ABSTRACT

The present study is undertaken with the objective of testing the effectiveness of Information Processing Models over the Activity Oriented Method in teaching Mathematics at secondary level. The pretest– posttest non equivalent group design is used for the experimentation. The dependent variables used in the study are Achievement in Mathematics, Problem Solving Ability, Mathematical Interest and Mathematical Attitude. A sample consisting of 310 students belonging to government and private schools following state syllabus of Kerala was used. Lesson transcripts based on both the methods were prepared by the investigator. An achievement test and a test of problem solving ability developed and standardized by the investigator, mathematical interest inventory prepared by Pressannakumar and the mathematical attitude scale prepared by Desai are the other tools used in the study.

The pretest and posttest scores of the experimental groups and control groups were first compared using the critical ratio test and then using the more precise technique of Analysis of Covariance.

The major conclusion derived from the study was that the instruction given using Information Processing Models is superior to the instruction given using Activity Oriented Method with respect to Achievement in
Mathematics, Problem Solving Ability, Mathematical Interest and Mathematical Attitude. It was also found that the instructions using Information Processing Models is superior with respect to the category-wise objectives of mathematics achievement like knowledge, comprehension, application, analysis, synthesis, and evaluation.