

Paramate Marutanin 2012: A Meta Analysis of Research on Cooperative Learning
Compare with Conventional Method. Master of Education (Educational Research and
Evaluation), Major Field: Educational Research and Evaluation, Department of Education.
Thesis Advisor: Associate Professor Boonreang Kajornsinsin, Ph.D. 196 pages.

The purpose of this study was to synthesis research that involve the cooperative learning compared with the conventional method during 2536-2550 B.E. by using meta-analysis followed Glass school of thought. Seventy-two synthesis researchs which are the experimental and quasi-experimental research were graduated thesis from fifteen universities that published in 2536-2550 B.E.. Seventy-two effect size and thirty-three characteristic variables were collected by characteristic research form and quality research evaluation form. Data were synthesized by using the Glass method. Thirty-three characteristic variables were divided to 4 of general characteristics, 12 of content characteristics, 16 of methodological characteristics and 1 of quality research characteristic. The variance of effect size was estimated by Ronald E. Walpole method. Descriptive statistics and multiple regression were employed to analyze data.

The results of research synthesis was found that at .05 level of statistical significance, the cooperative learning variables had no affected to effect size, but research plan variables and statistical significance variables had affected to effect size. The variance of effect size was accounted for 52.10 percents by those two sets of variables. Finally, if we knew the value of a variable research plan and variable statistical significance, we could predict the effect size from raw score and standard score from the following equations:

$$d_{\text{research}} = .996 + .073\text{posttest} - .458\text{fact} + .297\text{non random} + .443\text{non equiv} \\ + 3.032\text{pre exp}^* + .380\text{solomon} - .378\text{sig05}^* + .314\text{sig001}$$

$$Z_{d_{\text{research}}} = .017Z_{\text{posttest}} - .105Z_{\text{fact}} + .163Z_{\text{non random}} + .182Z_{\text{non equiv}} + .692Z_{\text{pre exp}}^* \\ + .062Z_{\text{solomon}} - .262Z_{\text{sig05}}^* + .072Z_{\text{sig001}}$$

*p < .05

Student's signature

Thesis Advisor's signature

____ / ____ / ____