

The Effect of Cooperative Learning on Academic Achievement of Grade Nine Students in Mathematics: The Case of Mettu Secondary and Preparatory School

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Abstract : The aim of this study was to examine the effect of cooperative learning method on student's academic achievement and on the achievement level over a usual method in teaching different topics of mathematics. The study also examines the perceptions of students towards cooperative learning. Cooperative learning is the instructional strategy in which pairs or small groups of students with different levels of ability work together to accomplish a shared goal. The aim of this cooperation is for students to maximize their own and each other learning, with members striving for joint benefit. The teacher's role changes from wise on the wise to guide on the side. Cooperative learning due to its influential aspects is the most prevalent teaching-learning technique in the modern world. Therefore the study was conducted in order to examine the effect of cooperative learning on the academic achievement of grade 9 students in Mathematics in case of Mettu secondary school. Two sample sections are randomly selected by which one section served randomly as an experimental and the other as a comparison group. Data gathering instruments are achievement tests and questionnaires. A treatment of STAD method of cooperative learning was provided to the experimental group while the usual method is used in the comparison group. The experiment lasted for one semester. To determine the effect of cooperative learning on the student's academic achievement, the significance of difference between the scores of groups at 0.05 levels was tested by applying t test. The effect size was calculated to see the strength of the treatment. The student's perceptions about the method were tested by percentiles of the questionnaires. During data analysis, each group was divided into high and low achievers on basis of their previous Mathematics result. Data analysis revealed that both the experimental and comparison groups were almost equal in Mathematics at the beginning of the experiment. The experimental group out scored significantly than comparison group on posttest. Additionally, the comparison of mean posttest scores of high achievers indicates significant difference between the two groups. The same is true for low achiever students of both groups on posttest. Hence, the result of the study indicates the effectiveness of the method for Mathematics topics as compared to usual method of teaching.

Keywords : academic achievement, comparison group, cooperative learning, experimental group

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