

Flipped Classroom Model: Effects on Grade 9 Students' Performance, Attitude, And Anxiety Toward Mathematics

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Abstract

An experiment was conducted to compare the effects of the flipped classroom model and the traditional teaching approach in teaching Mathematics to Grade 9 students of Eastern Bacoor National High School during the Fourth Grading Period, SY 2016-2017. Two intact classes served as respondents of the study with the experimental and control groups consisting of 30 students, respectively.

The study used a quasi-experimental design to compare the effects of the flipped classroom model and the traditional teaching approach by describing the achievement, anxiety, and attitude toward Mathematics of the respondents in the experimental and control groups. Significant differences in the pretest and/or post-test mean scores of each group as well as in the posttests scores of the two groups were determined and significant relationship between the respondents' achievement, anxiety, and attitude toward Mathematics after the experiment. The respondents' perception of the effectiveness of the flipped classroom model was also determined.

Findings revealed that there is a significant difference in the mean achievement scores, anxiety mean scores, and attitude mean scores of the two groups in favor of the flipped classroom model integration. It also revealed that there is a significant relationship between the performance and anxiety toward mathematics of the two groups. Lastly, students' general reactions to the use of the flipped classroom model integration in learning mathematics pointed out that they improved their mastery of learning, attitude, and confidence in mathematics, and through self-pacing, they became more motivated and eager in understanding the lessons.

Keywords: Flipped teaching, flipped classroom model, attitude towards mathematics, anxiety in mathematics, students' perception about flipped teaching