

47253310 : MAJOR : CURRICULUM AND SUPERVISION

KEY WORD : PROJECT APPROACH/MATHEMATICS PROCESS SKILLS

WANWILAI HONGTHONG : THE DEVELOPMENT OF MATHEMATICS PROCESS SKILLS OF FOURTH GRADE STUDENTS TAUGHT BY PROJECT APPROACH. THESIS

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The purposes of this experimental research with one group pretest – posttest design were: 1) to compare learning outcomes on geometry of fourth grade students taught by project approach, 2) to study the mathematics process skills of students taught by project approach and 3) to study the students' opinions toward project approach. The sample were 23 fourth grade students from Klongtongsai (suklom-utid) school Bangkok metropolitan in second semester of the academic year 2008. The research instruments used for gathering data were 1) lesson plans, 2) mathematics process skills evaluation form, 3) mathematics process skills test, 4) geometry learning outcomes test and 5) questionnaire. The statistical analysis employed were percentage(%), mean (\bar{x}), standard deviation (S.D.), t – test dependent and content analysis.

The results of this research were :

1. The learning outcomes on geometry of fourth grade students before and after being taught by project approach were statistically significant different at the 0.05 level; the students' learning outcomes after the instruction were higher than before the instruction.

2. The mathematics process skills of fourth grade students after being taught by project approach were at a high level. On the aspect of the communication, the reasoning and the connection were at a high satisfactory level but on the creativity and problem solving were at the moderate satisfactory level.

3. The students' opinions of fourth grade toward project approach were at a high agreement level in all aspects such as the learning activities, learning usefulness and learning environment respectively.

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Student's signature

Thesis Advisors' signature 1. 2.