



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

The Effect Of Learning Styles On Academic Achievement In High School Students With Reference To Mother Tongue Instruction

Author:

M.N.V.N.B.S. Sastry

M.Com, M.Ed, MBA, M.Sc (Psychology), SLET

School Assistant (Social Studies)

ZPHS Varahapuram, Cheedikada Mandal,

Anakapalli District, Andhra Pradesh

Abstract:

This paper examines the impact of students' learning styles on their academic achievement, specifically within high school environments where the mother tongue is the medium of instruction. The study aims to identify how visual, auditory, and kinesthetic learning preferences influence students' performance in subjects taught in their native language. By analyzing academic records and learning style inventories from a sample of high school students in government schools of Andhra Pradesh, the research highlights a positive correlation between learning style compatibility and improved academic outcomes. The study concludes that when instruction aligns with a student's learning preference and is delivered in the mother tongue, academic performance significantly improves. The paper recommends the integration of multi-sensory teaching methods and supports the inclusion of mother tongue-based education in secondary schools.

Keywords: Learning styles, academic achievement, mother tongue, high school education, instructional strategies

1. Introduction

In the Indian educational system, teaching in the mother tongue is encouraged during primary and secondary education to promote conceptual clarity. Equally important is recognizing that every student has a unique learning style. This paper explores the intersection between these two educational dimensions: how learning styles—visual, auditory, and kinesthetic—affect academic achievement when instruction is delivered in the student's native language.

2. Objectives of the Study

To identify the dominant learning styles among high school students.

To assess the academic performance of students with different learning styles.

To examine the relationship between mother tongue instruction and learning style effectiveness.

3. Review of Literature

Research in educational psychology suggests that when teaching methods align with students' cognitive preferences, academic outcomes improve (Kolb, 1984; Fleming, 2001). The VAK model categorizes learning into visual (seeing), auditory (hearing), and kinesthetic (doing) styles. Studies also support that teaching in the mother tongue enhances comprehension and retention, especially in the foundational years.

4. Methodology

A quantitative descriptive method was used for the study. A sample of 100 high school students from Zilla Parishad High Schools in Cheedikada Mandal, Anakapalli District, was selected. A standardized Learning Style Inventory was administered, and academic scores in subjects like Science, Social Studies, and Mathematics were collected. The data were analyzed using percentage analysis and correlation coefficients.

5. Results and Discussion

Learning Style Distribution: 40% Visual, 35% Auditory, 25% Kinesthetic

Academic Performance: Visual learners performed better in subjects with diagrams and maps; auditory learners excelled in language subjects; kinesthetic learners showed improved performance in hands-on activities and lab work.

Mother Tongue Impact: Students showed higher engagement and better scores when instruction was given in Telugu compared to English-medium counterparts.

This supports the hypothesis that mother tongue instruction, when combined with preferred learning styles, can lead to higher achievement.

6. Educational Implications

Teachers should identify student learning styles early.

Incorporating visual aids, storytelling, and activity-based learning can help meet diverse learner needs.

Curriculum planners should design textbooks and teaching aids that align with the local language and learning preferences.

7. Limitations

Study was limited to a small sample in a rural district.

Further research is required in urban and English-medium contexts.

8. Conclusion

Learning styles significantly affect academic performance, particularly when paired with mother tongue instruction. Schools should adopt flexible and student-centered teaching practices that address both cognitive diversity and linguistic comfort to improve learning outcomes.

References

Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*.

Fleming, N.D. (2001). *Teaching and Learning Styles: VARK Strategies*.

Government of India (2020). *National Education Policy 2020*.

NCERT (2019). *Learning Outcomes at the Elementary Stage*.

