

**FAVILA, PAZ. "The Effect of Homework upon the Achievement of Pupils in Grade Five Arithmetic." M.A.Ed. Central Philippine University, 1974.**

The purpose of this study was to find out whether homework has significant effect upon the achievement of the pupils in Grade V arithmetic.

The study was conducted in Puro Elementary School, District of Placer, Division of Masbate, and the subjects involved were Grade V pupils matched on the bases of age, sex, socio-economic status, arithmetic rating of pupils in Grade IV, and an initial test. There were fifty Grade V pupils with eight boys and seventeen girls in each group.

**PROCEDURE**

In order to have matched groups the raw scores in the above mentioned criteria were recorded. The mean and the standard deviations for the data were computed for the purpose of solving the T-score of each pupil in each test. The T-scores of each pupil in age and socio-economic status were given a weight of one each while the T-scores on the arithmetic rating in

Grade IV and the initial test in arithmetic were given a weight of two for the purpose of matching the two groups. The sum of the T-scores was used as the preliminary step in equating the two groups. The coefficient of correlations between the different variables were computed in order to check whether there was justification for adding the T-scores. Two pupils with the same or nearly the same composite score were paired. The same procedure was done to the girls. The means and the standard deviations of Group A and Group B were computed in order to determine the significance of the difference between the means and the standard deviations.

Two teachers were used in this study. They were more or less equated in their educational qualifications, training experience, sex, and the performance rating for the last three consecutive years. Teacher I, the experimenter, prepared the lesson plan for both groups, but

Teacher 2 was brief always on what to do before the period.

The study lasted for four grading periods. Teacher I taught Group A, with homework and Teacher 2 taught Group B without homework. In the second grading period, they exchanged class but still each used her procedure of teaching arithmetic to her respective class. In the third grading period they taught the same group, that is, Teacher 2 taught arithmetic with homework and Teacher I taught arithmetic without homework, but they exchanged their teaching procedure. In the fourth grading period, Teacher I returned to Group A and Teacher 2 to Group B, but still they used the same procedure of teaching arithmetic as in the third grading period. This plan was followed to minimize adjustments that student had to make and to minimize the effect of teacher as a variable. The same textbooks and materials were used to both groups. The subject matter was made comparable throughout the study. At the end of every grading period, a periodic test was conducted to both groups. The same type and forms of the tests were administered to the two groups. Four tests were given to the pupils till the culmination of

the investigation. Analysis of the four teacher-made tests showed that they were sufficiently reliable. The analysis of co-variance was used for the total test in order to control the possible effect of intelligence which has not been included as one of the criteria for matching the groups because of lack of facilities.

## FINDINGS

The results on the four teacher-made tests showed that Group A, with homework got relatively higher means than Group B, with no homework. On the first two periodic tests the obtained t-ratio showed that the mean difference was insignificant at the .05 level. The obtained t-ratio on the first periodic test was 1.64. For the second periodic test, the t-ratio was 1.97. This showed also that the difference was insignificant at the .05 level. The third and fourth periodic tests revealed that the differences between means were significant at the .05 level. The obtained t-ratio of the third periodic test was 3.96. A t-ratio of 2.72 was found on the fourth periodic test. The analysis of co-variance confirmed the result when the t-ratio was used. The obtained difference of 5.65 was higher

than the required difference of 5.51, which is the minimum difference to be significant at the .05 level.

The differences of the SDs on the four tests were constantly insignificant at the .05 level. They showed no effect on the relative variability of the two groups.

From the results of the study, it was revealed that:

(1) Teaching arithmetic in Grade-

(1) Teaching arithmetic in Grade V with homework is better than teaching arithmetic with no homework.

(2) The insignificant differences on the first two periodic tests may be due to the adjustments of the pupils to the modern method of teaching arithmetic.

## RECOMMENDATIONS

The researcher suggests the following recommendations:

(1) In teaching arithmetic in any grade in the intermediate, homework should generally be the supplementary activities of the class work.

(2) A replication of the study be done in other elementary schools, where big number of pupils are involved and where family background of the pupils is better and more varied than in the barrio.

(3) It would be useful to education if a study is done on the attitude of classroom teachers, parents and pupils toward the giving of homework.