

49253304 : MAJOR : CURRICULUM AND SUPERVISION

KEY WORD : DEVELOPMENT OF LEARNING OUTCOMES / 4 MAT APPROACH

PORNPIRAI KAIEWSOMBUT : THE DEVELOPMENT OF LEARNING OUTCOMES ON GEOMETRIC TRANSFORMATION OF EIGHTH GRADE STUDENTS TAUGHT BY 4 MAT APPROACH.

THESIS ADVISORS : ASST.PROF. SUTEP UAMCHAROEN, Ed.D., ASSOC.PROF. KANCHANA KUNARAK , M.Sc., AND PRASERT MONGKOL , Ed.D. 410 pp.

The Purposes of this experimental research were 1) to compare eighth grade students' learning outcomes on geometric transformation before and after being taught by 4 MAT approach. 2) to investigate the students' opinions towards taught by 4 MAT approach. The sample consisted of 39 eighth grade students in academic year 2008 of Prongmadua Wittaya School, Muang Nakhon Pathom District, Nakhon Pathom Province. The period of the study was during 24<sup>th</sup> November 2008 –19<sup>th</sup> December 2008. The instruments were lesson plans, learning outcomes test and on opinionnaire towards 4 MAT approach. The statistical analysis employed were mean ( $\bar{X}$ ), standard deviation (S.D.), t – test of dependence and content analysis.

The research results were as follow :

1. The learning outcomes of the eighth grade students on geometric transformation before and after being taught by 4 MAT approach were statistically significant different at the .01 level. The average scores of learning outcomes of the students after being taught by 4 MAT approach were higher than before the instruction.

2. Students' opinions towards 4 MAT approach were at a high agreement level in terms of learning climate , learning activities management and learning usefulness respectively.

---

Department of Curriculum and Instruction Graduate School, Silpakorn University Academic Year 2008

Student's signature \_\_\_\_\_

Thesis Advisors' signature 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_