

YUWADEE UNGSRIWONG : A COMPARISON OF MATHEMATICS PROBLEM-SOLVING ABILITY AND CREATIVE THINKING OF MATHAYOM SUKSA FIVE STUDENTS WITH DIFFERENT COGNITIVE STYLES. THESIS ADVISOR: ASSO.PROF.PROMPAN UDOMSIN, 127 PP. ISBN 974-578-909-7.

The purposes of this study were as follows:

1. To compare the mathematics problem-solving ability of mathayom suksa five students with different cognitive styles.
2. To compare the creative thinking of mathayom suksa five students with different cognitive styles.

The subjects were 377 mathayom suksa five students in academic year of 1990 which were multi-stage stratified random sampling from secondary schools under the jurisdiction of the Department of General Education, educational region eleven. The research instruments were the cognitive style test which had the reliability of 0.79, the power of discrimination from 0.20 to 0.67, the creative thinking test which had the reliability from 0.62 to 0.81 and the mathematics problem-solving ability test which was constructed by the researcher. The mathematics problem-solving ability test had the reliability of 0.78, the level of difficulty from 0.20 to 0.71 and the power of discrimination from 0.20 to 0.47. The data were analyzed by means of arithmetic mean, standard deviation and one-way analysis of variance.

The findings of the study showed that :

1. The students with descriptive-analytic cognitive style, categorical-inferential cognitive style and relational cognitive style had no different the mathematics problem-solving ability at the 0.05 level of significance.
2. The students with descriptive-analytic cognitive style, categorical-inferential cognitive style and relational cognitive style had no different the creative thinking at the 0.05 level of significance.