

Thesis title: The Effects of Mathematics Project Activities in the Topic of Fractions on Mathematics Learning Achievement and Mathematics Connection Ability of Mathayom Suksa I Students at Ban Thap Wang School in Chumphon Province

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Abstract

The purposes of this research were (1) to compare mathematics learning achievements in the topic of fractions of students before and after learning with mathematics project activities; (2) to study mathematics connection ability in the topic of fractions of students after learning with mathematics project activities; and (3) to study the quality of mathematics projects as results of mathematics project activities.

The research sample consisted of 30 Mathayom Suksa I students in an intact classroom of Ban Thap Wang School, Chumphon Province during the first semester of the 2011 academic year, obtained by cluster sampling. The employed research instruments were learning management plans in the topic of Fractions using mathematics project activities, a mathematics learning achievement test, an evaluation form for mathematics connection ability, and a quality assessment form for mathematics projects. Statistics employed for data analysis were the mean, standard deviation, and t-test.

Research findings were that (1) the post-learning achievement in the topic of Fractions of the students who learned with mathematics project activities was significantly higher than their pre-learning counterpart at the .05 level; (2) the post-learning mathematics connection ability in the topic of Fractions of the students who learned with mathematics project activities was at the very good level; and (3) the mathematics projects had quality at the very good level.

Keywords: Mathematics project activities, Learning achievement
Mathematics connection ability, Mathayom Suksa