The Effect of Cooperative Learning on Mathematics Achievement in the Rural Secondary Schools in Bangladesh

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Abstract

The purpose of this study was to investigate the effect of cooperative learning on students' Mathematics achievement in selected rural secondary schools in Rangladesh. The study also aimed at identifying teachers' perception on the implementation of cooperative learning. This quasi-experimental design compared a control group of conventional teaching method with an experimental group using a cooperative learning method – Learning Together model. A total of 168 full-time students from four secondary schools in Rangladesh constituted the sample. A pre-test of students' Mathematics achievement was administered to both the experimental and control groups. The experimental group received the cooperative learning treatment while the control group was taught using conventional method for the duration of 15-week. A post-test of students' Mathematics achievement was administered to both the experimental and control groups at the end of the 15-week session. Data were collected using students' Mathematics achievement test and individual in-depth interview. Quantitative data were analysed using descriptive and inferential statistics (independent sample t-test, paired sample t-test and MANOVA with repeated measures). Content analysis was conducted to analyse the qualitative data. The main finding revealed that cooperative learning had significant effect on students' Mathematics achievement. Findings from the teachers' interview illustrated positive perceptions on the implementation of cooperative learning. As such, cooperative learning can be effectively implemented to improve Mathematics achievement among rural secondary school students in Bangladesh.

Keywords: Cooperative learning, Learning Together model, quasiexperimental design, rural schools, Bangladesh