Exploring the Perception of Foundational Literacy and Numeracy among Primary School Teachers

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ABSTRACT

This study examines how primary school instructors' perceptions affect their students' basic literacy and numeracy skills. Effective teaching relies heavily on perception, the cognitive process of interpreting sensory data. It influences teachers' understanding of students' learning needs and directs their instructional decisions. Despite its importance, little study has been done on how teachers' perceptions affect how they teach in reading and numeracy domains. This study is to investigate primary school teachers' opinions regarding basic reading and numeracy training using a qualitative research methodology. The research aims to understand teachers' perspectives on students' development in these core academic areas through in-depth interviews and classroom observations. Furthermore, the research will examine the extent to which educators' assessments of students' skills and methods of instruction correspond with recognized educational frameworks and pedagogical best practices.

The research's conclusions are expected to shed light on the intricate interactions between fundamental literacy and numeracy instructors' activities and their perceptions of those practices. This study intends to inform teacher training programs and professional development initiatives by identifying the variables influencing teachers' views and how these perceptions impact classroom interactions, curriculum creation, and student results. The ultimate objective is to improve teachers' perceptual abilities so that they can provide better literacy and numeracy training in primary school settings and help pupils reach higher academic goals.

Keywords: Perception, Foundational Literacy, Foundational Numeracy, Primary School Teachers.

1. Introduction

The establishment of fundamental literacy and numeracy abilities in primary education serves as the basis for both academic achievement and lifetime learning. Along with giving students the ability to understand and communicate effectively, these core abilities also give them the numerical fluency they need to succeed in a variety of everyday situations as well as in their future academic endeavors. In the context of elementary school education, instructors are essential in helping pupils acquire and become proficient in these core abilities.

The teacher's perspective, or their cognitive interpretation of the skills, needs, and instructional strategies of their pupils, is critical to the success of teaching foundational literacy and numeracy. Teachers use perception as a lens through which to see and interact with their students, and this helps them make judgments about pedagogy, classroom dynamics, and, ultimately, student results. Notwithstanding its importance, perception is still a field that receives little research in elementary education, especially when it comes to how it affects teaching literacy and numeracy.

The purpose of this study is to close this gap by examining perception among primary school teachers in the context of core reading and numeracy. This study aims to clarify the complex relationship between perception and pedagogy in primary education by exploring teachers' views, attitudes, and beliefs regarding literacy and numeracy instruction. It is important to comprehend how basic reading and numeracy are viewed by primary school instructors for several reasons. First, the techniques and approaches teachers use to teach these foundational abilities are shaped by their perspectives, which in turn affects their instructional practices. The purpose of this research is to shed light on the attitudes that primary school teachers have about the reading and numeracy skills that their students are learning as well as the methods they use to teach these skills.

Second, teacher training programs and professional development activities can benefit from an investigation into primary school teachers' perceptions of fundamental reading and numeracy. Education stakeholders can create tailored interventions to improve teachers' comprehension of good literacy and numeracy instruction by detecting gaps or misconceptions in teachers' perspectives. Furthermore, encouraging a greater understanding of the role perception plays in education may enable teachers to evaluate and improve how they teach, eventually improving student results.

With these things in mind, this study aims to further the conversation about primary education by providing information about the function of perception in teaching basic literacy and numeracy. This study aims to provide insights into teachers' perceptions and how they affect classroom practices to improve the efficacy and quality of reading and numeracy instruction in primary schools.
1.1 FOUNDATIONAL LITERACY

The core abilities and information required for proficient reading and writing are referred to as foundational literacy. It includes all the fundamental components needed to acquire reading, such as phonemic awareness, phonics, fluency, vocabulary growth, and understanding. Higher-level literacy skills are built upon foundational literacy skills, which are normally learned in the early stages of education, frequently throughout preschool and primary school years.

For pupils to become proficient readers and writers, they must master these fundamental abilities. For example, phonemic awareness is the capacity to identify and work with sounds in spoken language, or phonemes, which is necessary for word decoding and encoding. Through the teaching of the relationship between letters (graphemes) and sounds, phonics training aids pupils in comprehending the alphabetic principle and decoding written words. Accuracy, speed, and expression in reading are all part of fluency, whereas vocabulary development aims to increase pupils' word knowledge to improve understanding. The capacity to read, comprehend, and analyse written material includes drawing conclusions, summarising data, and examining text structure.

Throughout their academic careers, students increase their literacy competency on the base of foundational literacy abilities. When students master these skills, they can interact with written language in a variety of contexts and subjects, which helps with learning and communication. Furthermore, a lifetime of learning, critical thinking, and academic performance are all linked to having good basic literacy abilities. As a result, encouraging educational success and supporting literacy development requires strong foundational literacy instruction.

![Figure 1: Essential Competencies Foundational Literacy](image)

**Oral Language Development**

includes enhanced conversational skills, increased oral vocabulary, and better listening comprehension. The development of reading and writing skills depends on oral language experiences.

**Decoding**

involves using knowledge of the correspondence between symbols and sounds to decode written words.

**Reading Fluency**

refers to the capacity for accurate, rapid (automaticity), expressive (prosody), and comprehension reading of a material that enables kids to get meaning from it. While many kids can identify aksharas, reading them one by one is time-consuming.

**Reading Comprehensive**

involves applying critical thought to a text and deriving meaning from it. This area includes the skills necessary to comprehend texts, extract information from them, and interpret them.

**Writing**
Writing Akshara’s words, as well as writing for expression, are included in this realm of competencies.

### 1.2 FOUNDATIONAL NUMERACY

The fundamental mathematical knowledge and abilities that serve as the cornerstone of all subsequent mathematical learning are referred to as foundational numeracy. These foundational abilities are usually formed in the early years of schooling, such as in preschool and primary school. They are essential for children to be able to solve problems and interact with more complex mathematical ideas later in their academic and daily lives.

**Figure 2- Essential skills - Foundational Numeracy**

#### Identifying the Counting Numbers

This calls for the capacity to precisely count items or amounts, identify, and label numbers, and comprehend their values. Rigid counting is the first step towards more sophisticated counting techniques like skip counting and pattern recognition in early numeracy skills.

#### Simple Arithmetic Function

The four fundamental operations of addition, subtraction, multiplication, and division are all part of foundational numeracy. Youngsters not only learn how to carry out these operations, but also understand the concepts of quantity sharing, grouping, combining, and separating that they represent. Both simple and more difficult mathematical issues require this understanding to be solved.

#### Set Value

Comprehending place value is essential to appreciating the importance of individual digits in larger quantities. Place value principles assist students' understanding of the structure of numbers and allow them to manipulate multi-digit numbers. This entails knowing decimals as well as units, tens, hundreds, and higher.

#### Number Relationships and Patterns

A key component of numeracy is the ability to identify and comprehend patterns, sequences, and relationships between numbers. This entails recognising even and odd numbers, comprehending multiples and factors, and investigating numerical patterns. Acknowledging these trends facilitates outcome prediction and effective issue solutions.

#### Calculation and Measurement

Understanding different units of measurement, such as length, weight, volume, time, and money, is a prerequisite for foundational numeracy. Pupils gain knowledge of object measurement, quantity comparison, and value estimation. These are practical talents that are used in daily life, such as grocery shopping, cooking, and event planning.

#### Fundamental Geometry and Spatial Intelligence
This involves being able to identify and comprehend two- and three-dimensional shapes, such as cubes and spheres, as well as two-dimensional shapes like squares and circles. Understanding the links between things in space, including symmetry, location, direction, and movement, is a necessary component of spatial reasoning. These abilities are essential for anything from comprehending scientific ideas to reading maps.

**Ability to solve problems**

Another aspect of foundational numeracy is the capacity to use mathematical ideas to resolve practical issues. This includes figuring out the settings of problems, coming up with and putting into practice solutions, and analyzing the outcomes. Logical thinking, inventiveness, and the capacity for clear communication of solutions are necessary for effective problem-solving.

### 1.3 Objectives

To Study the perception towards foundational literacy and numeracy (FLN) of private school teachers

### 1.4 Population

Private school teachers of Gautham Buddha Nagar, constituted the population of the present study.

### 1.5 Sample of the study

The Gautham Buddha Nagar provided the sample. To ensure statistical representativeness for the investigation, samples were chosen. The representation of private entities about their affiliation categories was equitable.” Twenty private instructors comprised the majority of the study's sample. For the survey, twenty samples in total were collected.

### 1.6 Tools to be Used for Data Collection

A self-made questionnaire for knowing the perception of school teachers towards foundational literacy and numeracy was used for the study. This need was highlighted by Likert (1932), which limits participants' ability to provide predetermined answers. The Researcher has developed a 5-point Likert scale on the perception of school teachers toward foundational literacy and numeracy. The Researcher has developed a 20-item-based survey to check the perception of school teachers toward foundational literacy and numeracy.

### 1.7 Scoring Methods

The mechanism of item scoring was arranged logically. A previously created scoring system was used to grade the answer sheets, with marks ranging from 5 to 1 for a positive statement for strongly agreeing to strongly opposing replies. The scoring method was inverted for negative items.

Each item is arranged on a five-point Likert scale with the following options:

A. Strongly Agree
B. Agree
C. No Response
D. Disagree
E. Strongly Disagree

### 1.8 Data Analysis

The perception of private school teachers towards foundational literacy and numeracy was collected through a questionnaire which was based on likert’s scale. The following graph indicates the perception of private school teachers on their knowledge, attitude and skill toward foundational literacy and Numeracy
The results of Figure 1 indicate that there is knowledge about foundational literacy and numeracy in private schools. According to the graph, 14% strongly agree, 86% of private school teachers agree, 0% have no response, 0% disagree, and 0% strongly disagree on these statements.

Figure 2 findings show that at private schools, understanding of (FLN) is crucial for developing global competency. The graph shows that, regarding these statements, 68% of private school instructors highly agree, 32% agree, 0% have no answer, 0% disagree, and 0% strongly disagree.

As illustrated in Figure 3 out of 50% teachers in 48% of private school teachers strongly agree with the positive impact on students’ career prospects. 52% of private school teachers agree, 0% have no response, 0% disagree and 0% strongly disagree of these statements towards positive impact towards student’s career supported. As shown in Figure 4 out of 50% of teachers in 56% of private school teachers strongly agree that support in teaching (FLN) and 44% of private school teachers agree, 0% no response, 0% disagree and 0% strongly disagree of these statements.
The data in Figure 5 points towards the cultural awareness (FLN) of private school teachers. As per the graph, 42% private teachers strongly agree and 58% private teachers agree, 0% no response, 0% disagree and 0% strongly disagree of these questions. The result of Figure 6 points towards the content (FLN) personal development. As per the graph, 54% private teachers strongly agree and 46% private teachers agree, 0% no response, 0% disagree and 0% strongly disagree of these statements.

The result of Figure 7 points out that the content improves students' communication skills. As per the graph, 56% of private teachers strongly agree that the content improves students' communication skills, 44% agree and 0% have no response, 0% disagree, 0% strongly disagree with these questions. The data in Figure 8 points towards that (FLN) should be integrated into the curriculum from an early age. As per the graph, 66% of private school teachers agree and 0% no response, 0% disagree, 0% strongly disagree of these statements.
The statistics of figure 9 point towards that the (FLN) enhances students’ empathy towards other cultures. As per the graph private school teachers 28% strongly agree that enhances students’ empathy towards other cultures among teachers 72% agree and 0% have no response, 0% disagree and 0% strongly disagree of these statements. The data in Figure 10 out of 50 teachers who participated in the survey 46% of private teachers strongly agree that feel confident in their ability to assess foundational literacy and numeracy (FLN) proficiency among teachers 54% agree and 0% have no response, 0% disagree and 0% strongly disagree of these questions.

The data in Figure 11 points toward the content of students’ critical thinking abilities as per the graph 40% of private school teachers strongly agree and point to the content of students’ critical thinking abilities. As per the graph, 60% of private school teachers agree 0% have no response, 0% disagree and 0% strongly disagree of these statements. The data in Figure 12 points toward Academic achievement in other subjects. As per the graph, 36% of private school teachers strongly agree and point that the content is Academic achievement in other subjects. As per the graph, 64% of private teachers agree and 0% have no response, 0% disagree, 0% strongly disagree with these questions.
Figure-13 Diversity among students

As shown in figure 13 points towards fostering a sense of openness to diversity among students. As per the graph, 44% of private school teachers strongly agree and point out that the content fosters a sense of openness to diversity among students. 56% of private school teachers agree 0% have no response, 0% disagree, 0% strongly disagree with these statements.

Figure-14 Promote tolerance

Figure 14 indicates the promotion of tolerance and understanding. As per the graph, 32% of private school teachers strongly agree and as per the graph 68% of private teachers agree and 0% response, 0% disagree, 0% strongly disagree with these questions.

Figure-15 Students to appreciate linguistic diversity

The result of Figure 15 points towards encouraging students to appreciate linguistic diversity. As per the graph, 42% of private school teachers strongly agree and as per the graph towards encouraging students to appreciate linguistic diversity 58% agree 0% no response, 0% disagree, and 0% strongly disagree with these statements.

As shown in figure 16 points towards that opportunity for professional growth. As per the graph, 52% of private school teachers strongly agree and as per the graph 48% of private school teachers agree and 0% of private school teachers have no response, 0% disagree, 0% strongly disagree of these questions.
Figure 17 Students develop a global perspective

As shown in figure-17 points towards that students develop a global perspective. As per the graph, 50% of private school teachers strongly agree and as per the graph 50% of private school teachers agree and 0% no response, 0% of teachers disagree and 0% of private school teachers strongly disagree of these statements.

Figure-18 prioritized in educational funding

Figure-18 indicates the prioritized in educational funding. As peer the graph 44% private school teachers strongly agree and as per the graph 56% private school teachers agree and 0% teachers no response, 0% private school teachers disagree, 0% private school teachers strongly disagree of these questions.

Figure-19 positive attitudes towards language learning in general

Figure-20 the diverse needs of (FLN)

As show in figure-19 indicates the positive attitudes towards language learning in general. As per the graph 38% private school teachers strongly agree and as per the graph 62% private school teachers agree, 0% of private school teachers have no response, 0% disagree, 0% of private school teachers strongly disagree with these questions.

The result of Figure 20 points toward the diverse needs of foundational literacy and numeracy. As per the graph, 42% of private school teachers strongly agree and as per the graph 58% private school teachers agree, 0% no response, 0% disagree and 0% strongly disagree of these statements.

Conclusion

All children go on a journey to acquire fresh insights and abilities that will support their growth as human resources and as an essential instrument for financial progress. Strong early schooling lay the groundwork for this. The National Education Policy (2020) makes a point of highlighting the significance of obtaining Foundational Literacy and Numeracy. "Solely, when this most central learning criterion (i.e., foundational reading, writing, and arithmetic) is met, will the rest of this Policy become pertinent for our kids. To guarantee that every child in India has achieved foundational literacy and numeracy by the end of Grade 3, the Ministry of Education in India launched the NIPUN Bharat mission along with a detailed action guideline for states. Grade 3
completion by 2026–2027. For this goal, the learning objectives for preschool through grade three have been established (3-9 years). The mission guidelines propose a shift to competency-based education and stress the importance of using school-based assessment to give teachers ongoing feedback. States are required to create block, district, and state missions that complement the national.

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