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TITLE OF RESEARCH: Cooperative Learning Strategies for Abstract Learning Among Visually Impaired Learners

FINDINGS

The present study entitled “Cooperative Learning Strategies for Abstract Learning Among Visually Impaired Learners” was conducted to examine the effectiveness of cooperative teaching–learning strategies in improving abstract concept learning among visually impaired students at the primary level.

Visually impaired learners often face difficulty in understanding abstract concepts, especially in Environmental Studies, due to lack of visual experiences. Keeping in view the inclusive education principles of the RPWD Act, 2016 and National Education Policy, 2020, the study adopted a cooperative and multisensory instructional approach.

An experimental single group pre-test and post-test design was used. A purposive sample of 50 Class V visually impaired students from special schools of Delhi NCR was selected. The intervention was carried out for three months using cooperative learning strategies such as Think–Pair–Share, Jigsaw, Round Robin and Numbered Heads Together, supported by tactile and auditory materials.

Quantitative data were collected through an achievement test, while qualitative data were gathered through classroom observations and teacher interviews. The tools were validated by experts and showed high reliability (Cronbach’s Alpha = 0.845).

The findings showed a statistically significant improvement in academic achievement, conceptual clarity, classroom participation, communication skills, and social interaction of visually impaired learners after the intervention:

- The mean achievement score increased from 24.78 in the pre-test to 57.36 in the post-test, indicating strong learning gains.
- The calculated t value confirmed that the difference between pre-test and post-test scores was statistically significant.
- A reduction in standard deviation after the intervention reflected increased consistency and reduced performance gaps among learners.
- Classroom observation showed substantial improvement in student interest, attention, and active participation.
- Nearly 90% of learners became actively involved in cooperative group activities.
- Communication skills, self-expression, and confidence levels of students improved noticeably.
- Peer interaction increased, reducing social isolation among visually impaired learners.
- Abstract EVS concepts became clearer through tactile materials, discussion, and peer support.
- Cooperative learning encouraged responsibility sharing and mutual help among students.
- Teachers reported improved classroom discipline and greater engagement of previously passive learners.
- Findings revealed that cooperative learning strategies are highly effective in transforming abstract learning experiences for visually impaired learners and recommends their systematic integration into inclusive and special education practices.