
Percentage of schools with hand wash facility	95.65
Percentage of schools with internet facility available	28.88
Percentage of schools with library facility	86.75
Percentage of schools with medical checkups	59.81

ACCESS TO EDUCATION 60.06

Primary level schools per lakh population	53.61
Adjusted(NER)-Primary level for girls	80.60
CWSN students get facilities from school	91.21
Dropout Rate-Primary	13.53
NER Enrollment ratio (NER)-Primary	62.19
Percentage of all minority group's enrolment to total enrolment	34.33
Percentage of enrollment of Children With Special Needs (CWSN)	56.92
Percentage of Teacher for Primary level education	42.97
Preschool education. Percentage	96.66
Pupil Teacher Ratio (PTR)-Primary	100.00
Ratio of contractual teachers relative to regular teachers	62.28

LEARNING OUTCOMES 40.81

Gender Parity Index (GPI)	0.00
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	86.81
NAS Class 3-EVS	56.14
NAS Class 3-Language	63.08
NAS Class 3-Mathematics	38.81
NAS Class 5-EVS	32.00
NAS Class 5-Language	46.30
NAS Class 5-Mathematics	11.11
Percentage of states/UTs exceeding global proficiency level in numeracy	5.88
Transition Rate-Primary	72.50

BASIC HEALTH 79.09

Children under 5 years who are severely wasted	50.00
Children under 5 years who are stunted (height-for-age)	91.32
Children under 5 years who are underweight	98.59
IMR	77.78
Percentage of fully immunized children in the age-group 0.5 year	61.35
USMR	81.27

GOVERNANCE 32.49

Central fund utilization under Poshan scheme	3.14
Expenditure on Education-As Ratio to Aggregate Expenditure	72.56
Percentage of expenditure-Mid day meal state share	2.78
Percentage of expenditure on teacher training (BE)	100.00
Percentage to total expenditure on primary education for Government schools	94.02
Percentage to total expenditure on primary education under SSA revenue account	6.83

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Dadra and Nagar Haveli & Daman and Diu, Andaman and Nicobar Islands, Chandigarh, Ladakh, Lakshadweep, Puducherry, Goa, Mizoram, Arunachal Pradesh, Nagaland

STATE

Tamil Nadu

52.83 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 84.82

Percentage of schools with Electricity connection	100.00
Percentage of schools with functional computer facility	72.52
Percentage of Schools with functional CWSN friendly toilet	28.18
Percentage of schools with functional drinking water	100.00
Percentage of schools with functional toilets	100.00
Percentage of schools with hand wash facility	100.00
Percentage of schools with internet facility available	32.25
Percentage of schools with library facility	100.00
Percentage of schools with medical checkups	100.00

ACCESS TO EDUCATION 45.34

Primary level schools per lakh population	21.28
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	82.42
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	62.69
Percentage of all minority group's enrolment to total enrolment	10.82
Percentage of enrollment of Children With Special Needs (CWSN)	42.56
Percentage of Teacher for Primary level education	40.27
Preschool education. Percentage	58.47
Pupil Teacher Ratio (PTR)-Primary	72.34
Ratio of contractual teachers relative to regular teachers	93.41

LEARNING OUTCOMES 41.59

Gender Parity Index (GPI)	42.11
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	98.90
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
Percentage of states/UTs exceeding global proficiency level in numeracy	11.76
Transition Rate-Primary	86.00

BASIC HEALTH 69.86

Children under 5 years who are severely wasted	62.79
Children under 5 years who are stunted (height-for-age)	81.13
Children under 5 years who are underweight	67.14
IMR	63.10
Percentage of fully immunized children in the age-group 0.5 year	84.59
USMR	62.71

GOVERNANCE 22.54

Central fund utilization under Poshan scheme	50.05
Expenditure on Education-As Ratio to Aggregate Expenditure	56.28
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	69.61
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Gujarat, Karnataka, Andhra Pradesh, Jharkhand, Odisha, Assam, Rajasthan, West Bengal, Madhya Pradesh, Telangana

STATE

Telangana

34.43 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 57.35

Percentage of schools with Electricity connection	87.12
Percentage of schools with functional computer facility	30.94
Percentage of Schools with functional CWSN friendly toilet	2.36
Percentage of schools with functional drinking water	74.81
Percentage of schools with functional toilets	32.28
Percentage of schools with hand wash facility	81.48
Percentage of schools with internet facility available	16.40
Percentage of schools with library facility	89.11
Percentage of schools with medical checkups	61.32

ACCESS TO EDUCATION 41.36

Primary level schools per lakh population	23.83
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	74.73
Dropout Rate-Primary	0.00
NER Enrollment ratio (NER)-Primary	82.84
Percentage of all minority group's enrolment to total enrolment	13.92
Percentage of enrollment of Children With Special Needs (CWSN)	14.87
Percentage of Teacher for Primary level education	24.69
Preschool education. Percentage	34.84
Pupil Teacher Ratio (PTR)-Primary	70.21
Ratio of contractual teachers relative to regular teachers	95.81

LEARNING OUTCOMES 14.96

Gender Parity Index (GPI)	42.11
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	83.52
NAS Class 3-EVS	8.77
NAS Class 3-Language	6.15
NAS Class 3-Mathematics	8.96
NAS Class 5-EVS	11.00
NAS Class 5-Language	1.85
NAS Class 5-Mathematics	5.56
Percentage of states/UTs exceeding global proficiency level in numeracy	58.82
Transition Rate-Primary	100.00

BASIC HEALTH 45.03

Children under 5 years who are severely wasted	27.91
Children under 5 years who are stunted (height-for-age)	50.57
Children under 5 years who are underweight	32.51
IMR	47.62
Percentage of fully immunized children in the age-group 0.5 year	57.30
USMR	50.84

GOVERNANCE 13.45

Central fund utilization under Poshan scheme	36.11
Expenditure on Education-As Ratio to Aggregate Expenditure	29.77
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	12.13
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Chhattisgarh, Kerala, Haryana, Assam, Punjab, Odisha, Jharkhand, Andhra Pradesh, Delhi, Jammu and Kashmir

STATE

Tripura

36.76 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 42.04

Percentage of schools with Electricity connection	40.24
Percentage of schools with functional computer facility	17.80
Percentage of Schools with functional CWSN friendly toilet	5.33
Percentage of schools with functional drinking water	54.63
Percentage of schools with functional toilets	31.10
Percentage of schools with hand wash facility	76.81
Percentage of schools with internet facility available	11.18
Percentage of schools with library facility	61.81
Percentage of schools with medical checkups	56.79

ACCESS TO EDUCATION 49.71

Primary level schools per lakh population	31.08
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	81.32
Dropout Rate-Primary	8.27
NER Enrollment ratio (NER)-Primary	100.00
Percentage of all minority group's enrolment to total enrolment	15.26
Percentage of enrollment of Children With Special Needs (CWSN)	13.85
Percentage of Teacher for Primary level education	39.19
Preschool education. Percentage	56.09
Pupil Teacher Ratio (PTR)-Primary	76.60
Ratio of contractual teachers relative to regular teachers	77.84

LEARNING OUTCOMES 38.63

Gender Parity Index (GPI)	57.89
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	89.01
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
Percentage of states/UTs exceeding global proficiency level in numeracy	64.71
Transition Rate-Primary	56.50

BASIC HEALTH 39.07

Children under 5 years who are severely wasted	41.86
Children under 5 years who are stunted (height-for-age)	53.58
Children under 5 years who are underweight	54.42
IMR	25.40
Percentage of fully immunized children in the age-group 0.5 year	31.35
USMR	27.59

GOVERNANCE 14.35

Central fund utilization under Poshan scheme	8.64
Expenditure on Education-As Ratio to Aggregate Expenditure	60.00
Percentage of expenditure-Mid day meal state share	0.00
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	0.32
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Manipur, Meghalaya, Nagaland, Arunachal Pradesh, Mizoram, Goa, Puducherry, Himachal Pradesh, Chandigarh, Dadra and Nagar Haveli & Daman and Diu

STATE

Uttar Pradesh

42.98 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 60.92

Percentage of schools with Electricity connection	75.17
Percentage of schools with functional computer facility	11.35
Percentage of Schools with functional CWSN friendly toilet	20.59
Percentage of schools with functional drinking water	93.70
Percentage of schools with functional toilets	92.13
Percentage of schools with hand wash facility	88.08
Percentage of schools with internet facility available	14.33
Percentage of schools with library facility	72.44
Percentage of schools with medical checkups	30.31

ACCESS TO EDUCATION 47.34

Primary level schools per lakh population	17.68
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	82.42
Dropout Rate-Primary	20.30
NER Enrollment ratio (NER)-Primary	62.44
Percentage of all minority group's enrolment to total enrolment	15.36
Percentage of enrollment of Children With Special Needs (CWSN)	36.92
Percentage of Teacher for Primary level education	71.57
Preschool education. Percentage	20.53
Pupil Teacher Ratio (PTR)-Primary	55.32
Ratio of contractual teachers relative to regular teachers	85.63

LEARNING OUTCOMES 41.27

Gender Parity Index (GPI)	63.16
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	82.42
NAS Class 3-EVS	40.35
NAS Class 3-Language	36.92
NAS Class 3-Mathematics	38.81
NAS Class 5-EVS	38.00
NAS Class 5-Language	31.48
NAS Class 5-Mathematics	29.63
Percentage of states/UTs exceeding global proficiency level in numeracy	70.59
Transition Rate-Primary	16.00

BASIC HEALTH 19.44

Children under 5 years who are severely wasted	41.86
Children under 5 years who are stunted (height-for-age)	25.66
Children under 5 years who are underweight	31.45
IMR	2.80
Percentage of fully immunized children in the age-group 0.5 year	31.62
USMR	4.30

GOVERNANCE 45.92

Central fund utilization under Poshan scheme	95.70
Expenditure on Education-As Ratio to Aggregate Expenditure	55.35
Percentage of expenditure-Mid day meal state share	26.32
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	0.04
Percentage to total expenditure on primary education under SSA revenue account	42.37

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Bihar, Maharashtra, Madhya Pradesh, West Bengal, Rajasthan, Gujarat, Tamil Nadu, Karnataka, Andhra Pradesh, Jharkhand

STATE

Uttarakhand

46.42 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 65.72

Percentage of schools with Electricity connection	84.86
Percentage of schools with functional computer facility	46.24
Percentage of Schools with functional CWSN friendly toilet	3.89
Percentage of schools with functional drinking water	86.11
Percentage of schools with functional toilets	80.71
Percentage of schools with hand wash facility	94.20
Percentage of schools with internet facility available	21.17
Percentage of schools with library facility	88.98
Percentage of schools with medical checkups	39.72

ACCESS TO EDUCATION 53.08

Primary level schools per lakh population	47.61
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	82.42
Dropout Rate-Primary	6.02
NER Enrollment ratio (NER)-Primary	92.79
Percentage of all minority group's enrolment to total enrolment	17.84
Percentage of enrollment of Children With Special Needs (CWSN)	0.00
Percentage of Teacher for Primary level education	47.35
Preschool education. Percentage	77.57
Pupil Teacher Ratio (PTR)-Primary	74.47
Ratio of contractual teachers relative to regular teachers	94.61

LEARNING OUTCOMES 36.67

Gender Parity Index (GPI)	52.63
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	92.31
NAS Class 3-EVS	33.33
NAS Class 3-Language	32.31
NAS Class 3-Mathematics	28.36
NAS Class 5-EVS	36.00
NAS Class 5-Language	35.19
NAS Class 5-Mathematics	24.07
Percentage of states/UTs exceeding global proficiency level in numeracy	23.53
Transition Rate-Primary	65.50

BASIC HEALTH 51.95

Children under 5 years who are severely wasted	72.09
Children under 5 years who are stunted (height-for-age)	73.58
Children under 5 years who are underweight	70.67
IMR	22.42
Percentage of fully immunized children in the age-group 0.5 year	61.89
USMR	23.75

GOVERNANCE 24.70

Central fund utilization under Poshan scheme	24.64
Expenditure on Education-As Ratio to Aggregate Expenditure	81.40
Percentage of expenditure-Mid day meal state share	7.14
Percentage of expenditure on teacher training (BE)	0.00
Percentage to total expenditure on primary education for Government schools	88.87
Percentage to total expenditure on primary education under SSA revenue account	0.00

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Jammu and Kashmir, Himachal Pradesh, Delhi, Meghalaya, Tripura, Manipur, Nagaland, Arunachal Pradesh, Mizoram, Goa

STATE

West Bengal

59.49 Index on foundational learning

EDUCATIONAL INFRASTRUCTURE 71.19

Percentage of schools with Electricity connection	94.95
Percentage of schools with functional computer facility	2.15
Percentage of Schools with functional CWSN friendly toilet	28.28
Percentage of schools with functional drinking water	99.07
Percentage of schools with functional toilets	99.61
Percentage of schools with hand wash facility	96.14
Percentage of schools with internet facility available	9.55
Percentage of schools with library facility	83.46
Percentage of schools with medical checkups	76.19

ACCESS TO EDUCATION 66.08

Primary level schools per lakh population	34.74
Adjusted(NER)-Primary level for girls	100.00
CWSN students get facilities from school	83.52
Dropout Rate-Primary	64.66
NER Enrollment ratio (NER)-Primary	100.00
Percentage of all minority group's enrolment to total enrolment	32.58
Percentage of enrollment of Children With Special Needs (CWSN)	36.41
Percentage of Teacher for Primary level education	100.00
Preschool education. Percentage	46.30
Pupil Teacher Ratio (PTR)-Primary	57.45
Ratio of contractual teachers relative to regular teachers	88.02

LEARNING OUTCOMES 62.87

Gender Parity Index (GPI)	36.84
Language of instruction in school at the foundational stage is the same as the medium of instruction in school	93.41
NAS Class 3-EVS	64.91
NAS Class 3-Language	72.31
NAS Class 3-Mathematics	61.19
NAS Class 5-EVS	64.00
NAS Class 5-Language	61.11
NAS Class 5-Mathematics	48.15
Percentage of states/UTs exceeding global proficiency level in numeracy	88.24
Transition Rate-Primary	54.50

BASIC HEALTH 52.15

Children under 5 years who are severely wasted	44.19
Children under 5 years who are stunted (height-for-age)	47.92
Children under 5 years who are underweight	31.10
IMR	56.35
Percentage of fully immunized children in the age-group 0.5 year	80.81
USMR	57.53

GOVERNANCE 45.17

Central fund utilization under Poshan scheme	0.00
Expenditure on Education-As Ratio to Aggregate Expenditure	68.37
Percentage of expenditure-Mid day meal state share	100.00
Percentage of expenditure on teacher training (BE)	14.80
Percentage to total expenditure on primary education for Government schools	0.06
Percentage to total expenditure on primary education under SSA revenue account	31.56

- Overperforming
- Performing within expected range
- Underperforming

Strengths and Weaknesses are relative to 10 regions of similar children population: Madhya Pradesh, Rajasthan, Maharashtra, Gujarat, Tamil Nadu, Karnataka, Andhra Pradesh, Jharkhand, Odisha, Assam

12 Methodology

Assigning weights to **various Indicators**

The indicators are assigned weights after being categorized under specific heads used to make the index more robust. For calculating the weights of indicators within a component, we used Principal Component Analysis (PCA). Parameters were then run through PCA to check for a fit between the indicators.

Educational Infrastructure

Indicators	Source
Percentage of schools with functional drinking water	0.1193
Percentage of schools with hand wash facility	0.1208
Percentage of schools with library facility	0.1232
Percentage of schools with medical checkups	0.0860
Percentage of schools with functional toilets	0.1242
Percentage of schools with functional computer facility	0.1069
Percentage of schools with internet facility available	0.0967
Percentage of Schools with functional CWSN friendly toilet	0.0933
Percentage of schools with Electricity connection	0.1295

Access to Education

Indicators	Source
Primary level schools per lakh population	0.1403
Percentage of Teacher for Primary level education	0.1307
Pupil Teacher Ratio (PTR) - Primary	0.1077
Percentage of enrollment of Children With Special Needs (CWSN) in primary	0.0659
Gross Enrolment ratio (GER) - Primary	0.1067
Percentage of all minority group's enrolment to total enrolment - Primary	0.1047
Pre school education - Percentage	0.0693
Dropout Rate - Primary	0.1248
Adjusted (NER) - Primary level for girls	0.0877
CWSN students get facilities from school	0.0571
Ratio of Contractual teacher relative to Regular teacher	0.0051

Basic Health

Indicators	Source
Percentage of fully immunized children in the age-group 0-5 years	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

Learning Outcomes

Indicators	Source
NAS scores: Class 3 (language)	0.1392
NAS scores: Class 3 (Mathematics)	0.1421
NAS scores: Class 3 (Environmental studies)	0.1416
NAS scores: Class 5 (language)	0.1380
NAS scores: Class 5 (Mathematics)	0.1366
NAS scores: Class 5 (Environmental studies)	0.1391
Transition Rate - Primary	0.0177
Gender Parity Index (GPI) - Primary	0.0541
Percentage of states/UTs exceeding global proficiency level in numeracy	0.0516
Language of instruction in school at the foundational stage is the same as the medium of instruction in the school	0.0400

Governance	Indicators	Source
	Expenditure on Education - As Ratio to Aggregate Expenditure	0.2106
	Percentage to total expenditure on primary education for Govt schools	0.0187
	Percentage of expenditure on teacher training (BE)	0.1324
	Percentage of expenditure -Mid day meal state share	0.2163
	Percentage to total expenditure on primary education under SSA revenue account	0.2338
	Central fund utilization under Poshan scheme	0.1882

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 1.

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 & 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 shortcoming but it is important to include these indicators as they reflect the underlying idea of the Pillar in the best possible manner.

Table 1

Educational Infrastructure	Access to Education	Basic Health	Learning Outcomes	Governance
Alpha values 0.9331	Alpha values 0.7845	Alpha values 0.8744	Alpha values 0.8854	Alpha values 0.6213

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

Aggregation

Index on Foundational Learning is based on two elements i.e., indicators and pillars. 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 Table 2.

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

Table 2

Educational Infrastructure	Access to Education	Basic Health	Learning Outcomes	Governance
Alpha values 0.8412	Alpha values 0.5919	Alpha values 0.7182	Alpha values 0.7713	Alpha values 0.6625

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

Methodological notes **for indicators that are dropped**

Every year, the Foundational Literacy and Numeracy framework is revisited, and in the process, various indicators are added and dropped to strengthen the framework for better assessment.

01 Per 1000 distribution of households by distance from school having primary classes for each State/UT

From a statistical perspective, it is imperative to prioritize the use of updated statistical information for our analysis. The indicator “Distribution of Households by Distance from School having Primary Classes (per 1000 households)” sourced from NSSO 2017-18, while valuable historically, may not provide the accurate, representative, and unbiased data needed for the current assessment. To maintain the integrity and relevance of our report, we have indicators which have more current data sources that align with our research objectives and provide a robust foundation for meaningful statistical analysis and inference.

02 Percentage of total assistance to non-government primary schools

The "Percentage of Total Assistance to Non-Government Primary Schools" indicator has been intentionally excluded from the Governance pillar's assessment. The rationale behind this decision is to sharpen the focus on evaluating state governments' commitment and effectiveness in improving primary education within government schools. While the support provided to non-government primary schools holds significance, including it in this context could potentially dilute the assessment's precision. By prioritizing government expenditure on education relative to total spending, the assessment remains more targeted, offering a clear evaluation of the governance of education expenditure. This approach ensures that the primary emphasis remains on assessing government investments and strategies aimed at enhancing primary education within the public education system, aligning with the overarching goal of improving educational outcomes in government schools.

Methodological notes **for indicators that are added**

03 Percentage of states/UTs exceeding global proficiency level in numeracy and language of instruction in school at the foundational stage is the same as the medium of instruction in the school

The FLS 2022 study emphasizes the importance of assessing the percentage of states or union territories (UTs) that exceed global proficiency levels in numeracy and language. This holistic evaluation provides a comprehensive view of learning outcomes across different regions of India. The study also offers valuable insights into the state of foundational learning in India, enabling policymakers and education stakeholders to identify areas requiring targeted interventions. This data can also highlight potential success stories and strategies for addressing lower learning outcomes. Hence, the inclusion of these indicators.

04 CWSN students get facilities from school, and the ratio of contractual teacher relative to regular teacher

Assessing the facilities provided to children with special needs (CWSN) in schools is a critical aspect of promoting inclusive education. Inclusive education aims to ensure that all students, regardless of their abilities or disabilities, or their socio-economic background have equitable access to quality education within the schools. The second indicator i.e., the ratio of contractual teachers to regular teachers in education, is essential as it helps in assessing the overall teacher composition for administrators or policy-makers to allocate resources and manage budget. It helps to maintain a balance between cost-effectiveness and quality of education, ensuring students have access to qualified teachers while managing financial sustainability. Monitoring this ratio helps to improve educational outcomes and promotes accessibility in education. It also highlights potential issues related to job security, teacher turnover, and the education system's stability.

Data Sources

Educational Infrastructure

Indicators	Source	Year
Percentage of schools with functional drinking water	UDISE+	2021-22
Percentage of schools with hand wash facility	UDISE+	2021-22
Percentage of schools with library facility	UDISE+	2021-22
Percentage of schools with medical checkups	UDISE+	2021-22
Percentage of schools with functional toilets	UDISE+	2021-22
Percentage of schools with functional computer facility	UDISE+	2021-22
Percentage of schools with internet facility available	UDISE+	2021-22
Percentage of Schools with functional CWSN friendly toilet	UDISE+	2021-22
Percentage of schools with functional drinking water	UDISE+	2021-22

Access to Education

Indicators	Source	Year
Primary level schools per lakh population	UDISE+	2021-22
Percentage of Teacher for Primary level education	UDISE+	2021-22
Pupil Teacher Ratio (PTR) - Primary	UDISE+	2021-22
Percentage of enrollment of Children With Special Needs (CWSN) in primary	UDISE+	2021-22
Gross Enrollment ratio (GER) - Primary	UDISE+	2021-22
Percentage of all minority group's enrolment to total enrolment - Primary	UDISE+	2021-22
Pre school education - Percentage	NFHS-5	2019-20
Dropout Rate - Primary	UDISE+	2021-22
Adjusted(NER) - Primary level for girls	UDISE+	2021-22
CWSN students get facilities from school	NAS	2021
Ratio of Contractual teacher relative to Regular teacher	UDISE+	2021-22

Basic Health

Indicators	Source	Year
Percentage of fully immunised children in the age-group 0-5 years	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

Learning Outcomes

Indicators		Source	Year
NAS scores: Class 3	Language	NAS	2021
	Mathematics		
	Environmental Studies		
NAS scores: Class 5	Language	NAS	2021
	Mathematics		
	Environmental Studies		
Transition Rate - Primary		UDISE+	2020-21
Gender Parity Index (GPI) - Primary		UDISE+	2020-21
Percentage of states/UTs exceeding global proficiency level in numeracy		FLS	2022
Language of instruction in school at the foundational stage is the same as the medium of instruction in the school		FLS	2022

Governance

Indicators	Source	Year
Expenditure on Education - As Ratio to Aggregate Expenditure	Budget analysis 2018-19 to 2020-21	2021-2022
Percentage to total expenditure on primary education for Govt schools	Budget analysis 2018-19 to 2020-21	2020-21
Percentage of expenditure on teacher training (BE)	Budget analysis 2018-19 to 2020-21	2020-21
Percentage of expenditure -Mid day meal state share	Budget analysis 2018-19 to 2020-21	2020-21
Percentage to total expenditure on primary education under SSA revenue account	Budget analysis 2018-19 to 2020-21	2020-21
Central fund utilization under poshan scheme	PIB	as on 1st January 2022

References

- Kitson et al., (1998). Enabling the implementation of evidence-based practice: A conceptual framework. Quality in Health Care, 7, 149–158.
- Fixsen et al., (2005). Implementation research: A synthesis of the literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network (FMHI Publication No. 231). Retrieved from http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/
- Fixsen, et al. (2001). In search of program implementation: 792 replications of the Teaching-Family Model. In G.A. Bernfeld, D.P. Farrington, & A.W. Leschied (Eds.), Offender rehabilitation in practice: Implementing and evaluating effective programs (pp. 149–166). London, England: Wiley.
- Best, A., Terpstra, J., Moor, G., Riley, B., Norman, C. D., & Glasgow, R. (2008, March). Building knowledge integration systems for evidence-informed decisions.
- Palinkas, L. A., & Soydan, H. (2012). Translation and implementation of evidence-based practice. Oxford, UK: Oxford University Press.
- R. Lyon, A. Implementation Science and Practice in the Education Sector.
- ICEBeRG. (2006). Designing theoretically-informed implementation interventions. Implementation Science.
- Fixsen et al., (2013). Statewide implementation of evidence-based programs. Exceptional Children. [Special Issue], 79, 213–230.
- Liang et al., (2021). Roles and research foci of artificial intelligence in language education: An integrated bibliographic analysis and systematic review approach. Interactive Learning Environments, 1–27.
- Ng et al., (2023). Teachers' AI digital competencies and twenty-first century skills in the post-pandemic world. Association for Educational Communications and Technology 2023.
- Kexin et al., (2020). Future education trend learned from the Covid-19 pandemic: Take artificial intelligence online course as an example. In 2020 International Conference on Artificial Intelligence and Education (ICAIE) (pp. 108–111). IEEE.
- Kexin et al., (2020). Future education trend learned from the Covid-19 pandemic: Take artificial intelligence online course as an example. In 2020 International Conference on Artificial Intelligence and Education (ICAIE) (pp. 108–111). IEEE.
- Chaudhry, M. A., & Kazim, E. (2022). Artificial Intelligence in Education (AIEd): A high-level academic and industry note 2021. AI and Ethics, 2(1), 157–165.
- Seo et al., (2021). The impact of artificial intelligence on learner–instructor interaction in online learning. International Journal of Educational Technology in Higher Education, 18(1), 1–23.
- Vazhayil, A., Shetty, R., Bhavani, R. R., & Akshay, N. (2019). Focusing on teacher education to introduce AI in schools: Perspectives and illustrative findings. In 2019 IEEE tenth international conference on Technology for Education (T4E) (pp. 71–77). IEEE.
- OECD. (2005). Teachers matter: Attracting, developing and retaining effective teachers. Retrieved November 11, 2022, from https:// www. oecd.org/ education/ school/ 34990 905. pdf
- Micheuz, P. (2020). Approaches to Artificial Intelligence as a Subject in School Education. In T. Brinda, D. Passey, & T. Keane (Eds), Empowering Teaching for Digital Equity and Agency. OCCE 2020. IFIP Advances in Information and Communication Technology, 595. Springer. https:// doi. org/ 10. 1007/978-3-030-59847-1_1
- Mondal, B. (2020). Artificial intelligence: State of the art. Recent Trends and Advances in Artificial Intelligence and Internet of Things, 389–425.
- Yang, W. (2022). Artificial Intelligence education for young children: Why, what, and how in curriculum design and implementation. Computers & Education: Artificial Intelligence, Article 100061.

- Williams et al., (2019). A is for artificial intelligence: The impact of artificial intelligence activities on young children's perceptions of robots. In Proceedings of the 2019 CHI conference on human factors in computing systems (pp.1–11). CHI conference.
- Williams et al., (2019). Popbots: Designing an artificial intelligence curriculum for early childhood education. Proceedings of the AAAI Conference on Artificial Intelligence, 33(1), 9729–9736. https://doi.org/10.1609/aaai.v33i01.33019729
- Bhowmik et al., (2022). Implementation of NEP-2020 and Capacity Building of Teachers at Foundation Stage: An Analysis with Empirical Evidences
- I. Clark, and P. James. (2005). Blended learning: An approach to delivering science courses on-line. Proceedings of the Blended Learning in Science Teaching and Learning Symposium, 30 September 2005, The University of Sydney: UniServe Science, 19-24.
- Vernadakis et al., (2020). The impact of blended and traditional instruction in students' performance.
- Hungwe, T. and Dagada, R. (2013). Blended Learning Approach: Perceptions in Higher Education, LAP LAMBERT Academic Publishing, Saarbrucken
- Fullan, M. (2017). Trends in Digital Learning: Building teachers' capacity and competency to create new learning experiences for students
- https://www.unicef.org/wca/improved-learning-outcomes#programme-challenge
- https://www.unicef.org/learning-crisis/commitment-action-foundational-learning#:~:text=Foundational%20learning%20refers%20to%20basic,such%20as%20socio%2Demotional%20skills.
- https://www.unicef.org/india/what-we-do/education-for-all#:~:text=Ensuring%20equity%20and%20excellence%20by,the%20child's%20journey%20through%20schooling.
- https://www.unicef.org/press-releases/teachers-leading-crisis-reimagining-future
- https://www.unicef.org/eca/press-releases/teachers-heart-education-recovery
- https://www.unicef.org/education/early-childhood-education
- https://www.oecd-ilibrary.org/sites/6d543b7b-en/index.html?itemId=/content/component/6d543b7b-en
- Houghton Mifflin Harcourt (HMH). Science of Learning: Reading. Research professional paper on The Science of early Literacy Implementation.
- Omdal, H. (2017). Creating teacher capacity in Early Childhood Education and Care institutions implementing an authoritative adult style.
- Su et al., (2023). Artificial Intelligence (AI) Literacy in Early Childhood Education: The Challenges and Opportunities. Retrieved from: www.sciencedirect.com/journal/computers-and-education-artificial-intelligence
- Ogden, T. Fixsen, D. (2014). Implementation Science: A Brief Overview and a Look Ahead. Implementation Research, Practice, and Policy. Zeitschrift für Psychologie. Vol 222, no 1.
- Durlak, J. Dupre, E. (2008). Implementation Matters: A Review of Research on the Influence of Implementation on Program Outcomes and the Factors Affecting Implementation.
- Halle et al., (2013). Applying Implementation Science in Early Childhood Programs and Systems. Brookes Publishing.
- Siraj-Blatchford et al., (2002). Researching Effective Pedagogy in the Early Years.
- Alam, M. Agarwal, J. (2020). Adopting a Blended Learning Model in Education: Opportunities and Challenges. International Journal of Early Childhood Special Education.
- Azer, M. (2009). Capacity Building in the New Era Using Blended E-learning.
- Chaudhry, M. Kazim, E. (2021). Artificial Intelligence in Education (AIEd): a high-level academic and industry note 2021.
- Su, J. Zhong, Y. (2022). Artificial Intelligence (AI) in early childhood education: Curriculum design and future directions.
- Ng et al., (2021). Conceptualizing AI literacy: An exploratory review. Computers and Education: Artificial Intelligence 2. Article 100041.
- OCED. (2005). Teachers matter: Attracting, developing and retaining effective teachers.

- Casal-Otero et al., (2023). AI literacy in K-12: a systematic literature review.
- Zhai et al. (2021). A Review of Artificial Intelligence (AI) in Education from 2010 to 2020.
- Chen, X. (2021). Two Decades of Artificial Intelligence in Education.
- Luckin, R. (2016). Intelligence Unleashed An argument for AI in Education.
- Fixsen et al. (2015). Implementation Science.
- Palinkas, L. Soydan, H. (2012). Translation and implementation of evidence-based practice. Building Social Work Research Capacity.
- UNESCO. UNICEF. (2021). India Case Study: Situation Analysis on the Effects of and Responses to COVID-19 on the Education Sector in Asia
- OECD. (2019). Strategic education Governance: Project plan and Organisational Framework. Centre for Educational research and Innovation.
- LLF and UNICEF. Guidelines for Design and Implementation of Early Learning Programmes.
- Eccles, M. Mittman, B. (2006). Implementation Science.
- Blasé et al., Implementation Science: changing hearts, minds, behavior, and systems to improve educational outcomes.
- Office of Educational Technology. (2023). Artificial Intelligence and the Future of Teaching and Learning Insights and Recommendations.
- Fazakas, M. Burns, T. (2021). Exploring the Complex Interaction Between Governance and Knowledge in Education. OECD Education Working Papers No. 67
- McColskey-Leary, C. Garman-McClaine, B. Integrating Improvement and Implementation Sciences to Enhance Educational Outcomes. Retrieved from: . www.sisep.fpg.unc.edu
- https://indianexpress.com/article/opinion/columns/nbfcs-credit-inadequacy-india-8898822/

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