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## Effect of Cooperative Learning on Secondary School Students' Mathematics Achievement

PDF (Size: 91KB) PP. 98-100 DOI : 10.4236/ce.2013.42014

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### ABSTRACT

The purpose of this study was to determine the effects of cooperative learning on students' mathematics achievement in secondary school students in Pekanbaru, Indonesia. In addition, this study also determined students' perception concerning cooperative learning. The samples of this study consisted of 61 Form Three students. In order to control the differences of dependent variables, a pre-test was given before treatment. After treatment, a post-test was administered to both groups. Two types of instruments were used to collect the data: the mathematics achievement test and open-ended questions on cooperative learning. The pre-test and the post-test data were analyzed using t-test. Content analysis was used for the open-ended questions on cooperative learning. The results showed that there was a significant difference of mean in students' mathematics achievement between the cooperative group and the traditional group. Content analysis data revealed that students in the cooperative group were able to increase their understanding and to develop their self-confidence.

### KEYWORDS

Mathematics Achievement; Jigsaw Cooperative Learning; Understanding; Self-Confidence

### Cite this paper

Zakaria, E. , Solfitri, T. , Daud, Y. & Abidin, Z. (2013). Effect of Cooperative Learning on Secondary School Students' Mathematics Achievement. *Creative Education*, 4, 98-100. doi: 10.4236/ce.2013.42014.

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