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# The Primary Teacher

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## About the Journal

*The Primary Teacher* is a quarterly journal brought out by the National Council of Educational Research and Training (NCERT), New Delhi. It carries articles and research papers on educational policies and practices, and values material that is useful for practitioners in contemporary times. The Journal also provides a forum to teachers to share their experiences and concerns about the schooling processes, curriculum, textbooks, teaching-learning and assessment practices. The papers for publication are selected on the basis of comments received from two referees. The views expressed by individual authors are their own and do not necessarily reflect the policies of the NCERT, or the views of the editor.

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Hello Children!

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2. Tell someone whom you trust
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*Ek Kadam Swachchhta ki or*

## EDITORIAL

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School routines give children frequent and repeated practice of tasks, empowering them to gradually take on an active role in their learning journey. The past few years have witnessed twin disruptions in school routine: one, the savage pandemic that shattered the comfort zone of schooling; and two, the sudden reliance on technology for learning.

This issue of *The Primary Teacher* presents an insight into these aspects of education.

The COVID-19 pandemic disrupted more than routines; it reshaped landscapes. One of the most dramatic shifts witnessed the classroom transitioning from sunlit halls to flickering screens, impacting the primary level, with its inherent reliance on play, activity, and physical interaction, faced a unique challenge. This, in turn, brought into focus the critical role of evaluation of online education. How do we assess the potential of young minds in this virtual space, ensuring that their growth is nurtured? The first article, 'Effectiveness of Evaluation Used in Online Education at Primary Level: Parents' Perception' by Trisha Bhattacharya and Rekha Shukla deals with this question, exploring the perceptions of parents on the effectiveness of evaluation methods used in online education for primary-level students.

The National Education Policy (NEP) 2020, paints a vibrant picture of a modernised technology-based learning ecosystem, in which lies the promise of quality e-learning, particularly in empowering primary education and bridging the vast access gap across the nation. E-learning holds the potential to upgrade the education system like never before, reaching even the most remote corners of India, where quality education has long remained a distant dream. In this regard, it is crucial to acknowledge the challenges faced by our primary teachers. The second article, 'Challenges and Opportunities for Primary Teachers in Implementing NEP 2020's Vision for Quality Education: E-learning perspective' by Neha Saxena, Kiran Gupta and Bishan Singh Nagi, talks about how teachers may be provided with the necessary skills, support, and resources, ensuring that they become not just users of technology, but active agents in shaping a vibrant, inclusive, and future-proof educational landscape for young minds.

With the NEP 2020's vision of education as the "single greatest tool to achieve social justice and equality in society", school education plays a critical role in shaping a just and equitable space for children. India's journey towards this ideal has been marked by significant milestones, from the Right to Education Act (RTE) of 2009 to the Rights of Persons with Disabilities (RPwD)

Act of 2016. Yet, a closer look reveals that well-intentioned policies haven't fully translated into tangible outcomes. NEP 2020 seeks to bridge these gaps, but the success of this policy hinges on the active engagement of the primary stakeholders—parents, teachers, school heads, and even peers. The third article, 'Ensuring Equitable and Inclusive School Education: Analytical Study of Primary Stakeholder' by C Thangminlal Doungel discusses education how cooperation, empathy, and a shared vision for a just and equitable education system will be the fuel to take forward to give every child the opportunity to reach their full potential, regardless of their background.

The human brain is a remarkable instrument, capable of learning, adapting, and solving complex problems. But this needs nurturing, and the foundation for future academic success is often laid in the early years. This is where preschool education plays a crucial role, particularly in fostering pre-numeracy readiness—the building blocks for later mathematical understanding. Next article, 'Enhancing Pre-Numeracy Readiness of Preschool Children' by Reetu Chandra highlights the importance of pre-numeracy readiness and suggests a set of activities to be incorporated into the curriculum, providing practical solutions for educators and policymakers.

The next article, 'Competencies of Head Teachers and SMC Chairpersons in Financial Management in Elementary Schools: A Case Study' by Swarna Prava Hota and Gitanjali Panda discusses the pursuit of quality education in Odisha's elementary schools. It talks about the transparent system of financial management, depending on two crucial stakeholders: Head Teachers and the School Management Committee (SMC). Despite their central position, both Head Teachers and SMC Chairpersons may lack the necessary knowledge, skills, and attitudes to effectively manage school finances, which in turn limits the ability to generate and utilize resources, ultimately impacting the quality of education delivered to students.

Another article, 'A Study of the Content Appropriateness of the Textbooks of FLN Prepared by Maharashtra in Light of NEP 2020 Recommendations' by Shruti Tripathi examines the content appropriateness of FLN textbooks developed by the State Council of Educational Research and Training (SCERT) Maharashtra through the lens of NEP 2020, prioritising the development of foundational Literacy and Numeracy (FLN) as the bedrock of lifelong learning. By pinpointing areas for improvement and offering actionable recommendations, the study provides a roadmap for SCERT to refine its FLN textbooks and make them truly NEP 2020 compliant. This includes incorporating authentic contexts, encouraging open-ended questions, and promoting learner agency through activities that require problem-solving and independent thinking.

The last article, 'The Concept of Disability Reflected in Textbooks of Jammu and Kashmir Board of School Education' by Hilal Ahmad Wani, discusses

disability which has been viewed for a long time as a personal limitation, and a barrier to societal participation, rather than a product of systemic exclusion. Fortunately, India's The Rights of Persons with Disabilities (RPwD) Act, 2016, emphasises inclusive education, ensuring equal opportunities and fostering active engagement in society. For true equality, education must be accessible to all, regardless of ability. This necessitates not just accessible infrastructure and specialised support, but also a fundamental shift in how we understand and represent disability within the learning environment. This study reveals a concerning disparity in the portrayal of disability. While NCERT-adapted books demonstrate some positive strides towards inclusivity, JKBOSE-prepared textbooks lack a comprehensive representation of the concept. This discrepancy highlights the need for a more proactive approach to integrating disability into educational materials.

The journal also includes its regular features. One of the four features is the 'Book Review' of '*Brown Like Dosas, Samosas, and Sticky Chikki*' which is a children's book written by Rebecca Manari and illustrated by Heetal Dattani Joshi. It tells the story of Samaira, a young girl who is proud of her brown skin. The book challenges the idea that fair skin is more beautiful and celebrates the diversity of skin tones. The book is full of colourful illustrations and playful rhymes that will make children laugh. It is a heartwarming story that teaches children to love and appreciate themselves for who they are.

In another feature, 'My Page', the author argues for the importance of including "Bharatiya content" in Indian textbooks, meaning content that is relevant to the Indian context and environment. The author, a teacher, reflects on a lesson using a poem about animals like seals and seagulls, which were unfamiliar to her first-grade students. This experience prompted her to analyse textbooks from Classes I to V. It emphasises the need for educational resources that resonate with Indian students and connect them to their own cultural heritage.

The last feature, 'From the States', is about the challenges posed by COVID-19 on education and the efforts taken by SCERT Telangana to address learning loss and improve primary school education in the state focusing on foundational skills, active participation, and individual learning pace.

— Academic Editors



Educate her, as She will Spread the Light of Knowledge



# 1

## Effectiveness of Evaluation Used in Online Education at Primary Level: Parent's Perception

Trisha Bhattacharya\*

Rekha Shukla\*\*

### Abstract

*“Children are not things to be molded, but are people to be unfolded ...” and their learning in their initial years is a milestone for their future. COVID-19 has suddenly shifted the classroom to their home from school. This had a great impact on the teaching learning and evaluation process of students, especially at the primary level as they are less adaptive to sudden change. The small students usually have a play way and activity-based learning. This study is on the perception of parents on the effectiveness of the evaluation process used in online education for the primary level. It is very important at this stage of education that a proper evaluation methodology should develop for these little ones as this pandemic has taught us to be future-ready in all the fields including education. This study help find the parent's perception on the evaluation process of virtual classes and will lead us to certain conclusions and suggestions regarding the evaluation process.*

### INTRODUCTION

Using digital technologies in teaching learning means the use of computer and technology-assisted strategies to support teaching and learning. It generally involves different applications designed to facilitate learning and problem-solving. It also includes technologies for teachers

that facilitate teaching like the use of whiteboards, and different interactive teaching-learning platforms. The use of technology has proved to be an instrument in harnessing the potential of teaching. It provides different instruments to make teaching much more interactive, fun, understandable, and creative. It supports teachers to provide more effective feedback or use

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more helpful presentations. Numerous studies are showing that the use of digital technology by different user groups is increasing teachers' productivity and competency.

Corona virus has not stopped spreading across the boundaries, which has inversely affected the whole world in every field (Pragholeapati, 2020), but with the outbreak of COVID-19 as an alternative the use of digital platforms for different purposes has gained acceleration. It has changed the traditional methodology of doing business and now more technology-oriented methodology in every field has started showing its impact. It has also shown its impact on the education system all over the world. Like other countries, India also has moved from their conventional face-to-face teaching platform to the virtual platform for their teaching-learning process.

In the last two years we witnessed the shift of the education system from conventional to virtual. This has sparked the use of virtual teaching-learning aids from primary to higher levels. UGC's concept note for implementation of a blended mode—a mix of online and offline-learning—in universities has proved the virtues of using virtual ways of teaching and learning. According to Murphy (2020), in light of medical examination, there is a worldwide agreement among disease specialists and officials of general health to limit classroom teaching as

a means of preventing students from the spread of the pandemic. School children were supposed to attend their online classes from home and were not allowed to attend regular classes in their classrooms.

## **REVIEW OF RELATED LITERATURE**

Research studies have indicated that when primary school students become well-equipped and efficient in terms of use of technologies, then they normally make use of them to a large extent as a result of making extensive use of technology for leisure and recreational purposes, their academic performance also suffers setbacks. Students usually spend an average of seven hours per day, sitting in front of computer screens (Epstein, 2015). Children who are below two years of age also spend about one or two hours a day making use of technology. These children normally make use of technology for leisure and recreational purposes.

Teachers and parents usually encourage their children to make use of technology to augment their academic skills. They are encouraged to pay regular attention to their studies and make use of technology primarily for academic purposes. Over the past few years, a lot of studies have been done on the effects of online teaching and learning processes. These studies were triggered by the outbreak of the COVID-19 pandemic as it has shifted almost every country educational system to the virtual

platform. Studies have been done on the effectiveness of online teaching at the primary, secondary and higher educational level.

### **EMERGENCE OF THE PROBLEM**

When technology is used suitably, it can be a boon and can be used at the primary level of education for reasoning development, counting numbers, and reading and writing skills development. At the primary level, technology affects positively for enjoyable active learning. However, it may also have an adverse effect on health, security and safety of children as it contains unsuitable content like games, sexual content, and undesirable statements. Both teachers and parents want the best learning methods for children, but increasing the use of technology is a matter of concern for all stakeholders. It is important to understand the parent's perception of the effectiveness of online education for primary level students.

Corona virus has caused large interruptions with intense difficulties for the entire education system. Education has been severely hit owing to COVID-19 pandemic with many scholars abandoning academic pursuits, instead gazing at the laptop/computer/tablet/mobile screen passively. The need for learning has been enhanced with the quick development of current innovation and information, but the speed of learning is unsteady (Rosenberg,

2001). As per Viner et al., (2020) with most of the colleges closing throughout the pandemic, education has shifted to online mode, thereby putting responsibility on parents. Online categories as a form of distance learning refer to any course of study that's available only through the Internet (Curran, 2008). The COVID-19 pandemic has created the largest interruption in education systems in the history, influencing nearly 1.6 billion students in excess of one hundred ninety nations. Termination of faculty and schools has affected 94 per cent of the world's student population. Colleges and schools has been lately busy in online with academics and other online activities.

Students are not restricted or confined in any means for connecting with specific teachers, or partaking in specific schooling courses. These features have staggered the event of e-adapting massively and thus, e-learning has replaced ancient teaching strategies over the last few decades. Borup, Graham & Drysdale (2013) conducted a survey on 79 per cent of elderly people concerning online categories, duration of time, interacting with scholars and pedagogues concerning the web categories.

On an average, elderly people preferred the traditional system of spending 86 per cent of time interacting with their children per week concerning the course, and

nine per cent of their time connecting with the online teacher each week. As per Soykan (2015), elderly people emphasised the expected danger of a tutorial performance due to the use of technology. The inability to understand parental concerns has prevented the employment of ICT on a worldwide scale in colleges. Their mentalities and points of view are important considerations for comprehensive information on internet education. The pandemic has forced an extra job on the guardians that of supervising their children while they take online classes, especially at the basic and primary levels. Hale, Troxel and Buysse (2020) concluded that parents feel unable to help their kids focus and join the classes virtually. Hence, this study is undertaken to understand parents' perceptions about the online classes. What do parents think about online classes? How effective these online classes are? What do they think about the effectiveness of virtual education on primary students (Class I to V)?

### **STATEMENT OF THE PROBLEM**

Study of parents' perception on the effectiveness of evaluation methods used in online education at primary level (Class I to V) in the urban region of Prayagraj, Uttar Pradesh.

### **OBJECTIVES**

1. To study the effectiveness of the evaluation methods used on online teaching on the students of primary level (Class I to V).
2. To analyse the parent's perception of the academic progress of their ward or wards on a virtual platform.
3. Parents' satisfaction with the evaluation procedure followed by teachers.

### **METHODOLOGY**

The survey method is used for the present research. The research conducted an online survey for which a questionnaire is created on Google Form. The questionnaire was distributed by the researcher among the parents through online mode and received back within a stipulated time.

Percentage analysis and graphic representation was used for data analysis.

### **Sample**

For the research, 500 parents of students belonging to the primary level (Classes I to V), from public schools of Prayagraj, Uttar Pradesh are chosen. Purposive sampling is done with the implementation of a questionnaire generated on Google Form and posted to the parents of the students under consideration.

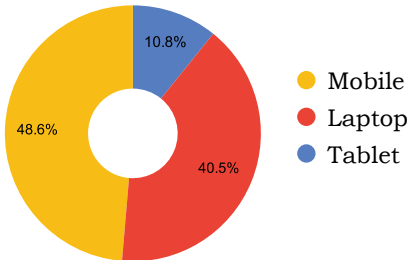
### **ANALYSIS AND INTERPRETATION**

In a nutshell, we can say that the outbreak of COVID-19 has accelerated the use of digital platforms for the teaching and learning process, so it is important to analyse the evaluation

process adopted especially for children at the primary level.

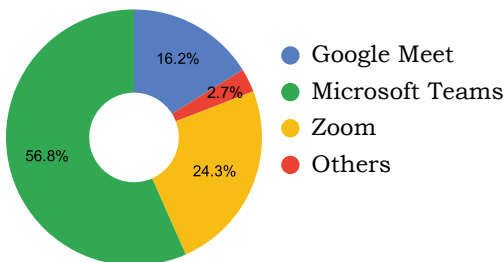
**General Information**

**1. Which device is your child using for online classes?**



As shown in the above pie chart, most of the parents are using mobile for online learning. This is alarming as it can lead to various eye-related problems. Spending long hours on mobile, tablet or laptop is causing various eye-related problems like dry eye syndrome, burning sensation in the eyes and also ear problems like noise induced deafness.

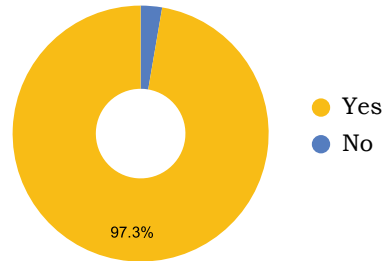
**2. Which platform is used by your ward's school for conducting online classes?**



Most of the schools are using Microsoft Teams, Zoom and Google Meet platforms for conducting online classes.

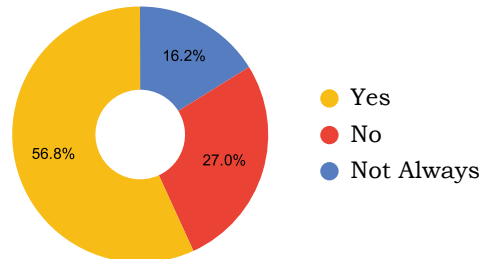
**Analysis of the Responses of Parents on the Effectiveness of Evaluation Methods Used in the Case of Online Education at Primary Level (Class I to V)**

**1. Is the School conducting online examinations?**



It is clear from the graph that 97.3 per cent of schools are conducting online examinations in their schools.

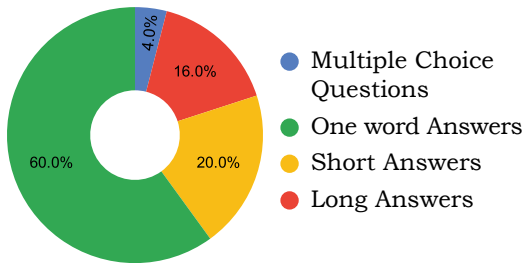
**2. Is your ward able to manage examinations on the virtual platform?**



The above pie chart shows that 56.8 per cent of children studying at primary level can manage their examinations themselves. 27 per cent cannot manage their examination themselves. This indicates that the schools can communicate with the children about the procedure to be

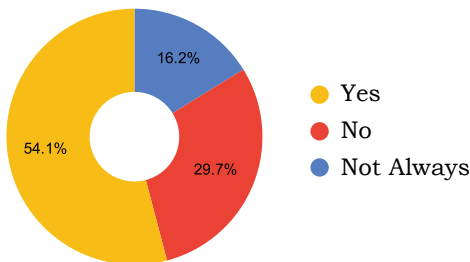
followed to attend the examination. They are going for mock tests and practice sessions for the students, so that their students can become familiar with the examination pattern and procedure of examination. These responses are very inspiring.

**3. What is the pattern of examination?**



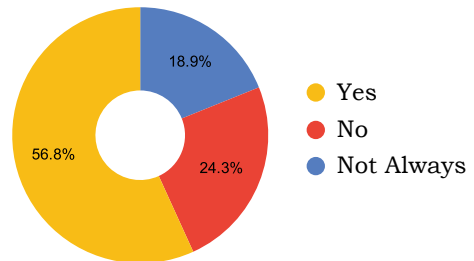
From the above pie chart, it is clear that most of the schools opt for multiple choice questions. Though multiple choice questions test a wide range of higher-order thinking skills and can cover a lot of content areas on a single exam and consume less time they often test literacy skills and provide unprepared students the opportunity to guess, and with right guesses, they get credit for things they don't know. It cannot always be used for evaluation purposes.

**4. Are you satisfied with the examination pattern?**



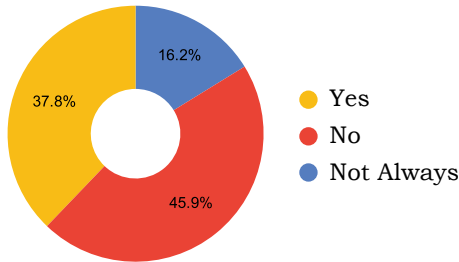
From the pie chart, it is clear that 54.1 per cent of parents are satisfied with the examination pattern, while 29.7 per cent are not satisfied. But we can also see that a large number of parents (16.2 per cent) are quite confused regarding the pattern of the examination, showing that there is still lack of confidence of parents in the pattern of examination.

**5. Are you able to track your ward's progress on a virtual platform?**



Nearly 56.8 per cent of parents can track their ward's progress on a virtual platform. 24.3 per cent are unable to track their wards' progress; this could be due to the interactive oral sessions conducted by most of the schools which gives a tentative view of the progress of their wards. Also, the formative and summative evaluation of students presents their progress. On the virtual platform, parents at home can see the interactions between teachers and students. The parents who are not always able to track their wards' progress are those with both the parents working and are mostly not present with their wards at the time of online classes, however they get to know their wards' progress through the test result.

## 6. Are you satisfied with the academic progress of your child?



Not even 50 per cent of the parents were satisfied with the academic progress of their ward. The major reason was the online nature of tests which supplemented with the text material (books, notes), were susceptible to cheating.

### CONCLUSION

This study analysed the perception of parents on the 'Effectiveness of Evaluation Methods Used in Online Education at the Primary Level' (Class I to V) in the urban region of Prayagraj Uttar Pradesh. With the outbreak of COVID-19 most of the teaching-learning process has shifted from conventional offline classes to the online platform. This change was sudden and was implemented on the students from primary to higher level. As the children belonging to the primary level are too young to adapt to sudden changes, thus teaching and evaluating them becomes a challenging job for the school authority, teachers and parents.

From the study it is evident that the evaluation process is the

most challenging job at every end as the platform used for the online evaluation has many lacunas. First and foremost, the platform used for conducting the examination does not always align with every parent. As not every parent is a technocrat, it might lead to ambiguity. Most of the schools are using Multiple Choice Questions for the evaluation of students, which limits their scope of evaluation, as they have no room for subjectivity and don't produce any qualitative data, but solely quantitative. Also, online evaluation puts up a big question mark on the reliability of examination, as it is evident that a child taking tests at home can use unfair means during examination marking doubt on his performance. Most of the parents are not satisfied with their wards' performance.

### SUGGESTIONS

There is always a scope everywhere for improvement in online evaluation. Some suggestions regarding this are as under:

1. Use of blended mode of learning for the future teaching-learning process which is an amalgamation of conventional offline teaching and virtual online teaching.
2. Use of concept-based questions and activity-based learning can somewhat reduce the child's urge for cheating.
3. Also, the platform used for online teaching should be such that the teachers can see all the students



- present in the virtual classroom.
4. Proper training should be conducted for students under supervision of their parents and teachers for the process of conducting online examinations with proper sample papers for practice.

### **Delimitation of the Study**

The study will be delimited to the

parents whose wards are studying at a pre-primary level in public schools in the urban area in Prayagraj city of Uttar Pradesh only.

The perception of the parents of children belonging to primary level (Class I to V) will be investigated in terms of their satisfaction on the evaluation process being adopted by the school for their wards.

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## Challenges and Opportunities for Primary Teachers in Implementing NEP 2020's Vision for Quality Education: E-learning Perspective

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### Abstract

*The introduction of India's National Education Policy 2020 (NEP 2020) has led to a significant change, emphasising a modern and comprehensive approach to education. A central aspect of this policy is the integration of technology, particularly the advancement of quality e-learning. Within the framework of implementing NEP 2020's vision for quality e-learning, it is essential to acknowledge the challenges and opportunities faced by primary teachers. E-learning has the potential to revolutionise education, providing equal access in a diverse and vast nation like India, where traditional educational resources are often inaccessible in various areas. This paper explores the various dimensions of this transformation, highlighting the important role of e-learning in achieving NEP 2020's objectives while emphasising the role of primary teachers in adapting to this evolving educational landscape.*

### INTRODUCTION

The National Education Policy (NEP) 2020 stands as a transformative milestone in India's educational landscape. Designed to reshape the country's educational system, the NEP 2020 envisions a more holistic, flexible, and contemporary

approach to learning. For decades, the country's education system has been characterised by a predominantly traditional and exam-centric approach. This approach, while yielding some successes, has often been criticised for stifling creativity, neglecting practical skills, and perpetuating educational inequalities.

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In response to these challenges, the NEP 2020 was crafted to revitalize and modernize India's education system. It not only recognises the importance of foundational and early childhood education but also acknowledges the significance of higher education and vocational training. It emphasises a shift from an examination-centric approach to a more comprehensive and competency-based learning system, focusing on essential life skills like critical thinking, problem-solving, and creativity. Recognising the importance of a strong foundation, the policy seeks to ensure universal access to quality education for all children. It also highlights the importance of mother tongue or regional languages in early education, aiming to make learning more relatable and inclusive. Furthermore, the NEP 2020 places a strong emphasis on the integration of technology and digital resources into the educational process, acknowledging the role of technology in making education more accessible and relevant (MHRD, 2020). In a country as diverse as India, where geographical and socio-economic disparities persist, the use of technology can democratise education and bring quality resources to remote and underserved areas.

### **E-Learning in NEP 2020**

E-learning is the process of getting and using information that is mostly shared and made easier through computer or electronic means (Wentling et al., 2000). E-learning assumes a crucial

role in realising the ambitions outlined in the National Education Policy (NEP) 2020 in India. Its significance extends across various dimensions of educational reform set forth by the policy. E-learning's primary contribution lies in democratising education by granting access to quality learning resources to students, irrespective of their geographic location, thus aligning with NEP 2020's commitment to universal access. Furthermore, it fosters personalised learning experiences, accommodating diverse learning needs in a learner-centric approach, a key principle of the policy. The availability of e-learning content in multiple languages supports NEP 2020's emphasis on mother tongue-based education. Additionally, e-learning promotes digital literacy, an essential skill in the technology-driven world, while also offering a collection of quality resources, supporting continuous assessment, and facilitating teacher professional development—all in line with NEP 2020's main goals of inclusivity, modernisation, and excellence in education.

### **Application of E-Learning in Primary Education in line with NEP 2020**

In the context of primary education in India as envisioned by the National Education Policy (NEP) 2020, practical applications of e-learning are transformative. E-learning can bridge resource gaps by providing access to interactive digital content, especially in underprivileged regions

with limited access to traditional teaching materials. It allows for the localisation of educational content in multiple languages, addressing NEP 2020's emphasis on mother tongue-based education, and making learning more inclusive and culturally relevant. Furthermore, e-learning facilitates continuous assessment, enabling teachers to track individual progress and provide timely interventions, aligning with NEP 2020's shift towards competency-based evaluation. Additionally, e-learning can serve as a valuable tool for teacher professional development, helping educators stay updated with modern pedagogical techniques and technologies, which is central to NEP 2020's goals of teacher empowerment and pedagogical innovation. These practical applications of e-learning can help bridge educational gaps, enhance the quality of primary education, and bring NEP 2020's transformative vision to fruitfully materialise in India.

### **Challenges Faced by Primary Teachers in Implementing E-Learning in Schools**

Primary school teachers face diverse obstacles in integrating e-learning in schools, such as lack of reliable Internet connection, lack of desired infrastructure, teacher training, engaging curriculum-aligned materials, regional language content, and technical issues which make teaching through e-learning difficult for teachers. Key challenges faced by teachers are stated below:

Firstly, the lack of reliable Internet connection in many regions, especially remote areas, is a major challenge for implementing e-learning. Teachers in these areas face the daunting task of delivering online education in environments with poor or no Internet connectivity. This digital divide not only hinders student learning, but also poses a significant obstacle for educators trying to adopt e-learning approaches.

Secondly, Teachers' technological proficiency is essential for successful e-learning implementation. Many teachers lack the necessary training and expertise to use digital platforms and tools effectively. This can make teachers struggle with the transition to e-learning owing to the technical aspects of delivering online education (Mynbayeva, Sadvakassova, & Akshalova, 2018).

Creating interesting e-learning resources that are specifically designed for the curriculum poses another significant obstacle. Teachers must devote a substantial amount of time and effort to designing digital content that connects with their teaching objectives and maintains students' interest and understanding.

Moreover, the need for e-learning materials in local languages presents an obstacle, often requiring the translation of the materials to accommodate various linguistic diversities. This introduces an additional level of complexity for teachers striving to ensure equal access to educational resources.

Additionally, technical problems and disruptions that occur during online classes can cause frustration for both teachers and learners. The smooth delivery of digital content is frequently hindered by technical issues, creating difficulties in sustaining an optimal learning environment.

Transitioning to e-learning requires a shift in teaching methods, which can be met with resistance and apprehension by teachers accustomed to traditional classroom settings. Adapting to new pedagogical approaches while effectively engaging students can be a difficult task.

Designing effective e-learning assessments and ensuring the integrity of examinations in a digital context is also a complex responsibility. Maintaining the credibility and fairness of assessments while utilising digital tools presents a significant challenge for teachers.

Another challenge for teachers is monitoring student participation and motivation in an e-learning environment. This requires innovative strategies, as it is more difficult to keep students engaged and motivated without the physical setting of a classroom.

Online privacy and security are also paramount concerns. Teachers and students must work together to ensure the protection of sensitive data and to foster a secure online learning environment. MoE and NCERT provide cybersecurity resources for teachers and students aiming to

equip them with the knowledge and tools necessary to enhance their understanding of cybersecurity concepts and best practices. It covers topics such as data privacy, recognising and mitigating cyber threats, cyber laws, etc. (CIET, n.d.).

Also, limited budgets can hinder schools' ability to acquire and maintain the necessary digital resources for e-learning. The cost of technology infrastructure, software licenses, and hardware upgrades can strain already tight financial resources (Khundrakpam, Singh & Singh, 2022).

E-learning can reduce personal interactions between teachers and students, which can impact students' emotional well-being and engagement. The lack of face-to-face contact can lead to students feeling isolated and detached.

Additionally, keeping e-learning materials up-to-date and effective requires teachers to invest significant time and effort. Ensuring that digital resources remain updated and relevant is a continuous challenge.

Finally, managing e-learning alongside traditional teaching tasks can be massive work. The proliferation of various digital platforms and tools can further complicate teachers' workloads, making effective time management essential. Overcoming these challenges requires a collaborative effort from educational authorities, governments, stakeholders and policymakers to provide primary

teachers with the necessary support, resources, and training required for successful e-learning implementation. Moreover, addressing the digital divide and ensuring equitable access to e-learning resources is imperative to make this transition more effective and inclusive, ultimately benefitting both teachers and students.

### **Opportunities for Primary Teachers with E-Learning**

The incorporation of e-learning offers various opportunities for primary teachers in India. They can engage in professional development through training programs, enhancing their digital literacy and teaching skills. Teachers can create customised e-learning materials, and share them within the academic community. E-learning fosters collaboration, enabling teachers to exchange ideas and best practices. It allows for personalised instruction, accommodating diverse learning styles, and even offers remote teaching prospects. Teachers can promote digital literacy, and assume leadership roles in implementing technology. E-learning opens avenues for educational research and prepares teachers for future trends in education. Lastly, it offers a global perspective, connecting educators worldwide. In essence, embracing these opportunities not only benefits teachers personally but also contributes to the improvement of primary education as a whole in India.

### **Role of Primary Teachers in Improving the Quality of E-Learning in Schools**

Primary teachers have a crucial role in advancing e-learning within the framework of NEP 2020. Their involvement and dedication are vital in ensuring that e-learning is effective, engaging, and aligned with the goals of the National Education Policy (NEP) 2020. Teachers can create personalised e-learning content, including videos, quizzes, and interactive lessons, tailored to their students' needs. Proficiency in e-learning platforms and digital tools is essential for primary teachers to assist students in navigating online resources, troubleshooting technical issues, and promoting responsible Internet usage. Using e-learning analytics, teachers can monitor students' progress and adapt their teaching strategies accordingly, adhering to NEP 2020's learner-centric approach. Additionally, they should be actively involved in designing and administering online assessments, offering constructive feedback for students' improvement. Promoting digital literacy, fostering inclusive education by adapting e-learning materials for diverse students' needs, and collaborating with parents to create a supportive e-learning ecosystem are vital roles of primary teachers. Teachers should critically evaluate e-learning resources for accuracy and guide students in finding reliable online information sources. Encouraging collaborative knowledge sharing by

teachers through the exchange of ideas, best practices, resources, and expertise can improve their teaching practice and lead to better outcomes for students. It also helps teachers to build a supportive community of colleagues and to improve their overall teaching effectiveness. By actively taking on these roles and responsibilities, primary educators in India can significantly contribute to uplifting the quality of e-learning and ensuring alignment with NEP 2020's principles, ultimately enhancing primary education in the country. Here are some suggestions for the practices that can be implemented by teachers and schools to ensure quality e-learning.

## **SUGGESTED BEST PRACTICES**

### **State-led Initiatives**

The use of specific best practices by the state government can significantly contribute to the advancement of e-learning in India. These can include developing age-appropriate, interactive e-content that is regularly updated to keep it relevant. The promotion of digital literacy among students is crucial to foster responsible utilisation of technology and facilitate active learning. There is a need of careful curation and development of regionally specific, multilingual e-learning resources to improve accessibility. It is advisable to promote the utilisation of competency-based assessment methods, such as formative assessments and projects,

accompanied by prompt feedback. Combining live and self-paced learning modalities provides students with increased flexibility in their educational pursuits. The provision of gadgets and Internet connectivity is crucial in endeavours aimed at mitigating the digital divide. The essential elements encompassed in educational practice involve the monitoring of academic progress among students who face challenges, ensuring inclusivity within the learning environment, and the provision of accessible resources and support systems for students with disabilities. Additionally, prioritising data privacy and security measures, promoting research and innovation in primary education e-learning, and engaging parents in supporting their children's e-learning are all crucial aspects of state-initiated best practices.

### **Teacher-led Initiatives**

Teachers also have a significant role to play in enhancing e-learning in India through their own best practices. One such approach is to divide lessons into engaging segments with clear instructions, hence facilitating comprehension and retention. They can identify and curate digital resources from national repositories such as DIKSHA, ePathshala, NROER, and NDL e-content portals, as well as contents from Open Educational Resources (OERs) (DSEL, 2020). Additionally, teachers can enhance the learning experience by using diverse modalities

that cater to different learning styles, such as the integration of relatable narratives(stories). Maintaining teacher-student interaction and promoting balanced screen time for young learners is important for effective teaching. The practice of gathering feedback from stakeholders for continuous e-learning improvement within the school is a valuable practice. Additionally, fostering teamwork among teachers and schools, offering comprehensive training for teachers to integrate e-learning tools effectively, and employing data analytics and assessment tools to monitor students' progress and adjust teaching methods are all essential teacher-initiated best practices.

By adopting these practices, primary educators in India can create a more engaging, effective, and inclusive e-learning environment tailored to the specific needs of young students in the digital age, ultimately helping them succeed in their education.

## **CONCLUSION AND RECOMMENDATIONS**

In conclusion, for the successful realisation of NEP 2020's vision for high-quality e-learning in primary education, several vital recommendations must be considered by those involved. Policymakers

should allocate significant resources to bridge the digital gap, ensuring both urban and rural schools have essential technological infrastructure. Investing in comprehensive teacher training programs is crucial, equipping educators with the needed digital skills and teaching expertise for effective e-learning integration (Bhalla, 2013). Policymakers should also ensure that e-learning resources align with the NEP 2020 curriculum and establish monitoring and support systems to aid progress and provide teacher assistance and professional development. Educational institutions should upgrade infrastructure, create culturally relevant e-learning content, support teachers, and involve parents in the e-learning process. Teacher training programs should emphasise e-learning pedagogy and inclusivity. Technology providers should offer affordable, user-friendly solutions with strong data security. Additionally, communities and civil society should advocate for equitable e-learning access, promote parental awareness, and empower parents to support their children's digital education. Together, these measures can transform challenges into opportunities, fostering a thriving e-learning environment in India's primary education sector.



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# 3

## Ensuring Equitable and Inclusive School Education: Analytical Review of Primary Stakeholders

C Thangminlal Dounge<sup>\*</sup>

### Abstract

*Education is the single greatest tool to achieve social justice and equality in society (NEP, 2020, p. 23). School education being a primordial tool at the forefront in this regard, plays a critical role. It is worth noting that in the context of India, efforts to ensure equitable and inclusive school education is an ongoing endeavour. It was the Right of Children to Free and Compulsory Education (RTE) Act 2009, followed by the Right of Persons with Disabilities (RPWD) Act of 2016, that added much-needed impetus towards this obligation of ensuring equitable and inclusive education. However, a closer observation at the implementation level reveals loopholes that need to be addressed. The National Education Policy (NEP) 2020 renewed commitment has added the much-needed fillip towards addressing these hitherto existing lacunas in our education system.*

*This article contends that despite a luminous and well-scripted policy documents, ensuring an inclusive and equitable education is still far-fetched without the active participation and collaboration amongst the primary stakeholders—parents, teachers, school heads, peers, etc. The current study based on secondary sources is the result of the analysis and argument drawn via literature reviews. The study establishes that a concerted effort by the stakeholders is critical to bridge the existing gaps in our education system pertaining to equitable and inclusive education. Furthermore, the cooperation and empathy of the stakeholders towards all sections of society will determine how many defects could be reduced or eliminated paving the way for achieving equitable and inclusive education.*

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## INTRODUCTION

With inclusive education, there is a need for a shift in attitude, availability and accessibility of infrastructure, pedagogy, need-based instructional methods, materials and the means of delivery, assessment and evaluation, and the much evident issue of acceptance at all levels in the education system (Ahmad, 2015, p.15). The NEP 2020 emphasises the need to provide all students, irrespective of their place of residence, with a quality education system, with a particular focus on historically marginalised, disadvantaged, and underrepresented groups. Its proposal to take initiatives to ensure that all students from such groups, despite inherent obstacles are provided with various targeted opportunities to enter and excel in the educational system (p.4), invariably entails that education must percolate to every section of the society to ensure an equitable and inclusive education.

In that respect, it was the Salamanca Statement and Framework for Action on Special Needs Education (1994) that brought a landmark shift towards the education of those children with special needs. The framework emphasises that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. India, being a signatory to the Salamanca Statement, is required to give the assurance that disability and diversity are addressed within an

inclusive educational domain (Forlin, 2013, p. 67). The Indian Education Commission (1964–66) was the first statutory body to suggest that the education of handicapped children be recognised (Yogi, 2021). Subsequently, several national initiatives were also undertaken afterwards. Some of the initiatives that followed suit were Integrated Education for Disabled Children (IEDC, 1974), the National Policy on Education (1986, 1992), the District Primary Education Programme (1994), the Persons with Disabilities Act (PWD, 1995), Sarva Shiksha Abhiyan (SSA, 2004) and RTE (2009), and the latest one being Right of Persons with Disabilities (RPWD) 2016, etc. Hence, to put this to practice the onus rests not just on the level of policies and acts, but the active involvement of the primary stakeholders becomes paramount.

With this understanding, the article focuses on the role of stakeholders in enabling inclusive and equitable education, with specific emphasis on school-going children with disabilities and challenges. The study uses secondary sources and literature reviews as the basis for analysis to draw a logical conclusion. The study contends that without the active participation and cooperation of the major stakeholders at the grassroot level, no amount of legislation or policy will be able to address the existing lacunas relating to inclusive and equitable education.

## LITERATURE REVIEW

### Equity in Education

The Cambridge dictionary defines equity as ‘the situation in which everyone is treated fairly and equally’. Sen (2009) defines equity as fairness, impartiality, and justice, and relates it to equal opportunity. It means that every child living in the society must have an equal opportunity to learn the skills of reading, writing, and simple arithmetic. Furthermore, inclusive education ensures that every child has the right to get a quality education in nearby schools in an environment that is friendly, safe, and secure. Here, diversity is acknowledged and measures are taken to remove any barriers to encourage participation (Kaushik & Srivastava, 2019). Hence, equity denotes a welcoming environment where everyone is valued, respected, and treated equally despite personal differences. Each student feels empowered, appreciated, and respected when educational practices are inclusive and based on equality and fairness.

Master and Adams (2018) exposed the challenges pertaining to the needs of the students as their needs are not uniform. This is because some students have special needs that require additional adult support, special school facilities and additional funding to meet those needs. This is where the role of primary stakeholders

becomes critical. Parents, teachers and peers must learn to accommodate and extend necessary assistance to such students. Since equitable and inclusive education for all remains a constant challenge, so, it is fair that resources are distributed unequally to meet these special needs and to ameliorate the disadvantages faced by students in the society. The proposal of NEP 2020 the establish gender inclusion fund to ensure that all girls receive equitable and quality education, and the setting up of Special Education Zones (SEZs) to provide targeted support to those disadvantage group is welcome step.

### Inclusive Education

Canada often is regarded as a leading nation in the area of inclusive education and disability. Andreas Hinz of Germany argued, “Canada has made inclusion a hallmark of its educational systems” (Bunch, 2015). The principle was later adopted at ‘World Conference on Special Needs Education: Access and Quality’ at Salamanca Spain in 1994, and was restated at the World Education Forum at Dakar Senegal in 2000 (cited in Nagpal, 2018, p.801). The concept of inclusion emerged from the idea of providing equal opportunities to all children keeping in mind the diverse nature of their individual needs (Swarup, 2007, p. 197). But the concept of equal opportunities is profoundly

challenging since it embodies the notion of egalitarianism—the idea that everyone ought to receive education as a right and not merely by chance or charity (Salam, 2020).

Today, the conceptual evolution of inclusion in education has moved beyond the bounds of disability and has now extended to all children in and out-of-school. It includes ‘culturally responsive’ education and pedagogy based on learning experiences sensitive to the cultural realities of the child—home life, community experiences, language background, and belief systems (UNESCO, 2004). To meet the various learning requirements, an inclusive education strategy calls for reorganising school and learning environment policies, curricula, cultures, and practices (Patton, 2011). With this strategy and approach, the school will then be able to meet the requirements of the students rather than forcing them to change (Mamidi, 2017).

The term “inclusion” emphasises society’s need to alter the environment so that Children with Disabilities (CwD) and those with Socially and Economically Disadvantaged Groups (SEDGs) feel empowered to participate in the educational system (Kaushik and Srivastava, 2019). Inclusive education suggests that all learners—those with and without disabilities—can study alongside one another by

having access to common pre-school facilities, schools with the support of the necessary infrastructure and services (Sanjeev & Kumar, 2007). Furthermore, the National Curriculum Framework for Teacher Education 2009 (NCFTE) emphasised inclusive education as philosophical as well as an arrangement of institutional facilities and processes.

Hence, a closer evaluation of the two definitions reveal that the two terms are almost symmetrical in their definition and approach. However, while equity has to do with laws and government arrangements, inclusion, on the other hand, has to do more with institutional arrangements. It endorses the role of government and social institutions to be accommodative and allow space for non-discrimination, irrespective of the differences and background of the individual. Table 1 shows the dropout rate on the basis of social categories. Over the years 2017–2019, it is evident that the dropout rate of those belonging to socially disadvantaged groups of SCs and STs is higher than the other groups. It is also evident that dropout rate of ST boys and girls continues to be high. Therefore, to achieve an inclusive education there ought to be considerable attention given to these groups while not losing focus on other categories of social and physical indicators.

**Table 1**  
**Dropout Rate at Different Levels, 2018–19\* (All-India)**

Social Category	Primary Level, 2018–19			2017–18
	Girls	Boys	Overall	
General	3.62	3.61	3.62	1.92
Scheduled Castes	4.90	5.41	5.16	4.86
Scheduled Tribes	5.23	5.71	5.48	3.65
Other Backward Class	4.18	4.55	4.37	3.76
Overall	4.30	4.60	4.45	3.51
Social Category	Upper Primary Level, 2018–19			2017–18
	Girls	Boys	Overall	
General	2.78	2.27	2.51	2.87
Scheduled Castes	6.48	5.62	6.04	6.69
Scheduled Tribes	6.46	6.89	6.69	6.06
Other Backward Class	5.60	4.22	4.89	5.35
Overall	5.14	4.26	4.68	5.02
Social Category	Secondary Level, 2018–19			2017–18
	Girls	Boys	Overall	
General	13.02	13.37	13.2	14.95
Scheduled Castes	18.95	21.3	20.18	21.79
Scheduled Tribes	23.25	26.26	24.8	22.27
Other Backward Class	17.34	19.22	18.34	19.58
Overall	17.01	18.64	17.87	18.96

Source: U-DISE+ portal. \* It is for cohort 2017–18 Cited in: Mehta (2021)

### **ANALYSIS OF PRIMARY STAKEHOLDERS AND THEIR MANDATE**

A stakeholder is either an individual or a group of persons having an interest in an enterprise that requires their support to be successful. Extrapolating the concept to the field of education, the stake is the education provided in schools and institutions of higher learning, and the stakeholders are teachers, parents, children, community members, educational

administrators, non-academic staff, and so on, because they all have an interest in the educational process and the enterprise of education cannot be successful without their support (Kaushik, 2019).

A proactive approach is required from the stakeholders both at the planning and execution stages to address the learning needs of students with special needs as equal participants in the learning

process. To implement need-based educational strategies effectively, it is important for all the stakeholders involved to collaborate, participate, and be better equipped with the necessary skills to help the learners learn the skills appropriate for their roles and capacities in order to help them perform well in education and life (Ahmad, 2015). Hence, the primary stakeholders must be identified, as well as their roles minutely understood. Since the educational process cannot be addressed in isolation, the study considers the collaborative roles and responsibilities of the stakeholders in addressing the challenges that arise as a result of children's diverse needs. Accordingly, the focus of this study will be on the implementing agencies such as schools, teachers, parents, siblings, peers, etc., and their roles critically analysed.

### Schools

Schools are regarded as the unit incharge of putting educational policies into action. When schools in India are asked to open their doors to children with special needs, they feel pressed and burdened. Attitudinal

and infrastructural barriers become an additional burden. The policies' intentions and their implementation on the ground are not in sync. As a result, the school administration has a lot of tasks in hand to achieve the desired level of inclusiveness and equity.

A study by Gupta (2019) reveals the need for teachers to consider every aspect of learners' cognitive, mental and physical needs in an inclusive classroom. Apart from the curricular adaptations, the need to modify infrastructures in the school is also emphasised. Physical infrastructure must facilitate a conducive environment for those physically challenged. Integration of inclusive schools with regular schools entails that every school must be physically prepared to accommodate any children with special needs for a wholesome inclusive learning. Even though the majority of our schools, as shown in Table 2, have building amenities, a sizable portion of them do not have ramps and other facilities within the school premises. With only 62.1 per cent of ramps, schools must do much more to eliminate infrastructural obstacles to move closer to inclusive goals.

**Table 2**  
**Facility Indicators 2017-18 (All India)**

Facilities	Total	Facilities	Total
Building	98.24	Ramp	62.12
Boundary Wall	56.15	Physics Laboratory	39.49
Separate Room for HM/ Principal	55.53	Chemistry Laboratory	39.22
Electricity connection	63.14	Biology Laboratory	37.46
Library	77.38	Computer Laboratory	45.17

Librarian	6.72	Mathematics Laboratory	15.47
Playground	62.17	Language Laboratory	9.79
Computer	29.57	Geography Laboratory	15.24
Functional Computer	13.07	Home Science Laboratory	9.03
Internet Connection	13.61	Psychology Laboratory	4.48
Drinking Water Facility (Functional)	90.1	Integrated Science Lab	47.8

Source: U-DISE 2017-18, NIEPA, New Delhi

## Teachers

Teachers are the primary actors in the educational process. The teacher is responsible for ensuring curriculum transactions, conducting assessments and evaluations, creating an accepting and democratic environment, and learning (Kaushik, 2019). Providing support to students with disabilities so that their inclusion in education will be socially and academically meaningful is a practical challenge faced by the teachers in inclusive programs. The teacher sets the stage right and conducive for meaningful learning. In essence, it is the teachers who are authors and creates an inclusive ambiance in the classroom and school.

Further, the curriculum that is alien to them must be evaluated and adequate changes must be introduced at the earliest as this leads to the feeling of alienation in the child, and could have a detrimental consequence as it demolishes the sole purpose of inclusion and equity in the classrooms. Meaningful inclusion cannot be accomplished by special education teachers alone. It requires the collective effort of the administrators, teachers, and

parents to not just value diversity, but also question the traditional ways of segregating difficult students (Swarup, 2007). Adaptability of the teachers to conform to the restructured curriculum and pedagogical practices as recommended by NEP 2020 to create an inclusive classroom where varied cultural, linguistic, and socio-economic background of the students are respected and cherished will help transform and foster inclusion in the classrooms.

In addition, peer-support and peer interaction must be valued and encouraged in the classroom by the teacher to engineer the spirit of equity and inclusion in the school (Kaushik, 2019). It is, therefore, incumbent upon the teachers to ensure that a conducive environment in the school is enabled where everyone accepts and internalise diversity as a positive strength in the learning process.

## Parents

Parents occupy a critical place among the primary stakeholders in education whose active involvement is vital to ensure that children perform well and realise their potential. The role of the family or parents in this case is so



critical that, the UN Convention on the 'Rights of Persons with Disabilities' advocated the role of the family as an initial participant in providing the conducive environment for children suffering from disabilities. This initial environment helps Children with Special Needs (CWSN) in realising their true potential and living a fulfilling life (Kaushik, 2019). Hence, the education of the parents in this regard is crucial and must not be overlooked. Parents must provide the necessary resources and emotional support their children, and must advocate for inclusive practices and policies. They must demonstrate inclusive behaviour and attitude at home while at a same time teach values of respect and acceptance to sow seed of inclusive mindset (NEP, 2020).

In addition, parents must accept the situation at hand and provide essential information to the teachers to help them facilitate the child with the right guidance and assistance. Having a fair amount of knowledge regarding the child's conditions is critical for teachers to help them decide their approach towards the child with special needs. Meanwhile, parents of children without special needs must also support inclusion by accepting and appreciating their children's participation in a diverse classroom and encourage them to become friends with children with special needs (ibid, p.157). However, despite emphasis given at the level of policies, absence of such

collaborations is still observed in our schools, and the case is acute in the far-flung rural schools. The parents in such areas do not even send their childrens with special needs to schools as they do not want to burden the school, or that parents are utterly ignorant otherwise.

### **Siblings**

Family is the first environment that a child encounters in the process of socialisation, and siblings learn from each other through lifelong relationships. In case one of them is born disabled or has special needs, the other gets impacted. The siblings without disability, if involved properly, with full awareness and knowledge, may prove to be beneficial in making their brother or sister with disability effectively included in the school or society (Kaushik, 2019). The traditional concept of hopelessness and disdain for education due to challenges faced by the SEDGs and families of CWSN must not be allowed to affect the ample possibility of turning the status-quo of the child and the family.

Siblings must take the moral responsibility of encouraging the less fortunate in the family to look ahead in life with hope and render assistance wherever required. Taking the support of the available resources and support system, siblings can become a great motivating factor. This attitudinal shift of the siblings towards the child that requires extra attention will pave the way for inclusiveness in the classroom or school. NEP 2020 also

recognised the critical role of siblings and advocates the need to offer emotional and academic support to its other, to help will confidence and self-esteem by encouraging their siblings with special needs to participate in school activities. Siblings, therefore have the moral obligation in sowing the seed of inclusion and equity right from the start. The spill over effect of this positivity beyond the family will eventually transform our approach towards those with special needs.

### **Peers**

In classroom teaching, maximum interaction occurs among the students which may not be teacher-directed. These interactions are often informal and outside the purview of the teacher's active gaze. This helps the children bond with each other and aids in the formation of a social identity and a kind of social solidarity that allows for a creation of a conducive environment in which the child with special needs feels accepted and acknowledged. It is in this kind of situation that the peers must aid and perform inclusive and equitable roles towards their fellow peers. NEP 2020 also emphasised the need for peers to create a school culture that values diversity and inclusivity by treating all classmates with respect and kindness, and to eliminate biases and stereotypes within the school environment.

Peers must be strictly informed that no child must abuse or make fun of CWSN or children belonging to the SEDGs that leads to the exclusion and

the feeling of alienation from the other children. This will allow the creation of an environment conducive to mutual acceptance and respect, thereby facilitating a proper foundation for an inclusive society. Interaction among peers must be carried out without hurting anyone's feelings and sentiments. Communication and social etiquettes must be enhanced to interact with positivity and respect for the feelings of CWSN and children belonging to SEDGs. Peer mentoring programme where students assist those who need extra help to foster a sense of community and belonging must be encouraged (NEP, 2020). The challenges lies in navigating such culture when our education system still celebrates competition, and is achievement oriented.

### **CONCLUSION**

While inclusive and equitable education is an essential goal in its own right, it is a huge challenge to achieve a society in which every citizen has the opportunity to dream, thrive, and contribute to the nation (NEP, 2020). Although the Government of India has attempted to create numerous policies that are inclusive for people with disabilities since the country's independence in 1947, their efforts have not borne the desired results, nor has it achieved its goal of "Education for all" uniformly across the country (Nagpal, 2018, p. 804). However, having understood the term equity and inclusiveness, as well as the associated barriers of our educational system in general and

school education in particular, we can now set a firm footing to address the core challenges that thwarts us from achieving our goals.

Today, there is an even greater need to emphasise the teamwork of all stakeholders. This has emerged from a thorough examination of our educational system available through relevant literature and research. The process from the time the policies are drafted to the time they are implemented at the grassroots has revealed a huge gap that needs to be bridged. All of the stakeholders we have extensively discussed must collaborate and work together for this

massive exercise to succeed. All roles and responsibilities must be seriously considered, followed through with almost sincerity, and done with a feeling of duty and empathy. Merely depending on the efficacy of laws and policies will have the reverse effect of what is intended. The plan to address the issues must be novel and relevant as requirements and demands diversify. The gaps that have so far existed at the implementation level to ensure inclusion and equity will be bridged when the true intentions of the implementing agencies and the appropriate cooperation of the stakeholders are in sync.

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# 4

## Enhancing Pre-Numeracy Readiness of Preschool Children

Reetu Chandra\*

### Abstract

*In the process of acquiring new information, cognitive skills help children think critically and creatively thus, solving problems. Preschool is the right place to begin by providing such input to young children. These inputs are vital to the development of pre-numeracy competencies called pre-numeracy readiness among preschool children, necessary for improving learning outcomes in mathematics in schools. These also help increase children's participation in school, strengthen retention, and thus ensure success in school. Realising the significant role of pre-numeracy in preschool children for their future learning and development, a study was conducted in preschools of four Municipal Corporation of Delhi (MCD) schools. This study intended to find out the existence of pre-numeracy competencies in the curriculum and among children. For this purpose, curriculum content analysis, classroom observation, and assessment of the level of pre-numeracy competencies among 82 preschool children were done to identify the learning gaps. To address the identified gaps, a set of activities were suggested to be included in the curriculum. The data was collected by the use of an observation schedule, a checklist to review curriculum content, and a school readiness instrument. The classroom observation suggested that though the curriculum contained some of the pre-numeracy activities in practice, such activities were rarely conducted. Gap analysis suggested that the majority of children were weak in the field of relative comparison: number-greater/lesser followed by making different patterns using different shapes, understanding pre-number concepts, identifying sequence and describing in words and understanding the concept of space. This study has the potential to identify the gaps in pre-numeracy readiness among preschoolers and provide possible solutions to address these issues at a large scale.*

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## INTRODUCTION

School readiness refers to the child's attainment of a certain set of skills and competencies under different domains of development such as physical, socio-emotional, language and cognitive. Children, who are weak in these skills and competencies are more likely to fail and eventually, drop out of school; get into trouble with the law; and have emotional difficulties, often leading to low-wage jobs, unemployment, and welfare dependence (CDPHE & CDHS, 2004).

According to Janus and Offord (2007), cognitive skills, reflecting an array of experiences in the early years, help make children ready to acquire new knowledge and information. Through cognitive development, children learn to observe, note similarities and differences, solve problems and ask questions (Mathematical knowledge and Abstract thinking). According to Naudeau et al. (2011), cognitive development indicators include problem-solving skills (for example, stacking and nesting objects), memory, and early numeracy skills (for example, sorting objects and knowing what is meant by 'one' or 'two' of something). As children near school age, indicators include knowledge of letters and numbers, the ability to retain information in short-term memory, and knowledge of key personal information like one's name and address. In Argentina, one year of pre-primary education/

ECE (Early Childhood Education) was estimated to increase the average third-grade test scores in mathematics and Spanish by 8 per cent. In Nepal, disadvantaged children attending pre-primary education/ECE recorded significant gains in cognitive development, with subsequent increase in enrolment and progression through primary school (UNESCO, 2011).

Therefore, gaining cognitive competence at the preschool level helps children understand pre-numeracy concepts thus ensuring that children are prepared. However, preschool centers, especially government schools, do not focus on the activities and opportunities related to building and strengthening these concepts and competencies among preschool children. A preliminary survey of MCD schools revealed a similar condition. Therefore, the researcher has conducted the present study to:

- find out the existence of activities related to the pre-numeracy competencies in the preschool curriculum of MCD schools; and
- identify the gaps in the pre-numeracy competencies among preschool children of MCD schools.

## METHODOLOGY

The study was conducted in preschools of four randomly selected Municipal Corporation of Delhi (MCD) schools in

the South District of Delhi. This study intended to find out the existence of pre-numeracy competencies in the curriculum and among children. For this purpose, curriculum content analysis, classroom observation, and assessment of the level of pre-numeracy competencies among 82 preschool children were done to identify the learning gaps. The data was collected by using Observation Schedule, Checklist to Review Curriculum Content, and School Readiness Instrument.

## RESULTS AND DISCUSSION

The results of this study fall under two parts. The first part charts the existence of activities related to the pre-numeracy competencies in curriculum and in practice. The second part shows the gaps in the pre-numeracy competencies among preschool children of MCD schools. The results of the study are as follows:

### **Existence of Activities Related to the Pre-numeracy Competencies in the Curriculum and Practice**

The curriculum review suggested that except for the activities related to the concept of 'space' and 'relative comparison', i.e., 'numbers lesser and higher', the curriculum has suggested activities under all the aspects like pre-number concepts, identification, differentiation, sequential thinking, classification/sorting, matching, missing numbers, pattern making, problem-solving,

etc. However, observation of all four classes suggested that in practice activities related to all the aspects of pre-numeracy concepts were not actually conducted in any of them. Occasionally, they conduct activities related to pre-number concept, classification and identification/writing of numbers. Apart from the identification of alphabets, curriculum suggested writing of numbers. Activities related to pattern making and relative comparison were negligible. Teachers were seen giving children some kind of writing work. It was noticed that all the children carried copies and pencils in their bags. On asking, teachers informed that due to the parents' pressure they give them some writing exercises. They said if they don't assign such exercises, parents will think, nothing is happening in the class and teachers are not teaching.

The findings of studies on preschool education in India also supported the findings of the present study about the existence of pre-numeracy or cognitive readiness in curriculum and practice. In 2006, NIPCCD reported that majority of the centres in the country organised outdoor activities—activities related to fine muscle coordination, while the activities related to the pre-numeracy or cognitive and language readiness were rarely observed. Kaul and Sharma, in 2019, reported a similar situation in Andhra Pradesh, Assam and Rajasthan. According to



### Gaps in the Performance of Children under Different Aspects in Pre-Mathematical Readiness

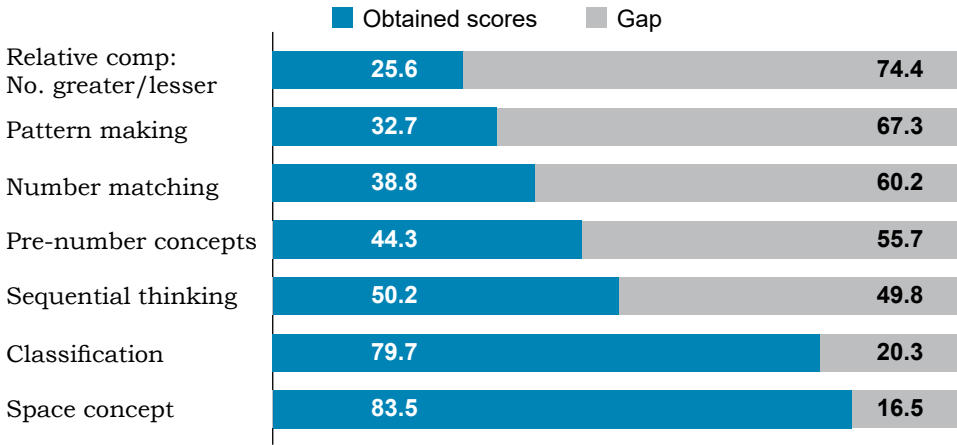


Figure 1: Gaps in pre-numeracy readiness of preschool children

them, activities for socio-emotional and cognitive development, and art and craft were only occasionally conducted.

#### Gaps in the Pre-Numeracy Competencies Among Preschool Children of MCD Schools

Gaps in the performance of preschool children were found in all seven aspects (100%) of pre-numeracy readiness. These gaps in scores ranged between a maximum of 74.4 per cent and to minimum of 16.5 per cent. As per the intensity of the gaps shown in the figure, the majority of children were weak in the aspect of relative comparison: number-greater/lesser with a gap of 74.4 per cent, making different patterns using different shapes (67.3%), matching numbers (60.2%), understanding pre-number concepts (55.7%), sequential thinking

(49.8%), classification (20.3%) and understanding the concept of space (16.5%).

The findings of the study conducted by Bhise (2015) in her study in Maharashtra reported that in of 90 per cent preschool centres the quality of activities for pre-numeracy/ cognitive skills such as classification, seriation, reasoning, pattern making and sequencing were poor. She further reported that in 86 per cent of centers reading, writing and number work using formal, rote memorisation methods like copying from the blackboard, chart and textbook by the children was observed. In 79.50 per cent of centres no activities were conducted to develop readiness for reading, writing and number such as phonetics, sound visual association, the odd man out, pre number concept, picture book reading, etc., where as

in only 19.5 per cent of centres some readiness activities were conducted but only a few children were involved. The present study reported a similar situation in the preschools under MCD schools in Delhi.

## CONCLUSION

The results revealed that, the preschool curriculum rolled out in preschools of MCD school of Delhi by the MCD administration suggested different activities for building and strengthening pre-numeracy competencies among preschool children such as, pre-number concept, identification, differentiation, sequential thinking, classification/

sorting, matching, missing numbers, pattern making, and problem-solving, etc. However, observations of sampled classes suggested that activities related to these competencies are not being carried out in the classroom. Assessment of the performance of pre-numeracy readiness of children also revealed heavy gaps in the readiness level of children under all seven competencies. Therefore, it is suggested that there is a need for intensive teacher training for preschool teachers. The focus of such teacher training should be on planning, developing, conducting, and evaluating the activities related to pre-numeracy competencies.

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## Competencies of Head Teachers and SMC Chairpersons in Financial Management in Elementary Schools: A Case Study

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Gitanjali Panda\*\*

### Abstract

*Head Teachers and the School Management Committee (SMC) are the main stakeholders entrusted with administrative roles in elementary schools to meet the financial objectives in Odisha. The dynamic changes in educational culture demand more knowledge, skills, values, and attitudes to achieve efficiency in financial management among the Principals and SMC members. The survey, with a well-structured questionnaire, was conducted in 58 government elementary schools across 116 respondents consisting of 58 head teachers and 58 SMC chairpersons. The objective of this study was to evaluate the competencies of primary schools in generating income and its effective utilisation for the school's development through the perceptions of the two major stakeholder groups. Frequencies, percentages, and averages were used in descriptive statistics, whereas inferential statistics were used for hypothesis testing. At a significance level of 0.05 in the t-test, the study indicated that there is no significant difference between the mean ratings of Head Teachers and SMC Chairpersons in the case of financial management practices. The major issues relating to the financial management of schools are found to be poor knowledge regarding sources of funds and means of acquiring them, poor follow-up and tracking of budget preparation and evaluation, a lack of auditing abilities, and a lack of transparency in financial operations, which are crucial for managing finances. Therefore, the quality of education can be improved through efficient financial management by addressing these issues.*

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## INTRODUCTION

The role of education can never be denied in a nation's development in all fronts, such as on the socio-economic, political, and cultural fronts. Finances, being the lifeblood of every institution, need to be managed efficiently to achieve quality improvement in education, particularly elementary education. The major stakeholders who are at the helm of affairs in elementary school management are the Principal and the School Management Committee, who take responsibility for providing the school's facilities, organising the teaching-learning process, planning co-curricular activities, supervising school activities, and identifying students' needs and demands. The scope of functions also includes maintaining the school's records, ensuring financial management, collaborating with parents and society, working with educational authorities, tracking and evaluating student performance.

This study examines the key areas on which the Principals and SMC members should give attention for proper financial management by utilising the resources given by the Education Department, thereby developing the education scenario. The research makes an effort to know how successfully Principals and SMCs use resources provided by the Department of Education to improve communities through education. The study suggests that there is a need for capacity development programmes

and follow-ups to upskill and reskill the staff, and strengthen the school governance structures in order to ensure solid financial management at the level of the school. The principal is one of the educational leaders, and his or her understanding and leadership abilities are essential to realising educational goals. This guarantees that Head Teachers' and SMCs' competence level improves and evolves in order to attain teacher professionalism rather than being stagnant at its current level.

This study has recommended that school Principals and SMCs be listed among the emphasised competencies for academic success. The study suggested training in financial management, record keeping, staff management, service law, and ICT skills for incoming Principals at the time of joining as well as capacity building for present Principals in these areas for efficient financial management.

## REVIEW OF LITERATURE AND RESEARCH GAP ANALYSIS

An attempt has been made to review some of the literature related to financial management of schools, both at national and international levels.

Alias and Nor (2018) conducted a study on the financial management skills of Principals in Malaysia, using descriptive survey design. They emphasised lifelong learning on the part of the Principals, particularly in the use of digital equipment in

managing school finances in the present era. Principals are also responsible for keeping track of all expenses related to their role as a school's financial manager. A financial committee must be constituted, with all members performing their responsibilities effectively and efficiently. In-service training, workshops, and seminars on financial resource management must be organised in order to give school administrators the tools they need to effectively manage school finances in secondary schools. It is also suggested that auditors check the schools' financial records on a regular basis.

Dwangu and Mahlangu (2021) and Kwan (2011) used semi-structured interviews to identify the effectiveness of accountability mechanisms in financial management practices of school Principals. The study stated that the School Governing Body (SGB) should continue to be involved in the budgeting process at the school. Parents should continue to approve the school budget, but the school administrator should be held responsible for its execution. The finance committee should have the ability to vote on who will provide specific items or services. The school principal should be required to hold parent meetings every year in order to submit a financial report to the parents. Last but not least, schools should consider creating a strategy for leadership succession.

Mobegi, Ondigi, and Simatwa (2012) revealed that a corrupt style of promotion, a lack of financial training, a weak board of governors, inadequate internal control systems, irregular auditing, a lack of trained bursars, and meddling from sponsors and the community were all major contributors to financial mismanagement.

Mestry and Singh (2007) conducted a study on continuing professional development for Principals in South Africa using qualitative research approach. The study revealed that the Advanced Certificate in Education (ACE) degree can help to provide a consistent and long-term approach to strengthening leadership and managerial skills across the educational system. In-service education should become an essential and required part of Principals' continuing professional development in school management, rather than a remedial accessory. In-service training is designed to assist a principal's advance professionally so that they may better manage their schools and respond to educational change and innovation.

Adegbemile (2011), Ray, Muhammad and Adnan (2021), and Ng and Szeto (2015) used survey questionnaire to investigate the competency needs of Principals for effective school management. The study ascertained that: 1) Teachers will be more committed to ensuring that the objectives are realised if they are involved in the definition

of the objectives. 2) The principal is responsible for keeping the school's financial records up to date. Giving non-governmental organisations, PTAs, people, and the government information about the school's current and financial situation would work as a "curtain raiser" for them to offer funds for school expansion.

### OBJECTIVE OF STUDY

The study is designed to ascertain the financial management practices of elementary school Principals and SMC Chairpersons in Jaleswar. The objectives of the study are:

1. Examine the financial management responsibilities of Principals, Head Teachers, and SMCs in elementary schools.
2. Determine the financial management issues in elementary schools that Principals and SMCs deal with in terms of funding sources, budgeting, audits, transparency and financial resource management.

### HYPOTHESES

The following hypotheses were tested in the study:

**Ho1:** There is no significant difference between the mean rating of Head Teachers and SMC Chairpersons in the case of financial management practices related to sources of fund, budget preparation and utilisation in elementary schools.

**Ho2:** There is no significant difference between the mean rating of Head Teachers and SMC Chairpersons in

the case of financial management practices related to financial resources, transparency, auditing and financial management in elementary schools.

### RESEARCH METHODOLOGY AND DATA

The study uses primary sources of data, gathered through survey questionnaires.

#### Area of Study

Jaleswar is located in the eastern part of Balasore district of Odisha in India. The town has a 78 per cent literacy rate, higher than the national average of 72.87 per cent. It is 8 km from the West Bengal border and 50 km from Balasore. It is one of the major blocks in Balasore. According to 2011 India census, Jaleswar had a population of 25,747 inhabitants which comprises 52 per cent male and 48 per cent female. There are 181 Government elementary schools in Jaleswar. 58 elementary school Principals or Head Teachers and 58 SMC Chairpersons make up the study's subject population. Participants in the study comprise 72 per cent males and 28 per cent females in Head Teachers, and 91 per cent males and 9 per cent females in SMC Chairpersons (as shown in Table-1) in 58 elementary schools. 55 per cent of Head Teachers are B.Ed. graduates, and 79.3 per cent of Head Teachers have more than 20 years of experience. 10 per cent of SMC chairpersons are not even matriculates and 98 per cent of SMC chairpersons have 0-5 years of experience.

**Table 1**  
**Profile of Head Teachers and SMC Chairpersons**

Participants	Demographic variable	Category	No of persons participating in survey	Percentage
Head Teachers	Gender	Male	42	72
		Female	16	28
	Educational Background	Post Graduate with B.Ed/ C.T	7	12.1
		Graduate with B.Ed/C.T	32	55.1
		Intermediate with C.T	11	19.0
		Matric with C.T	8	13.8
Experience	0-10 years	3	5.17	
	11-20 years	9	15.52	
	Above 20 years	46	79.32	
SMC Chairpersons	Gender	Male	53	91
		Female	5	9
	Educational Background	Graduate	15	25.8
		Intermediate	13	22.4
		Matriculate	24	41.4
		Lower than Matric	6	10.3
Experience	0-5 years	57	98.28	
	Above 5 years	1	1.72	

### Research Design

This research is primarily a descriptive survey. It was created to look into how accountable Head Teachers and SMCs are for financial management.

### Population of Study

The population of the study comprised 181 Government elementary school Principals and SMC Chairpersons in Jaleswar. The population of Principals and SMC was 756.

### Sample and Sampling Technique

The study was conducted in 58 schools out of 181 schools. The sample

consists of 58 Principals and 58 SMCs which gave a total of 116 respondents. The simple random technique was used. The sample was stratified into two strata, namely:

1. Principals or Head Teachers
2. School Managing Committee (SMC) Chairpersons.

### Instrument for Data Collection

The Financial Management Practices Questionnaire (FMPQ) is the instrument used for data collection. In order to provide knowledge of financial management techniques, this was examined and modified. There are 22 components in the instrument.

## Reliability of the Instrument

The Cronbach alpha method was used to determine the reliability of the instrument. This yielded a high reliability coefficient of 0.85.

## Data Collection Technique

The researchers were able to determine the best times to distribute and collect the questionnaires, which served as the primary study instrument, thanks to an earlier meeting with a few of the Principals, block and cluster resource people. The questionnaire, which has 22 items and was created in relation to accountability in financial management practices of Head Teachers and SMCs, was personally given to the respondents and collected by the researcher.

## HYPOTHESES

The null hypotheses below guided the study and they were tested as 0.05 level of significance  $H_0$ .

There will be no significant difference between the mean ratings of the Principals and SMCs with regard to the financial management of elementary schools.

## DATA ANALYSIS AND FINDINGS

The study used a descriptive survey design and was carried out in Odisha's

Jaleswar block. 58 Principals and 58 SMC Chairpersons from Jaleswar's elementary schools made up the study's sample. A 22-item questionnaire created by the researcher was used to analyse the managerial competencies of the Head Teacher and SMCs for effective management of school resources for the study. Each question had a 5-point Liked-scale with the following options: 5-Strongly Agree (SA), 4-Agree (A), 3-Neutral or I don't know, 2-Disagree (DA), and 1-(D) Strongly Disagree (SDA). In order to address the study issues, data were analysed using the mean and standard deviation.

To find the answers to the stated study questions, the gathered data were evaluated. The five point category approach was used to weigh the responses to the survey items.

1. Strongly agree (5 points)
2. Agree (4 points)
3. Neutral (3 points)
4. Disagree (2 points)
5. Strongly disagree (1 point)

$$\text{Mean } X = \frac{5 + 4 + 3 + 2 + 1}{5} = \frac{15}{5} = 3.0$$

In analysing the data, the simple mean was used to answer the research questions. The t-test statistics were used to test the hypothesis study.



**Table 2**  
**Mean Ratings of Head Teachers and SMC on the Sources of Funds and Budget for the Management of Elementary Schools**

S.N.	Questionnaire items	Head Teacher (N=58)		SMC (N=58)		Average Mean	Decision
		Mean	Decision	Mean	Decision		
1.	A school uses a community contribution as a source of school finance	2.74	Disagree	2.81	Disagree	2.8	Disagree
2.	A school generated its own additional sources of finance/Land rents, etc.	2.17	Disagree	2.28	Disagree	2.2	Disagree
3.	School uses any financial support from industry, promoters, MP, MLA, 5T and others	2.53	Disagree	2.62	Disagree	2.6	Disagree
4.	A school uses alumni contribution such as Mo School Aviyan as a source of school finance	3.55	Agree	3.41	Agree	3.5	Agree
5.	Concerned bodies (teachers, SMCs, head teacher, BEO, DEO) participate in budget preparation	3.81	Agree	3.93	Agree	3.9	Agree
6.	Adequate experience of the school Principals or heads and SMCs in budget preparation	2.69	Disagree	2.33	Disagree	2.5	Disagree
7.	Financial budget and planning as per need of schools	4.54	Agree	4.09	Agree	4.3	Agree
8.	Timely preparation of budget by concerned bodies	3.07	Agree	2.62	Disagree	2.8	Disagree
9.	The allocated budget was utilised as per financial norms	4.46	Agree	4.05	Agree	4.3	Agree
10.	The allocated school finance was recorded regularly	4.42	Agree	4.0	Agree	4.2	Agree

11.	School stakeholders directly participate in budget utilisation	3.98	Agree	3.76	Agree	3.9	Agree
<b>Grand Mean</b>		<b>3.45</b>	<b>Agree</b>	<b>3.26</b>	<b>Agree</b>	<b>3.4</b>	<b>Agree</b>

Source: Field Survey Data 2023

With average mean scores of 3.5, 3.9, 4.3, 4.3, 4, 2, and 3.9 respectively, respondents in Table 2 agreed with questions 4, 5, 7, 9, 10, and 11. Items 1, 2, 3, 6 and 8 all have mean scores below 3.0, indicating that respondents didn't agree with the assertion. They also opine that inadequate experience in budget

preparation and timely preparation of budget are the other weak areas. The grand average, being 3.4, shows that the managerial ability of the Principals and SMCs is average, which leaves a lot of scope for improvement.

The data for providing answers to the above research question are presented in Table 3 below:

**Table 3**  
**Mean Ratings of Head Teachers and SMCs on Financial Management Practices Related to Resource Monitoring and Controlling, Transparency, Auditing and Resources Management in Elementary Schools**

S.N.	Description	Head Teacher (N=58)		SMC (N=58)		Average Mean	Decision
		Mean	Decision	Mean	Decision		
1.	The school spends the funds according to approved budget in school	4.24	Agree	3.98	Agree	4.1	Agree
2.	Involvement of stakeholders (Head Teachers, Teachers, SMCs and other concerned) for implementation of financial activities	3.97	Agree	3.76	Agree	3.9	Agree
3.	Transparency on financial activities for the school community	2.62	Disagree	2.48	Disagree	2.6	Disagree
4.	Stakeholders (Head Teachers, Teachers, SMCs and other concerned) get any relevant training on financial control	3.34	Agree	3.33	Agree	3.3	Agree

5.	Receipts are serially numbered and issued for payment made	4.02	Agree	3.66	Agree	3.8	Agree
6.	School stakeholders (Head Teachers, Teachers, SMCs and other concerned) participated on internal auditing as per schedule	3.86	Agree	3.72	Agree	3.8	Agree
7.	Training in financial management for Principals, SMC members, Accountants	2.97	Disagree	2.71	Disagree	2.8	Disagree
8.	Properly implementing financial guidelines, rules and regulations of finance at the school level	2.53	Disagree	2.52	Disagree	2.5	Disagree
9.	There is no delay in purchasing	2.6	Disagree	2.5	Disagree	2.6	Disagree
10.	Involvement of Principals and School Management Committees in managing school finances	2.57	Disagree	2.36	Disagree	2.5	Disagree
11.	Transparency in school financial implementation	2.62	Disagree	2.48	Disagree	2.6	Disagree
<b>Grand Mean</b>		<b>3.26</b>	<b>Agree</b>	<b>3.1</b>	<b>Agree</b>	<b>3.2</b>	<b>Agree</b>

Source: Field Survey Data 2023

According to Table 3, respondents agreed with assertions 1, 2, 4, 5, and 6 since those items had mean scores above 3.0, but they disagreed with claims 3, 7, 8, 9, 10, and 11 because those items' means are below 3.0. This implies that both the categories of stakeholders, i.e., the Principals and SMC members hold the view that lack of transparency in financial activities and its implementation for the community, lack of involvement of the stakeholders in management of finance, inadequate training for

the stakeholders are the weak areas. The overall mean score of 3.2 shows that the managerial skills of SMC chairpersons and head teachers are not adequate for sound financial management.

### TEST OF HYPOTHESES

**H01:** There is no significant difference between the Mean Scores of Head Teachers and SMC Chairpersons in the case of the sources of funds and budget for financial management in elementary schools at Jaleswar, Odisha.

**Table 4**

**t-Test Analysis of the Differences Between the Mean Scores of Principals and SMC Chairpersons on the Sources of Funds and Budget for the Financial Management of Elementary Schools**

**Summary of t-Test for H01**

S.N.	Respondents	N	Mean	S.D	Significance level	df	t-cal	t-crit	Result
1.	Principals or Head Teachers	58	3.4	0.6	0.05	114	1.41	1.98	No significant (Ho accepted)
2.	SMC Chairpersons	58	3.26	0.42					

The t-test analysis produced a t-cal. of 1.41 at 114 degrees of freedom and 0.05 level significant, as shown in Table 4 above. The aforementioned null hypothesis is accepted since the t-crit. of 1.98 is greater than the t-cal. of 1.41.

Thus, there are no appreciable differences in viewpoints between SMC Chairpersons and elementary

school Principals or head teachers with regard to the budget and funding sources for the financial management at Jaleswar.

**Ho2:** There is no significant difference between Mean Ratings of Head Teachers and SMCs in the case of financial management practices to ensure fund availability.

**Table 5**

**t-Test Analysis of the differences between the Mean Ratings of Head Teachers and SMCS on Financial Management Practices to Ensure Fund Availability.**

**Summary of t-Test for H02**

S.N.	Respondents	N	Mean	S.D	Significance level	df	t-cal	t-crit	Result
1.	Principals or Head Teachers	58	3.27	0.61	0.05	114	1.62	1.98	No significant (Ho accepted)
2.	SMC Chairpersons	58	3.1	0.46					

The t-test analysis produced a t-cal. of 1.62 at 114 degrees of freedom and 0.05 level significant, as shown in Table 5 above. Because the t-crit. is higher than the t-cal. (1.62), the null

hypothesis stated above is accepted.

Thus, there are no significant differences in viewpoints between SMC Chairpersons and elementary school Principals about the financial management at Jaleswar.

## SUMMARY AND CONCLUSION

According to the study's findings, Jaleswar's elementary school Principals and SMC Chairpersons are responsible for possessing the managerial skills necessary for efficient budget management. Though the budget allotted is used in accordance with financial standards, recorded on a regular basis, and stakeholders are involved in budget creation and utilisation, the Head Teachers and SMCs need to concentrate on the availability of cash from various sources and there is a need for training to improve financial skill and timely budget preparation.

The Head Teachers and SMCs spend funds in accordance with the requirements, they include stakeholders in the execution of financial activities, take part in pertinent financial control training, and plan internal audits. To achieve the goals of schools, Head Teachers

and SMC Chairpersons must also place an emphasis on financial transparency, regular training in financial management, purchasing strategies, and financial regulations and standards. There is no statistically significant difference between primary school Principals' and SMC Chairpersons' perspectives regarding the availability of funds, budgeting, and financial management.

Therefore, more efforts should be made to raise additional funds from both external and internal sources. Training programmes and workshops should be organised for the Principals and SMC members, new teachers for development of financial management skills. Principals and SMCs must have tacit understanding of professional or financial development to make decisions regarding system transformation for general accountability and efficiency.

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# 6

## A Study of the Content Appropriateness of the Textbooks of FLN Prepared by Maharashtra in Light of NEP 2020 Recommendations

Shruti Tripathi\*

### Abstract

*The NEP 2020 has brought significant changes to the Indian education system, emphasising the importance of foundational skills development and the preparation of modern and quality textbooks to achieve the target of lifelong learning and holistic development. Foundational Literacy and Numeracy (FLN) are an integral part of the development of the abilities of children. They are like milestones in the learning curve of a child's personality. Students who are well versed in both these aspects will essentially do well when they are required to connect new knowledge with already existing knowledge. The present study is based on the mandate of the NEP 2020 which suggests a primary focus on foundational literacy and numeracy.*

*This research paper presents a comprehensive study examining the content appropriateness of the textbooks developed by the State Council of Educational Research and Training, Pune, Maharashtra in the context of the National Education Policy (NEP) 2020 recommendations. The emphasis of this research is on gaining insight into teachers' experiences and perceptions of what a textbook should be like. To ascertain more about the range of perspectives, a questionnaire on a four-point scale was given out to teachers teaching at the Foundational Stage with different questions, covering content appropriateness of FLN.*

*The research concludes with a set of actionable recommendations to enhance the content appropriateness of FLN textbooks in line with NEP 2020 guidelines. By addressing these suggestions, Maharashtra's education system can take significant strides towards providing a more comprehensive and inclusive learning experience, empowering students with the essential foundational skills needed for lifelong learning and success.*

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## INTRODUCTION

The first and fundamental level of comprehension and knowledge acquisition in a particular subject or field is referred to as the Foundational Stage of learning. It serves as the foundation for a student's education and establishes the direction for their subsequent academic endeavours. Students are introduced to the basic ideas, hypotheses, and information that serve as the subject's bedrock at this phase. The objective is to give pupils a firm grasp of the fundamental ideas so they can expand on them as they progress in their education.

At this early stage of learning, textbooks are essential. They give a well-organised and thorough summary of the subject while presenting the data logically. They work as a trustworthy source of knowledge, assisting pupils in developing a thorough comprehension of fundamental ideas, theories, and details. To ensure accuracy and relevance, textbooks are prepared by subject-matter experts and evaluated by peers. They become a reliable source of knowledge for both teachers and pupils as a result.

Furthermore, textbooks include tasks and examples that support the learning process. These tests might be anything from straightforward questions about memory to intricate, knowledge-intensive puzzles. These activities are meant to foster critical thinking in pupils and a deeper, more meaningful understanding of the subjects they are studying.

Textbooks are also a crucial teaching resource. They offer a framework for instruction and act as a manual for creating lesson plans and evaluations. Textbooks can be used by teachers to make lesson plans, assign homework, and design tests. When teachers want to expand their topic knowledge, textbooks are an invaluable resource. Teachers may make sure they are giving their pupils correct and current knowledge by using textbooks as a reference.

The fact that textbooks establish a common learning standard across all schools and states is another crucial component of textbooks. With uniform textbook standards, students can change schools with ease and receive a constant level of learning. This is crucial for students since it guarantees that the knowledge they have gained at one institution will be applicable and helpful in another.

Textbooks are necessary in the Foundational Stage of learning, which is a crucial step in a student's education. They give pupils a thorough understanding of the subject, support the learning process, and give the teaching process structure. Textbooks are an invaluable resource for both students and teachers since they lay the groundwork for further study and investigation of the subject.

## NEED AND JUSTIFICATION

Foundational Literacy and Numeracy (FLN) are an integral part of the development of the abilities of the child. They are like milestones in the

learning curve of a child's personality. Students who are well versed in both these aspects will essentially do well when they are required to connect new knowledge with already existing knowledge. The present study is based on the mandate of the NEP 2020 which suggests a primary focus on FLN. The NEP 2020 clearly states the following in Part I (point number 2 and 4) of the document:

**2. Foundational Literacy & Numeracy: An Urgent and Necessary Prerequisite to Learning.**

2.1. The ability to read and write, and perform basic operations with numbers, is a necessary foundation and an indispensable prerequisite for all future schooling and lifelong learning. However, various governmental, as well as non-governmental surveys, indicate that we are currently in a learning crisis: a large proportion of students currently in elementary school, estimated to be over 5 crore in number—have not attained FLN, i.e., the ability to read and comprehend basic text and the ability to carry out basic addition and subtraction.

2.4. On the curricular side, there will be an increased focus on FLN—and generally, on reading, writing, speaking, counting, arithmetic, and mathematical thinking—throughout the preparatory and middle school curriculum, with a robust system of continuous formative/adaptive assessment to track and thereby individualise and ensure each

student's learning. Specific hours on a daily basis—and regular events and activities over the year involving these subjects will be dedicated to encourage and enthuse students. Teacher education and the early grade curriculum will be redesigned to have a renewed emphasis on FLN.

**4. Curriculum and Pedagogy in Schools National Textbooks with Local Content and Flavour**

States will prepare their curricula (which may be based on the National Curriculum Framework for School Education (NCFSE) prepared by NCERT to the extent possible) and prepare textbooks (which may be based on the NCERT textbook materials to the extent possible), incorporating State flavour and material as needed. While doing so, it must be borne in mind that the NCERT curriculum would be taken as the nationally acceptable criterion. The availability of such textbooks in all regional languages will be a top priority so that all students have access to high-quality learning. All efforts will be made to ensure timely availability of textbooks in schools.

**OBJECTIVES OF THE STUDY**

The objectives of the study are:

1. To analyse the Content Appropriateness of the textbooks as per National Education Policy 2020 and National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat guidelines.

2. To suggest changes and reforms in the textbooks in alignment with NEP 2020 guidelines.

### **SCOPE AND DELIMITATIONS OF THE STUDY**

The scope of the study covers a vast range. It has tried to look into the various aspects that should be kept in mind by textbook developers before venturing into the task of textbook development. The results and suggestions of the present study can be utilised by all states when developing their textbooks. However, due to time and budgetary constraints the study was delimited on different aspects such as:

1. The study is confined to the textbooks developed by the State Council of Educational Research and Training (SCERT), Pune, Maharashtra.
2. In studying the textbooks the guidelines of NEP 2020 and NIPUN Bharat for textbook development have been kept in purview.

### **THE RESEARCH APPROACH**

The emphasis of this research is on gaining insight into teachers' experiences and perceptions of what a textbook should be like. To ascertain more about the range of perspectives, a questionnaire was given out to teachers focusing on different aspects.

Questionnaires are an efficient and effective means of achieving insight into several viewpoints,

potentially discovering patterns or contrasts. The questionnaire was designed using the four-point scale. The statements were formulated based on the research questions themselves and ideas developed from reading relevant literatures.

They dealt with the importance of physical appearance, content appropriateness and pedagogical processes in the development of textbooks. Most statements required respondents to select one of four categories ranging from 'strongly agree' to 'strongly disagree'. Space was provided after a set of questions to reflect on further suggestions on any point that was not covered in the questionnaire. Questions to provide an understanding of the demographic were also asked, the aim of which was to investigate potential factors influencing teachers' beliefs.

### **Sample**

The target population consisted of teachers teaching at the Foundational Stage in rural and urban schools across the state of Maharashtra. Data on various dimensions of textbook analysis was collected from 2,665 teachers teaching at the Foundational Stage.

### **Tools Employed in the Study**

A four-point questionnaire was developed based on important dimensions of textbook development and analysis pertaining to content appropriateness in workshop mode. In the development of tools, the guidelines

of NEP 2020 and NIPUN Bharat were kept as a base because the present study focuses on suggestions and guidelines of NEP 2020.

### Data Collection Procedure

For analysing the textbooks developed for the Foundational Stage by MSCERT, Pune; a questionnaire catering to various dimensions like the physical structure of the textbook, content appropriateness and pedagogical processes was developed through a workshop. The questionnaire thus prepared was converted into a Google Form with options on a four-point scale ranging from 'strongly agree' to 'strongly disagree'. The link to the Google Form was sent to officials from MSCERT who further shared it with teachers teaching at the Foundational Stage in rural and urban schools of Maharashtra. The form was kept open for 20 days. 2,665 responses were received from teachers teaching at the Foundational Stage from across the State of Maharashtra.

### Scoring, Tabulation and Analysis of the Data

After the collection of data, the scores were tabulated based on the answers received. The data was entered into excel sheets and converted into percentages. An analysis of the data was done by converting and depicting the percentages into bar diagrams. The qualitative data was thoroughly analysed through the thick description.

**Table 1**  
**Region of Teaching**

City name	Number	Percentage
Konkan	550	20.6
Pune	126	4.7
Nasik	1,056	39.6
Marathwada	203	7.6
Vidharabh	730	27.4

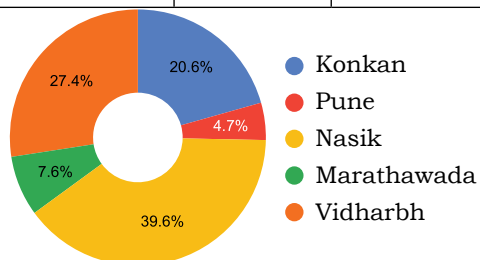


Figure 1: Region of the teaching

From the results of Table 1 and the corresponding Figure 1, it can be seen that 2,665 teachers have responded from five regions of Maharashtra, viz. 550 (20.6%) from Konkan, 126 (4.7%) from Pune, 1,056 (39.6%) from Nasik, 203 (7.6%) from Marathawada and 730 (27.4%) from Vidharbh.

### CONTENT APPROPRIATENESS

This section relates to the analysis and interpretation of data pertaining to objective number two of the study which reads, 'To analyse the Content Appropriateness of the textbooks as per National Education Policy 2020 and NIPUN Bharat guidelines', and seeks to answer the research question, 'How does the content of the textbooks align with the guidelines set by National Education Policy 2020 and NIPUN

Bharat in terms of appropriateness?'. The data for objective two was collected through a questionnaire developed on a five-point scale by the investigators. This section on content appropriateness is divided into two parts—Language and Numeracy. The data collected is presented in different sections.

### A. Language

**Table 2**

**Percentage of Teachers who Said that the Content is Organised According to the Students' Language Needs**

N = 2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,172	1,440	36	17
2.	43.98	54.03	1.35	0.64

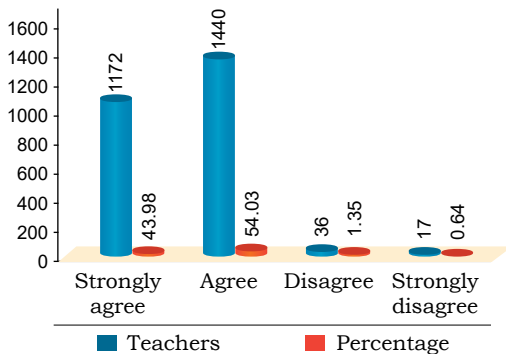


Figure 2: Percentage of teachers who said that the content is organised according to the students' language needs.

From the results of Table 2 and the corresponding Figure 2, it can be seen that 1,172 (43.98%) teachers strongly agree, 1,440

(54.03%) teachers agree, and 36 (1.35%) teachers disagree, while 17 (0.64%) teachers strongly disagree to the question that the content is organised according to the student's language needs.

**Table 3**

**Percentage of Teachers who Said that the Content is Suitable and Relevant as per Age and Class of Students**

N = 2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,165	1,429	55	16
2.	43.71	53.62	2.06	0.60

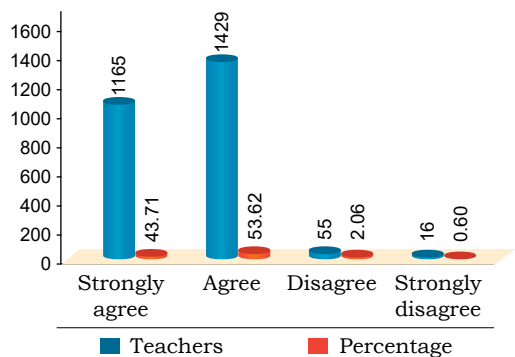


Figure 3: Percentage of teachers who said that the content is suitable and relevant as per age and class of students

From the results of Table 3 and the corresponding Figure 3, it can be seen that 1,165 (43.71%) teachers strongly agree, 1,429 (53.62%) teachers agree and 55 (2.06%) teachers disagree, with the question that the content is suitable and relevant as per age and class of students. While 16 (0.60%) teachers strongly disagree with the question.

**Table 4**

**Percentage of Teachers who Said that the Listening Activity can Help Students to Develop Speaking Skills**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,239	1,384	29	13
2.	46.49	51.93	1.09	0.49

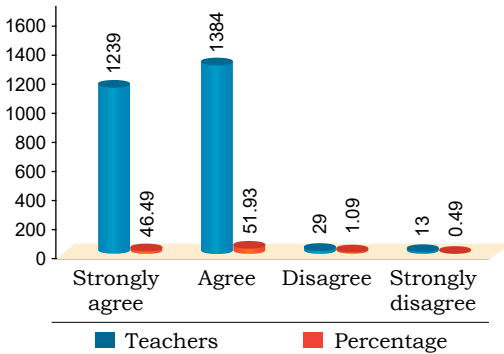


Figure 4: Percentage of teachers who said that the listening activity can help students to develop speaking skills

From the results of Table 4 and the corresponding Figure 4, it can be seen that 1,239 (46.49%) teachers strongly agree, 1,384 (51.93%) teachers agree and 29 (1.09%) teachers disagree to the question that the listening activity can help students to develop speaking skills. While 13 (0.49%) teachers strongly disagree with the question.

**Table 5**

**Percentage of Teachers who Said that the Listening Materials are Well-recorded**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly Disagree
1.	998	1,575	71	21
2.	37.45	59.10	2.66	0.79

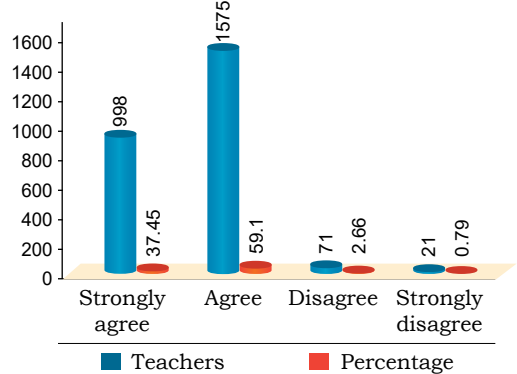


Figure 5: Percentage of teachers who said that the listening materials are well-recorded

From the results of Table 5 and the corresponding Figure 5, it can be seen that 998 (37.45%) teachers strongly agree, 1,575 (59.1%) teachers agree, and 71 (2.66%) teachers disagree with the question that the listening materials use standard English language. While 21 (0.79%) teachers strongly disagree with the question.

**Table 6**

**Percentage of Teachers who Said that the Textbook Materials Offer a Great Range of Listening Texts**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	959	1,593	96	17
2.	35.98	59.77	3.60	0.64

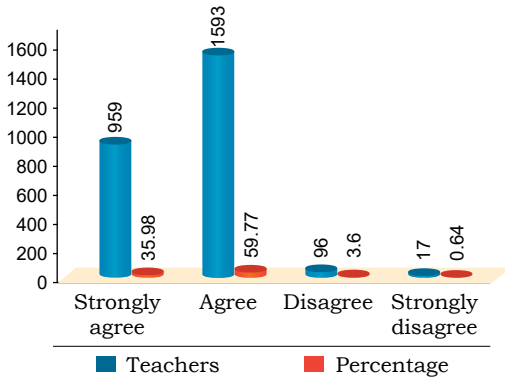


Figure 6: Percentage of teachers who said that the textbook materials offer a great range of listening texts

From the results of Table 6 and the corresponding Figure 6, it can be seen that 959 (35.98%) teachers strongly agree, 1,593 (59.77%) teachers agree, and 96 (3.6%) teachers disagree to the question that the textbook materials offer a great range of listening texts. 17 (0.64%) teachers strongly disagree with the question.

**Table 7**

**Percentage of Teachers who Said that the Textbook Activities can help Students to Improve their Listening Skills**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,093	1,515	41	16
2.	41.01	56.85	1.54	0.60

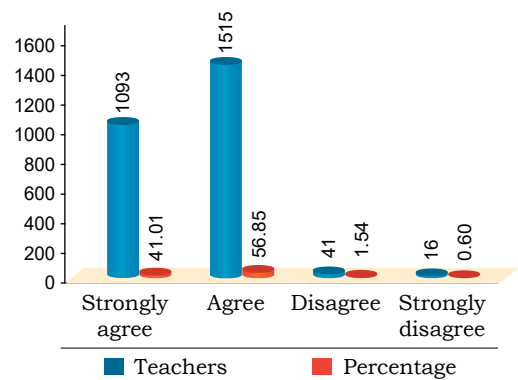


Figure 7: Percentage of teachers who said that the Textbook activities can help students to improve their listening skills

From the results of Table 7 and the corresponding Figure 7, it can be seen that 1,093 teachers strongly agree, 1,515 (56.85%) teachers agree, and 41 (1.54%) teachers disagree with the question that textbook activities can help students to improve their listening skills. While 16 (0.60%) teachers strongly disagree with the question.



**Table 8**

**Percentage of Teachers who Said that the Tasks or Activities (e.g., dialogues, role-plays, etc.) are Appropriate for Improving Students' Speaking Skills**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,073	1,531	46	15
2.	40.26	57.45	1.73	0.56

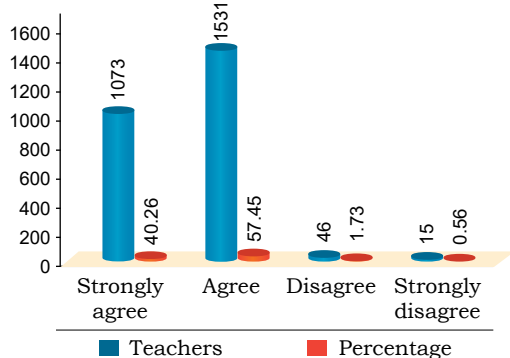


Figure 8: Percentage of teachers who said that the tasks/activities (e.g., dialogues, role-plays, etc.) are appropriate for improving students' speaking skills

From the results of Table 8 and the corresponding Figure 8, it can be seen that 1,073 (40.26%) teachers strongly agree, 1,531 (57.45%) teachers agree, and 46 (1.73%) teachers disagree to the question that the tasks/activities (e.g., dialogues, role-plays, etc.) are appropriate for improving students' speaking skills; while 15 (0.56%) teachers strongly disagree with the question.

**Table 9**

**Percentage of Teachers who Said that there are Adequate Materials for Spoken English, for example, Pronunciation and Stress**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	951	1,605	91	18
2.	35.68	60.23	3.41	0.68

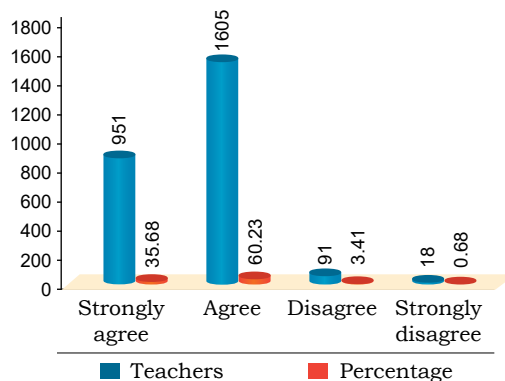


Figure 9: Percentage of teachers who said that there are adequate materials for spoken English, for example, pronunciation and stress

From the results of Table 9 and the corresponding Figure 9, it can be seen that 951 (35.68%) teachers strongly agree, 1,605 (60.23%) teachers agree, and 91 (3.41%) teachers disagree to the question that there are adequate materials for spoken English, for example, pronunciation and stress, while 18 (0.68%) teachers strongly disagree with the question.



**Table 10**

**Percentage of Teachers who Said that the Reading Activities can Motivate Students**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly Disagree
1.	1,081	1,527	44	13
2.	40.56	57.30	1.65	0.49

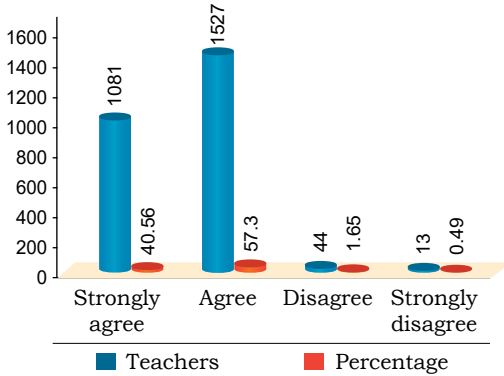


Figure 10: Percentage of teachers who said that the reading activities can motivate students

From the results of Table 10 and the corresponding Figure 10, it can be seen that 1,081 (40.56%) teachers strongly agree, 1,527 (57.3%) teachers agree, and 44 (1.65%) teachers disagree to the question that reading activities can motivate students, while 13 (0.49%) teachers strongly disagree to the question.

**Table 11**

**Percentage of Teachers who Said that the Reading Activities can Help Learners Become Effective Readers**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,084	1,517	48	16
2.	40.68	56.92	1.80	0.60

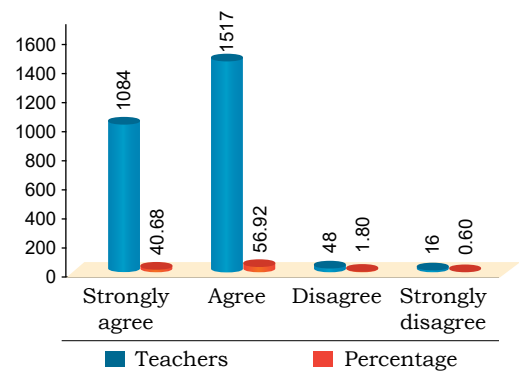


Figure 11: Percentage of teachers who said that the reading activities can help learners become effective readers

From the results of Table 11 and the corresponding Figure 11, it can be seen that 1,084(40.68%) teachers strongly agree, 1,517(56.92%) teachers agree, and 48 (1.80%) teachers disagree with the question that reading activities can help learners become effective readers. While 16 (0.60%) teachers strongly disagree with the question.

**Table 12**

**Percentage of Teachers who Said that There is a Variety of Reading Material (eg., Prose, Poetry, etc.)**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,137	1,466	46	16
2.	42.66	55.01	1.73	0.60

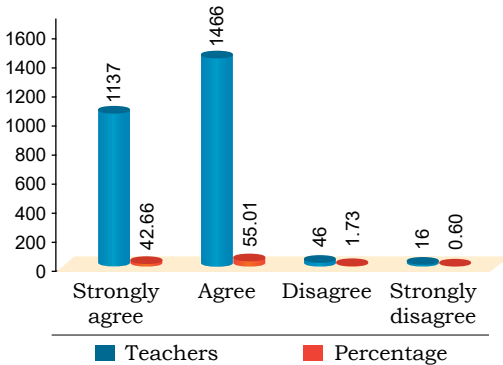


Figure 12: Percentage of teachers who said that there is a variety of reading material (eg. Prose, poetry, etc.)

From the results of Table 12 and the corresponding Figure 12, it can be seen that 1,137 (42.66%) teachers strongly agree, 1,466 (55.01%) teachers agree, and 46 (1.73%) teachers disagree with the question that there is a variety of reading material (eg. Prose, poetry, etc.), while 16 (0.60%) teachers strongly disagree with the question.

**Table 13**

**Percentage of Teachers who Said that the Reading Materials Help Learners Use English Language in Daily Life**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,098	1,505	46	16
2.	41.20	56.47	1.73	0.60

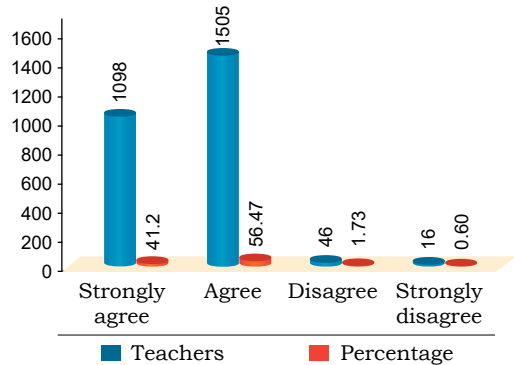


Figure 13: Percentage of teachers who said that the reading materials help learners use English language in daily life

From the results of Table 13 and the corresponding Figure 13, it can be seen that 1,098 (41.2%) teachers strongly agree, 1,505 (56.47%) teachers agree, and 46 (1.73%) teachers disagree with the question that reading materials help learners use English language in daily life, while 16 (0.60%) teachers strongly disagree with the question.

**Table 14**

**Percentage of Teachers who Said that the Writing Tasks are Appropriate for Improving Students' Writing Skills**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,160	1,454	36	15
2.	43.53	54.56	1.35	0.56

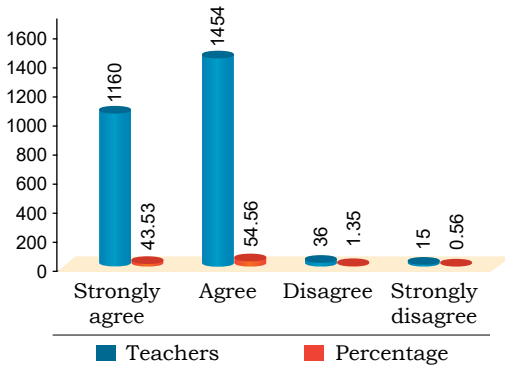


Figure 14: Percentage of teachers who said that the writing tasks are appropriate for improving students' writing skills

From the results of Table 14 and the corresponding Figure 14, it can be seen that 1,160 (43.53%) teachers strongly agree, 1,454 (54.56%) teachers agree, and 36 (1.35%) teachers disagree to the question that the writing tasks are appropriate for improving students' writing skills, while 15 (0.56%) teachers strongly disagree to the question.

**Table 15**

**Percentage of Teachers who Said that the Writing Tasks are Appropriate for Improving Students' Grammar and Composition**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,018	1,551	81	15
2.	38.20	58.20	3.04	0.56

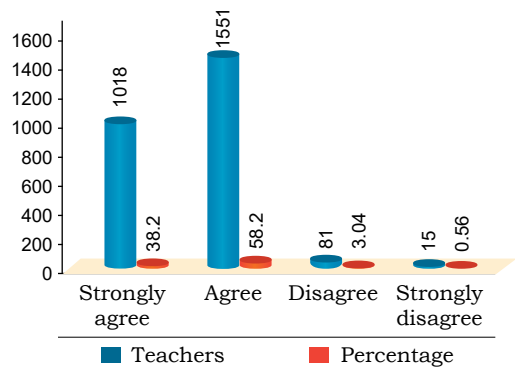


Figure 15: Percentage of teachers who said that the writing tasks are appropriate for improving students' grammar and composition

From the results of Table 15 and the corresponding Figure 15, it can be seen that 1,018 (38.2%) teachers strongly agree, 1,551 (58.2%) teachers agree, and 81 (3.04%) teachers disagree with the question that the writing tasks are appropriate for improving students' grammar and composition while 15 (0.56%) teachers strongly disagree to the question.

**Table 16**

**Percentage of Teachers who Said that the Textbook Encourages the Ability to Express Ideas in the Written Form**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,050	1,550	50	15
2.	39.40	58.16	1.88	0.56

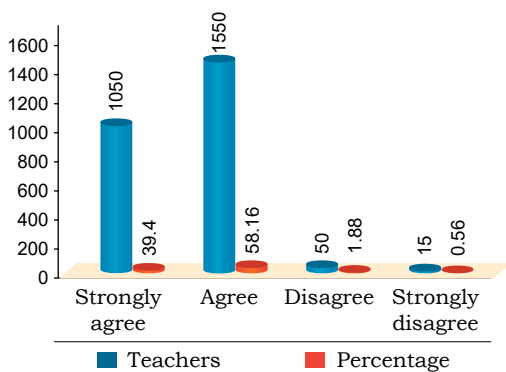


Figure 16: Percentage of teachers who said that the textbook encourages the ability to express ideas in the written form

From the results of Table 16 and the corresponding Figure 16, it can be seen that 1,050 (39.4%) teachers strongly agree, 1,550 (58.16%) teachers agree, and 50 (1.88%) teachers disagree to the question that the textbook encourages the ability to express ideas in the written form, whereas 15 (0.56%) teachers profoundly disagree with the question.

**Table 17**

**Percentage of Teachers who Said that the Vocabulary Items are Appropriate for the Students' Age Group**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,109	1,484	58	14
2.	41.61	55.68	2.18	0.53

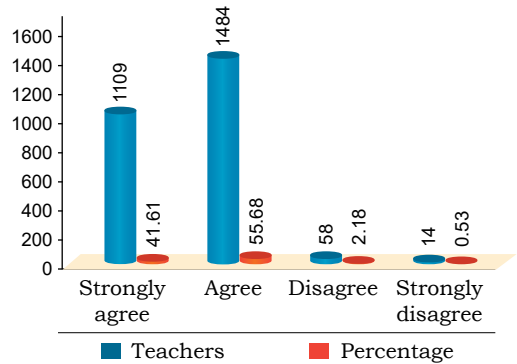


Figure 17: Percentage of teachers who said that the vocabulary items are appropriate for the students' age group

From the results of Table 17 and the corresponding Figure 17, it can be seen that 1,109 (41.61%) teachers strongly agree, 1,484 (55.68%) teachers agree, and 58 (2.18%) teachers disagree with the question that the vocabulary items are appropriate for the student's age group, while 14 (0.53%) teachers strongly disagree with the question.

**Table 18**

**Percentage of Teachers who Said that the Textbook Incorporates Sufficient Materials for Improving Vocabulary**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,042	1,534	72	17
2.	39.10	57.56	2.70	0.64

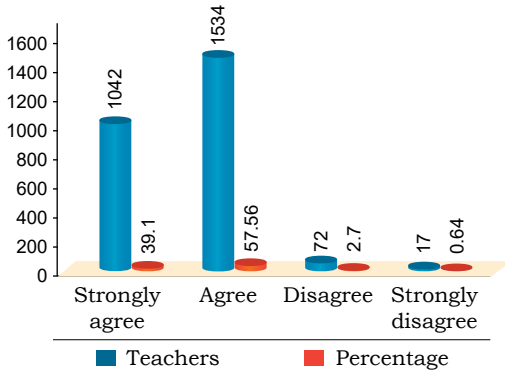


Figure 18: Percentage of teachers who said that the textbook incorporates sufficient materials for improving vocabulary

From the results of Table 18 and the corresponding Figure 18, it can be seen that 1,042 (39.1%) teachers strongly agree, 1,534 (57.56%) teachers agree, and 72 (2.7%) teachers disagree to the question that the textbook incorporates sufficient materials for improving vocabulary, while 17 (0.64%) teachers strongly disagree with the question.

**Table 19**

**Percentage of Teachers who Said that the Materials for Teaching Grammar, Vocabulary and Pronunciation are Graded in a Suitable Manner**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	995	1,564	89	17
2.	37.34	58.69	3.34	0.64

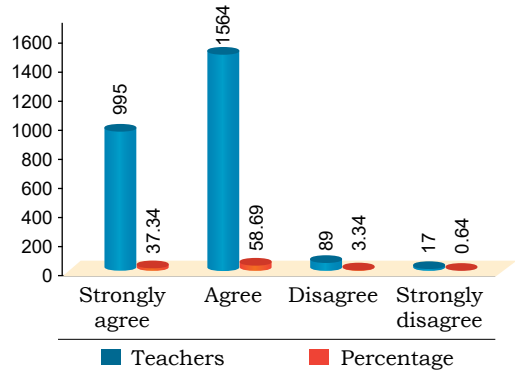


Figure 19: Percentage of teachers who said that the materials for teaching grammar, vocabulary and pronunciation are graded in a suitable manner

From the results of Table 19 and the corresponding Figure 19, it can be seen that 995 (37.34%) teachers strongly agree, 1,564 (58.69%) teachers agree, and 89 (3.34%) teachers disagree to the question that the materials for teaching grammar, vocabulary and pronunciation are graded in a suitable manner, while 17 (0.64%) of the teachers strongly disagree with the question.

**Table 20**

**Percentage of Teachers who Said that the Grammar Items in the Textbook are Appropriate for the Students' Age Group**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,045	1,541	64	15
2.	39.21	57.82	2.40	0.56

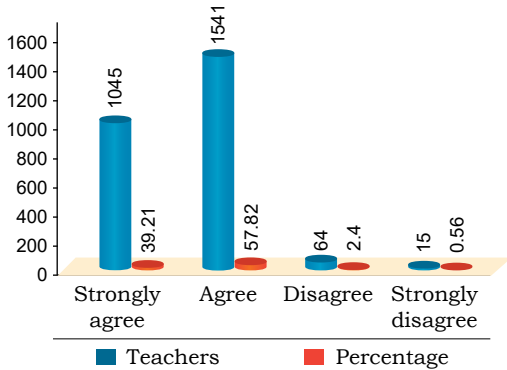


Figure 20: Percentage of teachers who said that the grammar items in the textbook are appropriate for the students' age group

From the results of Table 20 and the corresponding Figure 20, it can be seen that 1,045 (39.21%) teachers strongly agree, 1,541 (57.82%) teachers agree, and 64 (2.4%) teachers disagree with the question that the grammar items in the textbook are appropriate for the students' age group, while 15 (0.56%) of the teachers strongly disagree with the question.

**B. Numeracy**

To what extent is the textbook effective according to the numeracy skills (number, measurement, spatial understanding, basic operations with numbers, arithmetical reasoning, etc.)

**Table 21**

**Percentage of Teachers who Said that Real Objects, Visual Examples, Diagrams and Figures are Provided to Develop Fundamental Operations of Arithmetic at the Beginning Stage**

N=2,665

S. N.	Strongly Agree	Agree	Disagree	Strongly disagree
1.	1,201	1,420	30	14
2.	45.07	53.28	1.13	0.53

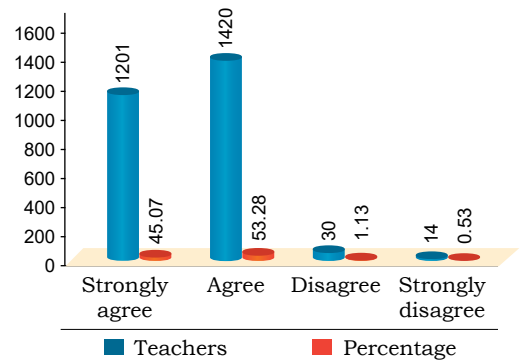


Figure 21: Percentage of teachers who said that real objects, visual examples, diagrams and figures are provided to develop fundamental operations of arithmetic at the beginning stage

From the results of Table 21 and the corresponding Figure 21, it can be seen that 1,201 (45.07%) teachers

strongly agree, 1,420 (53.28%) teachers agree, and 30 (1.13%) teachers disagree to the question that real objects, visual examples, diagrams and figures are provided to develop fundamental operations of arithmetic at the beginning stage. While 14 (0.53%) of the teachers strongly disagree with the question.

**Table 22**

**Percentage of Teachers who Said that Textbook Activities or Illustrations Facilitate the Understanding of Numerals**

N=2,665

S. N.	Strongly Agree	Agree	Disagree	Strongly disagree
1.	1,259	1,367	25	14
2.	47.24	51.29	0.94	0.53

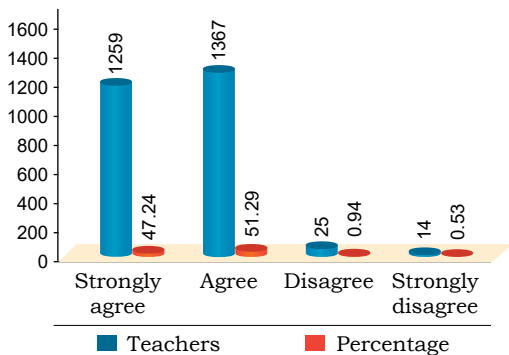


Figure 22: Percentage of teachers who said that textbook activities/illustrations facilitate the understanding of numerals

From the results of Table 22 and the corresponding Figure 22 it can be seen that 1,259 (47.24%) teachers strongly agree, 1,367 (51.29%) teachers agree, and 25 (0.94%) teachers disagree to the question that the textbook activities/illustrations

facilitate the understanding of numerals. While 14 (0.53%) of the teachers strongly disagree with the question.

**Table 23**

**Percentage of Teachers who Said that Examples or Illustrations from Local/Daily Life are Provided in the Textbook**

N=2,665

S. N.	Strongly Agree	Agree	Disagree	Strongly disagree
1.	1,180	1,433	36	16
2.	44.28	53.77	1.35	0.60

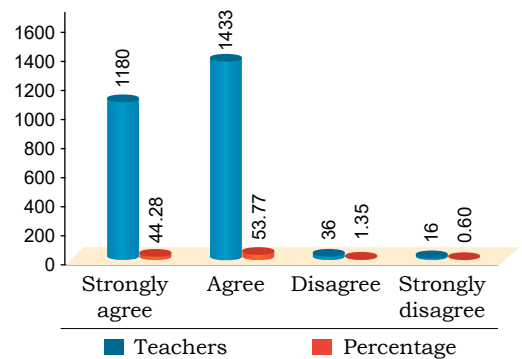


Figure 23: Percentage of teachers who said that examples or illustrations from local/daily life are provided in the textbook

From the results of Table 23 and the corresponding Figure 23, it can be seen that 1,180 (44.28%) teachers strongly agree, 1,433 (53.77%) teachers agree, and 36 (1.35%) teachers disagree to the question that the examples/illustrations from local/daily life are provided in the textbook. While 16 (0.60%) of the teachers strongly disagree with the question.

**Table 24**

**Percentage of Teachers who Said that Classification of Items or Objects According to Numbers and Shapes is Facilitated Through Textbook Activities**

N=2,665

S. N.	Strongly Agree	Agree	Disagree	Strongly disagree
1.	1,146	1,461	41	17
2.	43.00	54.82	1.54	0.64

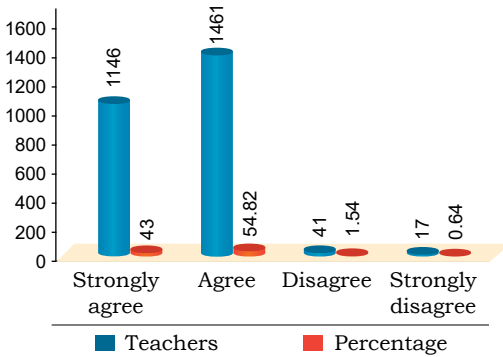


Figure 24: Percentage of Teachers who said that Classification of Items or Objects According to Numbers and Shapes is Facilitated Through Textbook Activities

From the results of Table 24 and the corresponding Figure 24, it can be seen that 1,146 (43.00%) teachers strongly agree, 1,461 (54.82%) teachers agree, and 41 (1.54%) teachers disagree with the question that Classification of items/objects according to numbers and shapes is facilitated through textbook activities. While 17 (0.64%) of the teachers strongly disagree with the question.

**Table 25**

**Percentage of Teachers who Said that Data Handling Skills have been Promoted in the Textbook Through Visuals and Numerical Activities**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,067	1,545	33	16
2.	40.04	57.97	1.24	0.60

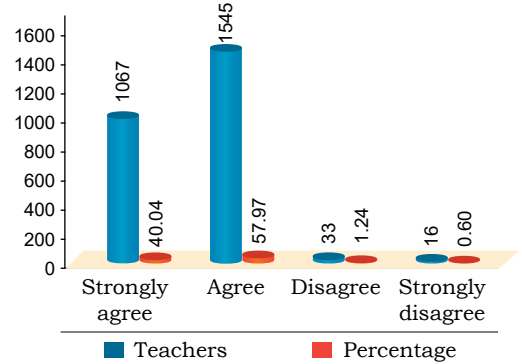


Figure 25: Percentage of teachers who said that data handling skills have been promoted in the textbook through visuals and numerical activities

From the results of Table 25 and the corresponding Figure 25, it can be seen that 1,067 (40.04%) teachers strongly agree, 1,545 (57.97%) teachers agree, and 33 (1.24%) teachers disagree to the question that the data handling skills has been promoted in the textbook through visuals and numerical activities. While 16 (0.60%) of the teachers strongly disagree with the question.



**Table 26**

**Percentage of Teachers who Said that Concept and Understanding of Measurement, Mass, Volume and Temperature is Handled with the Help of Daily life Examples from the Locale**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1	1,055	1,539	36	15
2	39.59	57.75	1.35	0.56

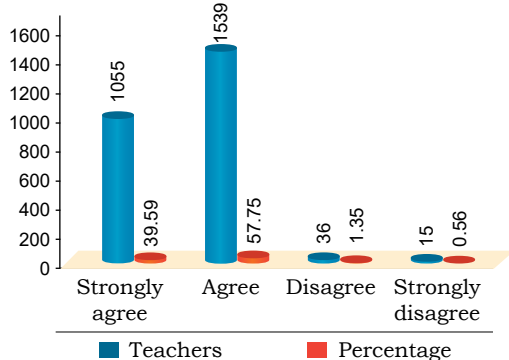


Figure 26: Percentage of teachers who said that the concept and understanding of measurement, mass, volume and temperature is handled with the help of daily life examples from the locale

From the results of Table 26 and the corresponding Figure 26, it can be seen that 1,055 (39.59%) teachers strongly agree, 1,539 (57.75%) teachers agree, and 36 (1.35%) teachers disagree with the question that concept and understanding of measurement, mass, volume and temperature is handled with the help of daily life examples from the locale. While 15 (0.56%) of the teachers strongly disagree with the question.

**Table 27**

**Percentage of Teachers who Said that Mathematical Language Used in the Textbook is According to the Students' Age and Culture**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1	1,068	1,540	41	16
2	40.08	57.79	1.54	0.60

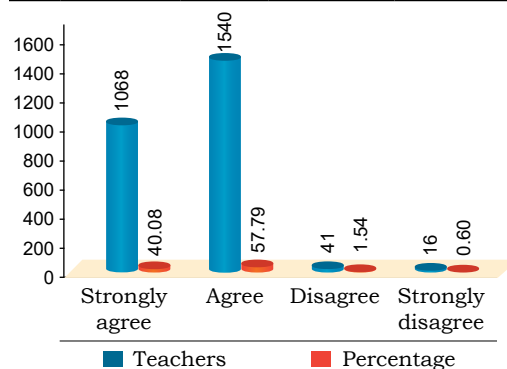


Figure 27: Percentage of teachers who said that Mathematical Language used in the Textbook is According to the Students' age and Culture

From the results of Table 27 and the corresponding Figure 27, it can be seen that 1,068 (40.08%) teachers strongly agree, 1,540 (57.79%) teachers agree, and 41 (1.54%) teachers disagree with the question that the mathematical language used in the textbook is according to the students' age and culture. While 16 (0.60%) of the teachers strongly disagree with the question.

**Table 28**

**Percentage of Teachers who Said that the Difficulty Level of Mathematical Concepts and Operations are Progressively Increased Within and Between Classes**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1	1,050	1,560	38	17
2	39.40	58.54	1.43	0.64

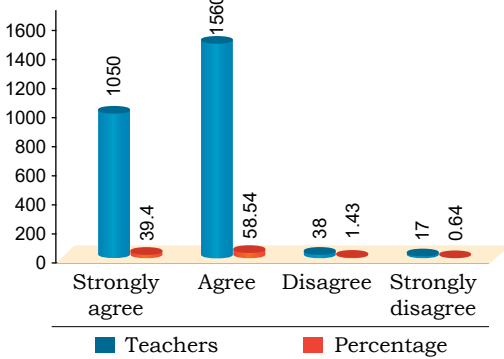


Figure 28: Percentage of teachers who said that difficulty level of mathematical concepts and operations are progressively increased within and between classes

From the results of Table 28 and the corresponding Figure 28, it can be seen that 1,050 (39.4%) teachers strongly agree, 1,560 (58.54%) teachers agree, and 38 (1.43%) teachers disagree with the question that difficulty level of mathematical concepts and operations are progressively increased within and between classes, while 17 (0.64%) of the teachers strongly disagree with the question.

**Table 29**

**Percentage of Teachers who Said that Basic Life Skills are Dealt Through Mathematical Operations**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1	1,083	1,534	29	19
2	40.64	57.56	1.09	0.71

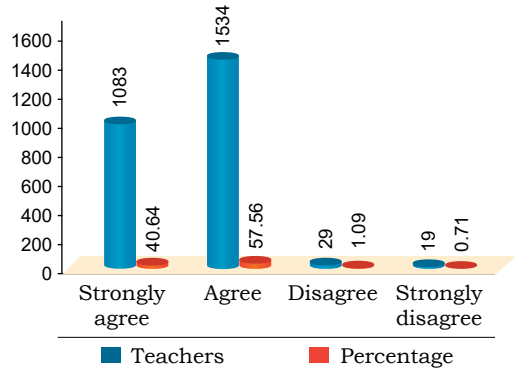


Figure 29: Percentage of teachers who said that basic life skills are dealt through mathematical operations

From the results of Table 29 and the corresponding Figure 29, it can be seen that 1,083 (40.64%) teachers strongly agree, 1,534 (57.56%) teachers agree, and 29 (1.09%) teachers disagree with the question that the basic life skills are dealt through mathematical operations, while 19 (0.71%) of the teachers strongly disagree with the question.

**Table 30**

**Percentage of Teachers who Said that Textbook Activities Motivate in the Development of Basic Life Skills Like Handling Money, Communication, Cooperation, Dealing with Individuals, etc.**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1	1,072	1,531	46	16
2	40.23	57.45	1.73	0.60

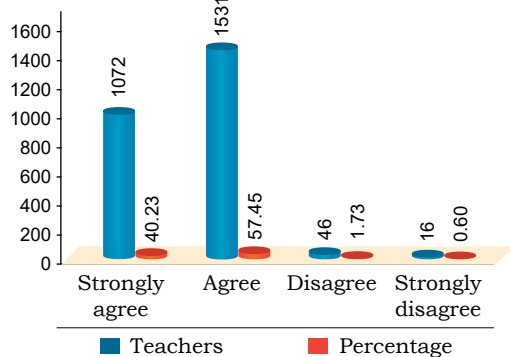


Figure 30: Percentage of teachers who said that textbook activities motivate in the development of basic life skills like handling money, communication, cooperation, dealing with individuals, etc.

From the results of Table 30 and the corresponding Figure 30, it can be seen that 1,072 (40.23%) teachers strongly agree, 1,531 (57.45%) teachers agree, and 46 (1.73%) teachers disagree with the question that the textbook activities motivate in the development of basic life skills like handling money, communication, cooperation, dealing with individuals, etc., while 16 (0.60%) teachers strongly disagree with the question.

**Table 31**

**Percentage of Teachers who Said that the Items or Activities Help in the Development of Twenty-first Century Skills**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1	1,026	1,571	52	16
2	38.50	58.95	1.95	0.60

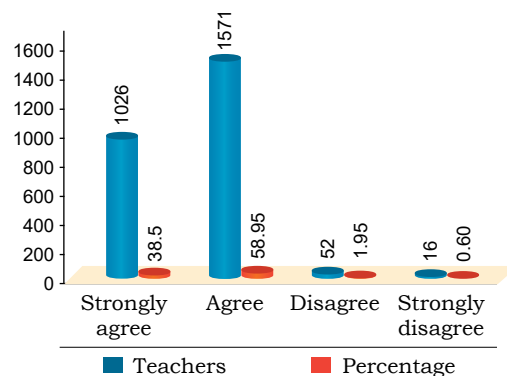


Figure 31: Percentage of teachers who said that the items or activities help in the development of twenty-first century skills

From the results of Table 31 and the corresponding Figure 31, it can be seen that 1,026 (38.5%) teachers strongly agree, 1,571 (58.95%) teachers agree, and 52 (1.95%) teachers disagree with the question that the Items/activities help in the development of twenty-first century skills while 16 (0.60%) of the teachers strongly disagree with the question.

**Table 32****Percentage of Teachers who Said that the Reading and Writing of Numbers is According to Students' Age Group**

N=2,665

S. N.	Strongly agree	Agree	Disagree	Strongly disagree
1.	1,167	1,454	29	15
2.	43.79	54.56	1.09	0.56

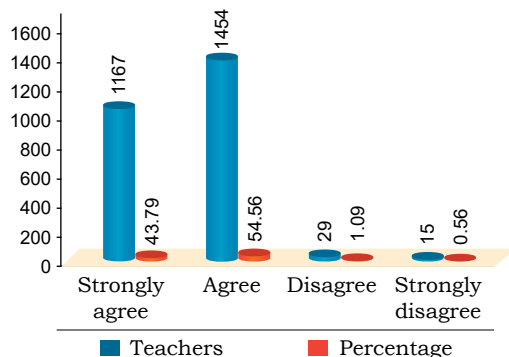


Figure 32: Percentage of teachers who said that the reading and writing of numbers is according to students' age group

From the results of Table 32 and the corresponding Figure 32, it can be seen that 1,167 (43.79%) teachers strongly agree, 1,454 (54.56%) teachers agree, and 29 (1.09%) teachers disagree with the question that reading and writing of numbers is according to students' age group, while 15 (0.56%) of the teachers strongly disagree with the question.

**RECOMMENDATIONS AND SUGGESTIONS**

1. Teaching learning materials and classroom practices should go hand in hand with content and pedagogical processes.

2. It has been seen that students learn better when they are engaged well, therefore, highly engaging, joyful, and innovative additional learning resources should be developed for the Foundational Stage.
3. Suitable jokes, proverbs, short stories, anecdotes, cartoons, caricatures, even newspaper articles, cartoon shows, movies, online resources, podcasts, rap songs, ideas set to music, etc., can be used for the process of teaching and learning.
4. Teaching learning material in all languages has to be created in all languages. If material is developed in the mother tongue of the students it will prove to be more beneficial.
5. Teaching through play way/ discovery/art and learning by doing has to be given weightage. For this purpose, toys, games, sports, puzzles, quizzes, worksheets or workbooks, and story books, etc., are to be used extensively.
6. A reading and learning corner should be created in the classroom where students can spend meaningful time and acquire good reading habits. Content should be such that it is related to the learning outcomes of a particular grade.
7. To foster the habit and enjoyment of reading, children should be encouraged to read books and print materials outside of the scope of the usual curriculum.

8. Listening tasks need to be well-planned and well-recorded. Recording in a tone, accent and pace that is comprehensible to children of specific age groups should be utilised.
9. More material on speaking can be created to cater to the requirements of pronunciation, stress and intonation. Material that is contextual and joyful can be created.
10. Meaningful and purposeful communication can be taught to students by placing them in contextual situations through role play, group activities, etc.
11. Textbooks can be relooked and redesigned keeping in mind the guidelines proposed by NIPUN Bharat and the three developmental goals, (see annexure).
12. Preparation of stage-wise and subject-wise learning matrices of simple measurable learning outcomes and their codification can be used by teachers to benchmark levels of achievement by each child.
13. Mapping of learning outcomes of the curriculum can be done, which can help determine the goals and the levels of learning of the children.
14. Inclusion is the key to imparting several life skills; it shall be the responsibility of the teacher to ensure it. Activities in the textbook can be planned so that they give an impetus to inclusion.
15. Content and activities in the book should be such that it is linked to the daily life situations of the children and their environment, area, culture, language, ethnicity, gender, etc.
16. In addition to emphasising the acquisition of knowledge, teaching and learning should also emphasise the development of values, life skills, and other skills.
17. For pupils with learning challenges, specialised e-learning materials for FLN (mathematics and reading literacy) should be developed.
18. Critical thinking, communication, collaboration, and creativity are essential twenty-first century learning abilities that should be incorporated into pedagogy. Emphasis should be on diversity, flexibility, and quality.
19. The textbooks should include art integrated learning for the development of early language, literacy, and numeracy as well as socio-emotional, ethical, and cultural understanding.
20. For students to be able to develop proficiency in each subject, classroom interactions should be built around incorporating real-life scenarios while keeping inter or multidisciplinary learning in mind.
21. Activities and group work to improve and inform about health, hygiene and sanitation should find place in the curriculum.

22. More interactive and easily accessible e-content should be developed for all classes.
23. Pictorial representations with local contexts should be provided for practising the skill of writing.
24. Language used in textbooks of numeracy should be simplified and should be of the level of students.
25. More bilingual or multilingual books should be developed.
26. Teacher training on using the textbook, developing authentic material, developing teaching-learning resources and e-content should be organised for the teachers teaching at the Foundational Stage.
27. Teachers should upgrade themselves professionally by learning new skills, so that they can keep pace with the demands of the time.

## CONCLUSION

At this early stage of learning, textbooks are an essential component of the process of learning. They give a well-organised and thorough summary of the subject while presenting the data logically. They work as a trustworthy source of knowledge, assisting pupils in developing a thorough

comprehension of fundamental ideas, theories, and details. To ensure accuracy and relevance, textbooks should be prepared by subject-matter experts and evaluated by peers. After going through rigorous procedures, the textbook can become a reliable source of knowledge for both teachers and pupils as a result.

Furthermore, textbooks should also include tasks and examples that support the learning process. These tests might be anything from straightforward questions about memory to intricate, knowledge-intensive puzzles. These activities are meant to foster critical thinking in pupils and a deeper, more meaningful understanding of the subjects they are studying.

The fact that textbooks establish a common learning standard across all schools and states is another crucial component shared through the vision of NEP 2020. With uniform textbook standards, students can change schools with ease and receive a constant level of learning. This is crucial for students who are changing schools or states since it guarantees that the knowledge they have gained at one institution will be applicable and helpful in another.

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## The Concept of Disability Reflected in the Textbooks of Jammu and Kashmir Board of School Education

Hilal Ahmad Wani\*

### Abstract

*Disability denotes the challenges faced by individuals with impairments due to certain limitations, hindering their equal participation in society compared to those without impairments. In the pursuit of empowering persons with disabilities, India introduced The Rights of Persons with Disabilities (RPwD) Act, 2016, replacing the Persons with Disability Act, 1995, shifting the focus from charity-oriented approaches to rights-based initiatives. It guarantees equal opportunities, prohibits discrimination, mandates reasonable accommodations, ensures accessibility, advocates inclusive education, reserves employment opportunities, and offers social security benefits, thereby fostering their active engagement in society. Specifically, addressing education, the RPwD Act, 2016 emphasises inclusive schooling, reasonable accommodations, and equal opportunities for individuals with disabilities. This includes ensuring accessible infrastructure, adapting learning materials, providing specialised support, and training educators to facilitate an inclusive learning environment. For creating an inclusive learning environment, comprehensive integration of the disability concept into textbooks gains paramount importance. This article assesses the integration of disability-related content in primary level textbooks sanctioned by the Jammu and Kashmir Board of School Education (JKBOSE). The study examined JKBOSE textbooks from Class I-V, revealing that while NCERT—adapted books show some inclusivity, JKBOSE-prepared textbooks lack a comprehensive representation of the disability concept. This analysis underscores the need for further enhancements in disability portrayal within educational materials, striving for a more inclusive educational landscape.*

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## UNDERSTANDING DISABILITY

### According to the Rights of Persons with Disabilities Act, 2016

“Person with a disability” means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others.

“Barrier” means any factor including communicational, cultural, economic, environmental, institutional, political, social, attitudinal or structural factors which hampers the full and effective participation of persons with disabilities in society.

This definition clearly states that disability is impairment in interacting with barriers, acknowledging its presence within both biological and social spheres. Disability as a concept can fluctuate over time, either improving or worsening further. Additionally, how they engage with their environment is greatly influenced by societal attitudes and behaviors towards them. In RPwD Act 2016, the number of disabilities was increased from seven to twenty one.

### The Act Covers the Following Disabilities

1. Locomotor Disability
2. Leprosy Cured Person
3. Cerebral Palsy
4. Dwarfism
5. Muscular Dystrophy
6. Acid Attack Victims

7. Blindness
8. Low-vision
9. Deaf
10. Hard of Hearing
11. Speech and Language Disability
12. Intellectual Disability
13. Specific Learning Disabilities
14. Autism Spectrum Disorder
15. Mental Illness
16. Multiple Sclerosis
17. Parkinson’s Disease
18. Haemophilia
19. Thalassaemia
20. Sickle Cell Disease
21. Multiple Disabilities

In the field of education, the objective of the act is to promote inclusive educational practices, cultivate a supportive atmosphere, and eliminate barriers to enable comprehensive development among students with disabilities. Students without disabilities need to develop empathy, resolving conflicts by understanding diverse perspectives and needs, without condescension but as an inherent right for everyone. Establishing positive relationships between students with and without disabilities is crucial for their mutual learning and enjoyment. These values should be integral to the school environment, fostering the holistic development of all students.

### INCLUSION IN TEXTBOOKS

Textbooks comprise textual information, visuals like pictures, interactive activities, exercises, and guidance for teachers, ensuring a

multifaceted learning experience. At the primary level, they are designed with vibrant colours, abundant visuals, and interactive activities aimed at captivating and engaging young learners. In our schools, textbooks serve as the primary source of information for students, guiding their learning and understanding of a subject. Children enjoy looking at pictures in their textbooks and engaging in discussions about stories with both their peers and parents. Thus, they should embrace inclusivity to develop a positive attitude among students towards disability and raise awareness about disability and the rights of individuals with disabilities. The integration of the concept of disability into textbooks serves several crucial purposes:

**Fostering Resilience and Aspiration**

It aims to nurture resilience among students with disabilities, inspiring them to dream big and achieve their full potential. Chapters dedicated to success stories and accomplishments of individuals with disabilities, especially in language subjects, would be instrumental in achieving this objective.

**Promoting Inclusivity**

An inclusive society embraces everyone, and textbooks can reflect this ethos by featuring images, activities, and exercises that represent diversity. Children with disabilities need to see

themselves in textbooks, facilitating their connection with every learning activity in school.

**Cultivating Good Values and Preventing Bullying**

Textbooks play a pivotal role in shaping students into compassionate individuals. They should instill values of empathy, kindness, and respect for diversity. Students need to comprehend their responsibilities, foster mutual respect, and understand both their own and others’ strengths and needs, thereby discouraging bullying both within and outside the school environment.

**Raising Awareness**

Textbooks can serve as a platform to educate students about the rights of individuals with disabilities, fostering awareness and understanding of the challenges they face.

**Examining Disability Inclusion in the Textbooks**

**Table 1**

Class	I and II
Disability Reflected in the Textbook	NIL

Most of the pages of the textbooks of Class I and Class II are filled with beautiful pictures but not a single picture shows anything related to the concept of disability or includes any person with disability. Pictures in textbooks of mathematics have more space to address the concept of disability than the pictures in

textbooks of English. At this stage, emphasis is primarily placed on fostering reading, writing, and numeracy skills, leaving little room to address disability-related aspects. Nonetheless, acknowledging socio-emotional development and promoting inclusive education is equally vital for students' holistic development, alongside other domains.

**Table 2**

<b>Class</b>	<b>III</b>
Subject	English (Chant -III)
Chapter	Smile Please
Name of the Disability	Locomotor Disability
Name of the Character	Shayaan
Theme of the Chapter	Resilience

This chapter reflects inclusiveness through pictures of Shayaan walking with the help of crutches. Explanation of the disability concept can be integrated into this chapter, but both the introductory instructions and the concluding exercises overlooked a significant opportunity to discuss the concept of disability and address Shayaan's rights, leaving out these crucial aspects altogether.

**Table 3**

<b>Class</b>	<b>III</b>
Subject	EVS
Chapter	Sharing Our Feelings
Name of the Disability	Blindness Problems faced by Old People

Name of the Character	Ravi Bhaiya—A teacher in a college
Theme of the Chapter	Disability does not stop a person from completing his/her work effectively and contributing to society.

This chapter is devoted to individuals with disabilities, addressing the challenges encountered by older individuals, such as back pain, hearing impairment, and low vision. It features a college teacher who is blind, effectively imparting knowledge and garnering admiration and respect from his students. The chapter delves into fostering friendships with individuals with disabilities, understanding their needs, and nurturing a positive attitude towards them. Furthermore, it includes exercises and activities centered around the concept of disability.

**Table 4**

<b>Class</b>	<b>IV</b>
Subject	English (Tulip Series Book-IV)
Chapter	Poem—The Blind Boy
Name of the Disability	Blindness
Name of the Character	Poet—a Blind Boy
Theme of the Chapter	Appreciate what you have and don't let the absence of something overshadow your happiness.

The poem describes the blind boy's sensory experiences, emphasising his ability to appreciate the beauty of nature through his other senses. Despite his blindness, he remains cheerful and content, finding joy in the world around him. JKBOSE is replacing the Tulip Series with the Chant Series for the subject English. Already Chant – I, Chant – II, and Chant – III are taught in schools. The concept of disability might not receive adequate focus in the Chant Series, similar to how other language textbooks prepared by JKBOSE lack sufficient attention to this topic.

**Table 5**

<b>Class</b>	<b>IV</b>
Subject	EVS
Chapter	Chuskit Goes to School
Name of the Disability	Locomotor Disability
Name of the Character	Chuskit – A ten years old girl who wants to go to school
Theme of the Chapter	Together with a little support, we can bring differently abled children to our schools

The chapter focuses on the difficulties faced by a ten-years-old girl who can't use her legs to access education like other children. It emphasises the importance of overcoming physical barriers through support systems like wheelchairs, ramps, and strong support from peers and authorities. Additionally, it highlights the crucial need for

the right to education, fostering positive attitudes, and initiating essential support for individuals with disabilities. This chapter stands out as a remarkable piece, encompassing various dimensions and aspects of disability in a beautifully comprehensive manner. Remarkably comprehensive, this chapter encompasses diverse dimensions of disability. Yet, its positioning at the end of the book diminishes its potential impact. Given its connection to Chapter 1, "Going to School," it would be more beneficial for students to position it after Chapter 1 as Chapter 2 in the book.

**Table 6**

<b>Class</b>	<b>V</b>
Subject	English
Chapter	The Man Who Empowered the Blind
Name of the Disability	Blindness
Name of the Character	Louis Braille
Theme of the Chapter	Success story and hard work of a person with disability and his contribution to the society

This chapter highlights the remarkable dedication of Louis Braille, who, despite being visually impaired, made an extraordinary impact on the lives of individuals with visual disabilities through the creation of the Braille system an innovation that empowered the blind

to read and write. The Teacher’s Page at the end of the chapter suggests organising a school trip to a blind school. Additionally, it provides instructions on developing a positive attitude among students towards visually impaired individuals and offers helpful guidelines on using the Braille system for reading. This chapter also raises awareness among students that children who cannot see are capable of learning to read and write through the Braille system.

**Table 7**

Class	V
Subject	EVS
Chapter	Like Father, Like Daughter
Name of the Disability	Locomotor Disability- Polio
Name of the Character	Satti
Theme of the Chapter	Traits that children get from parents

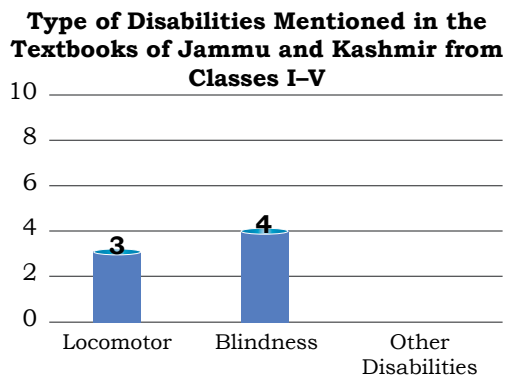
In this book, only a segment of a chapter touches on the concept of disability. This chapter provides awareness regarding the traits that children share with their parents. Towards the end of this chapter, a character named Satti, who had polio, is introduced. Some people discouraged her from having children, fearing that her offspring might inherit the same disability. However, the doctor reassured her by dispelling this unfounded belief.

**Table 8**

Class	V
Subject	Mathematics
Chapter	How Big? How Heavy?
Name of the Disability	Blindness
Name of the Character	Shahid
Theme of the Chapter	Big and Heavy Concept

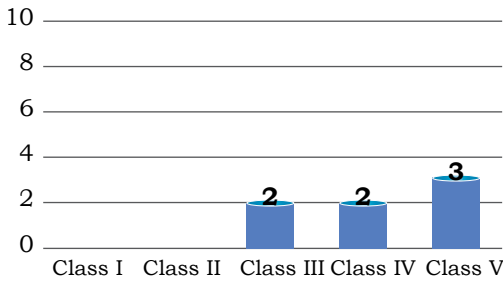
This serves as a wonderful illustration of how textbooks can adeptly integrate the notion of disability. Shahid, despite his inability to see, possesses an exceptional sense of touch, surpassing that of many individuals. He navigates tasks in his unique way. Rather than being labeled as disabled, Shahid is rightly recognised as differently abled, highlighting his unique strengths and abilities.

**CHART 1: DISABILITIES ADDRESSED IN THE TEXTBOOKS**



## CHART 2: CLASS-WISE FREQUENCY OF DISABILITY CONCEPT

Number of Times Disabilities addressed in the Textbooks of Jammu and Kashmir from Classes I-V



The main books examined for disability inclusion comprise Chant series of English for Classes I-III, *Tulip Series of English* for Classes IV and V, *environmental studies* for Classes III-V and *Merry math series of mathematics* for Classes I-V. Additionally, other textbooks like the baharistani urdu series for Classes I-V, saras bharti hindi series for Classes I-V, and Kashmiri textbooks for Classes I-V are utilised in various regions across Jammu and Kashmir. However, their utilisation varies across these regions, and the representation of the disability concept doesn't uniformly reach all students due to the specific language learning divide. Remarkably, the concept of disability remains largely absent in most of these textbooks, with the exception being the Hindi textbook designed for Class V. This specific textbook includes chapters titled 'Aik Maa Ki Bebasī' and 'Jahan Chah Wahan Rah', which delve into the subject, providing insights into

this crucial concept. These chapters need to be translated for inclusion in all other language textbooks across the region. This is important to ensure that the concept of disability is uniformly understood by all children.

## CONCLUSION

In most primary-level textbooks prepared by JKBOSE, there is a notable absence or very little coverage of the idea of disability and the rights associated with individuals who have disabilities. However, textbooks adapted from NCERT by JKBOSE, specifically *Environmental Studies* and *English*, do touch upon this concept to some extent. These inclusions effectively demonstrate the capabilities of individuals with disabilities, showcasing their potential to contribute to society while also addressing the necessary support they require to pursue their aspirations. However, there is a lack of emphasis on explaining the concept of disability and the associated rights of people with disabilities within these inclusions. Nevertheless, the representation of this concept remains quite limited to certain types of disabilities and lacks depth in various instances. Furthermore, it is evident that the portrayal and emphasis on the topic of disabilities in the pictures and activities within these textbooks, particularly in Class I and II, are not given significant attention and are often overlooked.

There's a critical need for our textbooks to comprehensively embrace inclusivity, serving as platforms to raise awareness and foster a deep understanding of disability concepts, the unique challenges individuals face, and their inherent rights. This goes beyond mere acknowledgment; textbooks should cultivate values, attitudes, and skills in young minds that promote compassion, reverence, assistance, and empathy towards individuals with disabilities.

Central to this effort is nurturing empathy among students without disabilities, encouraging them to connect with those facing challenges, offer support, and earnestly learn from their distinct perspectives and experiences. These reciprocal interactions significantly contribute to fostering solidarity, creating a more inclusive and supportive educational environment for all.

It's crucial to instill a sense of self-value and respect among children with disabilities, celebrating their inherent strengths. Educational content and activities within our schools should capture the richness of experiences of individuals with disabilities while articulating the necessary support they rightfully deserve. This inclusivity goes beyond providing special educators or arrangements; it requires broader understanding and acceptance.

By bridging gaps in understanding disabilities and nurturing empathy and inclusivity, these educational materials can pave the way for a more equitable future. Embracing diversity and nurturing a culture of acceptance and support within educational resources will not only enhance the learning journey but also significantly contribute to forging a fairer society for everyone.

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## A Small Step Towards Better Education

R. Savitha\*

It was a regular day at school. As a teacher, I loved my morning classes. As usual, I went to my class. The children of Class I were waiting for me. As soon as I enter the class, their broad smile usually lights up my day. After the regular wishes and pleasantries, I began my class. I took up a small poem. I had planned a tune for reciting the poem in the class. The students enjoyed the tune. Children usually love animals and stories and poems related to animals. In this poem, many animals and birds were mentioned. This excited the kids too!

As an extended activity, the students were asked to imitate the animals in this poem. It was then that one child asked a question. He asked me what a Seal was. Another child was quick to add, "What is a Seagull?" These questions set me into a thinking mode. It was then that I realised that, the children were enjoying the rhyme and rhythm of the poem, no doubt about that. But did they understand the poem? Were they

able to relate this poem to their lives? Do all of them recognise the animals (like seals, seagulls, eels, fleas and whales) mentioned in the poem?

The child usually connects the newly acquired knowledge in the classroom to the knowledge they already possess off the classroom. In this case, they were not able to relate as few of the animals mentioned in the poem were not from their familiar environment. What is the purpose then of inclusion of this sort of content in the textbooks, I wondered! This poem would be very meaningful to a child in Europe or America, perhaps.

The same day, I put together the textbooks of classes one to five on my table and sat for a critical examination of the books. I turned the pages and looked at the lessons and tasks with a new perspective. I began observing the illustrations that supported the content. On one hand I thought few of the lessons were very good with a message to the young learner. They

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had content that depicted the Indian family values like sharing and caring.

They even had content that gave a message of conservation of nature around us, like the plants and animals. They had the underling message of being happy. It is good that folk tales and stories from North-East corner of our country too are included. Few lessons also had their main concepts (like EVS concepts) woven around a story, which is an effective way of presentation.

On the other hand, I also felt few were hollow. They had a negative ending and no message at all. In a few lessons, the situation was not familiar to the child. Things like snow, fir trees, etc are not known to a child. The child has to imagine such things as there is no first-hand experience. A few illustrations were apt and relatable. But I found that illustrations in a few books were not clear (graphically blurred), not realistic (artificially put together) and that they do not give a true picture to the child.

After a thorough study of the content of various textbooks, I realised that there is a dire need to include "*Bharatiya Content*" in our books. The animals, pictures and many trees too which were mentioned in the lessons or poems were not from our country (or the immediate environment of the children). As a result of this, the children were not able to connect with the lesson or poem. This, I found to be one of the root causes that creates the unrelatability of our textbooks.

This point may be elaborated as: when a flower is mentioned in any lesson or task, the most commonly mentioned one seems to be the rose flower. Rose is now-a-days found everywhere across India, no doubt. But is it the only flower that deserves mention in the books? Where have our hibiscus flowers, jasmines, lotuses and marigolds gone? The apple seems to be the favourite fruit of the writers and our jackfruit, custard apple and guava seem to be lost!

I felt a strong need to give children "India-centric content". With all such thoughts in my head, I firmly resolved to continue teaching, making a conscious effort however, to supplement my teaching, substituting/supplementing the content with additional information for the benefit of my young learners.

When I read the draft National Education Policy 2019, I saw my thoughts being mirrored in it. As rightly mentioned in the draft of the National Education Policy, all the teaching-learning materials must be India-centric. All of us (citizens of our country) must take the collective responsibility of helping the younger generation know about our country, its flora and fauna, the festivals and traditions, and the beauty of our motherland. I do hope this suggestion in the draft is considered and it reflects in the teaching-learning materials developed henceforth.

## BOOK REVIEW

### *Brown Like Dosas, Samosas, and Sticky Chikki*

Ritika Marothia\*

**Author:** Rebecca Manari

**Illustrator:** Heetal Dattani Joshi

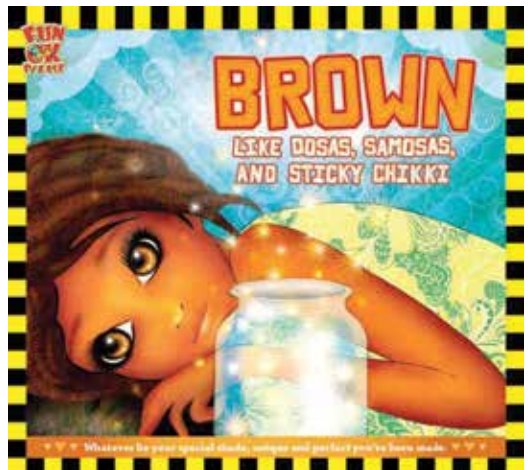
**Age:** 4 years and up

**Price:** ₹ 167

**Publisher:** Fun OK Please

**Year of Publication:** 2014

Penned down by Rebecca Manari, an author and teacher from Goa and illustrated by Heetal Dattani Joshi, an illustrator, designer, and storyteller from Bombay, the picture book, *Brown Like Dosas, Samosas, and Sticky Chikki* is a story of a young, chocolate-brown skin tone girl named Samaira who love colours. In the vibrant realm of children's literature that celebrates diversity, this story emerges as a heartwarming ode to cultural pride, identity, and the simplicity of childhood joys. With its infectious charm, the book engages readers, young and old, inviting them to delve into a world rich in tradition, colour, and flavor.



Set in the backdrop of a close-knit Indian community, the story begins on a fine day when Samaira receives a jar full of light. When she opens the lid, she is transported into another world. She meets Anahi, a purple skin tone lady, who offers to lighten Samaira's chocolate-brown skin "into a shade of white" in exchange for the shining jar. Samaira who is confident and bold enough, declines the offer saying, "I love my coffee brown cheeks

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*and arms of chocolate brown*". The lady still tries to persuade her into making her "fair from every finger to every toe" to which Samaira replies, "I am a girl, not a snowflake, If I were pale and as white as snow, I just wouldn't be the Samaira you know!" She politely refuses, remembering how her mother always said that there are many colours—some like sweet, earthy potatoes, others like sand and cinnamon—and that the world would be a dull place if everyone was the same colour. As Anahi comes up with more silly requests and absurd ideas which can be equated with the fairness cream commercials coaxing deep-skinned people into 'whiteness', Samaira resolutely reminds her that she is comfortable in her complexion and "quite happy to be her!"

Colours play an important role in the book. Not only the story starts with Samaira describing her love for painting but also it has various colours in it like purple, white, brown, orange, green, blue etc. Interestingly, the story also doesn't conform to any rules, for example, in another world, the river is green in colour, rose is turquoise and the crow is orange.

Illustrations done by Heetal Dattani Joshi makes the characters look like the Indian version of Disney princesses. Samaira has big, melting brown eyes, while Anahi looks similar to Anna from the Disney movie, Frozen. She has similar hair and white skin with magical elements attached to her personality. The book has a pull-out picture frame in the end

that delivers the message, "Whatever be your special shade; unique and perfect you've been made!"

Rebecca Manari's storyline is charming, brimming with some fun local food metaphors, such as skin "the delicious colour of black forest cake" and "brown like dosas, samosas and sticky chikki". The colour brown is seen throughout the story in food metaphors like tea, coffee, chocolate milk shake, coconut, cinnamon, murukku. Food descriptions are a sensory delight. From the golden-brown hue of dosas to the rich texture of chikki, the book celebrates not just the visual but the tactile, aromatic, and gustatory wonders of Indian cuisine.

This vivid imagery serves as a gateway to understanding and appreciating the broader tapestry of Indian culture. Rebecca's writing style is refreshingly lucid, ensuring that young readers remain captivated and wanting for more. The narrative flows smoothly, maintaining a pace that keeps the young audience engaged while allowing them to savor the rich details.

Her storytelling shines in its simplicity and genuineness. Through the eyes of Samaira, the narrative captures the wonder of a child's perspective, making the ordinary seem extraordinary. The effortless weaving of cultural elements with universal childhood experiences ensures that the book resonates with a broad audience.

The story challenges and debunks the discriminatory idea of "fair is beautiful" which is still prevalent in Indian society. The book becomes relevant because today children are adversely affected by various advertisements which promote white/light skin tone. Body image has become an important topic as a part of their identity for them and it's stressful to witness how they discriminate against people with deeper complexion. It encourages young readers to find beauty in their uniqueness and to draw pride from their heritage. Furthermore, the book beautifully touches upon the universality of childhood experiences, bridging cultural gaps.

The story makes Samaira embark on a delightful journey of self-discovery, as she joyously observes the shades of brown in her everyday life, from delicious dosas and crispy samosas to the sweet allure of sticky chikki. Through these

discoveries, she learns to embrace her skin colour, correlating it with the beloved items and experiences that bring her happiness and comfort.

Samaira is the epitome of innocence and curiosity. Her journey of correlating the beauty in her skin tone with her favorite foods offers an authentic portrayal of a child's process of understanding and embracing their identity. The supporting characters, from her family to friends, reinforce the theme of acceptance and pride in one's roots. Both the illustrator and the writer leave a personalised message to their readers in the end too saying that "you are your words, ideas, actions, thoughts, creations, emotions, decisions, fears, dislike more than just your skin and body".

This book is a must read not only for children to get inspiration from Samaira but also for teachers and parents too in order to teach children moral lessons like self love and self acceptance but also, life skills.

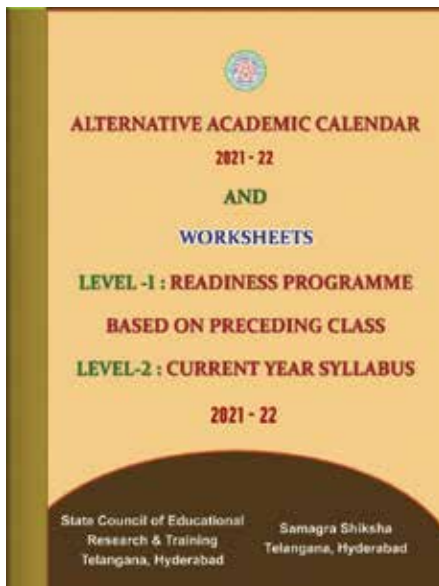
## SCERT Telangana's Journey Towards Educational Equity

A. Venkata Ramnamma\*

Once the students fall behind during the critical learning stage, they struggle to catch up, hindering their learning potential. Covid gave many challenges including the challenges related to learning loss and learning gaps besides the change in interpersonal relationships and emotional balance. Students found it extremely hard to catch up during

Covid, and the post-covid scenario wasn't different either. The social situation during Covid and beyond led to psychological detachment of the child towards learning thereby posing various challenges to the teachers. It's paramount to attract students towards learning and create an environment to nurture the curiosity of the child.

At the moment of crisis, State Council of Education Research and Training (SCERT) Telangana shouldered a huge responsibility to string all the possibilities keeping the students engaged in one way or the other and ensuring a feasible learning environment. The education system must cope with the challenges and come up with resources that must be accessible to the child and corroborate learning. The Curriculum and Textbooks department at SCERT designed a two-tier programme wherein a team of educators and teachers were involved in preparing worksheets to be distributed among the students following the Covid regulations and another team was



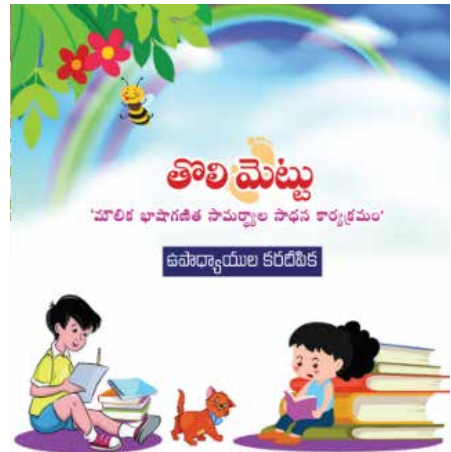
\*Team member, State Resource Group for English, Telangana

involved in designing, recording, and telecasting the digital lessons.

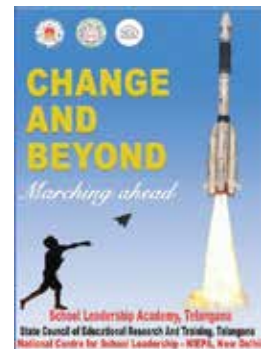
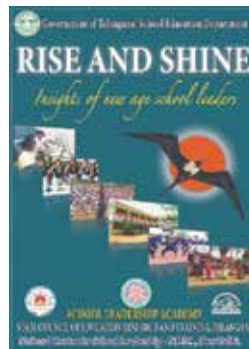
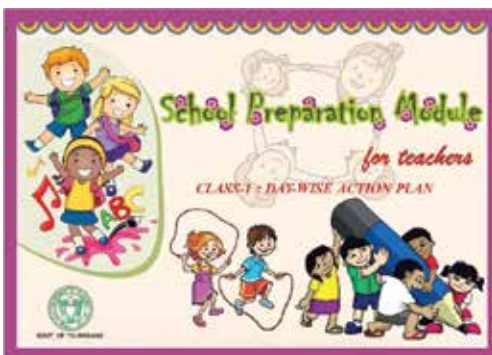
The motivation was highly pivotal to appreciate the good work of the teachers who went out of their comfort zones, took risks, and came up with innovative ways to ensure that there was no hiatus in providing learning opportunities for the children. The School Leadership Academy (SLA) at Telangana SCERT, an extended arm of National Centre for School Leadership (NCSL)-National Institute of Educational Planning and Administration (NIEPA) documented the remarkable journeys of the teachers and released the book 'Impact Influence Inspiration' to boost the morale of the teachers during the tough times and beyond. The SLA continued the same in the consecutive academic years continuing documentation of the success stories of teachers and publishing books to inspire further.

After the schools reopened, various studies on the learning loss among the students were staggering ringing alarming bells. In sync with the Vidya Pravesh guideline of

NCERT, Telangana SCERT developed the 'School Preparation Module' prescribing activities for Class I and II students that can address the needs of the students who came to school without pre-primary instruction.



Going further, in the next academic year, to address the low learning levels and growing gap in primary grades, the Department of School Education has launched a comprehensive programme named "Tholimettu" (First Step), Foundational Literacy and Numeracy (FLN) Mission extended to Classes III, IV and V as well. This flagship mission focuses on equipping



primary school children with foundational literacy and numeracy skills.

Implementation of 'Tholimettu' initiative began with a diagnostic study of the system (what are the major issues, gaps, and necessity for focusing on primary grades to ensure that we reduce learning poverty and learning losses) and a large-scale sample baseline study to understand the learning levels of students and further set appropriate goals and targets to be achieved.

Based on the study, the curriculum department took up the responsibility of creating resources for both teachers and students. Handbooks for teachers aligning the classroom processes with the learning outcomes were developed and simultaneously, workbooks for telugu, english, and mathematics were prepared for the use of the students of Classes I to V. Orientations were planned and executed at different levels to ensure that the processes given in the handbooks and the material in the workbooks aligned with the learning outcomes expected from the transaction of the textbooks, especially in bridging the learning gaps.

Further, a team of experts constituted the monitoring system by SCERT to equip and continuously support the teachers regarding the

classroom processes mentioned in the handbooks and the activities in the workbooks. The apex body of education of Telangana also saw the importance of developing appropriate teaching-learning materials to guarantee the participation of the child in the classroom process. Teachers were given specific guidelines to prepare TLM that align with the class-wise learning outcomes and conducted Teaching Learning Material melas at mandal (block) level and district levels.

The education system of Telangana has created a mobile app and has been successfully using the dashboards at the state and district levels, enabling an effective monitoring system. Being resourceful is crucial to keep up the momentum of Tholimettu. At the end of the day, the resources must help and ensure 100 per cent participation of the child and nurture the curiosity of the child by actively engaging the child in various interactions with peers and material. Completion of the syllabus is not the criterion, but the achievement of the class-specific and subject-specific learning outcomes was given priority for languages giving the freedom for teachers to plan classroom activities based on the learning pace of the children keeping in mind the individual differences of learning.

## Notes

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## Notes

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## Notes

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## TO THE CONTRIBUTORS

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*The Primary Teacher* invites teachers, teacher educators and research scholars to write articles, field notes and reports that impact Primary stage of education. The focus areas may be issues and concerns that you feel should be shared with other stakeholders.

- Each article should be about 1500 to 3000 words.
- Each article should have a short abstract in about 150 words.
- Use simple and non-technical language and a communicative tone.
- The photographs and illustrations should be sent in JPEG format, having a resolution of at least 300 dpi.
- The articles must be sent in soft and hard copy to:

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This section contains letters and feedback, where one can put forward responses, suggestions and expectations in the form of articles, papers and columns. It also addresses issues, concerns, doubts, incidences, experiences related to teaching-learning processes, classroom practices, syllabus, textbooks, evaluation patterns and research related to the primary stage of education.

#### **Book Review**

This section reviews fiction and nonfiction, books and documents relevant for school teachers. It provides a concise and critical perspective of a variety of works with details on language and style, along with a short summary, that would facilities schools in replenishing their libraries.

#### **From the States**

Various initiatives are taken up in school education by States and Union Territories of the country. This section showcase the best practices in teaching, highlights supplementary reading material and discusses new approaches to training and orientation developed by States/UT that may be replicated or scaled by stakeholders in other regions.

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