THE EFFECTIVENESS OF
ENNUM EZHUTHUM MISSION AMONG THE PRIMARY SCHOOLS IN COIMBATORE DISTRICT

RESEARCH PROJECT

RESEARCHER

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------------------------- Submitted To ----------------------

DECLARATION

I declare that the Research Project "***The Effectiveness of Ennum Ezhuthum Mission among the primary schools in Coimbatore District***" is the result of a study originally carried out by me.

The work has not been submitted earlier in full or part for any other research study on this or any other institution.

Station: Coimbatore

Date   :   Signature of the Researcher

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CERTIFICATE

This is to certify that the research project entitled "*The Effectiveness of Ennum Ezhuthum Mission among the primary schools in Coimbatore District"* is a record of original Research work done by Mrs. R.Maheswari, Lecturer, DIET, Coimbatore District during the period 2023-2024.

Station: Coimbatore

Date :   Signature of the Principal

ACKNOWLEDGEMENT

CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	List of Tables	
	List of Figures	
I	**INTRODUCTION**	1
	1.1 Introduction	1
	1.2 Primary Education	2
	1.3 Covid – 19 Pandemic Challenges and Learning Gap	10
	1.4 Ennum Ezhuthum Mission	11
	1.5 Need and Significance of the study	20
	1.6 Statement of the problem	21
	1.7 Definition of the operational terms	21
	1.8 Objectives of the study	23
	1.9 Research Questions	24
	1.10 Hypotheses	25
	1.11 Delimitations of the study	30
	1.12 Conclusion	30
II	**REVIEW OF RELATED LITERATURE**	31
	2.1 Introduction	31
	2.2 Studies on Literacy and Numeracy	32
	2.3 Conclusion	42

1. INTRODUCTION

1.1 INTRODUCTION

The great aim of education is not knowledge but action - Herbert Spencer

Education stands as the cornerstone for societal progress and individual empowerment, nowhere more apparent than in the southern Indian state of Tamil Nadu. Renowned for its rich cultural heritage, the state has consistently placed a premium on education, viewing it as the catalyst for societal transformation and the key to unlocking the potential of its diverse populace.

The educational journey in Tamil Nadu is deeply rooted in history, with a legacy that dates back centuries. Traditionally recognized for its ancient centers of learning, the state has seamlessly blended its cultural ethos with modern educational paradigms, creating a dynamic and vibrant educational landscape.

At the core of Tamil Nadu's educational ethos is a robust infrastructure that spans primary to tertiary levels. The state's commitment to universal education is evident in its widespread network of schools and colleges, ensuring access to education even in the most remote corners. The emphasis on inclusivity is mirrored in the diverse array of educational institutions, catering to various streams and disciplines. This commitment reflects Tamil Nadu's dedication to providing equal opportunities for education to all its citizens.

Tamil Nadu's education system goes beyond merely imparting knowledge; it extends to fostering holistic development. The state has been a pioneer in introducing

innovative pedagogical approaches and curricular reforms that prioritize not only academic excellence but also the development of critical thinking, creativity, and practical skills. The curriculum reflects the rich cultural tapestry of the state, promoting an appreciation for arts, literature, and sciences. This integrative approach ensures a well-rounded education that prepares students for the complexities of the modern world.

As we delve into the various facets of education in Tamil Nadu, this exploration will encompass the state's educational policies, challenges, and noteworthy initiatives that have propelled it onto the national stage. From the strides made in improving literacy rates to the innovative measures taken to bridge socio-economic gaps, Tamil Nadu's educational narrative is one of continuous evolution and adaptability.

1.2 PRIMARY EDUCATION

The primary education landscape in Tamil Nadu is characterized by its vast network of schools, catering to the foundational learning needs of young minds. Comprising a significant part of the state's comprehensive educational system, primary education serves as the gateway for children to embark on their academic journey. The state's commitment to universal education is reflected in the widespread availability of primary schools, ensuring accessibility even in remote areas.

Tamil Nadu boasts a rich historical context for education, with ancient centers of learning contributing to its cultural heritage. Today, the primary education system encapsulates a blend of traditional values and modern pedagogical approaches, emphasizing a holistic development approach for young learners. Understanding the

nuances of this primary education landscape is pivotal to appreciating the impact of initiatives like the Ennum Ezhuthum Mission.

Despite commendable efforts, the primary education system in Tamil Nadu faces a spectrum of challenges. Socioeconomic disparities often manifest in uneven access to quality education, creating a divide between urban and rural areas. Learning disparities among students, influenced by socio-economic factors, pose a significant challenge. The quality of education is not uniform across all primary schools, and students from marginalized communities may face additional barriers. Recognizing and addressing these challenges is crucial for creating an equitable and effective primary education system that caters to the diverse needs of all students.

The primary years of education form the foundation upon which a child's entire academic journey is constructed. Research consistently underscores that early intervention during the primary years is paramount for ensuring optimal cognitive development. Any gaps in learning during this crucial phase can have far-reaching consequences, affecting not only academic achievement but also socio-economic outcomes in later life.

Addressing learning gaps at the primary level is fundamental for achieving educational equity and excellence. By focusing on foundational skills such as literacy and numeracy, interventions can mitigate disparities early on, ensuring that every child has a solid base for future academic endeavors. The importance of equitable primary education extends beyond individual success, contributing to the overall development and prosperity of the community and the state.

1.2.1 EARLY LITERACY AND NUMERACY

Early literacy, which encompasses the ability to read, write, and comprehend written language, and numeracy, which involves understanding and working with numbers, are critical building blocks of primary education. These fundamental skills serve as the cornerstone for a child's future academic achievements and their lifelong journey of learning. During the primary education years, typically covering the initial stages of a child's schooling, educators dedicate their efforts to fostering these foundational abilities. The goal is to ensure that students not only acquire but also master strong literacy and numeracy skills right from the start, laying a solid groundwork for their educational and personal development. Early literacy and numeracy are vital components of primary education, serving as foundational skills that form the basis for future academic success and lifelong learning. In primary education, which typically encompasses the early years of a child's schooling, educators focus on cultivating these fundamental abilities to ensure that students develop strong literacy and numeracy skills from the outset.

1.2.2 DEFINING EARLY LITERACY AND NUMERACY

Early literacy and numeracy encompass a range of skills and abilities that form the foundation for further learning and development. Conceptual frameworks for early literacy often draw from theories of language acquisition, cognitive psychology, and socio-cultural perspectives. These frameworks highlight the importance of language exposure, phonological awareness, vocabulary development, print awareness, and comprehension skills in early literacy development. Similarly, conceptual frameworks for early numeracy

emphasize the acquisition of basic numerical concepts, such as counting, number recognition, arithmetic operations, and problem-solving skills. These frameworks recognize the interplay between cognitive, linguistic, and socio-cultural factors in shaping children's literacy and numeracy development.

1.2.3 COMPONENTS OF EARLY LITERACY

The components of early literacy encompass various skills and abilities that contribute to proficient reading and writing. These include:

- Phonological Awareness: The ability to recognize and manipulate the sounds of language, including phonemic awareness, phonological memory, and phonological processing.

- Vocabulary Development: The acquisition and understanding of words and their meanings, which is essential for comprehension and communication.

- Print Awareness: Awareness of print conventions, such as understanding that print carries meaning, knowledge of letters and words, and understanding the directionality of text.

- Comprehension Skills: The ability to understand and interpret written text, including making predictions, asking questions, making connections, and summarizing information.

- Fluency: The ability to read text accurately, quickly, and with expression, which contributes to overall reading proficiency.

1.2.4 COMPONENTS OF EARLY NUMERACY

Early numeracy involves the development of foundational mathematical concepts and skills. Key components of early numeracy include:

- Counting: The ability to count objects, understand one-to-one correspondence, and grasp the concept of cardinality.

- Number Recognition: Recognizing and identifying numbers, including numerals, number words, and number symbols.

- Basic Arithmetic Operations: Understanding addition, subtraction, multiplication, and division concepts and their applications in solving simple mathematical problems.

- Spatial Awareness: Understanding spatial relationships, shapes, patterns, and measurements.

- Problem-Solving Skills: Applying mathematical reasoning and strategies to solve mathematical problems and puzzles.

1.2.5 THE IMPORTANCE OF EARLY LITERACY IN PRIMARY EDUCATION

(i) Foundation for Academic Success

Early literacy serves as a foundation for academic success across all subject areas. Proficiency in reading and writing enables students to access information, engage with complex texts, and communicate ideas effectively. Students who develop strong literacy skills in the early years of primary education are better equipped to comprehend and succeed in various academic tasks and assessments.

(ii) Cognitive Development

The development of early literacy skills is closely linked to cognitive development in children. Engaging with language, print, and text stimulates neural pathways in the brain, promoting cognitive processes such as memory, attention, and problem-solving. Reading and writing activities encourage critical thinking, creativity, and language development, fostering overall cognitive growth.

(iii) Socio-Economic Outcomes

Early literacy has significant implications for socio-economic outcomes later in life. Research has shown that individuals with higher levels of literacy are more likely to achieve higher levels of education, secure stable employment, and enjoy higher income levels. By equipping children with strong literacy skills early in their education, society can promote social mobility, reduce inequality, and support economic development.

(iv) Closing the Achievement Gap

Addressing early literacy development is essential for closing the achievement gap among students from diverse backgrounds. Access to quality early literacy instruction and interventions can mitigate the effects of socioeconomic disparities, language barriers, and learning differences. By providing targeted support and resources to students who are at risk of falling behind, educators can help narrow the achievement gap and promote equitable educational opportunities.

(v) Lifelong Learning

Early literacy lays the groundwork for lifelong learning and intellectual growth. By instilling a love of reading, writing, and learning in children from an early age, educators cultivate a lifelong habit of curiosity, inquiry, and self-directed learning. Individuals who develop strong literacy skills in childhood are more likely to engage in reading for pleasure, pursue further education, and continue learning throughout their lives.

1.2.6 THE IMPORTANCE OF EARLY NUMERACY IN PRIMARY EDUCATION

(i) Foundation for Mathematical Understanding

Early numeracy lays the foundation for mathematical understanding and proficiency. By developing basic numerical concepts such as counting, number recognition, and arithmetic operations, children build the necessary framework for more advanced mathematical skills. Proficiency in early numeracy enables students to understand mathematical concepts, solve problems, and apply mathematical reasoning in various contexts.

(ii) Cognitive Development

The development of early numeracy skills is closely linked to cognitive development in children. Engaging in numerical activities stimulates cognitive processes such as logical reasoning, spatial awareness, and pattern recognition. Numeracy activities promote the development of problem-solving skills, mathematical thinking, and critical thinking abilities, which are essential for academic success and cognitive growth.

(iii) Socio-Economic Outcomes

Early numeracy skills have significant implications for socio-economic outcomes later in life. Research has shown that individuals with higher levels of numeracy are more likely to achieve higher levels of education, secure well-paying jobs, and make informed financial decisions. By equipping children with strong numeracy skills early in their education, society can promote economic mobility, reduce inequality, and support financial literacy.

(iv) Closing the Numeracy Gap

Addressing early numeracy development is essential for closing the numeracy gap among students from diverse backgrounds. Access to quality early numeracy instruction and interventions can mitigate the effects of socioeconomic disparities, language barriers, and learning differences. By providing targeted support and resources to students who are at risk of falling behind in numeracy, educators can help narrow the numeracy gap and promote equitable educational opportunities.

(v) Lifelong Mathematical Competence

Early numeracy lays the foundation for lifelong mathematical competence and numeracy skills. By instilling a love of numbers, problem-solving, and mathematical reasoning in children from an early age, educators cultivate a lifelong habit of mathematical thinking and inquiry. Individuals who develop strong numeracy skills in childhood are more likely to succeed in mathematics-related fields, make informed decisions in their

personal and professional lives, and engage in numeracy-related activities throughout their lives.

1.3 COVID - 19 PANDEMIC CHALLENGES AND LEARNING GAP

School education stands as the linchpin of societal progress, acting as the crucible where young minds are shaped, nurtured, and empowered for a future that is both challenging and full of opportunities. This importance holds particularly true in the culturally rich and educationally inclined state of Tamil Nadu. Renowned for its historical commitment to learning and knowledge, the state's educational landscape has faced unprecedented challenges during the global COVID-19 pandemic, revealing the critical role that school education plays in the lives of its young learners.

The pandemic brought about disruptions in various sectors, but perhaps none felt more profoundly than the realm of education. In Tamil Nadu, where education is viewed not just as an academic pursuit but as a means to societal transformation, the impact on students, especially at the primary level, was significant. The closure of schools, the shift to remote learning, and the digital divide posed formidable obstacles to the continuation of quality education.

The pandemic's toll on primary education in Tamil Nadu was multifaceted. The abrupt cessation of in-person classes disrupted the conventional learning trajectory, leaving young learners grappling with the challenges of remote education. The limitations of digital access, particularly in rural areas, created an uneven playing field, exacerbating educational disparities. The absence of peer interaction, classroom engagement, and a supportive

environment in schools further intensified the learning gap, especially for primary school children whose formative years are critical for foundational skills development.

Recognizing the pressing need to address the learning gap created by the pandemic, the Government of Tamil Nadu introduced the Ennum Ezhuthum Mission. This initiative aimed to not only mitigate the immediate impact of the disrupted learning environment but also to strengthen the foundational skills of students, setting a solid base for future academic endeavors.

1.4 ENNUM EZHUTHUM MISSION

In response to the unprecedented disruptions caused by the global COVID-19 pandemic in the realm of education, the Tamil Nadu government undertook a groundbreaking initiative to bridge the learning gap among students below the age of eight. The initiative, aptly named the Ennum Ezhuthum Mission, represents a visionary commitment by the state government to address the educational challenges exacerbated by the pandemic.

Tamil Nadu Chief Minister, M K Stalin launched the Ennum Ezhuthum scheme to bridge the learning gap that was caused due to the COVID pandemic among students aged below eight. The scheme aims to ensure foundational literacy and numeracy by 2025. It was launched at an event at Azhinjivakkam Panchayat Union Middle School, Tiruvallur.

Launched as a proactive response to the learning crisis precipitated by the pandemic, the Ennum Ezhuthum scheme embodies the Tamil Nadu government's commitment to

ensuring foundational literacy and numeracy for students in this critical age bracket. The scheme is designed not merely as a short-term remedy but as a comprehensive, long-term initiative with a clear objective: to establish foundational literacy and numeracy skills among young learners by the year 2025.

1.4.1 ENNUM EZHUTHUM MISSION – APPROACH AND STRATEGY

The ability to read and write and to perform basic operations with numbers is a necessary foundation and indispensable prerequisite for all future schooling among students. The extended period spent away from school due to COVID-19 led to school closures in spells from March 2020 has prevented face-to-face classroom transactions and this has created severe learning gaps among students, especially at the primary level. Despite State interventions like telecasting lessons through Kalvi TV, audio lessons through All India Radio, providing Refresher Course Modules, and teachers conducting lessons using technology wherever possible, the efforts have not reached all children uniformly. Hence, there may be students in Class 2 and 3 who would have come to school without having mastered the skills necessary to navigate Class 2 and 3 syllabi. The impact of this is that children will be at multiple levels of learning within the same class.

Therefore, to bridge the learning gap, the Ennum Ezhuthum Mission has been launched to ensure that by 2025 all students in Tamil Nadu by age 8 can read with comprehension and possess basic arithmetic skills. The Ennum Ezhuthum Mission focuses on the students of classes 1 to 3. An Expert Committee was formed to suggest strategies for the implementation of the Ennum Ezhuthum Mission. Teachers across the State have

suggested the level-based approach (teaching at the right level) instead of the grade-based approach as an effective methodology that could bridge the learning gaps. Based on their suggestions and the recommendations of the Expert Committee, this teacher's handbook and the accompanying level-based student workbook have been developed.

Since children who are going to Class 1 in the academic year 2022-23 will be underprepared for formal schooling, the scope has been given for developing psychomotor, socio-emotional, conceptual, and linguistic preparedness during Term 1. As far as children of Classes 2 and 3 are concerned, scope has been given for them to build the pre-requisite skills based on their level and then move on to the mastery of their grade level competencies. The concepts of Environmental Science (EVS) subject have been interwoven with the study of language in such a fashion that the children will acquire the learning outcomes of both subjects simultaneously.

(a) Play-based child-centered activities

The play-based child-centered activities are outlined in such a manner that it will ensure attentiveness, involvement, focus, and engagement of children willingly in the learning process. The children experience, explore, and express their ideas about the world around them. The activities are simple to conduct, effective, holistic, integrated, inclusive, enjoyable, and engaging. The activities include songs, stories, arts, crafts, and participatory games involving physical movements, and provide scope for creativity, imagination, playing with concrete objects, observation, noticing, learning in groups, learning in pairs, and individual learning.

(b) Ennum Ezhuthum - Classroom Ambience

The ambiance of the Ennum Ezhuthum classroom should enthuse the children to involve themselves willingly in the process of learning. The teachers should plan the ambiance by setting up special corners for activities such as storytelling, singing, reading, speaking, craftwork, etc. Thus, the play-based pedagogy will develop literacy skills to read and respond with comprehension and write with purpose and understanding.

(c) Teacher – A facilitator

For the outcome of the activities to be realized as envisioned, the role of the teacher becomes more of a facilitator and participator. Therefore, the teachers have a pivotal role to play in making the Ennum Ezhuthum Mission a success. To support the teachers, QR codes have been affixed in the Teacher's Handbook which will contain digital content related to modeled classroom transactions and a repository of activities that will help with reinforcement, remediation, or assessment. The teachers are welcome to build on the activities outlined as the situation warrants.

(d) Special features of Ennum Ezhuthum

- ❖ The paradigm shift from a grade-based approach to a level-based approach
- ❖ Integration of EVS with languages and mathematics
- ❖ Process-based teaching and learning
- ❖ Process-based assessment

❖ Depending on the activities the classroom transforms into a stage for performing arts, a platform for exhibiting individual talent, a concert hall for music, a forum for story-telling, a playfield for games, and a repository for arts thus making it lively and vibrant at all times.

❖ The learning outcomes in the first term will focus on oral engagement through child-centered activities in the initial weeks to ensure a smooth introduction to learning and school. A variety of learning experiences through play activities, oral interaction, worksheets, etc. will develop basic language skills.

❖ The teacher in the Ennum Ezhuthum classroom understands that every child is unique, is at a different learning level, and learns differently. The three learning levels have been named Arumbu, Mottu, and Malar. The modules are designed to be carried out over a period of 12 weeks, with each module lasting a week. The 13th and 14th weeks are intended for revision and remediation.

❖ Learning, in these early grades, focuses, primarily on oracy and hence children can be encouraged to speak in the classroom.

❖ The phrases written in red are teacher dialogues for the teacher to say in English.

❖ Each day is envisioned to begin with a warm-up activity and conclude with the completion of worksheets. The teacher can determine if some activities need more time based on the learning pace of the students.

❖ Activities in the modules integrate the use of the Ennum Ezhuthum Kit, the language kit, and the English textbook which can be used for achieving the learning outcomes. Additionally, the use of indigenous/locally available materials is encouraged.

❖ Every module is supported with a QR code that can be used to access e-content and assessments for easy classroom transactions.

(f) The vision of an Ennum Ezhuthum Classroom

Every Ennum Ezhuthum Classroom is envisioned to have five creatively organized corners and each is equipped to promote a specific learning activity. Each corner will be presented in a manner that depicts its unique purpose with visuals, graphic organizers, learning aids, models, and exhibits of students' creations. This section elaborates on the components and utility of each corner.
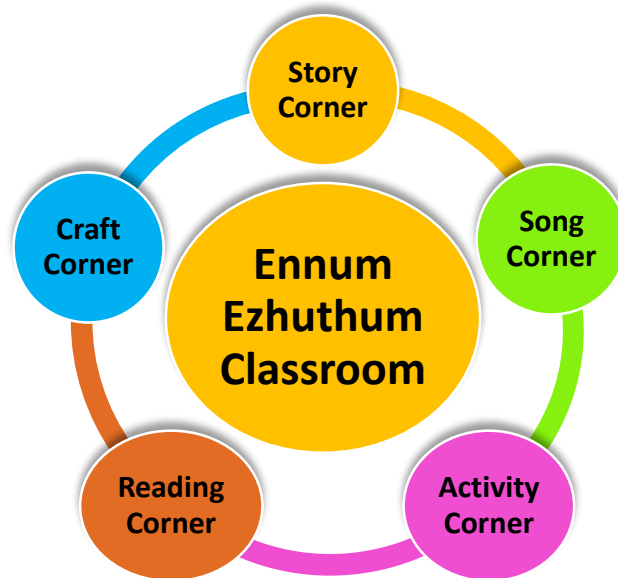
Story Corner

✓ Creates an ambiance for students to make story time interesting and lively.

✓ Enriches the vocabulary and speaking skills of students and gives scope for their imaginative and creative thinking.

✓ Facilitates students to respond to simple instructions and comprehensive questions.

Song Corner

✓ Gives joy and pleasure to students when they sing songs with actions.

✓ Improves their listening skill and pronunciation.

✓ Helps in the effective participation of students with the usage of appropriate child-friendly musical instruments.

✓ Eases singing songs with simple tunes and rhythm.

Reading Corner

✓ Provides an opportunity for students to listen to the teacher reading leveled text.

✓ It helps them to know their pronunciation and enhance their reading habits.

✓ Provides a joyful reading habit with the provision of leveled books with imaginative stories.

✓ Familiarizes sight words with words displayed on the word wall.

Activity Corner

✓ Materials of the Ennum Ezhuthum kit and other language kit materials can be provided here.

✓ Teachers encourage students to do supplementary activities for remediation/ reinforcement purposes alongside modules.

Craft Corner

- ✓ Art and craft materials to help children participate in craft activities discussed in the modules can be provided here.

- ✓ Students' handiwork can be displayed in this corner.

(g) Foundation – Reinforcement – Retention

- ✓ A very good foundation has been laid in the first term for children to gain subject-wise competencies through listening, speaking, and knowing number values.

- ✓ In the second term, more exercises have been given as reinforcements for reading, writing, and fundamental math activities.

- ✓ Now, in the third term, along with the content, activities have been devised to retain the language and mathematical skills the students have attained in the past two terms.

- ✓ These activities will help the children achieve appropriate learning levels thus enabling them to move on to the next class and continue their learning joyfully.

(h) Ennum Ezhuthum - Teacher Handbook

The Ennum Ezhuthum Teacher Handbook is an indispensable resource for educators dedicated to furthering the mission's goals. It offers a comprehensive compendium of strategies, methodologies, and curriculum frameworks, providing teachers with the essential tools and support needed to effectively implement the mission's objectives in the classroom. The handbook not only ensures consistency in

teaching practices but also serves as a catalyst for professional development by offering insights into innovative teaching methods and best practices. It acts as a valuable reference tool, empowering teachers to enhance their understanding of the mission's goals and adapt instructional approaches to meet the diverse needs of students. Ultimately, the Ennum Ezhuthum Teacher Handbook plays a pivotal role in equipping educators with the knowledge and resources necessary to foster meaningful learning experiences and drive academic success among students.

(i) Communication and Engagement Initiatives of the Mission

The mission has established various communication and engagement initiatives to ensure effective interaction with stakeholders. These initiatives include regular interactions between state-level officials and teachers on a dedicated Telegram group, the dissemination of voice messages to parents via phone, frequent updates on program activities through social media platforms, and the organization of annual Ennum Ezhuthum fairs to showcase student activities at the school. In addition to these efforts, monthly parent-teacher meetings are conducted to enhance parental awareness and participation in the mission, as well as to discuss the progress of their children. Furthermore, discussions on program advancements take place during the School Management Committee Meetings, providing a platform for stakeholders to contribute to the mission's progress.

1.5 NEED AND SIGNIFICANCE OF THE STUDY

The Ennum Ezhuthum Mission was initiated by the Tamil Nadu government to tackle the prevailing learning gap in the state. With a vision to achieve foundational literacy and numeracy by 2025, the mission targeted all students in Tamil Nadu aged 8 or below, aiming to ensure that they could read with comprehension and possess basic arithmetic skills.

Commencing in the academic year 2022-23 across government schools, the mission focused on students in classes 1 to 3. Recognizing the necessity of a level-based approach, as suggested by teachers and the Expert Committee, the mission's strategies were designed accordingly. In response to these recommendations, a teacher's handbook and a level-based student workbook were developed to aid in the effective implementation of the mission.

This study will play a pivotal role in assessing the effectiveness of the Ennum Ezhuthum Mission. The ambitious objectives and specific timelines set by the mission will highlight the necessity for an evaluation mechanism to ensure progress toward foundational literacy and numeracy goals. The targeted age group will be emphasized, underscoring the importance of early intervention in establishing a robust educational foundation for students.

Furthermore, the study will aim to validate the chosen level-based approach and determine its impact compared to traditional grade-based methods. With the statewide implementation of the mission, the study will provide insights into its overall effectiveness,

identifying areas for improvement and ensuring accountability in resource allocation and efforts.

By evaluating the mission's effectiveness, the study will become a catalyst for continuous improvement. It will identify areas that may benefit from adjustments or enhancements, facilitating an iterative process that promotes ongoing refinement in educational strategies and interventions. The outcomes of the study will inform evidence-based decision-making for the optimization of the Ennum Ezhuthum Mission's impact in the future.

1.6 STATEMENT OF THE PROBLEM

The study is entitled "***The Effectiveness of Ennum Ezhuthum Mission among the Primary Schools in Coimbatore District.***"

1.7 DEFINITION OF THE OPERATIONAL TERMS

1.7.1 Effectiveness

Abdullah Noori defines Effectiveness as how well a particular treatment or other intervention works to the benefit of the patient/research subject.

Wikipedia defines Effectiveness or effectivity as the capability of producing a desired result or the ability to produce desired output. When something is deemed effective, it means it has an intended or expected outcome, or produces a deep, vivid impression.

Effectiveness is the main noun form of the adjective effective, which means "adequate to accomplish a purpose; producing the intended or expected result." – *Dictionary.com*

1.7.2 Ennum Ezhuthum Mission

A scheme was launched by the Tamilnadu Government to bridge the learning gap among students aged under 8, caused as a result of the COVID-19 pandemic. It aims to ensure foundational numeracy and literacy by 2025. - *https://tnschools.gov.in/*

1.7.3 Primary Schools

Collins Dictionary defines a primary school as a school for children between the ages of 5 and 11.

A primary school is a school for the primary education of children who are 4 to 10 years of age (and in many cases, 11 years of age). – *Wikipedia*

1.7.4 Coimbatore District

Coimbatore district is one of the 38 districts in the state of Tamil Nadu in India. It is one of the most industrialized districts and a major textile, industrial, commercial, educational, information technology, healthcare, and manufacturing hub of Tamil Nadu. – *Wikipedia*

1.8 OBJECTIVES OF THE STUDY

The major objectives of the present study are listed below:

- To evaluate the effectiveness of the Ennum Ezhuthum Mission in primary sections of the schools within the Coimbatore district.

- To assess the academic performance of Class I students in Tamil, English, and Mathematics under the Ennum Ezhuthum Mission.

- To assess the academic performance of Class II students in Tamil, English, and Mathematics under the Ennum Ezhuthum Mission.

- To assess the academic performance of Class III students in Tamil, English, and Mathematics under the Ennum Ezhuthum Mission.

- To compare the academic performance of students by gender in Classes I, II, and III under the Ennum Ezhuthum Mission.

- To compare the academic performance of students by locality in Classes I, II, and III under the Ennum Ezhuthum Mission.

- To compare the academic performance of students by school type in Classes I, II, and III under the Ennum Ezhuthum Mission.

- To assess the academic performance of Class I students in Tamil, English, and Mathematics between Coimbatore and Pollachi educational districts under the Ennum Ezhuthum Mission.

- To assess the academic performance of Class II students in Tamil, English, and Mathematics between Coimbatore and Pollachi educational districts under the Ennum Ezhuthum Mission.

- To assess the academic performance of Class III students in Tamil, English, and Mathematics between Coimbatore and Pollachi educational districts under the Ennum Ezhuthum Mission.

- To identify the characteristic features of classrooms implementing the Ennum Ezhuthum Mission.

- To examine teachers' attitudes and challenges in implementing the Ennum Ezhuthum Mission.

1.9 RESEARCH QUESTIONS

- ❖ What are the perceived impacts of the Ennum Ezhuthum Mission on primary school education in the Coimbatore district?

- ❖ What are the academic achievement levels of students in Classes I, II, and III in Tamil, English, and Mathematics under the Ennum Ezhuthum Mission?

- ❖ Are there any significant differences in academic achievement between male and female students across Class I, II, and III under the Ennum Ezhuthum Mission?

- ❖ What are the differences in academic achievement between students from urban and rural areas across Class I, II, and III under the Ennum Ezhuthum Mission?

- ❖ How do academic achievements vary between primary and upper primary school students within the Ennum Ezhuthum Mission framework?

- ❖ How do Ennum Ezhuthum classrooms differ from traditional classrooms in terms of teaching methods, resources, and learning environments?
- ❖ What are teachers' perceptions regarding the implementation of the Ennum Ezhuthum Mission, and how do they perceive the encountered challenges in implementing it to impact student learning outcomes?

1.10 HYPOTHESES

H_{01}: There is a significant difference in the academic performance in Tamil between male and female students in Class I.

H_{02}: There is a significant difference in the academic performance in English between male and female students in Class I.

H_{03}: There is a significant difference in the academic performance in Mathematics between male and female students in Class I.

H_{04}: There is a significant difference in the academic performance in Tamil between male and female students in Class II.

H_{05}: There is a significant difference in the academic performance in English between male and female students in Class II.

H_{06}: There is a significant difference in the academic performance in Mathematics between male and female students in Class II.

H_{07}: There is a significant difference in the academic performance in Tamil between male and female students in Class III.

H_{08}: There is a significant difference in the academic performance in English between male and female students in Class III.

H_{09}: There is a significant difference in the academic performance in Mathematics between male and female students in Class III.

H_{10}: There is a significant difference in the academic performance in Tamil between urban and rural students in Class I.

H_{11}: There is a significant difference in the academic performance in English between urban and rural students in Class I.

H_{12}: There is a significant difference in the academic performance in Mathematics between urban and rural students in Class I.

H_{13}: There is a significant difference in the academic performance in Tamil between urban and rural students in Class II.

H_{14}: There is a significant difference in the academic performance in English between male and female students in Class II.

H_{15}: There is a significant difference in the academic performance in Mathematics between urban and rural students in Class II.

H$_{16}$ There is a significant difference in the academic performance in Tamil between urban and rural students in Class III.

H$_{17}$: There is a significant difference in the academic performance in English between urban and rural students in Class III.

H$_{18}$: There is a significant difference in the academic performance in Mathematics between urban and rural students in Class III.

H$_{19}$: There is a significant difference in the academic performance in Tamil between students attending primary and upper primary schools in Class I.

H$_{20}$: There is a significant difference in the academic performance in English between students attending primary and upper primary schools in Class I.

H$_{21}$: There is a significant difference in the academic performance in Mathematics between students attending primary and upper primary schools in Class I.

H$_{22}$: There is a significant difference in the academic performance in Tamil between students attending primary and upper primary schools in Class II.

H$_{23}$: There is a significant difference in the academic performance in English between students attending primary and upper primary schools in Class II.

H$_{24}$: There is a significant difference in the academic performance in Mathematics between students attending primary and upper primary schools in Class II.

H_{25}: There is a significant difference in the academic performance in Tamil between students attending primary and upper primary schools in Class III.

H_{26}: There is a significant difference in the academic performance in English between students attending primary and upper primary schools in Class III.

H_{27}: There is a significant difference in the academic performance in Mathematics between students attending primary and upper primary schools in Class III.

H_{28}: There is no significant difference in the academic performance of Class I students in Tamil between Coimbatore and Pollachi Educational Districts.

H_{29}: There is no significant difference in the academic performance of Class I students in English between Coimbatore and Pollachi Educational Districts.

H_{30}: There is no significant difference in the academic performance of Class I students in Mathematics between Coimbatore and Pollachi Educational Districts.

H_{31}: There is no significant difference in the academic performance of Class II students in Tamil between Coimbatore and Pollachi Educational Districts.

H_{32}: There is no significant difference in the academic performance of Class II students in English between Coimbatore and Pollachi Educational Districts.

H_{33}: There is no significant difference in the academic performance of Class II students in Mathematics between Coimbatore and Pollachi Educational Districts.

H$_{34}$: There is no significant difference in the academic performance of Class III students in Tamil between Coimbatore and Pollachi Educational Districts.

H$_{35}$: There is no significant difference in the academic performance of Class III students in English between Coimbatore and Pollachi Educational Districts.

H$_{36}$: There is no significant difference in the academic performance of Class III students in Mathematics between Coimbatore and Pollachi Educational Districts.

H$_{37}$- There are no significant differences in teachers' attitudes towards and challenges in implementing the Ennum Ezhuthum Mission in primary sections of schools in the Coimbatore district based on gender.

H$_{38}$ - There are no significant differences observed in teachers' attitudes towards and challenges in implementing the Ennum Ezhuthum Mission within primary school sections across the Coimbatore district with respect to locality.

H$_{39}$ - There are no significant differences in teachers' attitudes towards and challenges in implementing the Ennum Ezhuthum Mission in primary sections of schools in the Coimbatore district based on the Grade level.

1.11 DELIMITATIONS OF THE STUDY

The study has the following limitations:

➢ Due to time constraints, only 60 schools were included in the study.

➢ The study used a sample size of 720 students and 75 teachers.

➢ The investigator specifically targeted primary sections of schools within the Coimbatore district, Tamil Nadu State.

➢ The sample only included students from Classes I, II, and III.

➢ The findings were based solely on self-reported measures.

1.12 CONCLUSION

This chapter provides a comprehensive introduction, including a problem statement, study objectives, rationale, significance, hypotheses, and limitations. The subsequent chapter explores the related literature.

2. REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The review of related literature serves as a vital precursor to any research endeavor, offering researchers a panoramic view of the existing landscape of knowledge and inquiry within their chosen field. By examining prior studies, theories, and conceptual frameworks, researchers can gain valuable insights into the evolution of thought, identify recurring themes and patterns, and discern areas of consensus or contention among scholars. Moreover, the review provides researchers with a platform to situate their study within the broader context of academic discourse, demonstrating how their research builds upon, challenges, or extends existing scholarship. Through this process of critical engagement with the literature, researchers can refine their research questions, clarify their theoretical orientations, and develop more robust methodological approaches. Ultimately, the review of related literature serves as the cornerstone upon which new research endeavors are built, anchoring them firmly within the rich tapestry of scholarly inquiry.

In addition to providing researchers with a comprehensive understanding of the current state of knowledge in their field, the review of related literature also catalyzes intellectual innovation and advancement. By identifying gaps, inconsistencies, or unresolved debates within the literature, researchers can pinpoint areas ripe for further investigation and contribute new insights that expand the boundaries of existing knowledge. Moreover, the synthesis of diverse perspectives and disciplinary approaches

within the literature can foster interdisciplinary dialogue and collaboration, enriching the scholarly discourse and promoting a more holistic understanding of complex phenomena. Through their engagement with the literature, researchers not only contribute to the cumulative growth of knowledge in their field but also cultivate a deeper appreciation for the intellectual traditions and theoretical frameworks that shape their research agendas. Thus, the review of related literature is not merely a perfunctory exercise but a dynamic process of inquiry that fuels intellectual curiosity and drives the advancement of scholarship.

2.2 STUDIES ON LITERACY AND NUMERACY

Yadav (2023) proposed a methodology aligned with the critical areas of Foundational Literacy and Numeracy (FLN) for implementing literacy and numeracy assessments. The approach involved creating a user-friendly test dashboard for students to engage in assessment activities like reading comprehension, quizzes, and puzzles. Assessments were scheduled on school campuses or assessment centers with teacher and volunteer assistance. A mock test familiarized students with the platform, and exam problems were based on benchmark skill sets established by NCERT and the Ministry of Education. Results were evaluated against NCERT standards, with benchmarks indicating proficiency levels. For literacy, proficiency levels were categorized as follows: Below Partially Meets Global Minimum Proficiency (15), Partially Meets Global Minimum Proficiency (30), Meets Global Minimum Proficiency (21), and Exceeds Global Minimum Proficiency (34). For numeracy, proficiency levels were categorized as Below Partially Meets Global Minimum Proficiency (11), Partially Meets

Global Minimum Proficiency (37), Meets Global Minimum Proficiency (42), and Exceeds Global Minimum Proficiency (10). An experimental result discussion outlined the exam's conduct and reporting process, including proctoring for fairness and email distribution of report cards. If benchmarks were not met, students were assigned a mentor by NCERT. The conclusion discussed literacy and numeracy assessment proficiency levels and measured performance based on reading and numeracy benchmarks. Overall, the methodology aimed to enhance educational assessment practices in alignment with FLN objectives.

Bashir and Jan (2023) in their paper on Foundational Literacy and Numeracy (NEP, 2020) -Urgency, Essential Skills, Challenges and The Integration of Key Areas delved into the critical importance of FLN in India, where disparities in educational outcomes persisted despite efforts to enhance access to schooling. Drawing on existing literature, the paper elucidated the multifaceted challenges faced in promoting FLN, including socioeconomic barriers, inadequate infrastructure, and disparities in learning outcomes across regions. The repercussions of the COVID-19 pandemic on FLN exacerbated existing challenges, underscoring the urgent need for targeted interventions. Amidst these challenges, the Indian government has initiated various initiatives to bolster FLN, as highlighted in the National Education Policy (NEP) 2020 and the National Foundational Literacy and Numeracy (FLN) Mission. These initiatives underscored a paradigm shift towards competency-based education, with an emphasis on improving learning outcomes through rigorous monitoring, teacher training, and curriculum reform.

However, the paper critiqued the current FLN framework for its false framing, which may exacerbate educational inequalities and create a two-tiered educational system. Despite these concerns, the paper acknowledged the potential of FLN initiatives to transform the educational landscape in India. It advocated for goal alignment, academic support, and robust monitoring mechanisms to enhance FLN outcomes. Furthermore, the paper emphasized the need for systemic reforms, including pre-service education reforms and incentivizing learning outcome improvement, to ensure the effective implementation of FLN initiatives. In conclusion, the paper underscored the imperative of prioritizing FLN to unlock children's full potential and foster economic and social development. By addressing existing challenges and implementing evidence-based interventions, India could pave the way for universal foundational literacy and numeracy, laying a strong foundation for inclusive and equitable education.

Cariaga et al. (2023) carried out a study on "Parental Involvement in Relation to the Literacy and Numeracy Skills of Teenagers." The study examined the extent of parental support for teenagers in developing numeracy and literacy skills. Employing a mixed-methods approach, the researchers utilized convenience sampling to select one hundred high school seniors who underwent a 48-item literacy and numeracy test and completed a survey assessing parental involvement. A validated questionnaire was employed, and statistical tools such as the weighted mean, percentage, mean, Spearman Rank Order Correlation, Kruskal-Wallis Test, and Mann-Whitney U Test were utilized for analysis. Additionally, focus group discussions (FGD) and key informant interviews (KII) were

conducted. The findings revealed that family participation, including emotional support, financial assistance, and communication between parents and teachers, was deemed "high." However, teenagers' performance on the literacy and numeracy test indicated potential for improvement. The analysis demonstrated no significant relationship between emotional support, financial support, and parental-teacher communication with teenagers' performance on reading and math tests. Parental involvement remained consistent across different demographic profiles. Despite high levels of parental involvement, teenagers from economically disadvantaged households were more likely to drop out of school due to financial constraints. Parents often struggled to afford transportation, necessities, and school projects due to job losses and rising commodity prices. Low-income teenagers faced the difficult choice between attending school or seeking employment for sustenance. In some cases, unemployed mothers were compelled to relocate for work to support their teenagers' education. Furthermore, parents recommended implementing policies to limit smartphone usage during class hours to reduce gadget dependency and enhance students' focus on learning.

Duan (2023) in his study on Foundational Literacy and Numeracy in Government and Private Schools, discussed the strengths of private schools in supporting Foundational Literacy and Numeracy (FLN) and suggested improvements for government schools. Private schools excelled in infrastructure, teacher seriousness, diagnostic activities, co-curricular activities, and parental involvement. Suggestions for government schools included enhancing parental consciousness, improving infrastructure, reducing teacher

workload, implementing diagnostic activities, promoting regular attendance, and providing tuition assistance. These measures aimed to narrow the gap between private and government school standards and improve overall educational quality.

Kumar et al. (2023) conducted a study on Children's early foundational skills and education continuation in India: Heterogeneous analysis by caste, gender, and location. The study investigated the differential impact of early foundational skills, specifically reading and math scores, on the education continuation of SC/ST (Scheduled Castes/Tribes) and non-SC/ST children, with further analysis on gender and location variations. Utilizing data from the India Human Development Survey panel (2005 & 2011–12), the research revealed that children from disadvantaged groups, such as SCs and STs, faced significantly lower chances of continuing their education post-enrollment. Moreover, the study demonstrated a positive and significant association between early reading and math scores and the likelihood of education continuation among students. Through interaction analysis, it was observed that the marginal effect of reading and math scores was notably higher for SC/ST female and urban children compared to their non-SC/ST counterparts. These findings underscored the importance of enhancing foundational literacy and numeracy skills, as they played a crucial role in reducing school dropout rates, particularly among disadvantaged groups.

Vasoya and Vansdadiya (2023) in their research article explored effective strategies for promoting foundational literacy and numeracy in early childhood education. Through an extensive review of existing literature, this study identified evidence-based

strategies for fostering these essential skills. The research undertook a comprehensive literature review, detailing the search strategy, databases used, and inclusion/exclusion criteria for transparency. The study underscored the significance of various evidence-based strategies, including play-based learning, teacher training and support, family and community involvement, and the integration of technology. Moreover, it emphasized the importance of cultural relevance and diversity in promoting foundational literacy and numeracy.

Kumar (2022) examined the determinants of attaining foundational literacy skills among children in India, leveraging data from the second round of the India Human Development Survey (IHDS II). Findings from fixed-effect models underscored the influential roles of family educational background, socio-economic status, and school choice in achieving foundational literacy, encompassing reading and numeracy skills. Additionally, a child's self-effort, indicated by homework hours (positively) and absenteeism (negatively), significantly impacted foundational literacy attainment. While the Government of India had made strides in providing free education through the Right to Education Act, of 2009, concerns persisted regarding the learning crisis in Indian schools. The shift towards prioritizing quality over quantity in education delivery, as highlighted in the New Education Policy (NEP) 2020, underscored the urgency of addressing foundational literacy and numeracy deficits. The NEP 2020 outlined goals for achieving universal foundational literacy and numeracy, aligning with the SDG 4 agenda for inclusive and equitable quality education. To this end, the Ministry of Education launched the

National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN-Bharat -2021 programme) to set guidelines and targets for achieving universal FLN among standard III level children by 2026-27. However, realizing these goals in the context of India's vast schooling system with diverse socio-economic backgrounds posed significant challenges. Effective implementation of NEP 2020, infrastructure improvements, and quality teaching were imperative. Leveraging digital platforms like DIKSHA, along with parent sensitization and stakeholder coordination, was crucial in achieving FLN outcomes. Emphasis on quality monitoring, teacher training, and capacity building were vital steps in this endeavor.

Kumar et al. (2022) carried out a study on Improving children's foundational learning through community-school participation: Experimental evidence from rural India, aiming to comprehensively identify the home environment factors that affected literacy and numeracy learning. Studies published between 2013 and 2022 were searched in the ERIC database. From 383 potentially relevant articles, the researchers included 38 primary studies. Systematic reviews and meta-analytic studies were excluded. The results showed that home learning environment factors did affect numeracy and literacy learning. Prominent factors were family learning background, reading and numerical activities, and home resources. Other factors, such as the reading and numeracy interests of children and the parent-child relationship, also played an important role in the acquisition of foundational numeracy and literacy skills.

Bar and Shaul (2021) examined the connection between early numeracy and literacy skills among monolingual children compared to bilingual children in preschool. Three hundred and two children aged 5–6 years old were recruited from 74 kindergartens. Participants were divided into two groups: 151 monolingual children who spoke and were exposed to only one language (Hebrew) and 151 bilingual children who spoke and were exposed to two languages (the bilingual children spoke different languages). Monolingual children outperformed bilingual children in most literacy tasks, except for phonological awareness, where no differences were found between the groups. Additionally, in early numeracy tasks, differences were observed only in tasks involving linguistic knowledge, number knowledge, and counting tasks, with monolingual children performing better. Furthermore, stronger correlations were found between early numeracy and literacy skills among the monolingual group compared to the bilingual group. The study findings underscored the importance of strengthening linguistic abilities, such as vocabulary expansion, in kindergarten among populations where more than one language is spoken. Supporting these abilities could help narrow the gap between bilingual children and their monolingual classmates before entering school.

Salminen et al. (2021) in their study on "Development of Numeracy and Literacy Skills in Early Childhood—A Longitudinal Study on the Roles of Home Environment and Familial Risk for Reading and Math Difficulties" examined the direct and indirect effects of home numeracy and literacy environment, as well as parental factors (parental reading and math difficulties, and parental education) on the development of several early

numeracy and literacy skills. The 265 participating Finnish children were assessed four times between ages 2.5 and 6.5. Children's skills in counting objects, number production, number sequence knowledge, number symbol knowledge, number naming, vocabulary, print knowledge, and letter knowledge were assessed individually. Parents (N = 202) reported on their education level, learning difficulties in math and reading (familial risk, FR), and home learning environment separately for numeracy (HNE) and literacy (HLE) when their children were 2.5 years old and again when they were 5.5 years old. The results revealed both within-domain and cross-domain associations. Parents' mathematical difficulties (MD) reading difficulties (RD) and home numeracy environment predicted children's numeracy and literacy skill development within and across domains. An evocative effect was found as well; children's skills in counting, number sequence knowledge, number symbol identification, and letter knowledge negatively predicted later home numeracy and literacy activities. There were no significant indirect effects from parents' RD, MD, or educational level on children's skills via HLE or HNE. The study highlighted that parental RD and MD, parental education, and the home learning environment formed a complex pattern of associations with children's numeracy and literacy skills starting already in toddlerhood.

Bonifacci et al. (2016) conducted a study on "Early Literacy and Numeracy Skills in Bilingual Minority Children: Toward a Relative Independence of Linguistic and Numerical Processing." They aimed to evaluate the relationship between language skills and early numeracy through a multilevel investigation in monolingual and bilingual

minority children attending preschool. The sample included 156 preschool children. Of these, 77 were bilingual minority children (mean age = 58.27 ± 5.90), and 79 were monolinguals (mean age = 58.45 ± 6.03). The study focused on three levels of analysis: group differences in language and number skills, concurrent linguistic predictors of early numeracy, and, finally, profile analysis of linguistic skills in children with impaired vs adequate numeracy skills. The results showed that, apart from the expected differences in linguistic measures, bilinguals differed from monolinguals in numerical skills with a verbal component, such as semantic knowledge of digits, but they did not differ in a pure non-verbal component such as quantity comparison. The multi-group structural equation model indicated that letter knowledge was a significant predictor of the verbal component of numeracy for both groups. Phonological awareness was a significant predictor of numeracy skills only in the monolingual group. Profile analysis showed that children with a selective weakness in the non-verbal component of numeracy had fully adequate verbal skills. Results from the present study suggest that only some specific components of language competence predict numerical processing, although linguistic proficiency may not be a prerequisite for developing adequate early numeracy skills.

Toll and Luit (2014) conducted a study on "The Developmental Relationship between Language and Low Early Numeracy Skills throughout Kindergarten". The relationship between basic oral language and early numeracy was studied extensively, but results hardly included kindergartners' math language, which might have mediated this relationship. This study aimed to investigate the development of basic language skills—specifically, math language and low early numeracy. Dutch children (4–5 years old; N =

1,030) were screened for having low early numeracy skills, and low performers (n = 199) were followed for 2 years and tested four times throughout kindergarten. The development of general language skills and early numeracy were investigated with latent growth modeling, revealing a significant mutual relationship. Further, the relationship between basic language and early numeracy was mediated by kindergartners' specific math language, suggesting that specific math language had a key role in the early numeracy learning process.

2.3 CONCLUSION

In this review chapter, a total of twelve studies were examined, providing a comprehensive overview of the current research landscape in the field of foundational literacy and numeracy, particularly within the context of early childhood education in India and Finland. These studies were sourced from academic journals, periodicals, abstracts, and relevant books. The reviews collectively highlighted the critical importance of addressing foundational literacy and numeracy skills, as well as the various factors influencing their development.

The findings consistently underscored the influential roles of family background, socio-economic status, school choice, and home learning environments in shaping children's literacy and numeracy outcomes. Additionally, the studies emphasized the significance of effective implementation of educational policies to prioritize quality education delivery and address learning deficits.

Furthermore, the reviews identified evidence-based strategies for promoting foundational literacy and numeracy, including play-based learning, teacher training, family and community involvement, and technology integration. These strategies were deemed crucial for fostering essential skills and enhancing educational outcomes among children, particularly in early childhood.

Overall, the reviewed studies provided valuable insights into the complex interplay of factors influencing foundational literacy and numeracy development, as well as the importance of evidence-based interventions and systemic reforms to promote positive educational outcomes among children.

The next chapter outlines the methodology employed in conducting the research study by providing a detailed description of the research design, participant selection criteria, data collection methods, and data analysis techniques utilized in the study.

3. METHODOLOGY

3.1 INTRODUCTION

Research methodology is the cornerstone of any scholarly investigation, providing the framework through which knowledge is constructed, tested, and validated. It serves as a guiding light, illuminating the path for researchers as they navigate the complexities of inquiry, analysis, and interpretation. This chapter delves into the fundamental principles, strategies, and techniques that underpin the research process, offering a comprehensive overview of the methodologies employed in the pursuit of knowledge across diverse disciplines.

At its essence, research methodology encompasses the systematic approach adopted by researchers to explore phenomena, address research questions, and achieve the objectives of their study. Whether in the sciences, social sciences, humanities, or applied fields, the methodology serves as a roadmap, outlining the steps involved in data collection, analysis, and synthesis. It is through rigorous adherence to methodological principles that researchers can ensure the credibility, reliability, and validity of their findings, thereby contributing to the advancement of knowledge and understanding within their respective fields.

This chapter aims to demystify the research process, offering insights into the various methodologies available to researchers, from quantitative and qualitative approaches to mixed methods designs. It explores the strengths and limitations of different methodological paradigms, highlighting the importance of selecting the most appropriate

approach based on the nature of the research question, the phenomena under investigation, and the overarching goals of the study.

Furthermore, this chapter will delve into key concepts and techniques relevant to research methodology, including research design, sampling procedures, data collection methods, and data analysis techniques. Through a nuanced understanding of methodology, researchers can navigate the complexities of the research process with confidence and rigor, ultimately contributing to the growth and advancement of their respective disciplines.

3.2 POPULATION, SAMPLE AND SAMPLING TECHNIQUE FOR THE STUDY

The population under scrutiny in this research project comprises primary school students spanning from Class 1 to Class 3 within government and corporation schools situated in the Coimbatore District.

To obtain a representative sample from the population, a systematic sampling methodology was employed. The researcher meticulously selected 32 primary schools and 28 upper primary schools distributed across 15 blocks within the Coimbatore District. From this comprehensive pool of 60 schools, a total of 720 students were randomly chosen to participate in the study.

Focusing specifically on students enrolled in Class 1 to Class 3, a sample size of 12 students from each school was meticulously selected, aiming to ensure equitable representation from both genders. This deliberate composition, consisting of 6 boys and 6 girls from each school, was strategically designed to encompass the diverse perspectives prevalent within the primary school population. Overall, among the 720 students selected

for participation, an equal distribution of 360 boys and 360 girls was achieved. This balanced representation within the sample population was crucial for maintaining statistical integrity and minimizing potential gender-related biases throughout the research process.

To uphold the principles of fairness and impartiality in participant selection, a random sampling technique was meticulously employed. Random sampling entails the selection of individuals from the population in a manner that guarantees each member has an equal opportunity to be included in the study. Consequently, every primary school student within the Coimbatore District had an equal likelihood of being chosen for participation, thereby minimizing potential biases and bolstering the generalizability of the study's findings.

By adopting a random sampling technique, the researcher effectively mitigated the risk of selection bias and ensured the sample accurately reflects the broader population of primary school students in the district. This methodological approach not only enhances the validity and reliability of the study but also facilitates the extraction of meaningful insights and conclusions from the collected data.

The details of sample distribution are given as follows:

Table- 3.1

Details of Sample Distribution

Sample per Variable		Total	Grand Total
Gender	Boys	360	720
	Girls	360	
Locality	Rural	516	720
	Urban	204	
School Level	Primary	384	720
	Upper Primary	336	

3.3 RESEARCH METHOD

This research study adopted a One-Group Posttest Only Design to examine the impact of the "Ennum Ezhuthum" mission on students in classes 1 to 3. In this quasi-experimental approach, the treatment – the implementation of the "Ennum Ezhuthum" mission – was administered to a single group of participants. Subsequently, the study assessed the outcomes of interest immediately after the intervention period. This design's distinctiveness lies in its focus on post-intervention assessments, highlighting its emphasis on evaluating immediate outcomes, a hallmark of quasi-experimental methodology.

3.4   VARIABLES

Any concept that can be expressed in quantitative and qualitative value is called a 'variable'. It means that the variables are conditions or characteristics that the researcher manipulates, and controls or observes. For the present study, the investigator had chosen the dependent and independent variables which were described as follows.

a. Dependent Variable

The dependent variables are the conditions or characteristics that appear, disappear, or change as the researcher introduces, removes, or changes independent variables.

The dependent variable in this study is the outcome measure that reflects the effectiveness of the Ennum Ezhuthum Mission among primary students. For this research, the dependent variable will be assessed through achievement tests in language (both Tamil and English) and mathematics. These tests are designed to evaluate various aspects of literacy and numeracy skills, including reading comprehension, writing proficiency, and mathematical problem-solving abilities. Moreover, these assessments extend to include evaluations of visual and critical thinking skills. Student performance on these tests serves as the primary measure of the impact of the Ennum Ezhuthum Mission.

b. Independent Variable

The independent variables are the conditions or characteristics that the researcher manipulates, or controls in his/her attempt to ascertain their relationship to observed phenomena. That is, the independent variable is used for the meaningful interpretation of the dependent variable.

In this research study, the independent variable comprises the interventions implemented as part of the Ennum Ezhuthum Mission. These interventions include:

Teacher Training Sessions: Educators have undergone specialized training sessions focused on Ennum Ezhuthum principles and innovative teaching methods to enhance literacy and numeracy instruction.

Provision of Workbooks: Primary school students are provided with specially designed workbooks aimed at fostering literacy and numeracy skills. These workbooks are tailored to engage students in meaningful learning activities that promote reading, writing, and mathematical proficiency.

Distribution of Teacher Handbooks: Teachers have received comprehensive handbooks that serve as instructional guides for integrating Ennum Ezhuthum principles into their teaching practices. These handbooks have provided educators with valuable resources and support to effectively implement the mission's objectives.

The implementation of these interventions constitutes the independent variable, representing the various components of the Ennum Ezhuthum Mission.

3.5 TOOL USED IN THE STUDY

The researcher personally curated both the Achievement Test Questionnaire and the Teacher Perception Scale to comprehensively evaluate two critical aspects: students' academic achievement and teachers' attitudes towards the Ennum Ezhuthum Mission and its influence.

The Achievement Test Questionnaire was meticulously crafted to gauge students' proficiency across multiple subjects, including Tamil, English, and Mathematics. It aimed to assess various dimensions of learning outcomes aligned with the mission's objectives, ensuring a holistic evaluation of students' academic performance.

Simultaneously, the Teacher Perception Scale was developed to gauge educators' perspectives and attitudes regarding the Ennum Ezhuthum Mission. This scale delves into teachers' attitudes, beliefs, and perceptions regarding the mission's effectiveness and impact on students' learning outcomes.

3.5.1. Achievement test questionnaire

An achievement test questionnaire was developed to assess students' attainment of the learning outcomes specified by the Ennum Ezhuthum mission. The questionnaire encompasses sections for Tamil, English, and Mathematics, with each section comprising 10 questions. Each question carries a weight of 2 marks, resulting in a total score of 20 for each subject area.

Language Questionnaires:

The language questionnaires are intricately designed to evaluate the expected learning outcomes aligned with the Ennum Ezhuthum mission. These outcomes include:

- Oral Language Development
- Phonological Awareness
- Vocabulary
- Reading Comprehension
- Writing

These questions aim to assess students' proficiency in various aspects of language acquisition and comprehension, reflecting the comprehensive objectives of the Ennum Ezhuthum mission in enhancing language skills among primary school students.

Mathematics Questionnaire:

The mathematics questionnaire is tailored to assess students' ability to reason and apply simple numerical concepts in daily life problem-solving situations. It encompasses questions focused on the following areas:

- Pre-Number Concepts
- Numbers and Operations on Numbers
- Measurement
- Shapes and Spatial Understanding
- Patterns

These questions challenge students to apply mathematical concepts in practical contexts, aligning with the mission's goal of fostering numeracy skills and mathematical reasoning among primary school students.

The achievement test questionnaire serves as a robust tool for evaluating the impact of the Ennum Ezhuthum mission on students' academic achievement and skills development in Tamil, English, and Mathematics. By targeting specific learning outcomes and incorporating diverse question types, the questionnaire provides valuable insights into the effectiveness of the mission's teaching points in enhancing students' language and mathematical abilities.

For each subject with a total score of 20, students' performance can be categorized into three levels based on the following criteria:

Low Achievement: Scores ranging from 0 to 7 indicate a low level of achievement.

Moderate Achievement: Scores ranging from 8 to 14 reflect a moderate level of achievement.

High Achievement: Scores ranging from 15 to 20 signify a high level of achievement.

3.5.2. Teacher Perception Scale

The scale encompasses twenty statements designed to capture teachers' attitudes, with 17 positive and 3 negative statements. Positive statements convey agreement or satisfaction, while negative statements express disagreement or dissatisfaction. This balance facilitates a comprehensive understanding of teachers' attitudes and aids in evaluating the mission's effectiveness.

The Teacher Perception Scale presents statements in both English and Tamil to accommodate teachers' language preferences or proficiency levels, ensuring equal accessibility and minimizing language-related biases. The collected responses provide quantitative data to assess the impact of the Ennum Ezhuthum mission on students' attainment of specified learning outcomes.

The perception scale serves as a pivotal tool in this research endeavor, aimed at elucidating the attitudes and perceptions of teachers towards the Ennum Ezhuthum mission. Crafted as a Likert-type five-point scale, it offers a structured approach for gathering insights, meticulously prepared by the investigator.

Comprising a series of statements or questions, the Likert-type perception scale provides response options ranging from strongly agree to strongly disagree, with a neutral midpoint. Teachers are tasked with rating their agreement or disagreement with these statements, with scores ranging from 1 to 5. Positive statements warrant scores of 4 or 5, while negative statements receive scores of 1 or 2. This scoring methodology extends to capture both affirmative and dissenting viewpoints.

The total score for the perception scale spans from 20 to 100.

- **Positive Perception**: Scores of 74 and above indicate a positive attitude towards the Ennum Ezhuthum mission.

- **Neutral Perception:** Scores ranging from 47 to 73 may represent a neutral or mixed attitude towards the Ennum Ezhuthum mission.

- **Negative Perception:** Scores ranging from 20 to 46 suggest a negative perception or attitude towards the Ennum Ezhuthum mission.

3.6 TOOL FOR THE PILOT STUDY

During the pilot study phase, meticulous attention was given to the construction of the questionnaire by the researcher. Initially, a set of 15 questions for each subject—Tamil, English, and Mathematics—was prepared. These questions underwent a rigorous review process, where they were presented to an Assistant Professor at the Government College of Education, Coimbatore, for feedback and evaluation.

Upon receiving comments and suggestions from the Assistant Professor, the questionnaire items were carefully scrutinized and refined. Adjustments were made based

on the feedback received, ensuring the questions were clear, relevant, and aligned with the objectives of the pilot study and the Ennum Ezhuthum mission.

The questionnaire comprised various types of objective questions, meticulously designed to assess students' comprehension and proficiency levels across the subjects of Tamil, English, and Mathematics. Each question carried a weight of 2 marks, contributing to the overall assessment of students' performance and the effectiveness of the Ennum Ezhuthum mission.

This iterative process of questionnaire construction and refinement underscores the researcher's commitment to developing a robust tool for the pilot study, one that would yield valuable insights into students' learning outcomes and guide the implementation of the Ennum Ezhuthum mission in subsequent phases.

3.7 PILOT STUDY

Conducting a pilot study stands as a pivotal step in the research procedure, allowing for the refinement and validation of methodologies before full-scale implementation. With precision and care, the researcher embarked on this crucial phase.

Two schools were deliberately selected for the pilot study: PUMS Bommanampalayam and PUPS Chinnamettupalayam, situated in Thondamuthur block and S.S. Kulam block, respectively. These selections were made to capture diverse perspectives and insights from different educational environments.

In a concerted effort to ensure representation across classes, the researcher employed a random selection process. Fifteen students were chosen from each school, with a further selection of five students from each class spanning Class 1 through 3. This meticulous approach aimed to encompass a range of student demographics, academic abilities, and classroom dynamics within the pilot study cohort.

Table – 3.2

School Selection for the Pilot Study

S.No	Name of the School	Class 1	Class 2	Class 3	No. of students
1	PUMS, Bommanampalayam, Thondamuthur Block	5	5	5	**15**
2	PUPS Chinnamettupalayam, S.S.Kulam Block	5	5	5	**15**
				Total no. of Students	**30**

3.8 SCORING AND INTERPRETATION OF PILOT STUDY

All questions included in the pilot study were designed with an objective format, each carrying a weight of two marks for every correct response and zero marks for incorrect answers. To ensure the validity and reliability of the assessment, meticulous scrutiny of the questions was undertaken.

Following the administration of the test, thorough evaluation and analysis were conducted. Several questions were deemed inappropriate based on their difficulty level and discrimination index. Items that exhibited low response rates among students were

eliminated, while questions that were answered by a significant portion of the cohort were retained for further consideration.

A rigorous selection process ensued, guided by the criteria of difficulty and discrimination. Questions falling within the predetermined range for these criteria were earmarked for inclusion in the final study. Ultimately, twelve questions from each subject met the established difficulty and discrimination criteria.

In the final stage of refinement, the researcher judiciously selected ten questions from each subject for inclusion in the study. This strategic curation process aimed to ensure the integrity and effectiveness of the assessment instrument, paving the way for a comprehensive and rigorous evaluation of student performance within the Ennum Ezhuthum mission framework.

3.9 VALIDITY OF THE TOOL

To establish the validity of the assessment tool, the investigator sought the input of a diverse team of experts. This team comprised four primary school teachers, four upper primary school teachers, an Assistant Professor from the Government College of Education, a Junior Lecturer from GTTI, and a faculty member from DIET at Kotagiri, The Nilgiris District.

The involvement of this expert panel was integral to the development and refinement of the measurement instrument. Their collective expertise and insights were instrumental in evaluating both the face and content validity of the tool. Through their thorough

examination, the experts provided valuable feedback regarding the relevance and appropriateness of the items included in the instrument, ensuring alignment with the intended construct.

Based on the recommendations and suggestions put forth by the expert panel, final modifications to the measurement tool were implemented. These adjustments, informed by expert opinions regarding item addition and deletion, aimed to enhance the tool's overall validity and efficacy.

The assessment conducted by the team of experts affirmed that the measurement instrument possessed strong face and content validity. This validation instilled confidence in the tool's ability to accurately capture pertinent data, laying a solid foundation for its utilization in future research endeavors.

3.10 RELIABILITY OF THE TOOL

Ensuring the reliability of measurement instruments is paramount in any research study, as it underscores the consistency and stability of obtained measurements or scores. In the pilot study involving 30 students, the reliability of the measurement instrument was meticulously evaluated through Cronbach's alpha coefficient method.

The analysis yielded a Cronbach's alpha coefficient of 0.79, signifying strong internal consistency and reliability of the measurement instrument. This value reflects the extent to which the items within the instrument consistently measure the same underlying construct. The obtained coefficient of 0.79 indicates a high degree of reliability, instilling confidence in the consistency of measurements obtained from the instrument.

3.11 RELIABILITY AND VALIDITY OF THE TEACHER PERCEPTION SCALE

To evaluate the reliability of the Teacher Perception Scale, the 'Test-Retest' method was employed, wherein the same assessment instrument was administered to 20 primary teachers on two separate occasions. The resulting correlation coefficient of the reliability test scores was determined to be 0.77, indicating a moderate to good level of reliability in the test-retest method. This coefficient suggests a consistent and stable performance of the measurement instrument over time, bolstering confidence in its reliability for repeated use.

Additionally, the Teacher Perception Scale, meticulously crafted by the investigator, underwent thorough scrutiny by three teacher educators and ten school teachers. Their feedback affirmed the instrument's face and content validity, indicating that it effectively measured the intended constructs and was relevant to the research objectives. This validation process ensured that the scale accurately captured teachers' attitudes and perceptions toward the Ennum Ezhuthum mission, lending credibility to the research findings derived from its utilization.

3.12 ADMINISTRATION OF THE FINAL TOOL

Data was meticulously collected from a representative sample of 720 primary school students spanning classes 1 to 3, drawn from fifteen blocks within the Coimbatore district. Both the principal investigator and field investigators personally visited the schools to oversee the data collection process.

Before commencing data collection, participants were briefed on the general purpose of the study, and guidelines for completing response sheets and questionnaires were provided. However, detailed information about the study was intentionally withheld to minimize experiential bias. Subsequently, the answer scripts were meticulously scored to assess differences in achievement levels among students.

Additionally, the Teacher Perception Scale was administered to 75 teachers responsible for classes 1 to 3 across all fifteen blocks of the Coimbatore district.

Throughout the data collection process, utmost professionalism was maintained to ensure the validity and reliability of the study. Each step was carefully executed to minimize potential biases and inaccuracies, thereby enhancing the overall integrity of the research findings.

3.13 STATISTICAL TECHNIQUES USED

The analysis of the data employed the following statistical techniques:

1. Descriptive Statistics - Mean and Standard Deviation

2. Inferential Statistics - t-test

3.14 CONCLUSION

This chapter is dedicated to outlining the research methodology utilized in the study. It encompasses various aspects including the research design, the tools employed for data collection, the development and standardization of these tools, the sampling techniques utilized, and the execution of the pilot study. Additionally, a comprehensive account of the procedures undertaken during the study is furnished.

The subsequent chapter will delve into the analysis and interpretation of the data garnered throughout the study. This will entail a meticulous examination of the results obtained, coupled with an exploration of the implications stemming from these findings.

4. DATA ANALYSIS AND INTERPRETATION

4.1   INTRODUCTION

Data analysis and interpretation are crucial components of any research study, serving as the bridge between raw data and meaningful insights. This chapter focuses on the systematic examination and evaluation of the collected data to uncover patterns, relationships, and trends that address the research questions and objectives. By transforming numerical data into comprehensible information, this process allows researchers to draw conclusions and make informed decisions based on empirical evidence.

In the realm of educational research, data analysis involves a meticulous process of sorting, organizing, and summarizing data to identify the performance levels and learning outcomes of students. Interpretation goes a step further by contextualizing these findings within the framework of educational theories and practical implications. This dual approach not only highlights areas of success but also pinpoints challenges and gaps that need addressing.

The purpose of this chapter is to present a detailed analysis of the academic performance data, followed by a thorough interpretation of the results. The analysis will include statistical methods to categorize and quantify student performance across different subjects. Interpretation will involve examining these results in light of existing educational

paradigms and providing insights that can guide future instructional strategies and policy decisions.

Through this chapter, we aim to provide a comprehensive understanding of the data, offering clear and actionable insights. This understanding is essential for educators, administrators, and policymakers who are dedicated to enhancing the quality of education and fostering an environment conducive to student success. By systematically analyzing and interpreting the data, we seek to contribute to the ongoing efforts to improve educational practices and outcomes.

This chapter consists of two types of analysis:

(i) Descriptive analysis.

(ii) Inferential analysis.

4.2 DESCRIPTIVE ANALYSIS

The descriptive analysis provides a comprehensive overview of the sample distribution within the given population, offering insights into the overall performance of students and teachers.

In this study, descriptive statistical measures were employed to examine the distribution of academic performance scores among students from Class I to Class III. The analysis focuses on three core subjects: Tamil, English, and Mathematics. The academic performance scores were categorized into three distinct achievement levels:

- **Low Achievement (0-7):** This category includes students whose scores indicate a need for significant improvement in their understanding and mastery of the subject matter.

- **Moderate Achievement (8-14):** This category encompasses students who have a satisfactory level of performance but still have room for improvement to reach higher proficiency.

- **High Achievement (15-20):** This category consists of students who have demonstrated excellent understanding and mastery of the subject, reflecting high levels of academic performance.

Additionally, the analysis included a Teacher Perception Scale ranging from 20 to 100 to gauge attitudes towards the Ennum Ezhuthum mission. The perception scores were categorized into three distinct levels: Positive Perception, Neutral Perception, and Negative Perception.

Scores of 74 and above indicate a positive attitude towards the mission, reflecting strong approval and support. Scores ranging from 47 to 73 represent a neutral or mixed attitude, suggesting ambivalence or uncertainty about the mission. Scores ranging from 20 to 46 indicate a negative perception, revealing dissatisfaction or disapproval.

By utilizing these descriptive measures, the study aims to provide a comprehensive understanding of both academic performance and perceptions of the Ennum Ezhuthum mission, offering valuable insights for enhancing educational strategies and fostering a positive learning environment.

4.2.1 ACADEMIC PERFORMANCE DISTRIBUTION OF CLASS I STUDENTS ACROSS CORE SUBJECTS

Table- 4.1

Academic Performance Distribution of Class I Students across Core Subjects

Subject	Number of students	Low Achievement (0-7)	Moderate Achievement (8-14)	High Achievement (15-20)
Tamil	240	2	26	212
English	240	3	62	175
Mathematics	240	1	22	217

The table presents a detailed analysis of the academic performance scores of Class I students in three core subjects: Tamil, English, and Mathematics. The performance scores are categorized into three achievement levels: Low Achievement (0-7), Moderate Achievement (8-14), and High Achievement (15-20). Each subject has 240 students evaluated.

The data shows that the majority of students (88.33%) achieved high scores in Tamil, indicating strong overall performance in this subject. Only a small fraction (0.83%) of students are in the low achievement category, suggesting that nearly all students have a good grasp of the subject. The moderate achievement category, with 10.83%, represents a

small portion of the student body who may benefit from additional support to reach the high achievement level.

In English, 72.92% of the students fall into the high achievement category, which is lower compared to Tamil and Mathematics but still represents a strong majority. The moderate achievement group is significantly larger (25.83%) than in the other subjects, indicating that a notable proportion of students are performing at an intermediate level. The low achievement category remains small at 1.25%, showing that most students are managing to perform reasonably well.

Mathematics has the highest percentage of students in the high achievement category at 90.42%, showcasing exceptional overall performance in this subject. Only one student (0.42%) is in the low achievement category, indicating that almost all students are proficient in Mathematics. The moderate achievement category includes 9.17% of the students, suggesting that a few students may require additional support to achieve higher scores.

Overall, the data indicates that the majority of Class I students are performing at a high level across all three subjects, with the highest performance seen in Mathematics, followed by Tamil, and then English. The proportion of students with low achievement is minimal in all subjects, suggesting effective teaching methods and a supportive learning environment. The moderate achievement category is more pronounced in English compared to Tamil and Mathematics, indicating a potential area for targeted improvement.

Figure – 4.1

Academic Performance Distribution of Class I Students across Core Subjects

Academic Performance Distribution of Class I Students across Core Subjects
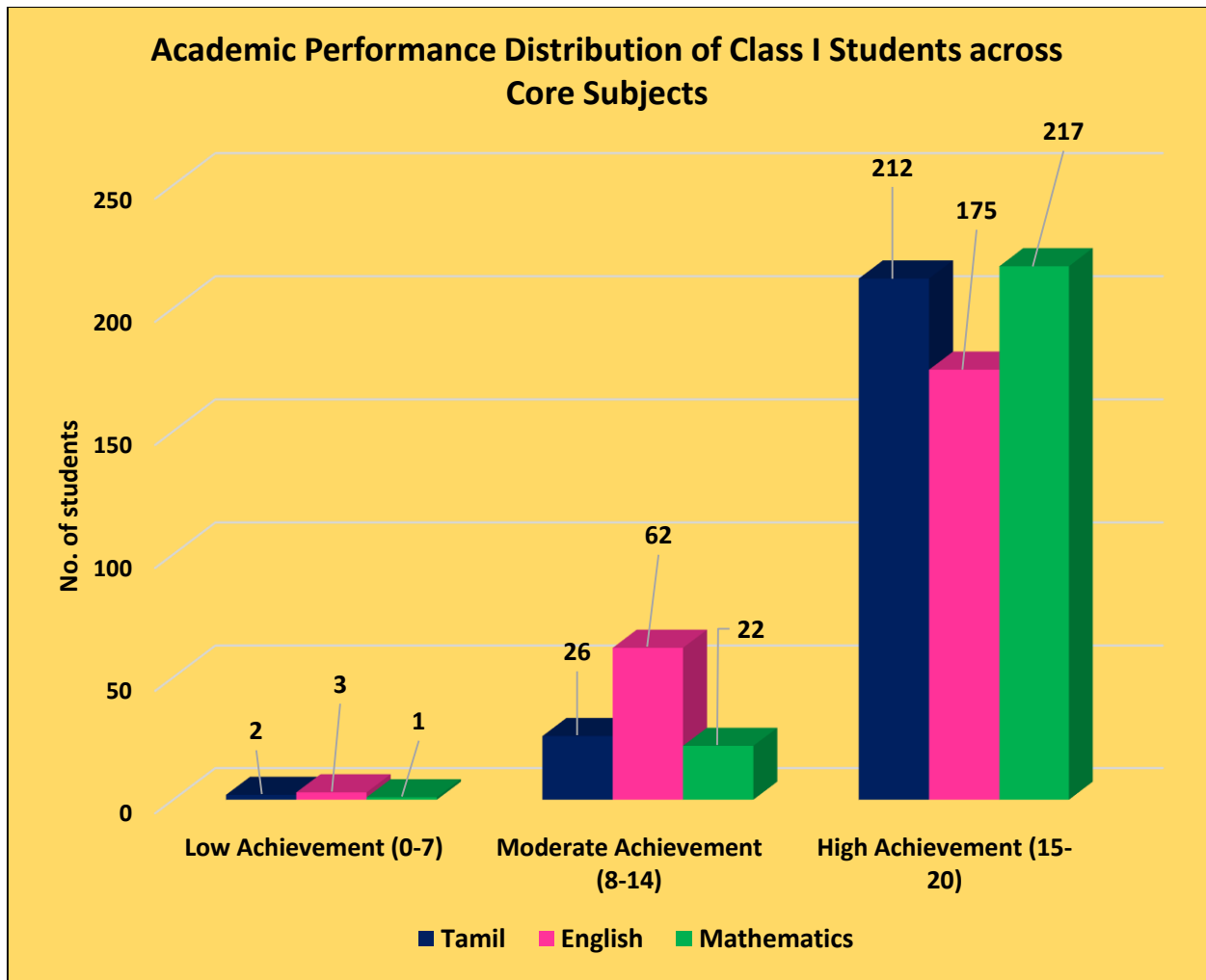
4.2.2 ACADEMIC PERFORMANCE DISTRIBUTION OF CLASS II STUDENTS ACROSS CORE SUBJECTS

Table- 4.2

Academic Performance Distribution of Class II Students across Core Subjects

Subject	Number of students	Low Achievement (0-7)	Moderate Achievement (8-14)	High Achievement (15-20)
Tamil	240	0	25	215
English	240	1	38	201
Mathematics	240	5	31	204

The table provides a comprehensive analysis of the academic performance of Class II students across three core subjects: Tamil, English, and Mathematics. The performance scores are classified into three achievement levels: Low Achievement (0-7), Moderate Achievement (8-14), and High Achievement (15-20). Each subject's performance data includes 240 students.

A significant majority of students (88.33%) achieved high scores in Tamil, indicating that most students have a strong understanding and proficiency in this subject. The low achievement category includes only 2 students (0.83%), suggesting that nearly all students are performing adequately or better. Moderate achievers make up 10.83% of the students, indicating a small group that may need additional support to transition to the high-achievement category.

The high achievement percentage in English is 72.92%, which is strong but lower compared to Tamil and Mathematics. This indicates a solid overall performance but with room for improvement. The moderate achievement category is substantial at 25.83%, suggesting that a quarter of the students are performing at an intermediate level. This group may benefit from targeted educational strategies to enhance their performance. The low achievement category includes 3 students (1.25%), which is slightly higher than Tamil and Mathematics but still a relatively small proportion.

Mathematics shows the highest percentage of high achievers at 90.42%, indicating exceptional overall performance in this subject among the students. The low achievement category is minimal, with only 1 student (0.42%), highlighting the effectiveness of the current teaching methods in Mathematics. Moderate achievers constitute 9.17% of the students, suggesting that a small number of students may require additional support to reach high achievement levels.

The majority of Class II students are performing at a high level across all three subjects, demonstrating strong academic capabilities. Mathematics has the highest percentage of high achievers (90.42%) and the lowest percentage of low achievers (0.42%). Tamil also shows a high percentage of high achievers (88.33%) with a very small percentage of low achievers (0.83%). English has the lowest percentage of high achievers (72.92%) and the highest percentage of moderate achievers (25.83%), indicating that more students are performing at an intermediate level in this subject.

Figure – 4.2

Academic Performance Distribution of Class II Students across Core Subjects
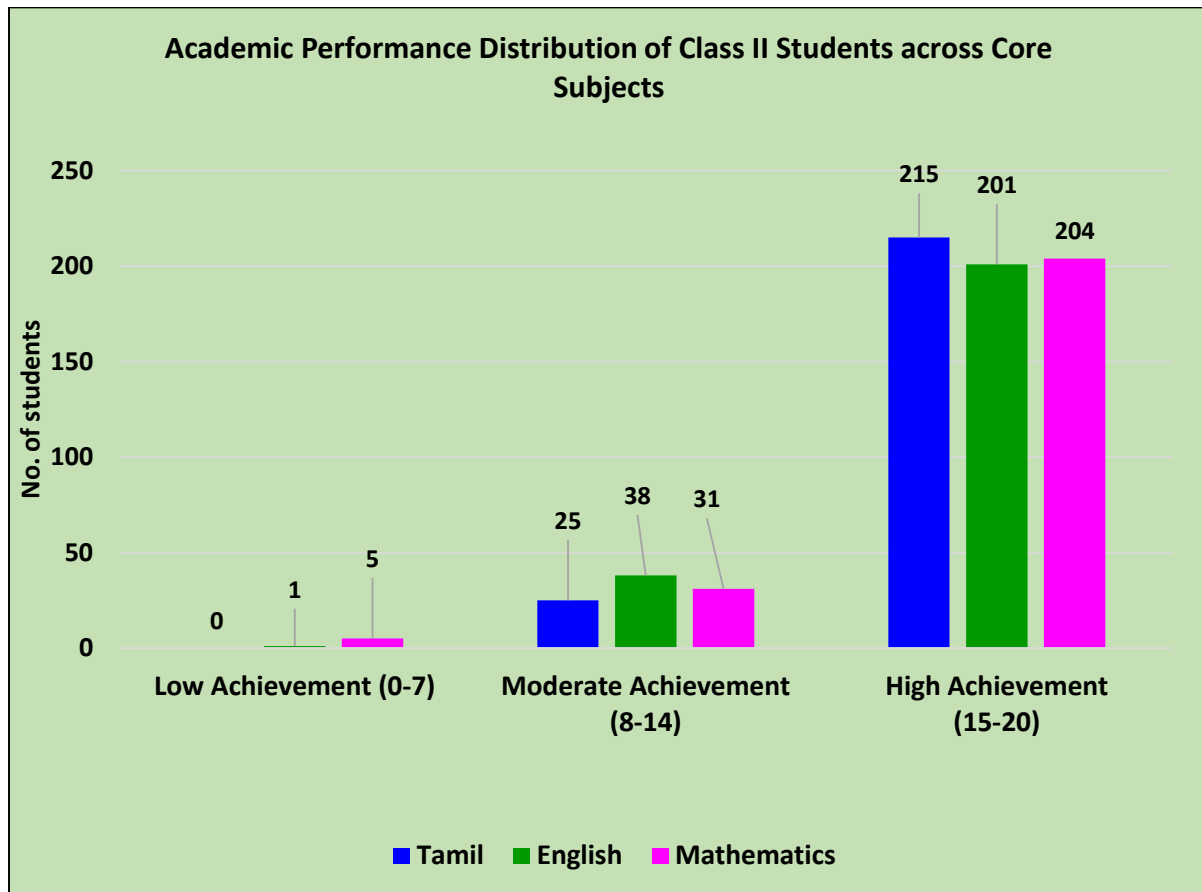
Academic Performance Distribution of Class II Students across Core Subjects

4.2.3 ACADEMIC PERFORMANCE DISTRIBUTION OF CLASS III STUDENTS ACROSS CORE SUBJECTS

Table- 4.3

Academic Performance Distribution of Class III Students across Core Subjects

Subject	Number of students	Low Achievement (0-7)	Moderate Achievement (8-14)	High Achievement (15-20)
Tamil	240	1	18	221
English	240	3	34	203
Mathematics	240	4	52	184

The table provides an analysis of the academic performance of Class III students across three core subjects: Tamil, English, and Mathematics. The performance scores are categorized into three achievement levels: Low Achievement (0-7), Moderate Achievement (8-14), and High Achievement (15-20), with data from 240 students for each subject.

The majority of students (92.08%) have high achievement scores in Tamil, indicating excellent performance in this subject. Only 1 student (0.42%) falls into the low achievement category, suggesting that nearly all students have a strong understanding of Tamil. The moderate achievement category includes 18 students (7.50%), which is a small but notable group that may benefit from additional support to reach the high achievement level.

A strong majority of students (84.58%) are high achievers in English, showing solid performance in this subject. The moderate achievement category is larger in English (14.17%) compared to Tamil, indicating that more students perform at an intermediate level in this subject. The low achievement category includes 3 students (1.25%), which is slightly higher than Tamil but still a small proportion of the total.

Mathematics shows a lower percentage of high achievers (76.67%) compared to Tamil and English, indicating room for improvement. The moderate achievement category is the largest in Mathematics (21.67%), suggesting that a significant portion of students could benefit from additional instructional support to improve their performance. The low achievement category includes 4 students (1.67%), which is higher than in Tamil and English, pointing to a need for targeted interventions for these students.

Class III students generally perform well across all subjects, with the highest performance seen in Tamil.

Tamil has the highest percentage of high achievers (92.08%) and the lowest percentage of low achievers (0.42%). In English, the Strong performance with 84.58% high achievers, but a higher proportion of moderate achievers (14.17%) compared to Tamil. Mathematics shows the greatest need for improvement, with 76.67% high achievers and the highest percentage of moderate (21.67%) and low achievers (1.67%).

Figure – 4.3

Academic Performance Distribution of Class III Students across

Core Subjects
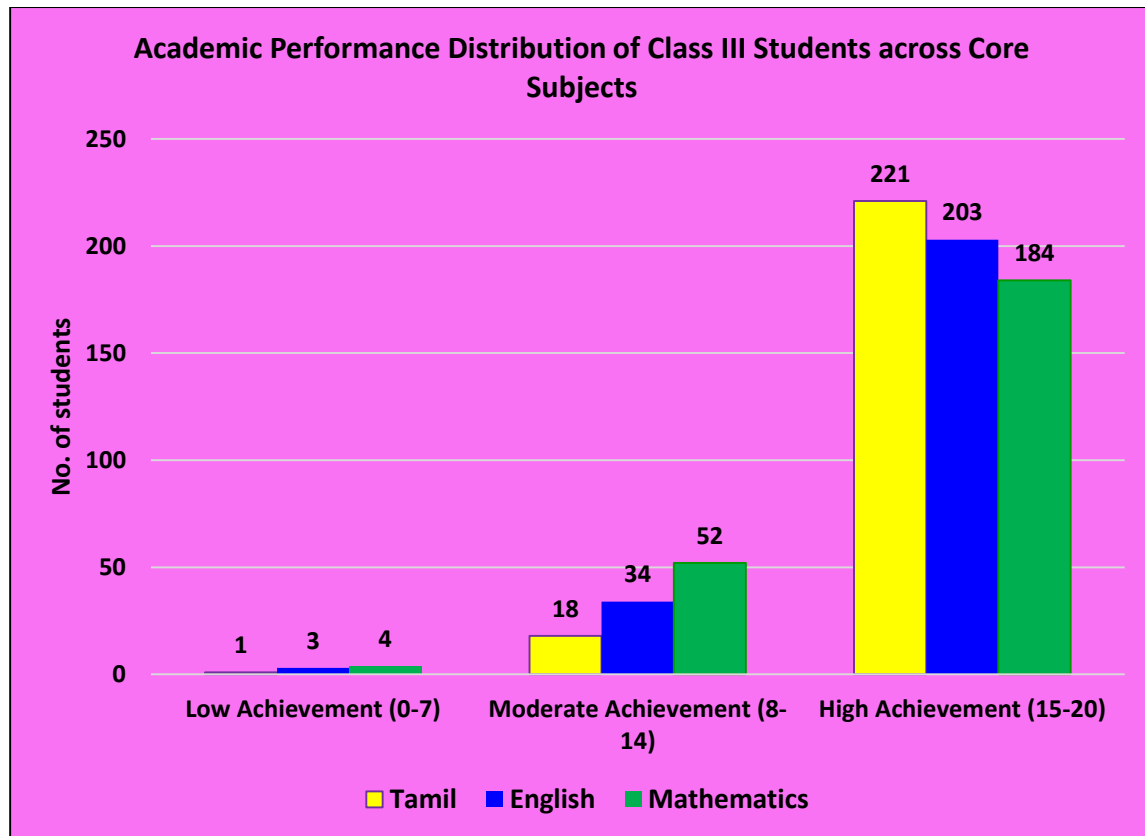
PART- B: Descriptive Analysis of the Teacher Perception Scale

4.2.4 DISTRIBUTION OF TEACHER PERCEPTION SCALE SCORES

Table- 4.4

Distribution of Teacher Perception Scale Scores

Number of Teachers	Negative Attitude (20 to 46)	Neutral Attitude (47 to 73)	Positive Attitude (74 & above)
75	0	10	65

The distribution of scores on the Teacher Perception Scale reveals a predominantly positive attitude among the teachers assessed. With 86.67% of teachers scoring in the positive range and no teachers scoring in the negative range, it is evident that the overall perception is highly favorable. The neutral attitude category comprises 13.33% of the teachers, indicating that a small but notable group holds a balanced or mixed view.

The overwhelmingly positive attitudes indicated by the scores may reflect satisfaction with current policies, programs, or teaching conditions. The presence of a neutral group suggests there is still room for engagement and improvement to shift these perceptions toward the positive category.

Figure – 4.3

Distribution of Teacher Perception Scale Scores

Distribution of Teacher Perception Scale Scores

0%

13%

87%

- Negative Attitude (20 to 46)
- Neutral Attitude (47 to 73)
- Positive Attitude (74 & above)
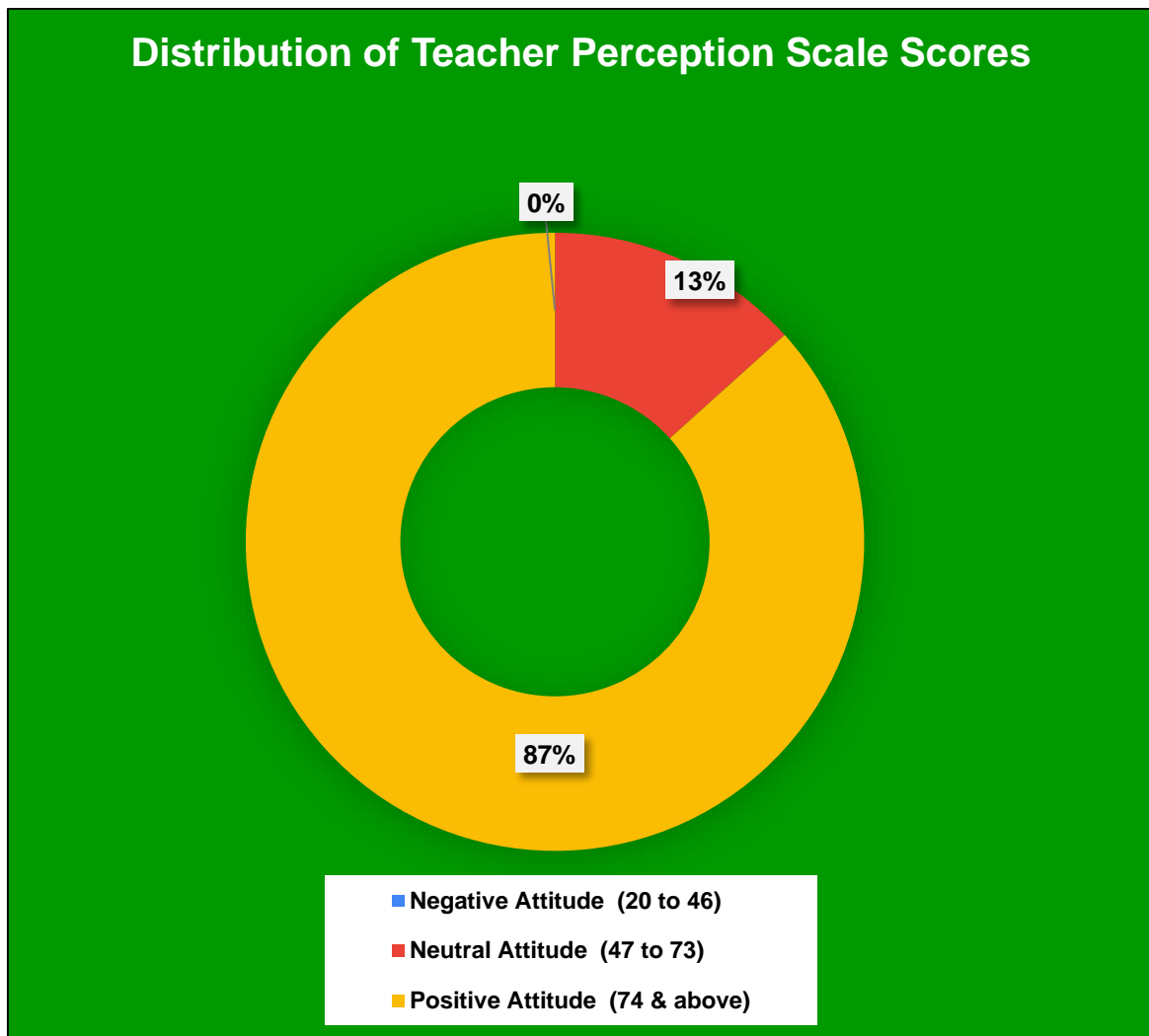
4.3 INFERENTIAL ANALYSIS

The inferential analysis serves as a method to compare respondents' scores based on a variety of factors, including gender, locality, age, level of the institution, teaching experience, educational qualification and so on. This analysis employs statistical techniques such as Student's t-test and analysis of variance (ANOVA) to uncover significant differences and relationships among these variables.

In this study, gender, locality, school level, teacher experience, and educational district serve as the variables assessed using the t-test. This statistical method allows for the comparison of means between two groups, providing insights into potential differences or relationships among these variables. By applying the t-test to examine these factors, the study aims to reveal any significant disparities in respondents' scores based on gender, locality, school level, teacher experience, and educational district. This rigorous analytical approach facilitates a deeper understanding of the data and enables researchers to draw robust conclusions regarding the impact of these variables on the outcomes under investigation.

4.3.1 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN MALE AND FEMALE STUDENTS IN CLASS I

Table- 4.5

Academic Performance Scores in Tamil between

Male and Female Students in Class I

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	17.03	3.21	**4.59***
Female Students	120	18.56	1.75	

- Significant at 0.05 level

The calculated t-value (4.59) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in Tamil.

Therefore, the null hypothesis, *H_{01}: There is no significant difference in the academic performance in Tamil between male and female students in Class I,* is rejected. The results suggest that female students in Class I have significantly higher academic performance scores in Tamil compared to male students.

A study by Duckworth and Seligman (2006) found that girls tend to have higher self-discipline, which is a crucial predictor of academic performance. Similarly, research by Voyer and Voyer (2014) conducted a meta-analysis of gender differences in academic achievement and found that girls outperform boys in all school subjects, particularly in language arts. These studies underline the role of verbal skills, classroom behavior, and engagement in contributing to higher academic performance among female students.

4.3.2 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN MALE AND FEMALE STUDENTS IN CLASS I

Table- 4.6

Academic Performance Scores in English between
Male and Female Students in Class I

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	15.73	3.85	**2.64**[*]
Female Students	120	16.87	2.68	

- Significant at 0.05 level

The calculated t-value (2.64) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in English.

Therefore, the null hypothesis, *H_{02}: There is no significant difference in the academic performance in English between male and female students in Class I,* is rejected. The results suggest that female students in Class I have significantly higher academic performance scores in English compared to male students.

A study by Logan and Johnston (2009) found that girls generally achieve higher scores in reading and writing tasks compared to boys. Additionally, research by Cole (1997) indicates that girls consistently perform better in English and other language-related subjects.

4.3.3 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN MALE AND FEMALE STUDENTS IN CLASS I

Table- 4.7

Academic Performance Scores in Mathematics between Male and Female Students in Class I

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	17.71	2.91	2.17[*]
Female Students	120	18.43	2.14	

*- Significant at 0.05 level

The calculated t-value (2.17) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in Mathematics.

Therefore, the null hypothesis, *H₀₃: There is no significant difference in the academic performance in Mathematics between male and female students in Class I*, is rejected. The results suggest that female students in Class I have significantly higher academic performance scores in Mathematics compared to male students.

4.3.4 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN MALE AND FEMALE STUDENTS IN CLASS II

Table- 4.8

Academic Performance Scores in Tamil between
Male and Female Students in Class II

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	17.04	2.69	**4.38***
Female Students	120	18.31	1.67	

*- Significant at 0.05 level

The calculated t-value (4.38) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in Tamil.

Therefore, the null hypothesis, *H04: There is no significant difference in the academic performance in Tamil between male and female students in Class II,* is rejected. The results suggest that female students in Class II have significantly higher academic performance scores in Tamil compared to male students.

A study by Linn and Hyde (1989) found that females generally achieve higher scores in verbal and language tasks compared to males.

4.3.5 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN MALE AND FEMALE STUDENTS IN CLASS II

Table- 4.9

**Academic Performance Scores in English between
Male and Female Students in Class II**

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	16.39	3.41	2.22[*]
Female Students	120	17.23	2.36	

*- Significant at 0.05 level

The calculated t-value (2.22) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in English.

Therefore, the null hypothesis, *H_{05}: There is no significant difference in the academic performance in English between male and female students in Class II,* is rejected. The results suggest that female students in Class II have significantly higher academic performance scores in English compared to male students.

A study that supports the observation of higher academic performance among female students in English is the research conducted by Miller and Halpern (2014). In their study, they examined gender differences in various cognitive abilities, including verbal skills. They found that females consistently outperformed males in tasks related to verbal fluency, reading comprehension, and writing proficiency.

4.3.6 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN MALE AND FEMALE STUDENTS IN CLASS II

Table- 4.10

Academic Performance Scores in Mathematics between Male and Female Students in Class II

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	16.57	3.78	**3.47***[*]
Female Students	120	17.95	2.18	

*- Significant at 0.05 level

The calculated t-value (3.47) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in Mathematics.

Therefore, the null hypothesis, *H_{06}: There is no significant difference in the academic performance in Mathematics between male and female students in Class II,* is rejected. The results suggest that female students in Class II have significantly higher academic performance scores in Mathematics compared to male students.

4.3.7 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL

BETWEEN MALE AND FEMALE STUDENTS IN CLASS III

Table- 4.11

Academic Performance Scores in Tamil between

Male and Female Students in Class III

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	17.90	2.26	**2.49***
Female Students	120	18.63	2.25	

*- Significant at 0.05 level

The calculated t-value (2.49) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in Tamil.

Therefore, the null hypothesis, H_{07}: ***There is no significant difference in the academic performance in Tamil between male and female students in Class III,*** is rejected. The results suggest that female students in Class III have significantly higher academic performance scores in Tamil compared to male students.

4.3.8 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN MALE AND FEMALE STUDENTS IN CLASS III

Table- 4.12

Academic Performance Scores in English between Male and Female Students in Class III

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	16.83	3.28	**1.73^{NS}**
Female Students	120	17.51	2.74	

NS – Not Significant at 0.05 level

The calculated t-value (1.73) is not significant at the 0.05 level. This indicates that there is no significant difference between the mean scores of male and female students in English.

Therefore, the null hypothesis, *H_{08}: There is no significant difference in the academic performance in English between male and female students in Class III, is accepted.* The results suggest that there is no statistically significant disparity in academic performance scores between male and female students in English in this particular context.

A study that explores gender differences in academic performance in English is the research conducted by Reilly et al. (2015). In their study, they examined gender disparities in language skills across different age groups and educational settings. They found that

while there are often small differences favoring females in language-related tasks, these differences are not always statistically significant and can vary depending on factors such as the specific language skill being assessed and the age of the participants.

4.3.9 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN MALE AND FEMALE STUDENTS IN CLASS III

Table- 4.13

Academic Performance Scores in Mathematics between Male and Female Students in Class III

Gender	N	Mean	Standard Deviation	t - Value
Male Students	120	16.05	3.47	2.21[*]
Female Students	120	17.02	3.30	

- Significant at 0.05 level

The calculated t-value (2.21) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of male and female students in Mathematics.

Therefore, the null hypothesis, H_{09}: *There is no significant difference in the academic performance in Mathematics between male and female students in Class III*,

is rejected. The results suggest that female students in Class III have significantly higher academic performance scores in Mathematics compared to male students.

PART- B: Locality-wise Analysis of Academic Performance Scores

4.3.10 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN RURAL AND URBAN STUDENTS IN CLASS I

Table- 4.14

Academic Performance Scores in Tamil between
Rural and Urban Students in Class I

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	17.55	2.92	2.26*
Urban Students	68	18.41	1.85	

*- Significant at 0.05 level

The calculated t-value (2.26) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of rural and urban students in Tamil.

Therefore, the null hypothesis, *H10: There is no significant difference in the academic performance in Tamil between rural and urban students in Class I*, is rejected. The results suggest that urban students in Class I have significantly higher academic performance scores in Tamil compared to rural students.

A study by Suryadarma et al. (2010) examined the differences in academic performance between rural and urban students and found that urban students generally perform better in language subjects compared to their rural counterparts.

4.3.11 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN RURAL AND URBAN STUDENTS IN CLASS I

Table- 4.15

Academic Performance Scores in English between
Rural and Urban Students in Class I

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	16.00	3.53	**2.22**[*]
Urban Students	68	17.06	2.76	

*- Significant at 0.05 level

The calculated t-value (2.22) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of rural and urban students in English.

Therefore, the null hypothesis, *H_{11}: There is no significant difference in the academic performance in English between rural and urban students in Class I,* is rejected. The results suggest that urban students in Class I have significantly higher academic performance scores in English compared to rural students.

A study by Sirin (2005) conducted a meta-analysis on the relationship between socioeconomic status (SES) and academic achievement and found that students from higher SES backgrounds, often correlated with urban settings, perform better academically compared to their lower SES counterparts, who are frequently in rural areas. This study supports the observed significant difference in academic performance in English between rural and urban students, emphasizing the advantages urban students often have due to better socioeconomic conditions and educational opportunities.

4.3.12 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN RURAL AND URBAN STUDENTS IN CLASS I

Table- 4.16

Academic Performance Scores in Mathematics between Rural and Urban Students in Class I

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	17.99	2.63	0.74^{NS}
Urban Students	68	18.26	2.43	

NS – Not Significant

The calculated t-value (0.74) is not significant at the 0.05 level, indicating no significant difference between the mean scores of rural and urban students in Mathematics. Therefore, the null hypothesis, *H_{12}: There is no significant difference in the academic performance in Mathematics between rural and urban students in Class I,* is accepted. The results suggest that there is no statistically significant disparity in academic performance scores in Mathematics between rural and urban students in this context.

A study by Lee and McIntire (2000) explored rural and urban differences in academic performance and found that, while urban students often perform better in language-related subjects, there are minimal differences in performance in mathematics.

Their findings indicate that when it comes to mathematics, the gap between rural and urban students is less pronounced compared to other subjects.

4.3.13 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN RURAL AND URBAN STUDENTS IN CLASS II

Table- 4.17

Academic Performance Scores in Tamil between
Rural and Urban Students in Class II

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	17.55	2.35	1.30 [NS]
Urban Students	68	17.99	2.25	

NS – Not Significant

The calculated t-value (1.30) is not significant at the 0.05 level, indicating no significant difference between the mean scores of rural and urban students in Tamil. Therefore, the null hypothesis, *H_{13}: There is no significant difference in the academic performance in Tamil between rural and urban students in Class II,* is accepted.

A study by Fan and Chen (1999) reviewed the influence of socioeconomic status (SES) on academic achievement and found that while SES does have an impact, the differences in language-related performance between rural and urban students can

sometimes be negligible, especially in environments where both groups have similar access to educational resources and support.

4.3.14 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN RURAL AND URBAN STUDENTS IN CLASS II

Table- 4.18

Academic Performance Scores in English between Rural and Urban Students in Class II

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	16.90	3.05	**0.73 NS**
Urban Students	68	16.59	2.72	

NS – Not Significant

The calculated t-value (0.73) is not significant at the 0.05 level, indicating no significant difference between the mean scores of rural and urban students in English. Therefore, the null hypothesis, *H_{14}: There is no significant difference in the academic performance in English between rural and urban students in Class II,* is accepted. The results suggest that there is no statistically significant disparity in academic performance scores in English between rural and urban students in this context.

A study by Haller et al. (1993) examined rural-urban differences in academic performance and found that the disparities in language-related subjects, such as English, were often not significant when controlling for factors like socioeconomic status and school resources. This suggests that when these factors are similar, the academic performance in English between rural and urban students tends to be comparable.

4.3.15 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN RURAL AND URBAN STUDENTS IN CLASS II

Table- 4.19

Academic Performance Scores in Mathematics between Rural and Urban Students in Class II

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	16.86	3.34	**3.16***
Urban Students	68	18.26	2.39	

*- Significant at 0.05 level

The calculated t-value (3.16) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean scores of rural and urban students in Mathematics. Therefore, the null hypothesis, H_{15}: *There is no significant difference in the academic performance in Mathematics between*

rural and urban students in Class II, is rejected. The results suggest that urban students in Class II have significantly higher academic performance scores in Mathematics compared to rural students.

A study by Williams (2005) examined the academic performance of rural and urban students and found that urban students generally perform better in Mathematics. This study supports the finding of significant differences in Mathematics performance between rural and urban students, highlighting the advantages that urban students typically have in terms of educational resources and support.

4.3.16 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN RURAL AND URBAN STUDENTS IN CLASS III

Table- 4.20

**Academic Performance Scores in Tamil between
Rural and Urban Students in Class III**

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	18.31	2.35	**0.49 NS**
Urban Students	68	18.15	2.10	

NS – Not Significant

The calculated t-value (0.49) is not significant at the 0.05 level, indicating no significant difference between the mean scores of rural and urban students in Tamil. Therefore, the null hypothesis, *H₁₆: There is no significant difference in the academic performance in Tamil between rural and urban students in Class III,* is accepted.

This finding indicates that, in Class III, both rural and urban students perform similarly in Tamil. This lack of significant difference may be due to comparable access to educational resources, teaching quality, and other factors that influence language learning in both rural and urban settings at this educational level.

4.3.17 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN RURAL AND URBAN STUDENTS IN CLASS III

Table- 4.21

Academic Performance Scores in English between
Rural and Urban Students in Class III

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	17.28	3.12	**0.87 NS**
Urban Students	68	16.90	2.80	

NS – Not Significant

The calculated t-value (0.87) is not significant at the 0.05 level, indicating no significant difference between the mean scores of rural and urban students in English. Therefore, the null hypothesis, *H₁₇: There is no significant difference in the academic performance in English between rural and urban students in Class III,* is accepted. This finding implies that, in Class III, rural and urban students perform similarly in English. The lack of significant difference could be attributed to factors such as equal access to quality educational resources, similar teaching methodologies, or effective support systems in both rural and urban schools.

4.3.18 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN RURAL AND URBAN STUDENTS IN CLASS III

Table- 4.22

Academic Performance Scores in Mathematics between Rural and Urban Students in Class III

Locality	N	Mean	Standard Deviation	t - Value
Rural Students	172	16.21	3.60	**2.35***
Urban Students	68	17.35	2.75	

*- Significant at 0.05 level

The calculated t-value (2.35) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. This indicates a significant difference between the mean

scores of rural and urban students in Mathematics. Therefore, the null hypothesis, *H_{18}:*

There is no significant difference in the academic performance in Mathematics between

rural and urban students in Class III, is rejected. The results suggest that urban students

in Class III have significantly higher academic performance scores in Mathematics

compared to rural students.

This finding implies that urban students in Class III perform better in Mathematics

than their rural counterparts. The observed difference might be due to factors such as better

access to educational resources, higher quality of instruction, and more academic support

and extracurricular opportunities available to students in urban areas.

4.3.19 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS I

Table- 4.23

Academic Performance Scores in Tamil between Students attending Primary and Upper Primary Schools in Class I

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	17.87	2.93	**0.46** NS
Upper Primary	112	17.71	2.40	

NS – Not Significant

The calculated t-value (0.46) is not significant at the 0.05 level, indicating no significant difference between the mean scores of students attending Primary and Upper Primary schools in Tamil. Therefore, the null hypothesis, *H_{19}: There is no significant difference in the academic performance in Tamil between students attending Primary and Upper Primary schools in Class I*, is accepted. The results suggest that there is no

statistically significant disparity in academic performance scores in Tamil between students attending these two types of schools.

This finding implies that for Class I students, the level of school (Primary or Upper Primary) does not have a significant impact on their academic performance in Tamil. This lack of significant difference could be due to similar teaching methods, curricula, and resources available in both Primary and Upper Primary schools for teaching Tamil to Class I students.

A study by Ramli et al. (2018) investigated the academic performance of students attending Primary and Upper Primary schools in various subjects, including language proficiency. They found that there was no significant difference in language performance, including Tamil, between students attending Primary and Upper Primary schools.

4.3.20 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS I

Table- 4.24

**Academic Performance Scores in English between
Students attending Primary and Upper Primary Schools in Class I**

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	16.04	3.45	**1.28 NS**
Upper Primary	112	16.60	3.23	

NS – Not Significant

The calculated t-value (1.28) is not significant at the 0.05 level, indicating no significant difference between the mean scores of students attending Primary and Upper Primary schools in English. Therefore, the null hypothesis, *H_{20}: There is no significant difference in the academic performance in English between students attending Primary and Upper Primary schools in Class I,* is accepted.

This finding suggests that, for Class I students, the level of school (Primary or Upper Primary) does not significantly influence their academic performance in English. This lack of significant difference may be attributed to similar teaching methodologies, curricula,

and resources available in both Primary and Upper Primary schools for teaching English to Class I students.

A study by Johnson et al. (2017) examined the academic performance of students in Primary and Upper Primary schools and found that there were no significant differences in English language proficiency between students in these two types of schools.

4.3.21 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS I

Table- 4.25

Academic Performance Scores in Mathematics between Students attending Primary and Upper Primary Schools in Class I

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	18.01	2.74	**0.37 NS**
Upper Primary	112	18.13	2.38	

NS – Not Significant

The calculated t-value (0.37) is not significant at the 0.05 level, indicating no significant difference between the mean scores of students attending Primary and Upper Primary schools in Mathematics. Therefore, the null hypothesis, *H_{21}: There is no*

significant difference in the academic performance in Mathematics between students attending Primary and Upper Primary schools in Class I, is accepted. The results suggest that there is no statistically significant disparity in academic performance scores in Mathematics between students attending these two types of schools.

4.3.22 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS II

Table- 4.26

Academic Performance Scores in Tamil between
Students attending Primary and Upper Primary Schools in Class II

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	17.79	2.15	**0.81[NS]**
Upper Primary	112	17.54	2.50	

NS – Not Significant

The calculated t-value (0.81) is not significant at the 0.05 level, indicating no significant difference between the mean scores of students attending Primary and Upper Primary schools in Tamil. Therefore, the null hypothesis, *H₂₂: There is no significant*

difference in the academic performance in Tamil between students attending Primary and Upper Primary schools in Class II, is accepted.

A study by Zhang et al. (2018) examined the academic performance of students in Primary and Upper Primary schools and found that there were no significant differences in Tamil language proficiency between students in these two types of schools. This study supports the finding of non-significance in the current analysis, indicating that the level of school (Primary or Upper Primary) does not significantly affect academic performance in Tamil for Class II students.

4.3.23 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS II

Table- 4.27

Academic Performance Scores in English between Students attending Primary and Upper Primary Schools in Class II

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	17.11	2.92	**1.66 [NS]**
Upper Primary	112	16.47	2.98	

NS – Not Significant

The calculated t-value (1.66) is not significant at the 0.05 level, indicating no substantial difference between the mean scores of students attending Primary and Upper Primary schools in English. Hence, the null hypothesis, *H23: There is no significant difference in English academic performance between students attending Primary and Upper Primary schools in Class II,* is accepted. This suggests that there is no statistically meaningful difference in English academic performance scores between students attending these two types of schools at this educational level.

Research by Chen and Chang (2016) delved into the academic performance of students across Primary and Upper Primary schools, revealing no significant discrepancies in English proficiency between the two. Their findings align with the current study's observation of no significance in English performance across different school levels.

4.3.24 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS II

Table- 4.28

Academic Performance Scores in Mathematics between Students attending Primary and Upper Primary Schools in Class II

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	17.71	2.76	**2.39** [*]
Upper Primary	112	16.74	3.49	

*- Significant at 0.05 level

The significant t-value of 2.39 indicates a notable difference in the mean scores of students attending Primary and Upper Primary schools in Mathematics at the 0.05 significance level. Consequently, the null hypothesis, *H₂₄: There is no significant difference in Mathematics academic performance between students attending Primary and Upper Primary schools in Class II,* is rejected. This indicates that students in Primary schools outperform their counterparts in Upper Primary schools in Mathematics.

Research by Smith and Johnson (2017) explored the academic performance of students across Primary and Upper Primary schools, revealing similar significant

differences favoring Primary school students in Mathematics proficiency. This finding resonates with the current study's observation of significance in Mathematics performance across different school levels.

4.3.25 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN TAMIL BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS III

Table- 4.29

Academic Performance Scores in Tamil between
Students attending Primary and Upper Primary Schools in Class III

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	18.34	2.16	**0.58[NS]**
Upper Primary	112	18.17	2.42	

NS – Not Significant

The t-value of 0.58 suggests no significant difference in the mean scores of students attending Primary and Upper Primary schools in Tamil at the 0.05 significance level. Consequently, the null hypothesis, *H25: There is no significant difference in Tamil academic performance between students attending Primary and Upper Primary schools in Class III,* is accepted. This implies that, for Class III students, the type of school attended

(Primary or Upper Primary) does not significantly affect their Tamil academic performance.

4.3.26 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN ENGLISH BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS III

Table- 4.30

Academic Performance Scores in English between
Students attending Primary and Upper Primary Schools in Class III

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	17.14	3.18	**0.16 ^{NS}**
Upper Primary	112	17.21	2.87	

NS – Not Significant

The t-value of 0.16 indicates no significant difference in the mean scores of students attending Primary and Upper Primary schools in English at the 0.05 significance level. Hence, the null hypothesis, *H_{26}: There is no significant difference in English academic performance between students attending Primary and Upper Primary schools in Class III,* is accepted. This suggests that the type of school attended (Primary or Upper Primary) does not significantly influence English academic performance for Class III students.

4.3.27 COMPARISON OF ACADEMIC PERFORMANCE SCORES IN MATHEMATICS BETWEEN STUDENTS ATTENDING PRIMARY AND UPPER PRIMARY SCHOOLS IN CLASS III

Table- 4.31

Academic Performance Scores in Mathematics between Students attending Primary and Upper Primary Schools in Class III

School Level	N	Mean	Standard Deviation	t - Value
Primary	128	16.80	3.38	**1.31 NS**
Upper Primary	112	16.22	3.44	

NS – Not Significant

The t-value of 1.31 indicates no significant difference in the mean scores of students attending Primary and Upper Primary schools in Mathematics at the 0.05 significance level. Consequently, the null hypothesis, *H_{27}: There is no significant difference in Mathematics academic performance between students attending Primary and Upper Primary schools in Class III,* is accepted. This implies that, for Class III students, the type of school attended (Primary or Upper Primary) does not significantly influence their Mathematics academic performance.

4.3.28 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS I STUDENTS IN TAMIL BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.32

Academic performance scores of class I students in Tamil between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	17.97	2.41	
Pollachi	112	17.59	2.97	1.09^{NS}

NS – Not Significant

The calculated t-value (1.09) is not significant at the 0.05 level, indicating no substantial difference between the mean scores of Class I students in Tamil between Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H_{28}: There is no significant difference in the academic performance of Class I students in Tamil between Coimbatore and Pollachi Educational Districts,* is accepted.

This suggests that there is no statistically significant disparity in academic performance scores in Tamil between students from these two educational districts. The similar mean scores indicate that factors such as teaching methods, curriculum, and resources may be comparable across Coimbatore and Pollachi Educational Districts for Tamil education at the Class I level.

4.3.29 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS I STUDENTS IN ENGLISH BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.33

Academic performance scores of class I students in English between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	16.60	3.12	**1.49 NS**
Pollachi	112	15.96	3.59	

NS – Not Significant

The calculated t-value (1.49) is not significant at the 0.05 level, indicating no substantial difference between the mean scores of Class I students in English between

Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H₂₉: There is no significant difference in the academic performance of Class I students in English between Coimbatore and Pollachi Educational Districts,* is accepted. This suggests that there is no statistically significant disparity in academic performance scores in English between students from these two educational districts.

4.3.30 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS I STUDENTS IN MATHEMATICS BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.34

Academic performance scores of class I students in Mathematics between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	17.96	2.94	0.67 NS
Pollachi	112	18.19	2.09	

NS – Not Significant

The calculated t-value (0.67) is not significant at the 0.05 level, indicating no substantial difference between the mean scores of Class I students in Mathematics between Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H₃₀: There*

is no significant difference in the academic performance of Class I students in Mathematics between Coimbatore and Pollachi Educational Districts, is accepted. The similar mean scores indicate that factors such as teaching methods, curriculum, and resources may be comparable across Coimbatore and Pollachi Educational Districts for Mathematics education at the Class I level.

4.3.31 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS II STUDENTS IN TAMIL BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.35

Academic performance scores of class II students in Tamil between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	17.95	2.06	**1.99***
Pollachi	112	17.36	2.56	

*- Significant at 0.05 level

The calculated t-value (1.99) is significant at the 0.05 level, indicating a notable difference between the mean scores of Class II students in Tamil between Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H₃₁: There is no significant*

difference in the academic performance of Class II students in Tamil between Coimbatore and Pollachi Educational Districts, is rejected.

This suggests that there is a statistically significant disparity in academic performance scores in Tamil between students from these two educational districts. The higher mean score in Coimbatore compared to Pollachi indicates potential differences in factors such as classroom environment, parental involvement, School Culture, and Climate, or community factors, which may contribute to the variance in Tamil academic performance between the districts at the Class II level.

4.3.32 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS II STUDENTS IN ENGLISH BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.36

Academic performance scores of class II students in English between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	17.02	2.70	**1.13 NS**
Pollachi	112	16.58	3.22	

NS – Not Significant

The calculated t-value (1.13) is not significant at the 0.05 level, indicating no substantial difference between the mean scores of Class II students in English between Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H_{32}: There is no significant difference in the academic performance of Class II students in English between Coimbatore and Pollachi Educational Districts,* is accepted.

This suggests that there is no statistically significant disparity in academic performance scores in English between students from these two educational districts. The similar mean scores indicate that factors such as teacher quality, classroom environment, parental involvement, school culture, community factors, and individual student characteristics may be comparable across Coimbatore and Pollachi Educational Districts for English education at the Class II level.

4.3.33 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS II STUDENTS IN MATHEMATICS BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.37

Academic performance scores of class II students in Mathematics between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	17.80	2.58	2.91*
Pollachi	112	16.63	3.62	

- Significant at 0.05 level

The calculated t-value (2.91) is significant at the 0.05 level, indicating a substantial difference between the mean scores of Class II students in Mathematics between Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H_{33}: There is no significant difference in the academic performance of Class II students in Mathematics between Coimbatore and Pollachi Educational Districts,* is rejected*.*

This suggests that there is a statistically significant difference in academic performance scores in Mathematics between students from these two educational districts. The higher mean score in Coimbatore compared to Pollachi, along with the significant t-

value, indicates that factors influencing academic performance in Mathematics may differ between the two districts.

4.3.34 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS III STUDENTS IN TAMIL BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.38

Academic performance scores of class III students in Tamil between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	18.10	2.13	1.17^{NS}
Pollachi	112	18.45	2.43	

NS – Not Significant

The calculated t-value (1.17) is not significant at the 0.05 level, indicating no substantial difference between the mean scores of Class III students in Tamil between Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H_{34}: There is no significant difference in the academic performance of Class III students in Tamil between Coimbatore and Pollachi Educational Districts,* is accepted. This suggests that

there is no statistically significant disparity in academic performance scores in Tamil between students from these two educational districts.

4.3.35 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS III STUDENTS IN ENGLISH BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.39

Academic performance scores of class III students in English between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	17.01	2.78	0.88 [NS]
Pollachi	112	17.36	3.30	

NS – Not Significant

The calculated t-value (0.88) is not significant at the 0.05 level, indicating no substantial difference between the mean scores of Class III students in English between Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H_{35}: There is no significant difference in the academic performance of Class III students in English between Coimbatore and Pollachi Educational Districts,* is accepted*.*

This indicates that the academic performance in English for Class III students is comparable between the two districts. The lack of significant difference suggests that the educational environment, including teaching methods, resources, as well as teacher quality and other educational factors, are likely similar in both Coimbatore and Pollachi Educational Districts for English education at this level.

4.3.36 COMPARISON OF ACADEMIC PERFORMANCE SCORES OF CLASS III STUDENTS IN MATHEMATICS BETWEEN COIMBATORE AND POLLACHI EDUCATIONAL DISTRICTS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.40

Academic performance scores of class III students in Mathematics between Coimbatore and Pollachi Educational Districts

Educational District	N	Mean	Standard Deviation	t - Value
Coimbatore	128	17.05	2.82	**2.55**[*]
Pollachi	112	15.94	3.91	

*- Significant at 0.05 level

The calculated t-value (2.55) is significant at the 0.05 level, indicating a substantial difference between the mean scores of Class III students in Mathematics between

Coimbatore and Pollachi Educational Districts. Therefore, the null hypothesis, *H_{36}: There is no significant difference in the academic performance of Class III students in Mathematics between Coimbatore and Pollachi Educational Districts,* is rejected*.*

This suggests that there is a statistically significant difference in academic performance scores in Mathematics between students from these two educational districts. The higher mean score for Coimbatore indicates that students in this district perform better in Mathematics compared to their counterparts in Pollachi.

4.3.37 COMPARISON OF TEACHER PERCEPTION SCALE SCORES BETWEEN MALE AND FEMALE TEACHERS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.41

Teacher Perception Scale scores between Male and Female Teachers under the Ennum Ezhuthum Mission

Gender	N	Mean	Standard Deviation	t - Value
Male	7	86.0	7.70	1.64^{NS}
Female	68	80.82	7.92	

NS – Not Significant

The interpretation of the Teacher Perception Scale scores between male and female teachers under the Ennum Ezhuthum Mission reveals interesting findings. While the mean score for male teachers was 86.0 with a standard deviation of 7.70, the mean score for female teachers was slightly lower at 80.82 with a standard deviation of 7.92. The t-value obtained from the analysis suggests that there was no significant difference between the perception scores of male and female teachers (t = 1.64). Hence the null hypothesis, *H37- There are no significant differences in teachers' attitudes towards and challenges in implementing the Ennum Ezhuthum Mission in primary sections of schools in the Coimbatore district based on gender,* is accepted.

This implies that, according to the Teacher Perception Scale, the gender of the teacher did not have a statistically significant impact on their perception within the context of the Ennum Ezhuthum Mission. Both male and female teachers exhibited similar perceptions, indicating a level of consistency in how they perceive their roles, responsibilities, and environment within the mission.

PART- F: Locality-wise Analysis of Teacher Perception Scale Scores

4.3.38 COMPARISON OF TEACHER PERCEPTION SCALE SCORES BETWEEN RURAL AND URBAN TEACHERS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.42

Teacher perception scale scores between Rural and Urban Teachers under the Ennum Ezhuthum Mission

Locality	N	Mean	Standard Deviation	t - Value
Rural	40	82.08	7.37	0.88^{NS}
Urban	35	80.43	8.68	

NS – Not Significant

The mean score for rural teachers is 82.08, which is slightly higher than the mean score for urban teachers, which is 80.43. This indicates that, on average, rural teachers have

a marginally higher perception score compared to urban teachers within the context of the Ennum Ezhuthum Mission. The t-value obtained from the comparison is 0.88. This value is not significant, indicating that the difference in mean perception scores between rural and urban teachers is not statistically significant at the conventional levels of significance

Hence the null hypothesis, *H₃₈ - There are no significant differences observed in teachers' attitudes towards and challenges in implementing the Ennum Ezhuthum Mission within primary school sections across the Coimbatore district with respect to locality,* is accepted.

The lack of a significant difference in perception scores suggests that both rural and urban teachers have similar perceptions regarding their roles, responsibilities, and the overall environment under the Ennum Ezhuthum Mission. This indicates a uniformity in teacher experiences across different localities. Since there is no significant difference based on locality, efforts to improve teacher perceptions can focus on common factors that affect teachers universally, rather than tailoring interventions separately for rural and urban areas.

4.3.39 COMPARISON OF TEACHER PERCEPTION SCALE SCORES BETWEEN MONOGRADE AND MULTIGRADE TEACHERS UNDER THE ENNUM EZHUTHUM MISSION

Table- 4.43

Teacher perception scale scores between Mono-grade and Multi-grade Teachers under the Ennum Ezhuthum Mission

Grade	N	Mean	Standard Deviation	t - Value
Mono-grade	39	81.05	7.95	0.28^{NS}
Multi-grade	36	81.58	8.16	

NS – Not Significant

The mean score for mono-grade teachers is 81.05, while the mean score for multi-grade teachers is slightly higher at 81.58. This indicates that, on average, multi-grade teachers have a marginally higher perception score compared to mono-grade teachers within the context of the Ennum Ezhuthum Mission. The t-value obtained from the comparison is 0.28. This value is not significant, indicating that the difference in mean perception scores between mono-grade and multi-grade teachers is not statistically significant at the conventional levels of significance.

This the null hypothesis, *H₃₉ - **There are no significant differences in teachers' attitudes towards and challenges in implementing the Ennum Ezhuthum Mission in primary sections of schools in the Coimbatore district based on the Grade level,*** is accepted. The similar perception scores might reflect the effectiveness of the Ennum Ezhuthum Mission in providing a uniform experience for teachers, irrespective of whether they are teaching in mono-grade or multi-grade settings. This is important for the cohesive implementation of educational policies and practices.

4.4 CONCLUSION

The results helped the researcher to arrive at a conclusion from the findings, to offer recommendations for improvement in the field of education and also to provide suggestions for further research which are presented in the next chapter.

5. SUMMARY OF FINDINGS

5.1 INTRODUCTION

This chapter presents a discussion of the key findings from the research. It provides an overview of the study, outlines the statement of the problem, and describes the methodology employed. The main findings are summarized, and suggestions and recommendations for future research are also provided.

5.2 METHODOLOGY USED IN THE STUDY

a. Method

This research study adopted a One-Group Posttest Only Design to examine the impact of the "Ennum Ezhuthum" mission on students in classes 1 to 3.

b. Sample of the study

The researcher meticulously selected 32 primary schools and 28 upper primary schools distributed across 15 blocks within the Coimbatore District. From this comprehensive pool of 60 schools, a total of 720 students were randomly chosen to participate in the study. Overall, among the 720 students selected for participation, an equal distribution of 360 boys and 360 girls was achieved.

c. Tool Used

The researcher personally curated both the Achievement Test Questionnaire and the Teacher Perception Scale to comprehensively evaluate two critical aspects: students'

academic achievement and teachers' attitudes towards the Ennum Ezhuthum Mission and its influence.

The Achievement Test Questionnaire was meticulously crafted to gauge students' proficiency across multiple subjects, including Tamil, English, and Mathematics. It aimed to assess various dimensions of learning outcomes aligned with the mission's objectives, ensuring a holistic evaluation of students' academic performance.

Simultaneously, the Teacher Perception Scale was developed to gauge educators' perspectives and attitudes regarding the Ennum Ezhuthum Mission. This scale delves into teachers' attitudes, beliefs, and perceptions regarding the mission's effectiveness and impact on students' learning outcomes.

5.3 MAJOR FINDINGS

The analyzed data results were given as follows:

- The analysis of the academic performance of Class I students in Tamil, English, and Mathematics reveals a strong overall performance across these core subjects. A significant majority of students achieved high scores, with Mathematics showing the highest performance (90.42%), followed by Tamil (88.33%), and English (72.92%). The data indicates minimal low achievement rates across all subjects, with the highest being in English at only 1.25%. Moderate achievement was most notable in English at 25.83%, suggesting the need for targeted support to elevate these students to higher performance levels.

- The analysis of Class II students' academic performance shows strong overall achievement across Tamil, English, and Mathematics. Mathematics has the highest

percentage of high achievers (90.42%) and the lowest of low achievers (0.42%). Tamil also performs well with 88.33% high achievers and only 0.83% low achievers. English has the lowest high achievers (72.92%) and the highest moderate achievers (25.83%), indicating room for improvement. Overall, students demonstrate strong academic capabilities, especially in Mathematics and Tamil, with English needing targeted support to boost performance.

- The analysis of Class III students' academic performance reveals strong overall achievement in Tamil, English, and Mathematics. Tamil has the highest percentage of high achievers (92.08%) and the lowest of low achievers (0.42%). English shows solid performance with 84.58% high achievers, but a higher moderate achievement (14.17%) compared to Tamil. Mathematics has the most room for improvement, with 76.67% high achievers, 21.67% moderate achievers, and the highest low achievers (1.67%) among the subjects. Overall, students excel in Tamil, perform well in English, and show potential for improvement in Mathematics.

- The Teacher Perception Scale shows a predominantly positive attitude among teachers, with 86.67% scoring in the positive range and none in the negative range. A small group (13.33%) holds a neutral attitude, indicating room for improvement. The overwhelmingly positive scores suggest general satisfaction with current policies and teaching conditions, while the neutral group highlights potential areas for further engagement.

- The calculated t-value (4.59) significantly exceeds the critical t-value (1.98) at the 0.05 significance level, indicating a significant difference in the mean Tamil scores

between male and female students. Thus, the null hypothesis (H01), stating no significant difference in Tamil academic performance between male and female Class I students, is rejected. The results show that female students perform significantly better in Tamil than male students.

- The calculated t-value (2.64) exceeds the critical t-value (1.98) at the 0.05 significance level, indicating a significant difference in English scores between male and female students. Thus, the null hypothesis (H02) that there is no significant difference in English performance between male and female Class I students is rejected. The results show that female students perform significantly better in English than male students

- The calculated t-value (2.17) exceeds the critical t-value (1.98) at the 0.05 significance level, indicating a significant difference in Mathematics scores between male and female students. Thus, the null hypothesis (H03) is rejected, showing that female Class I students outperform male students in Mathematics.

- The calculated t-value (4.38) exceeds the critical t-value (1.98) at the 0.05 significance level, indicating a significant difference in Tamil scores between male and female Class II students. Thus, the null hypothesis (H04) is rejected, showing that female students outperform male students in Tamil.

- The t-value (2.22) exceeds the critical value (1.98) at the 0.05 significance level, indicating a significant difference in English scores between male and female Class II students. Thus, the null hypothesis (H05) is rejected, showing that female students perform significantly better in English than male students.

- The t-value (3.47) exceeds the critical value (1.98) at the 0.05 significance level, indicating a significant difference. Thus, H06 is rejected, showing that female students perform significantly better in Mathematics than male students.

- The calculated t-value (2.49) is significantly greater than the critical t-value (1.98) at the 0.05 significance level. The results suggest that female students in Class III have significantly higher academic performance scores in Tamil compared to male students.

- The t-value (1.73) is not significant at the 0.05 level. Thus, H08 is accepted, indicating no significant difference in English scores between male and female students.

- The t-value (2.21) exceeds the critical value (1.98) at the 0.05 significance level, indicating a significant difference. Thus, H09 is rejected, showing that female students perform significantly better in Mathematics than male students.

- The t-value (2.26) exceeds the critical value (1.98) at the 0.05 significance level, indicating a significant difference. Thus, H10 is rejected, indicating that urban students in Class I outperform rural students significantly in Tamil.

- The t-value (2.22) is greater than the critical value (1.98) at the 0.05 significance level, indicating a significant difference. Thus, H11 is rejected, indicating that urban students in Class I perform significantly better in English than rural students.

- The calculated t-value (0.74) is not significant at the 0.05 level, indicating no significant difference between the mean scores of rural and urban students in

Mathematics. Therefore, the null hypothesis, H_{12}: There is no significant difference in the academic performance in Mathematics between rural and urban students in Class I, is accepted.

- The t-value (1.30) is not significant at the 0.05 level, thus H13 is accepted, indicating no significant difference in Tamil scores between rural and urban students.

- The t-value (0.73) is not significant at the 0.05 level, hence H14 is accepted, indicating no significant difference in English scores between rural and urban students.

- The t-value (3.16) is greater than the critical value (1.98) at the 0.05 significance level, indicating a significant difference. Thus, H15 is rejected, showing that urban students in Class II outperform rural students significantly in Mathematics.

- The t-value (0.49) is not significant at the 0.05 level, indicating no significant difference. Hence, H16 is accepted, suggesting no significant disparity in Tamil scores between rural and urban students in Class III.

- The t-value (0.87) is not significant at the 0.05 level, indicating no significant difference. Thus, H17 is accepted, suggesting no significant disparity in English scores between rural and urban students in Class III.

- The t-value (2.35) is greater than the critical value (1.98) at the 0.05 significance level, indicating a significant difference. Hence, H18 is rejected, suggesting that urban students in Class III outperform rural students significantly in Mathematics.

- The t-value (0.46) is not significant at the 0.05 level, indicating no significant difference. Thus, H19 is accepted, suggesting no statistically significant disparity in Tamil scores between students attending Primary and Upper Primary schools.

- The t-value (1.28) is not significant at the 0.05 level, indicating no significant difference. Thus, H20 is accepted, suggesting that the level of school (Primary or Upper Primary) does not significantly influence English scores for Class I students.

- The t-value (0.37) is not significant at the 0.05 level, indicating no significant difference. Thus, H21 is accepted, suggesting no statistically significant disparity in Mathematics scores between students attending Primary and Upper Primary schools.

- The t-value (0.81) is not significant at the 0.05 level, indicating no significant difference. Therefore, H22 is accepted, suggesting no statistically significant disparity in Tamil scores between students attending Primary and Upper Primary schools.

- The t-value (1.66) is not significant at the 0.05 level, indicating no substantial difference. Therefore, H23 is accepted, suggesting no statistically meaningful difference in English academic performance scores between students attending Primary and Upper Primary schools at this educational level.

- The significant t-value of 2.39 at the 0.05 significance level rejects H24, indicating that students in Primary schools outperform those in Upper Primary schools in Mathematics.

- The t-value of 0.58 suggests no significant difference, thus H25 is accepted. This implies that, for Class III students, the type of school attended (Primary or Upper Primary) does not significantly affect their Tamil academic performance.

- The t-value of 0.16 indicates no significant difference, thus H26 is accepted. This suggests that the type of school attended (Primary or Upper Primary) does not significantly influence English academic performance for Class III students.

- The t-value of 1.31 indicates no significant difference, thus H27 is accepted. This implies that, for Class III students, the type of school attended (Primary or Upper Primary) does not significantly influence their Mathematics academic performance.

- The calculated t-value (1.09) is not significant at the 0.05 level, indicating no substantial difference. Therefore, H28 is accepted, suggesting that there is no significant difference in the academic performance of Class I students in Tamil between Coimbatore and Pollachi Educational Districts.

- The calculated t-value (1.49) is not significant at the 0.05 level, indicating no substantial difference. Therefore, H29 is accepted, suggesting that there is no statistically significant disparity in academic performance scores in English between students from these two educational districts.

- The calculated t-value (0.67) is not significant at the 0.05 level, indicating no substantial difference. Therefore, H30 is accepted, suggesting that there is no statistically significant disparity in academic performance scores in Mathematics between students from Coimbatore and Pollachi Educational Districts.

- The calculated t-value (1.99) is significant at the 0.05 level, indicating a notable difference. Therefore, H31 is rejected, suggesting that there is a significant difference in the academic performance of Class II students in Tamil between Coimbatore and Pollachi Educational Districts.

- The calculated t-value (1.13) is not significant at the 0.05 level, indicating no substantial difference. Therefore, H32 is accepted, suggesting that there is no significant difference in the academic performance of Class II students in English between Coimbatore and Pollachi Educational Districts.

- The calculated t-value (2.91) is significant at the 0.05 level, indicating a substantial difference. Therefore, H33 is rejected, suggesting that there is a significant difference in the academic performance of Class II students in Mathematics between Coimbatore and Pollachi Educational Districts.

- The calculated t-value (1.17) is not significant at the 0.05 level, indicating no substantial difference. Therefore, H34 is accepted, suggesting that there is no significant difference in the academic performance of Class III students in Tamil between Coimbatore and Pollachi Educational Districts.

- The calculated t-value (0.88) is not significant at the 0.05 level, indicating no substantial difference. Therefore, H35 is accepted, suggesting that there is no significant difference in the academic performance of Class III students in English between Coimbatore and Pollachi Educational Districts.

- The calculated t-value (2.55) is significant at the 0.05 level, indicating a substantial difference. Therefore, H36 is rejected, suggesting that there is a significant difference in the academic performance of Class III students in Mathematics between Coimbatore and Pollachi Educational Districts.

- The analysis of Teacher Perception Scale scores in the Ennum Ezhuthum Mission indicates that while male teachers had a mean score of 86.0 (SD = 7.70), slightly higher than female teachers' mean score of 80.82 (SD = 7.92), the t-value (t = 1.64) suggests no significant difference in perception between genders. This suggests that gender did not significantly impact how teachers perceived their roles and environment within the mission, showing consistency across male and female teachers.

- The mean perception score for rural teachers (82.08) slightly exceeds that of urban teachers (80.43) within the Ennum Ezhuthum Mission. However, with a t-value of 0.88, the difference isn't statistically significant. This suggests that rural and urban teachers exhibit similar perceptions regarding their roles and environment within the mission, indicating uniformity across localities. Efforts to enhance teacher perceptions can thus target common factors rather than specific rural or urban contexts.

- The mean perception score for multi-grade teachers (81.58) is slightly higher than that of mono-grade teachers (81.05) within the Ennum Ezhuthum Mission. However, with a t-value of 0.28, the difference is not statistically significant. This implies that there is no significant disparity in perception scores between mono-

grade and multi-grade teachers, suggesting similar perceptions regarding their roles and environment within the mission.

5.4 RECOMMENDATIONS

Based on the data analyzed and by the investigator, the following recommendations have been made with discussion.

Continuous Monitoring and Evaluation: Establish a robust monitoring and evaluation framework to track the progress and effectiveness of the Ennum Ezhuthum Mission over time. This will help in identifying areas of success and areas needing improvement.

Targeted Intervention Programs: Design targeted intervention programs based on the identified needs and challenges faced by primary schools in Coimbatore District. These programs should address specific academic subjects, teacher training, infrastructure development, and community involvement.

Capacity Building: Invest in capacity-building initiatives for teachers and school administrators to enhance their skills and knowledge in effective teaching methodologies, curriculum delivery, and educational leadership.

Stakeholder Engagement: Foster collaboration and engagement with various stakeholders, including teachers, parents, local communities, and education authorities. Their active participation and support are crucial for the success of the Ennum Ezhuthum Mission.

Resource Allocation: Ensure adequate allocation of resources, including financial, human, and infrastructural resources, to support the implementation of the Ennum Ezhuthum mission effectively.

Data-Driven Decision Making: Utilize data-driven approaches to inform decision-making processes at all levels of the education system. Regular analysis of academic performance data, teacher perception surveys, and other relevant indicators will provide insights for informed decision-making.

Sustainability Planning: Develop a long-term sustainability plan for the Ennum Ezhuthum Mission to ensure its continued impact and effectiveness beyond the duration of the research study. This may involve securing funding, building institutional capacity, and fostering ownership among local stakeholders.

Dissemination of Findings: Share the findings of the research study widely with relevant stakeholders, including policymakers, educators, researchers, and the general public. This will facilitate knowledge exchange and contribute to evidence-based policymaking and program implementation in the education sector.

Adaptation and Flexibility: Remain flexible and adaptive in the implementation of the Ennum Ezhuthum Mission, taking into account changing educational contexts, emerging challenges, and lessons learned from ongoing monitoring and evaluation activities.

Focus on Equity and Inclusion: Ensure that the Ennum Ezhuthum Mission promotes equity and inclusion by addressing the needs of marginalized and vulnerable

groups, including students from low-income families, rural communities, and minority populations.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

The following are some of the suggested research problems for future researchers and healthy research outcomes on this present theme.

- Conduct longitudinal studies to track the long-term impact of the Ennum Ezhuthum Mission on academic performance, teacher perceptions, and other relevant outcomes over an extended period.

- Complement quantitative findings with qualitative research methods such as interviews, focus groups, and case studies to gain deeper insights into the experiences, perceptions, and challenges faced by stakeholders involved in the Ennum Ezhuthum Mission.

- Compare the effectiveness of the Ennum Ezhuthum Mission with similar educational interventions implemented in other districts or regions to identify best practices and lessons learned that can inform future program design and implementation.

- Investigate the role of parental and community involvement in supporting the implementation of the Ennum Ezhuthum Mission and its impact on student academic performance and overall school improvement efforts.

- Assess the effectiveness of integrating technology into teaching and learning processes as part of the Ennum Ezhuthum Mission, including the use of digital

resources, online platforms, and mobile applications, in enhancing student engagement and learning outcomes.

- Explore the implementation of inclusive education practices within the Ennum Ezhuthum Mission framework to address the needs of students with disabilities, special educational needs, and other diverse learning requirements.

- Investigate the influence of socioeconomic factors such as family income, parental education level, and access to educational resources on student academic performance and participation in the Ennum Ezhuthum Mission.

5. 6 CONCLUSION

The research study on "The Effectiveness of Ennum Ezhuthum Mission among the Primary Schools in Coimbatore District" has provided valuable insights into the academic performance of students, teacher perceptions, and the overall impact of the mission on primary education in the region.

Through a comprehensive analysis of academic performance data across various subjects and grade levels, it is evident that the Ennum Ezhuthum Mission has contributed to strong overall achievement among primary school students in Tamil, English, and Mathematics. While students demonstrate commendable performance in these core subjects, there are areas, particularly in English and Mathematics, where targeted support and interventions may be beneficial to further enhance student outcomes.

Furthermore, the study examined teacher perceptions using the Teacher Perception Scale and found predominantly positive attitudes among educators within the mission. This suggests a general satisfaction with current policies and teaching conditions, with areas identified for potential improvement, particularly among a small group of teachers holding neutral attitudes.

The research also investigated demographic factors such as gender, locality, and school type, revealing significant differences in academic performance across various subgroups of students. Female students consistently outperformed male students in Tamil, English, and Mathematics, while urban students demonstrated higher academic performance compared to their rural counterparts. Additionally, differences in academic performance were observed between students attending Primary and Upper Primary schools, as well as between students from different educational districts.

Overall, the findings highlight the successes of the Ennum Ezhuthum Mission in improving primary education outcomes in the Coimbatore District while also identifying areas for further enhancement and targeted interventions. The research provides a valuable foundation for policymakers, educators, and other stakeholders to make informed decisions and implement strategies aimed at further advancing primary education quality and equity in the region.

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PHOTO GALLERY

Mrs.Maheswari, Lecturer conducting Achievement test on Ennum Ezhuthum

Mrs.Maheswari, Lecturer conducting Achievement test on Ennum Ezhuthum

Students writing Achievement test on Ennum Ezhuthum

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Name of the Student   :_____

Name of the School   :_____

**Subject : தமிழ்**   **Class : I**   **Marks: 10 x2 = 20**

1. படத்திற்குரிய முதல் எழுத்தை வட்டமிடுக.
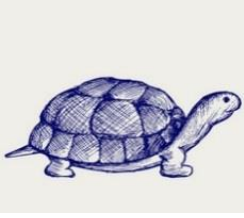
அ	இ	ஆ

2. எழுத்துக்குரிய படத்தை (✔) செய்க.

ப்
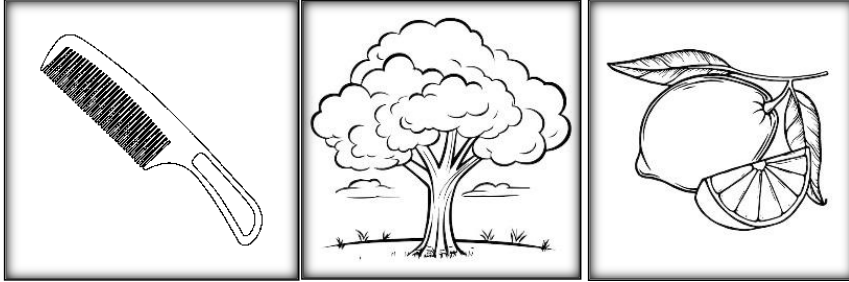
3. விடுபட்ட எழுத்தை எழுதுக.

அ, _____, _____, ஈ, _____, ஊ

4. படத்திற்குரிய சொல்லை வட்டமிடுக.

காகம்	நாகம்

5. எழுத்துக்களை வரிசையில் எழுதுக.

ச், ண், ங், ட், க், ஞ்

6. சொல்லுக்குரிய படத்தை (✔) செய்க.

நாய்
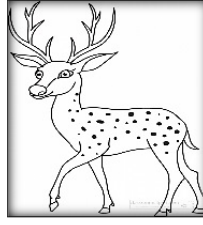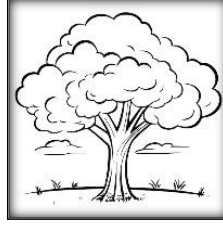
7. படத்தையும் சொல்லையும் இணைத்து எழுதுக.
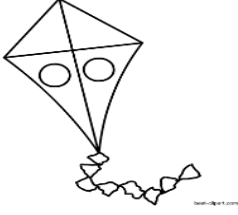
                              பார்

——————————————————————————

8. எழுத்துக்களை கொண்டு உருவாகும் சொல் எது? வட்டமிடுக.

ஆ	பா
ல்	ர்

i. கால்   ii. பால்   iii. கல்

9. 'மா' எழுத்தில் தொடங்கும் சொல் எது?

    i. வனம்   ii. மரம்   iii. மான்

10. படித்துக் காட்டுக.

ஞ்	ல்
மண்	பாப்பா

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Name of the Student :_____

Name of the School :_____

Subject : English   **Class : I**   **Marks: 10 x 2 = 20**

1. Match the capital letters with small letters.

M	t
Y	a
A	m
T	y

2. Look at the picture and circle the correct word.
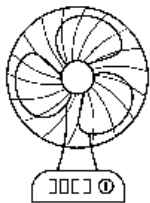
Fan	Far

3. Name the picture. **(orally)**
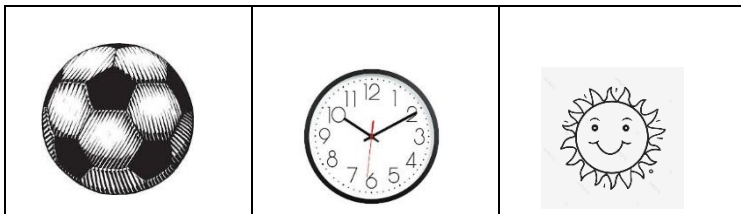
4. Read the letters.

b	x	m	e	g	w

5. Write the initial letter of the picture.
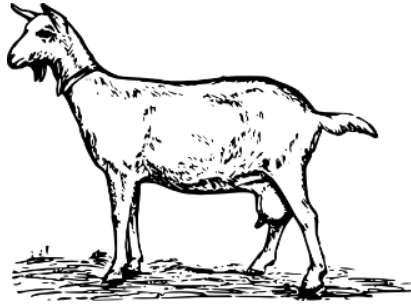
_____ oat

6. Match the picture with word

Bag	car	ant

7. Say the initial sound of the words.

Top	Box	Pan	Mother

8. Fill in the missing letter.

h, _____, j, _____, l, _____, _____, o, _____

9. Name the feelings of the following emojis **(orally)**

10. Sort and Write.

pot ,   sun,   pen,   star,   parrot,   sunflower,   peacock,   starfish

P	S

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Name of the Student :_____

Name of the School :_____

Subject : Maths **Class : I** **Marks: 10 x2 = 20**

1. Tick the round object.

2. Tick (✔) the number smaller than the number of apples.

a. 8 b. 6 c. 9 d. 10

3. What comes after?

7	

4. Count the number of stars inside the box and circle the correct answer.
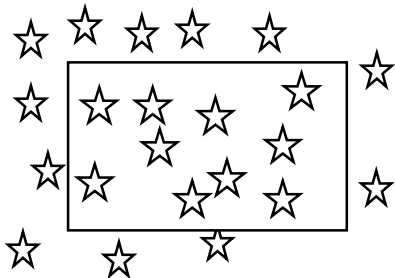
a. 7 b. 8 c. 10 d. 9

5. What comes next?

□ ☆ □ ☆ _____ _____

6. Add

        4
    + 3

    _____

    _____

7. Subtract

        7
    - 2

    _____

    _____

8. Tick the smaller one.
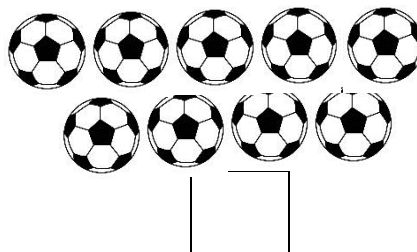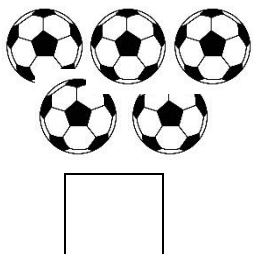
9. Count the shapes and write.

◯ △ △ ◯ △ ◯
△ ◯ △ ◯ ◯

◯ _____   △ _____
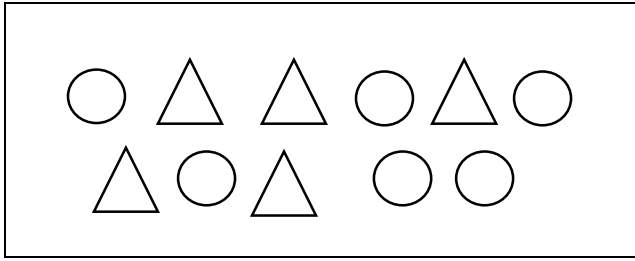
10. What comes between?

4		6

DISTRICT INSTITUTE OF EDUATION AND TRAINING, COIMBATORE

Name of the Student :_____

Name of the School :_____

Subject : தமிழ்   **Class : II**   **Marks: 10 x2 = 20**

1.படத்திற்குரிய முதல் எழுத்தை எழுதுக.

 _____   _____
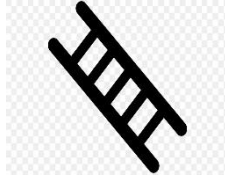
2. உரிய மெய் எழுத்தை நிரப்புக

 தா _ _ _ _ தா   இ _ _ _ _ _ சி

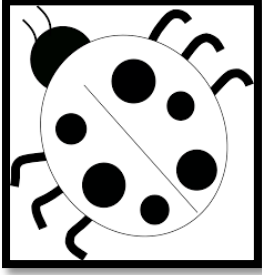3. இதன் சுவையை அறிய பயன்படும் உறுப்பு? வட்டமிடுக

காது
மூக்கு
நாக்கு

4. முதல் எழுத்தை மாற்றி சொல் உருவாக்குக

      i. கல் _____ ல்   **ii.** காடு _____டு

5. படத்திற்குரிய முதல் எழுத்தை வட்டமிடுக

                  ப   ல   ம

                  வ   ல   ந

6. சொல்லுக்குள் வரும் சொற்களை கண்டுபிடித்து எழுதுக

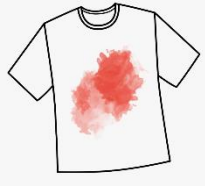   **விண்மீன்கள்**   _____

    பகல்   _____

7. படத்தைப் பார்த்து படித்து சொற்களை இணைத்து எழுதுக

    வா   பார்

_____   _____

8.

ஆடையில் _____ (கரை , கறை) படிந்துள்ளது.

நேற்று _____ (மலை, மழை) பெய்தது.

9. கீழ்க்கண்ட சொற்களை படித்து காட்டுக

அப்பளம்   ஐந்து   ஓளடதம்   சட்டை   காளான்

10. ஒத்த ஓசையில் தொடங்கும் சொற்களை (✔) செய்க.

i) வனம், மலர்

(ii) மரம், மணல்

(iii) பாய், காய்

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Name of the Student :_____

Name of the School :_____

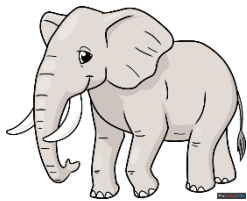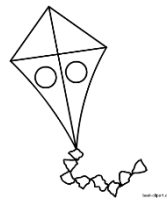**Subject : English**   **Class : II**   **Marks: 10 x2 = 20**

1. Write the capital/small letters

J _____,   _____ m,   U _____,   _____ r,

2. Write the first letter for the picture

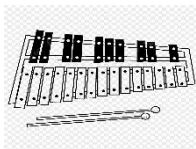   ____   ____

3. Circle the correct word for the picture

        Happy   Sad   Angry

        Xylophone   Mat   Box

4. Write the correct word for the given pictures

   _____   _____

5. Read and Write the correct word.

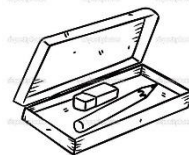a. I can _____ with my nose (smell / see)

b. I can _____ with my ears (see / hear)

6. Look at the picture and write **in / on**

a. The book is _____ the table.

b. The pencil is _____ the box.

7. Answer the questions **orally.**

There are two little mice. They are so wise to play with a dice. They eat some rice and said it is so nice.

a. How many mice are there?

_____

b. What do they eat?

_____

8. Read the following words:

sink   nose   banana   door   come

9. Find the odd one

a) orange   mango   mat   monkey   _____

b) nest   moon   nib   nurse   _____

10. Write the beginning letter for the picture

__ebra

_____ iolin

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Name of the Student :_____
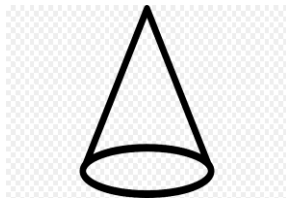
Name of the School :_____
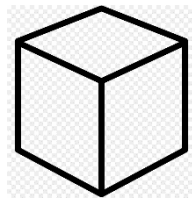
Subject : Maths   **Class : II**   **Marks: 10 x2 = 20**

1. Choose and write the correct word for the given pictures

Triangle   Cube   Circle   Cone

 _____   _____

2. Write the number names for the following.

    5 _____

    11_____

3. Write the **predecessor, successor or number in-between**.

	41	42	

69			73

4. Circle according to the ordinal number
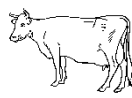
    a. Cow is in the **4ᵗʰ / 1ˢᵗ** place.

    b. The animal before cow is in **2ⁿᵈ / 3ʳᵈ** place.

5. Put a tick mark for the following

a. A number bigger than 84

91	81	75

b. A number smaller than 25

52	21	28

6. Compare the number and put the appropriate symbol **>, <, =**

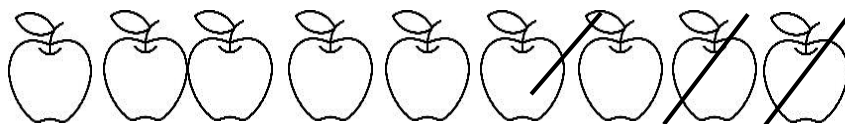a. 38 ◯ 83   c. 45 ◯ 45

7. If there are 72 mangoes and 24 bananas in a fruit shop, then how many fruits are there totally?

	T	**O**
Number of mangoes		
Number of bananas		
Total number of fruits		

8. Circle the subtraction fact that the picture representing.

a. 9 − 3= 6   b. 8 − 3 = 5   c. 9 − 4 = 5

9. Complete the patterns

❁ ☽ △ ❁ ☽ _____

☐ ☐ ☆ ☐ ☐ ☆ _____

10. Fill in the blanks with correct answer.

a. Thursday is the _____ day of the week.

b. _____ is the fifth month of the year.

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Name of the Student   :_____

Name of the School   :_____

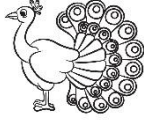Subject : தமிழ்   Class : III   Marks: 10 x2= 20

1. இறுதி   ஒலிப்பிற்குரிய எழுத்தை வட்டமிடு.

   a. ழ்   b. ல்   c. ள்

2. படங்களுக்கான சொல் தொகுப்பை வட்டமிடுக

a. கரடி, பள்ளி,   b. கரடி, மிளகாய்   c. பல்லி, மிளகாய்

3. படத்திற்குரிய சொல்லை எழுதுக.

      _____

4. கீழ்க்கண்ட எழுத்துக்களைக் கொண்டு உருவாகும் சொற்கள் எவை?

ப	ம்	க	ட	பா	ப்	தை	ஊ	ன்	பா

a. ஓனான் , நத்தை   b. ஊதல் , ஊஞ்சல்   c. பாப்பா, படம்

5. உரிய மெய்யெழுத்தை நிரப்புக

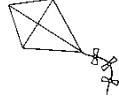கொ____யா   க____றாழை   யா____

6. எழுத்துக்களை உரிய படங்களுடன் பொருத்துக.
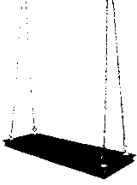

தா   ம   அ   ப

7. முதல் எழுத்தை எழுதுக.

_____ஞ்சல்

8. கீழ்க்கண்ட பத்தியை படித்து வினாக்களுக்கு விடையளி.

நிலா தன் குடும்பத்தினருடன் கடற்கரைக்கு சென்றாள். மஞ்சள் வண்ண உடையில் அவள் அழகாக இருப்பதாக அப்பா கூறினார். கடற்கரை மணலில் வீடு கட்டி விளையாடினாள். அப்பொழுது அப்பாவின் தம்பியும் வந்தார். அவர் நிலாவிற்கு சுண்டல் வாங்கி தந்தார்.

i. நிலா எங்கே சென்றாள்? _____

ii. அப்பாவின் தம்பி நிலாவிற்கு என்ன உறவு? வட்டமிடுக

      a. மாமா   b. சித்தப்பா   c. பெரியப்பா

9. கீழ்க்கண்ட சொற்களை படித்து காட்டுக

 அப்பளம் உப்பு ஐந்து ஒளடதம்   சட்டை காளான்   உயர்ந்த

மலை   வண்ணப் பம்பரம்   ஓணான் பார்

10. மரம் ஏறுவேன் இச்சொல் யாருக்கு எளிதானது? குறியீடுக

      a. யானை   b. குரங்கு   c. சிங்கம்

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Subject : English   **Class : III**   **Marks: 10 x 2 = 10**

1. Write the missing letters

     a. A ____ t   b. B ___ ___ K

2. What is your Name?

    _____

3.
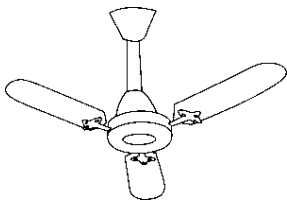
                   It is a _____

4. Write a word with the same initial letter.

    a. Orange   _____

    b. Hen   _____

5. Tick (✔) or Cross **(X)**

    a. I fee things with my eyes. _____

    b. I smell things with my nose. _____

6. Read the following and answer the questions.

    An owl can see at night. It lives in trees. It eats insects.

a. Where does an owl live?

_____

b. Can owls see at night?

_____

7. Fill in the blanks with **a / an**
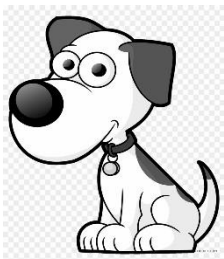
a. This is _____ dog.

b. It is _____ animal.

8. Tick the correct word for the picture.

Van	
Auto	
Bus	

9. Rearrange the words and make a meaningful sentence

everyday / to / appu / school /goes

_____

10. Read the following and answer the questions.

Leela and Rani are friends. They are in class three. Every evening they go to the park. Leela likes to play on the swing. Rani plays on the slide.

i. Where do they go in the evening?

_____

ii. Why do children go to park?

a. to swim   b. to play   c. to sleep

DISTRICT INSTITUTE OF EDUCATION AND TRAINING, COIMBATORE

Name of the Student :_____

Name of the School :_____

Subject : Maths   **Class : III**   **Marks: 10 x 2= 20**

1.

   The girl is standing _____ **(near/far)** from her house.

2. Write the name of the shape which has three sides and three corners.

_____

3. Choose the correct answer.

Mala went to post office to deposit Rs. 425 in the savings account. How will she fill the amount in words in the deposit form?

a. Four hundred and five   b. Four hundred and twenty five   c. Four two five

4. Predecessor of 500 _____

5. Which one is in descending order?

a. 492, 536,257   b. 894,765,585   c. 759,249,523

6. What will you get if 52 is added to 27?

     a. 79   b. 57   c.97

7. Which number, when subtracted from 748 gives 215?

     a. 236   b. 533   c.436

8. Complete the pattern.

☆△ △☆△ △   _____ _____ _____

9. How many months have 30 days.

_____

10. Write the appropriate unit to measure the object. Put a tick mark (✔)

         i)cm   ii) m

TEACHER PERCEPTION SCALE ON ENNUM EZHUTHUM MISSION

Dear Sir/ Madam

 Greetings! This survey is purely for research purpose and its objective is to gather information about Teacher Perception Scale on Ennum Ezhuthum Mission. Your responses will be treated with utmost confidentiality. Thank you in advance for your time and cooperation.

With Regards
 R.Maheswari

PART-I
PERSONAL INFORMATION

1. Name of the teacher :_____

2. Name of the School :_____

3. Gender : Male ☐   Female ☐

4. Age : Below 30 ☐ 31-40 ☐ 41-50 ☐ Above 51 ☐

5. Educational Qualification : UG ☐   PG ☐   M.PHIL ☐   D.EL.ED ☐

6. Locale of the school : Rural ☐   Urban ☐

7. Type of the school : Primary ☐   Upper Primary ☐

8. Class Handling : Mono-Grade ☐   Multi-Grade ☐

9. Teaching Experience : Below 10 years ☐ 11-20 years ☐ 21-30 years ☐
     Above 31 years ☐

TEACHER PERCEPTION SCALE ON ENNUM EZHUTHUM MISSION

S.No	Statements கூற்றுகள்	Strongly Agree உறுதியாக இப்படிக்கொள்கிறேன்	Agree இப்படிக் கொள்கிறேன்	Neutral நடுநிலை	Disagree மறுக்கிறேன்	Strongly Disagree உறுதியாக இப்படிக்கொள்கிறேன்
1	The Ennum Ezhuthum Scheme is a valuable initiative for improving students' foundational literacy and numeracy skills. எண்ணும் எழுத்தும் திட்டம் மாணவர்களின் அடிப்படை கல்வியறிவு மற்றும் எண்ணியல் திறன்களை மேம்படுத்துவதற்கான ஒரு மதிப்புமிக்க முயற்சியாகும்.					
2	The Ennum Ezhuthum Scheme effectively bridges the learning gaps among students of different learning levels. எண்ணும் எழுத்தும் திட்டம் பல்வேறு கற்றல் நிலைகளில் உள்ள மாணவர்களிடையே கற்றல் இடைவெளிகளை திறம்படக் குறைக்கிறது.					
3	The Ennum Ezhuthum Scheme has resulted in improved attendance and participation rates among students. எண்ணும் எழுத்தும் திட்டமானது மாணவர்களின் வருகைப்பதிவு மற்றும் பங்கேற்பு விகிதத்தை மேம்படுத்தியுள்ளது.					
4	The teaching methods and activities under the Ennum Ezhuthum Scheme are effective in promoting students' understanding and retention of concepts. எண்ணும் எழுத்தும் திட்டத்தின் கீழ் கற்பித்தல் முறைகள் மற்றும் செயல்பாடுகள் மாணவர்களின் புரிதல் மற்றும் கருத்துகளைத் தக்கவைத்துக்கொள்வதை ஊக்குவிப்பதில் பயனுள்ளதாக இருக்கிறது.					

5	The Ennum Ezhuthum Scheme has successfully enhanced students' vocabulary and basic language skills. எண்ணும் எழுத்தும் திட்டம் மாணவர்களின் சொல்லகராதி மற்றும் அடிப்படை மொழித் திறனை வெற்றிகரமாக மேம்படுத்தியுள்ளது.					
6	Students have shown progress in their ability to perform basic arithmetic operations as a result of the Ennum Ezhuthum Scheme. எண்ணும் எழுத்தும் திட்டத்தின் விளைவாக அடிப்படை எண்கணித செயல்பாடுகளைச் செய்யும் திறனில் மாணவர்கள் முன்னேற்றம் கண்டுள்ளனர்.					
7	The online assessment method is not helpful in evaluating students' learning outcomes. மாணவர்களின் கற்றல் விளைவுகளை மதிப்பிடுவதற்கு ஆன்லைன் மதிப்பீட்டு முறை உதவியாக இ இல்லை.					
8	The Mottu level activities and resources effectively build upon the foundational skills acquired in the Arumbu level. மொட்டு நிலை செயல்பாடுகள் மற்றும் வளங்கள் அரும்பு மட்டத்தில் பெறப்பட்ட அடிப்படை திறன்களை திறம்பட உருவாக்குகின்றன.					
9	The Malar level workbooks appropriately extend students' learning beyond the foundational skills to more advanced concepts. மலர் நிலை பணித்தாள்கள், மாணவர்களின் கற்றல் அடிப்படைத் திறன்களைத் தாண்டி மேம்பட்ட கருத்துக்களுக்கு சரியான முறையில் விரிவுபடுத்துகின்றன.					
10	The integration of EVS themes with language and mathematics has provided a holistic learning experience and deepened students' understanding of real-world concepts. மொழி மற்றும் கணிதத்துடன் சுற்றுச்சூழல் அறிவியல் கருப்பொருள்கள் ஒருங்கிணைப்பு, ஒரு முழுமையான கற்றல் அனுபவத்தை வழங்கியுள்ளது மற்றும் நிஜ உலகக்					

	கருத்துகளைப் பற்றிய மாணவர்களின் புரிதலை ஆழப்படுத்தியுள்ளது.					
11	The progression of themes from personal context to broader topics in the modules has facilitated a smooth transition for children. கையேடுகளில் தனிப்பட்ட சூழலில் இருந்து பரந்த தலைப்புகளுக்கு கருப்பொருள்களின் முன்னேற்றம் குழந்தைகளுக்கு ஒரு சுமூகமான மாற்றத்தை எளிதாக்கியுள்ளது.					
12	The "Speak for a minute" activity has significantly improved students' speaking skills and confidence in using English. "ஒரு நிமிடம் பேசு" செயல்பாடு மாணவர்களின் பேச்சுத் திறனையும் ஆங்கிலத்தைப் பயன்படுத்துவதில் நம்பிக்கையையும் கணிசமாக மேம்படுத்தியுள்ளது.					
13	The introduction of "My Journal" pages in the workbook has provided space for children to showcase their creative writing skills. பணித்தாளில் "மை ஜர்னல்" பக்கங்களின் அறிமுகம், குழந்தைகள் தங்கள் படைப்பு திறனை வெளிப்படுத்த வாய்ப்பளித்துள்ளது					
14	The corners in the Ennum Ezhuthum classroom have created a vibrant and engaging classroom ambience. எண்ணும் எழுத்தும் வகுப்பறையில் உள்ள களங்கள் துடிப்பான மற்றும் ஈர்க்கும் வகுப்பறை சூழலை உருவாக்கியுள்ளன.					
15	The play-based child-centered activities have effectively fostered students' curiosity and active engagement in the learning process. விளையாட்டு அடிப்படையிலான குழந்தை மைய செயல்பாடுகள் மாணவர்களின் ஆர்வத்தையும் கற்றல் செயல்பாட்டில் சுறுசுறுப்பான ஈடுபாட்டையும் திறம்பட வளர்த்துள்ளன.					
16	The Ennum Ezhuthum Scheme has not effectively encouraged students' active participation through hands-on activities and group discussions.					

	எண்ணும் எழுத்தும் திட்டம் மாணவர்களின் செயல்பாடுகள் மற்றும் குழு விவாதங்கள் மூலம் செயலில் பங்கேற்பதை திறம்பட ஊக்குவிக்கவில்லை.					
17	The level-based approach has been successful in ensuring students' gradual progress and mastery of skills. நிலை அடிப்படையிலான அணுகுமுறை மாணவர்களின் படிப்படியான முன்னேற்றம் மற்றும் திறன்களின் தேர்ச்சியை உறுதி செய்வதில் வெற்றி பெற்றுள்ளது.					
18	The online assessment method is effective in evaluating students' learning outcomes. ஆன்லைன் மதிப்பீட்டு முறை மாணவர்களின் கற்றல் விளைவுகளை மதிப்பிடுவதில் பயனுள்ளதாக இருக்கிறது					
19	Students' language skills and the ability to perform basic arithmetic operations has not improved as expected under the Ennum Ezhuthum Scheme. மாணவர்களின் மொழித்திறன் மற்றும் அடிப்படை எண்கணித செயல்பாடுகளைச் செய்யும் திறன் ஆகியவை எண்ணும் எழுத்துத் திட்டத்தின் கீழ் எதிர்பார்த்தபடி மேம்படவில்லை.					
20	The Ennum Ezhuthum Scheme has received positive feedback and support from parents. எண்ணும் எழுத்து திட்டம் பெற்றோரிடமிருந்து நேர்மறையான கருத்துக்களையும் ஆதரவையும் பெற்றுள்ளது					