

# A Study of the Effects of Innovative Teaching Methods in Teaching Mathematics at the Middle School Level

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## Abstract

The purpose of this research is to study the effects of innovative teaching methods in teaching mathematics at the middle school level. A quantitative research method was used to compare the students' mathematics achievement between the control and experimental groups. The students from the control group were taught by using traditional teaching method. The students from the experimental group were taught by using innovative teaching methods. The design adopted in this study was the posttest only control group design. Two sample schools, No.1 B.E.H.S, Dawbon and B.E.H.S, Pyinhthaung, Thanlyin were selected by simple random sampling method. The subjects were (60) Grade Eight students from each school. Learning materials were selected from Grade Eight Mathematics textbook: Chapter (14) and (15) from Mathematics Textbook Vol-I and Chapter (5) and (6) from Mathematics Textbook Vol-II. The independent samples *t*-test was used to compare the differences between the two groups. The results showed that the students who received a treatment by innovative teaching methods demonstrated significantly better than those who received traditional teaching method in No. (1) Basic Education High School, Dawbon ( $t=9.917$ ,  $p<.001$ ), and in Basic Education High School, Pyinhthaung, Thanlyin ( $t = 5.267$ ,  $p<.001$ ). Research findings revealed that teaching by innovative teaching methods had a positive contribution to the improvement of teaching mathematics. It was concluded that teaching by innovative teaching methods was effective in raising students' mathematics achievement at the middle school level.

**Key words:** method, innovative teaching methods, traditional teaching method

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