

DOCUMENT RESUME

ED 059 769

PS 005 388

AUTHOR Robertson, Douglas J.  
TITLE The Effects of an Intergrade Tutoring Experience on Tutor Self-Concept.  
PUB DATE 30 Apr 71  
NOTE 8p.; Paper presented at Annual Conference of the California Educational Research Association (49th, San Diego, April 30, 1971)

EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Analysis of Variance; \*Behavioral Objectives; Comparative Analysis; \*Cross Age Teaching; \*Elementary School Students; Grade 1; Grade 5; \*Self Concept; \*Tutoring

ABSTRACT

The effects of an intergrade tutoring experience on the self-concepts of 93 fifth-grade students who tutored 31 first-grade students in the attainment of sight words are described. The study tested and analyzed the hypothesis that there will be no significant difference in the posttest semantic differential mean scores among groups on the concept "Self." Two experimental groups and one control group were used. A modified Pretest-Posttest Control Group Design was employed. The actual tutorial sessions were held 30 minutes per day, three days per week over a two-month period. The semantic differential was used to assess the self-concepts of the fifth-grade subjects, and a distinct, one-way analysis of variance was applied to test the null hypothesis. The results indicated that the fifth-grade student tutors developed significantly different and more positive self-concepts. Factors that contributed to this result were that the student tutors were thoroughly trained in tutoring behaviors and procedures, given a well-defined set of tasks to accomplish, given demonstrations on how to employ the program materials, provided with opportunities to role play the part of the first grader and the fifth grader, informed as to the purposes and expected outcomes of the program, and directly involved in the evaluation process. (DB)

## THE EFFECTS OF AN INTERGRADE TUTORING EXPERIENCE ON TUTOR SELF-CONCEPT\*

Douglas J. Robertson

San Fernando Valley State College

This study investigated the effects that an intergrade tutoring experience had on the self-concepts of fifth grade students who were trained to tutor first graders in the attainment of sight words. The investigator hypothesized that the task of tutoring would enable fifth graders to develop more positive self-concepts as a consequence of being provided with opportunities to: (1) become actively involved in a meaningful activity, (2) contribute and be useful to others and (3) develop interpersonal and intrapersonal competencies.

### Research Hypothesis

The present study was designed to test and analyze the following null hypothesis:

Hypothesis 1: There will be no significant difference in the posttest semantic differential mean scores among groups on the concept, Self.

### Sample: Tutors

The subjects were ninety-three fifth grade students from Wilbur Avenue Elementary School in Tarzana, California. Five fifth grade teachers listed in rank order students from the lower 50% of their classes in reading achievement. The sample was later divided into two experimental groups and one control group. There were thirty-one subjects in each group.

\*Paper presented at the 49th Annual Conference of the California Educational Research Association, San Diego, April 30, 1971.

ED 059769

8  
8  
3  
0  
0  
PS

Sample: Learners

Five first grade teachers from Wilbur Avenue Elementary School selected thirty-one first graders to receive tutoring. The first graders were chosen on the basis of needing individual help in sight word instruction. Each first grade learner was randomly assigned to a trained fifth grade tutor in an attempt to control for any possible effects of tutor-learner interaction.

Design and Procedures

A modified Pretest-Posttest Control Group Design was employed. Two experimental groups and one control group were used in the present study. The second experimental group was added in order to distinguish the effects of tutor training from the actual intergrade tutoring experience. The organization of the treatments in the design are shown in illustration 1.

Illustration 1

Pretest-Posttest Control Group Design

		Week 1	Weeks 2 - 8		
O <sub>1</sub>	Mr	X	X'	O <sub>2</sub>	(Experimental Group I)
O <sub>1</sub>	Mr	X		O <sub>2</sub>	(Experimental Group II)
O <sub>1</sub>	Mr			O <sub>2</sub>	(Control Group)

Where: O indicates an attitude measure is given

X indicates administration of tutor training sessions

X' indicates administration of the inter-grade tutoring program

Mr indicates subjects are matched according to pre-determined criteria; then, members of each matched trio are randomly assigned to Experimental Group I, Experimental Group II or the Control Group

Matching was used as an adjunct to randomization in order to gain statistical precision and to achieve equivalent groups. The fifth grade students were organized into matched trios on the basis of their: (1) sex, (2) pretest score on the Stanford Diagnostic Reading Test (Level II); and (3) pretest attitude scores on the concept, SELF. Members of each matched trio were then randomly assigned to Experimental Group I, Experimental Group II or the Control Group.

The pretests were administered during the third week of October, 1970. Following the pretests, the subjects in the two experimental groups received four, one-hour tutor training sessions which were conducted in four consecutive days. Separate but equivalent tutor training sessions were held for the two experimental groups. The subjects in the two experimental groups were taught: (1) specific tutor behaviors, (2) specific tutoring procedures and (3) to use the Dolch Picture Word Cards through role-playing situations.

Following the tutor training sessions, the subjects in Experimental Group I were randomly chosen to tutor first graders in sight word instruction. The subjects in Experimental Group II were told that they would be unable to tutor due to a shortage of first graders who needed help in sight word instruction. However, the subjects in Experimental Group II were promised a tutoring assignment at a later date. The subjects assigned to the Control

Group were merely pretested and posttested. The posttests were given at the conclusion of the eight-week tutoring program, during the third week of December, 1970.

The actual tutorial sessions were held three days a week. Each fifth grade tutor worked with his first grader 30 minutes per day over a period of two months. Little instructional time was lost from the classroom as the fifth graders tutored during their morning recess period. Twice a week the investigator supervised the tutorial program.

#### Instrument

The semantic differential was used to assess the self-concepts of the fifth grade subjects. The subjects were asked to judge the individual concept, SELF, against a number of seven-point rating scales with bipolar adjectives at the end of each scale. (See attachment.)

#### Statistical Analysis

A distinct, one-way analysis of variance was applied to test the null hypothesis stated in the present study. The .05 level of significance was utilized. The Scheffe' post-hoc multiple comparison method was applied to test the difference between all of the obtained means when the F ratio was found significant for the stated hypothesis.

#### Results

##### Hypothesis No. 1

The null hypothesis stated that there would be no significant difference in the posttest semantic differential mean scores among groups on the concept, Self. The statistical data in Table 1 show the results of the F test:

TABLE 1

THE POSTTEST ANALYSIS OF VARIANCE SUMMARY TABLE  
ON THE CONCEPT, SELF (N=93)

Source	Errors of Estimate Sum of Squares	df	Mean Square	F
Between Groups	9.74	2 (k-1)	4.87	10.14*
Within Groups	42.81	90 (N-k)	.48	
Total	52.55	92 (N-1)		

\*  $p < .01$

There was a significant difference in the posttest semantic differential mean scores among groups on the concept, Self. Therefore, Hypothesis No. 1 was rejected. The results derived from the analysis of variance showed that there were significant differences in the attitudes of the three groups regarding the concept, Self. The Scheffe test was applied to test the significance of the differences between all pairs of means. The results are reported in Table 2.

TABLE 2

THE SCHEFFE POST-HOC MULTIPLE COMPARISON  
SUMMARY TABLE ON THE CONCEPT, SELF

Means			Diff. $\bar{M}'s$	Confidence Limits	
Set I	Set II	Set III		Lower	Upper
5.82	5.23		.59±(.42)	.17	1.01
5.82		5.06	.76±(.42)	.34	1.18
	5.23	5.06	.17±(.42)	-.25	.59

The results of the Scheffe post-hoc multiple comparison method indicated that the differences between the means of Sets I and II and Sets I and III were significant at the .05 level. The difference between the means of Sets II and III was not significant at the .05 level.

These findings indicate that the tutors' (Set I) self-concepts were significantly different and more positive than the self-concepts of the subjects in Experimental Group II (Set II) and the Control Group (Set III). Neither the pretests nor the tutor training sessions had a significant effect on the posttest results.

#### Conclusions

The results of the present study indicate that experience as a tutor was a powerful independent variable. Fifth grade student tutors developed significantly different and more positive self-concepts as measured by the semantic differential. Subjects who were trained to tutor but were withheld from tutoring and the control subjects did not develop significantly different and more positive self-concepts.

The following factors contributed largely to the significant results realized in the present study. The fifth grade student tutors were: (1) thoroughly trained in specific tutoring behaviors and procedures, (2) given a well-defined set of tasks to accomplish, (3) given demonstrations in how to employ the program materials, (4) provided with opportunities to role play the part of the first grader as well as the part of a fifth grade student tutor, (5) informed regarding the purposes and expected outcomes of the

tutorial program and (6) directly involved in the process of evaluation.

If the above conditions are met within an elementary school attempting to implement an intergrade tutoring program, it seems highly probable that positive attitudinal effects will be realized for both the tutor and the learner regardless of the content or complexity of the subject matter or learning tasks.



SELF

strong	_____	_____	_____	_____	_____	_____	_____	weak
big	_____	_____	_____	_____	_____	_____	_____	little
sad	_____	_____	_____	_____	_____	_____	_____	happy
rich	_____	_____	_____	_____	_____	_____	_____	poor
high	_____	_____	_____	_____	_____	_____	_____	low
unworthy	_____	_____	_____	_____	_____	_____	_____	worthy
powerful	_____	_____	_____	_____	_____	_____	_____	powerless
bad	_____	_____	_____	_____	_____	_____	_____	good
smart	_____	_____	_____	_____	_____	_____	_____	dumb
nice	_____	_____	_____	_____	_____	_____	_____	awful