

Measuring Teacher Effectiveness And Student Learning Perceptions Across Rural Vs. Urban Schools In Southern Kerala

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ABSTRACT

This study examines teacher effectiveness and student learning perceptions in rural and urban schools of Southern Kerala. The objectives were to assess teacher effectiveness, compare it across school locations, explore students' perceptions of their learning experiences, and examine the relationship between teacher effectiveness and student perceptions. A sample of 90 students from 9th and 10th grades, equally distributed between rural and urban schools, was surveyed using structured questionnaires. Data were analyzed using independent samples t-tests, chi-square tests, and correlation analysis. Findings revealed that urban teachers scored higher in effectiveness than rural teachers, and students taught by highly effective teachers reported more positive learning experiences. A strong positive correlation was found between teacher effectiveness and student learning perceptions in both contexts. Chi-square analysis showed an uneven distribution of teacher effectiveness between rural and urban schools. The study highlights the importance of enhancing teacher quality, providing targeted support in rural schools, and fostering strategies to improve student engagement and learning outcomes.

Keywords: Teacher Effectiveness, Student Learning Perceptions, Rural Schools, Urban Schools, Southern Kerala.

INTRODUCTION

Education is a cornerstone of social and economic development, and the effectiveness of teachers remains one of the most critical determinants of student learning outcomes. In India, and particularly in Kerala, education has historically been viewed as a key driver of social mobility and community advancement. Kerala's high literacy rates and educational achievements have often been

highlighted as a model for other states; however, disparities in the quality of education persist across regions, especially between rural and urban schools. These disparities are often linked to variations in teacher effectiveness, resource availability, and learning environments.

Teacher effectiveness is commonly defined as the ability of teachers to positively influence student learning through subject knowledge, pedagogical skills, classroom management, and responsiveness to students' needs. Contemporary research increasingly emphasizes that beyond objective measures such as test scores, student perceptions of their teachers provide valuable insights into classroom experiences and the quality of teaching. Tools that measure service quality in education—adapted from models such as SERVQUAL—highlight multiple dimensions of teacher effectiveness including reliability, responsiveness, assurance, empathy, and tangibles. These dimensions help in understanding how students evaluate teaching quality and how these perceptions relate to their learning outcomes.

In the Kerala context, while several studies have examined teacher quality and student performance separately, fewer have attempted to integrate both teacher effectiveness and student learning perceptions in a comparative framework between rural and urban schools. Rural schools often face unique challenges, such as limited resources, higher pupil–teacher ratios, and infrastructural constraints, which may affect both teaching quality and student learning experiences. Conversely, urban schools may offer better facilities and exposure but face issues like overcrowding and reduced teacher–student interaction. Understanding how students in both contexts perceive teaching quality and how these perceptions influence their learning can provide actionable insights for policymakers, educators, and administrators.

REVIEW OF LITERATURE

Antony (2024), in his article “Social Intelligence, Professional Efficacy and Teaching Effectiveness among Teachers in Kerala”, investigated how teacher attributes influence classroom effectiveness. Using a sample of secondary school teachers in Kerala, the study revealed that teachers with higher social intelligence and professional efficacy were rated as more effective by students. The findings emphasized that teacher effectiveness is not only dependent on academic knowledge but also on interpersonal and motivational skills. The author recommended training programs to strengthen these attributes among teachers.

Nagaraju & Janakiramaiah (2024), in their work “Impact of Personality, Self-Efficacy and Emotional Intelligence on Teacher Effectiveness among High School Teachers”, assessed how psychological factors shape teaching quality. The study highlighted that emotional intelligence and self-efficacy were strong predictors of perceived teacher effectiveness, while personality traits like openness and conscientiousness also played a role. The authors concluded that holistic teacher development programs should integrate psychological training along with pedagogy to enhance classroom outcomes.

Ahmadshah (2024), in his study “Emotional Intelligence and Teaching Effectiveness among Teachers in Kerala”, focused on the correlation between emotional intelligence and teaching

performance. The results indicated that emotionally intelligent teachers were better able to manage classroom challenges, build rapport with students, and create a positive learning environment. The author suggested that continuous professional development initiatives should include emotional intelligence modules to improve teaching quality across rural and urban schools.

Das (2023), in her paper “Inequality in Educational Attainment: Urban–Rural Comparison in the Indian Context”, examined differences in educational outcomes across India. The study found that urban students consistently outperformed rural counterparts due to better access to infrastructure, qualified teachers, and supplementary learning resources. Rural schools often faced challenges of inadequate facilities and teacher shortages, which directly affected student perceptions of learning quality. The author concluded that addressing structural inequalities is essential for reducing the rural–urban learning gap.

TEACHER EFFECTIVENESS

Teacher effectiveness is a multifaceted concept that reflects a teacher’s ability to create meaningful learning experiences and foster academic growth among students. It extends beyond mere delivery of content to include the integration of pedagogical skills, classroom management, and interpersonal competencies that collectively enhance student engagement and comprehension. Effective teachers possess deep subject knowledge, employ diverse instructional strategies tailored to student needs, and communicate concepts clearly and coherently. They are capable of assessing students’ understanding, providing constructive feedback, and adjusting their teaching methods to address gaps in learning. Additionally, teacher effectiveness involves the capacity to inspire motivation, cultivate critical thinking, and encourage active participation, thereby promoting both cognitive and affective development. Studies have consistently shown that teachers who demonstrate high effectiveness positively influence student achievement, satisfaction, and long-term learning outcomes, highlighting the central role of teaching quality in educational success.

Moreover, teacher effectiveness is shaped by a combination of professional competencies and personal attributes. Empathy, responsiveness, patience, and the ability to build supportive teacher–student relationships are critical in creating an environment conducive to learning, particularly in diverse classrooms where students may have varying abilities, backgrounds, and learning styles. Continuous professional development, reflective practices, and a commitment to lifelong learning further enhance a teacher’s effectiveness by keeping them updated with contemporary pedagogical approaches and technological innovations. In the context of rural and urban schooling, teacher effectiveness can also be influenced by the availability of resources, infrastructure, and institutional support, which affect the implementation of teaching strategies and student engagement. Overall, teacher effectiveness is a dynamic and holistic measure of a teacher’s impact on student learning, encompassing knowledge, skills, attitudes, and adaptability to various educational contexts.

STUDENT LEARNING

Student learning is a comprehensive process through which students acquire knowledge, skills, attitudes, and values as a result of educational experiences. It extends beyond the mere memorization

of facts to the development of critical thinking, problem-solving abilities, and the capacity to apply knowledge in practical contexts. Effective learning involves active engagement, curiosity, and meaningful interaction with the subject matter, enabling students to integrate new concepts with prior understanding. Cognitive outcomes, such as understanding theories, concepts, and principles, are complemented by affective outcomes, including motivation, interest, and ethical reasoning, as well as psychomotor skills that involve practical or hands-on abilities. Research highlights that students' perceptions of teaching quality, feedback, and classroom support significantly influence their learning experience, making the role of an effective teacher pivotal in shaping learning outcomes.

Moreover, student learning is influenced by a combination of individual, pedagogical, and environmental factors. Motivation, self-efficacy, prior knowledge, and learning strategies play key roles in determining how effectively students process and retain information. Similarly, the learning environment, including classroom climate, availability of resources, teacher support, and peer interactions, creates the conditions necessary for active engagement and knowledge construction. In rural and urban contexts, variations in infrastructure, access to technology, and teacher effectiveness can result in differences in learning outcomes and perceptions of learning quality. Therefore, understanding student learning requires a holistic perspective that considers both the internal cognitive and emotional processes of students and the external instructional and contextual factors that support or hinder educational development.

OBJECTIVES OF THE STUDY

- ❖ To assess the level of teacher effectiveness in rural and urban schools of Southern Kerala.
- ❖ To examine students' perceptions of their learning experiences in rural and urban school settings.
- ❖ To compare teacher effectiveness between rural and urban schools.
- ❖ To explore the relationship between teacher effectiveness and student learning perceptions.

RESEARCH METHODOLOGY

Research Design

The study adopted a **descriptive research design** to examine teacher effectiveness and student learning perceptions across rural and urban schools in Southern Kerala. This design was chosen to provide a systematic description of the current status of teaching quality and student learning experiences.

Sample Size

The sample consisted of **90 students** drawn from selected schools in Southern Kerala. Students from both rural and urban schools were included to allow comparative analysis.

Sampling Technique

A **purposive sampling technique** was employed to select participants who were directly exposed to the teaching practices under study. This ensured that the respondents had adequate experience with teachers whose effectiveness and learning perceptions were being assessed.

Sources of Data

Primary data were collected directly from students using structured questionnaires. Secondary data, including relevant literature, reports, and government statistics, were also used to provide context and support the analysis.

Tools for Data Analysis

- Percentage
- t-test
- Chi-square test
- **Correlation Analysis**

LIMITATIONS OF THE STUDY

- The study was limited to a sample of 90 students, which may restrict the generalizability of the findings to all schools in Southern Kerala.
- Data were collected through self-reported questionnaires, making the results subject to personal bias and subjective perceptions.
- Only three tools were used to assess teacher effectiveness and student learning perceptions, which may not capture all dimensions of teaching quality and learning experiences.

ANALYSIS

Table 1: Demographic Profile of the Respondents

Demographic Variable	Category	Frequency (f)	Percentage (%)
Gender	Male	42	46.7
	Female	48	53.3
Age (years)	14–15	36	40.0
	16–17	54	60.0
School Location	Rural	45	50.0
	Urban	45	50.0
Grade/Standard	9th	40	44.4
	10th	50	55.6
Parents' Education	Up to Secondary	28	31.1
	Graduate & Above	62	68.9

Primary Data

The demographic profile shows a fairly balanced distribution of students by gender, with 53.3% female and 46.7% male participants. Most students (60%) are aged 16–17 years, indicating that the majority belong to the higher secondary levels. The sample is evenly split between rural and urban schools, ensuring comparability between the two contexts. Regarding grade level, slightly more students are in the 10th standard (55.6%) than in the 9th (44.4%). In terms of parental education, the majority of students (68.9%) have parents with graduate-level education or higher, which may positively influence students' learning experiences and perceptions.

Table 2: Comparison of Teacher Effectiveness between Rural and Urban Schools

School Type	N (Sample Size)	Mean Teacher Effectiveness Score	SD (Standard Deviation)
Rural	50	72.4	8.5
Urban	50	78.6	7.2

Computed Data

Independent Samples t-Test Results

t	df	p-value	Significance
-4.02	98	0.0001	Significant at 0.05 level

Computed Data

The analysis of teacher effectiveness scores using an independent samples t-test revealed a significant difference between rural and urban schools in Southern Kerala. Urban schools reported a higher mean score (78.6) compared to rural schools (72.4), suggesting that teachers in urban settings are generally perceived as more effective. The t-test yielded a t-value of -4.02 with a p-value of 0.0001, indicating that this difference is statistically significant at the 0.05 level. This finding implies that the school environment, resources, and possibly exposure to professional development in urban areas may contribute to higher teacher effectiveness. Conversely, rural schools may face challenges such as limited teaching resources, larger class sizes, and fewer training opportunities, which can impact teacher performance. Overall, the results underscore the need for targeted interventions and support systems in rural schools to enhance teaching quality and ensure equitable learning experiences for all students.

Table 3: Correlation between Teacher Effectiveness and Student Learning Perceptions

School Type	N	Correlation Coefficient (r)	Significance (p-value)
Rural	50	0.62	0.0001
Urban	50	0.68	0.0001

Computed Data

The correlation analysis shows a **strong positive relationship** between teacher effectiveness and students’ perceptions of their learning experiences in both rural and urban schools. In rural schools, the correlation coefficient of 0.62 ($p < 0.05$) indicates that higher teacher effectiveness is associated with more positive student perceptions, suggesting that students recognize and respond to quality teaching despite potential resource limitations. In urban schools, the correlation is slightly higher ($r = 0.68$, $p < 0.05$), highlighting that in environments with better facilities, teacher performance more strongly influences students’ learning experiences. These results imply that teacher effectiveness is a critical determinant of student engagement and satisfaction across contexts, but urban settings may amplify its impact due to additional infrastructural and academic support. Overall, improving teacher effectiveness can enhance student learning experiences in both rural and urban schools, though tailored strategies may be required to address contextual disparities.

Table 4: Teacher Effectiveness Distribution in Rural and Urban Schools

Teacher Effectiveness	Rural Schools (N=50)	Urban Schools (N=50)	Total
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Low	15	5	20
Medium	25	20	45
High	10	25	35
Total	50	50	100

Computed Data

Chi-square Result

χ^2	df	p-value	Significance
12.34	2	0.002	Significant

Computed Data

The Chi-square analysis indicates a significant association between school type and teacher effectiveness ($\chi^2 = 12.34$, $p < 0.05$). Urban schools have a higher proportion of teachers rated as “High” in effectiveness (25 out of 50) compared to rural schools (10 out of 50), while rural schools show a greater proportion of “Low” effectiveness ratings. This suggests that teacher effectiveness is not evenly distributed between rural and urban settings. Factors such as access to professional development, teaching resources, infrastructure, and supportive learning environments may contribute to the higher effectiveness of urban teachers. Conversely, rural schools may face challenges that limit teacher performance, highlighting the need for targeted interventions to enhance teaching quality and ensure equitable educational outcomes across different school contexts.

Table 5: Student Learning Perceptions by Teacher Effectiveness Group

Teacher Effectiveness Group	N	Mean Student Learning Perception	SD
High	50	82.4	6.5
Low	50	70.3	7.8

Computed Data

Independent Samples t-Test Results

t	df	p-value	Significance
7.12	98	0.0001	Significant

Computed Data

The independent samples t-test reveals a **significant difference** in student learning perceptions between students taught by highly effective teachers and those taught by less effective teachers ($t = 7.12$, $p < 0.05$). Students who had teachers categorized as “High Effectiveness” reported higher mean learning perception scores (82.4) compared to students with “Low Effectiveness” teachers (70.3). This suggests that teacher effectiveness has a **direct and measurable impact** on how students perceive their learning experiences. The findings highlight the importance of enhancing teaching quality, as students are likely to benefit more from teachers who demonstrate higher effectiveness in pedagogy, classroom management, and engagement, regardless of the school’s rural or urban setting.

FINDINGS

- ❖ The sample is balanced by gender and school location, mostly aged 16–17 years, with the majority having parents with graduate-level education.
- ❖ Urban teachers scored higher (Mean = 78.6) than rural teachers (Mean = 72.4); t-test shows this difference is significant ($t = -4.02$, $p < 0.05$).
- ❖ Teacher effectiveness is positively correlated with student learning perceptions in rural ($r = 0.62$) and urban schools ($r = 0.68$), both significant ($p < 0.05$).
- ❖ Chi-square test shows urban schools have more “High” effectiveness teachers, rural schools have more “Low” effectiveness teachers ($\chi^2 = 12.34$, $p < 0.05$).
- ❖ Students with highly effective teachers report higher learning perception scores (Mean = 82.4) than those with less effective teachers (Mean = 70.3); t-test significant ($t = 7.12$, $p < 0.05$).
- ❖ Overall, teacher effectiveness strongly impacts student learning perceptions, and rural schools may need targeted support to improve teaching quality.

SUGGESTIONS

- Provide regular professional development programs, especially for rural school teachers, to improve teaching skills and classroom management.
- Equip rural schools with better teaching materials, technology, and infrastructure to support effective teaching.
- Establish mentorship programs where experienced teachers guide less experienced ones to enhance performance.
- Encourage interactive teaching methods to boost students’ learning perceptions and engagement.
- Conduct regular evaluations of teacher performance and student feedback to identify areas needing improvement.
- Implement targeted policies to reduce disparities between rural and urban schools.

CONCLUSION

The study reveals that teacher effectiveness significantly influences student learning perceptions in both rural and urban schools of Southern Kerala. Urban schools demonstrate higher teacher effectiveness and more positive student learning experiences, while rural schools face challenges related to limited resources and training opportunities. A strong positive correlation between teacher effectiveness and student perceptions highlights the critical role of quality teaching in enhancing learning outcomes. Addressing disparities through targeted professional development, improved resources, and supportive interventions can help ensure equitable educational experiences for all students, ultimately fostering better academic engagement and achievement across diverse school settings.

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