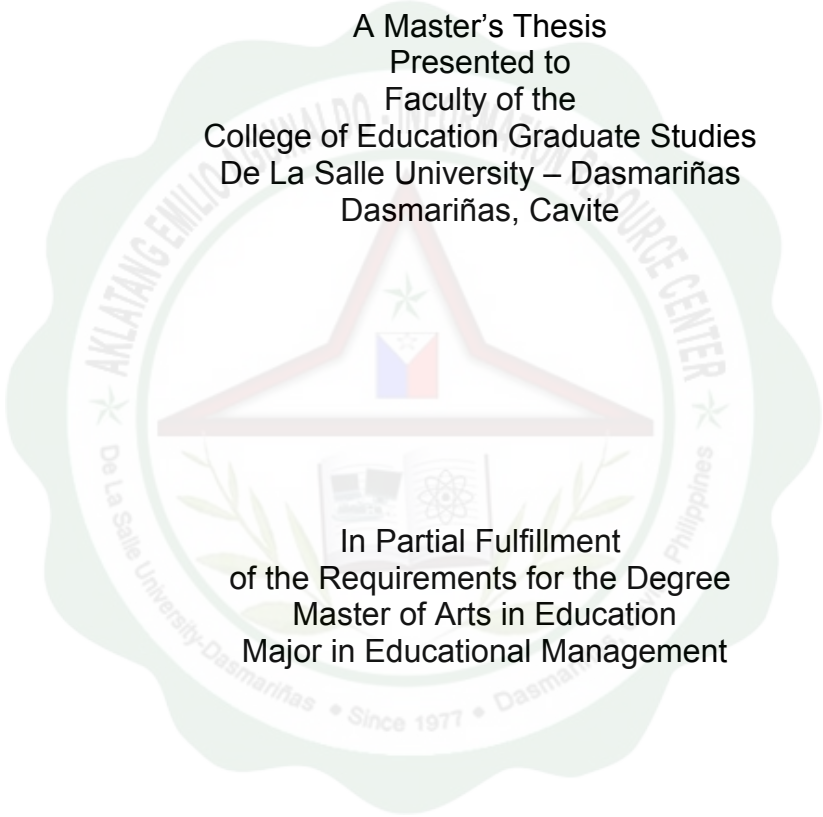


**THE EFFECTS OF COOPERATIVE LEARNING
ON THE ACHIEVEMENT LEVEL AND
ATTITUDE OF STUDENTS
TOWARDS ALGEBRA**

A Master's Thesis
Presented to
Faculty of the
College of Education Graduate Studies
De La Salle University – Dasmariñas
Dasmariñas, Cavite

The seal of De La Salle University - Dasmariñas is a circular emblem with a scalloped border. It features a central shield with a cross and a star, flanked by two figures. Below the shield are two open books. The text around the seal includes "AKLATANG EMILIO AQUINO", "RESOURCE CENTER", "De La Salle University - Dasmariñas", "Philippines", and "Since 1977".

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education
Major in Educational Management

ELIZABETH B. DIZON

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ABSTRACT

Title of the Research: **THE EFFECTS OF COOPERATIVE LEARNING ON THE ACHIEVEMENT LEVEL AND ATTITUDE OF STUDENTS TOWARDS ALGEBRA**

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This study aimed to determine the effects of cooperative learning on the achievement level and attitude of students towards Algebra. The conceptual framework evolved from two major theories associated with cooperative learning: motivational and cognitive (Johnson, Johnson & Holubec, 2004); and principles of development of Mathematics Framework for Basic Education: Mathematics is best learned when students are actively engaged; and Students' attitudes and beliefs about mathematics affect learning.

Two classes of second year students enrolled in the school year 2009-2010 in San Jose Community High School were the samples of this study. The researcher employed a quasi-experimental design known as the Pretest-Posttest Nonequivalent Control Groups Design. The samples were grouped as experimental and control. The experimental group was confined to cooperative learning strategy and the control group was exposed to traditional method of learning. Each group consisted of 30 students. Both groups were given pretests and posttests to infer if there was a significant difference in their achievement. Similarly, a validated Mathematics Attitude Scale was given before and after the intervention to determine if there was any significant change in their attitude.

To determine the significant difference between the achievement and the attitude of students towards Algebra, the researcher used t-test for dependent samples and t-test for independent samples at 0.05 level of significance.

The study found out that respondents of experimental group obtained a pretest mean score of 10.37 and got a posttest mean score of 22.03 while the control group was able to get a mean score of 9.43 and a posttest mean of 14.10. The difference between the mean score of posttest of the two groups had a computed value of 9.11 which is higher than the critical value of 2.002. The two groups' mean scores in the achievement significantly differed in favor of the experimental group. The experimental group gained more than the control group. Before the intervention both group had no significant difference on the attitude towards Algebra. However in the posttest, the mean attitude score of the experimental group was significantly higher than the control group. This means that cooperative learning developed a more positive, favorable attitude of students towards learning Algebra.

The study concludes that using cooperative learning strategy specifically the Jigsaw II had a significant effect on the students' achievement based on the achievement scores. It also had a significant effect on the students' attitudes towards Algebra.

Cooperative learning strategy would be the most recommended teaching strategy designed for Mathematics classes to combat the negative attitudes of students towards learning the subject. Seminars and workshops, in-service trainings may be provided to teachers so that they would be properly guided on the principles of cooperative learning technique. Future research may be done in order to draw more conclusive findings on the effects of cooperative learning strategy on the achievement and attitude of students towards Algebra.

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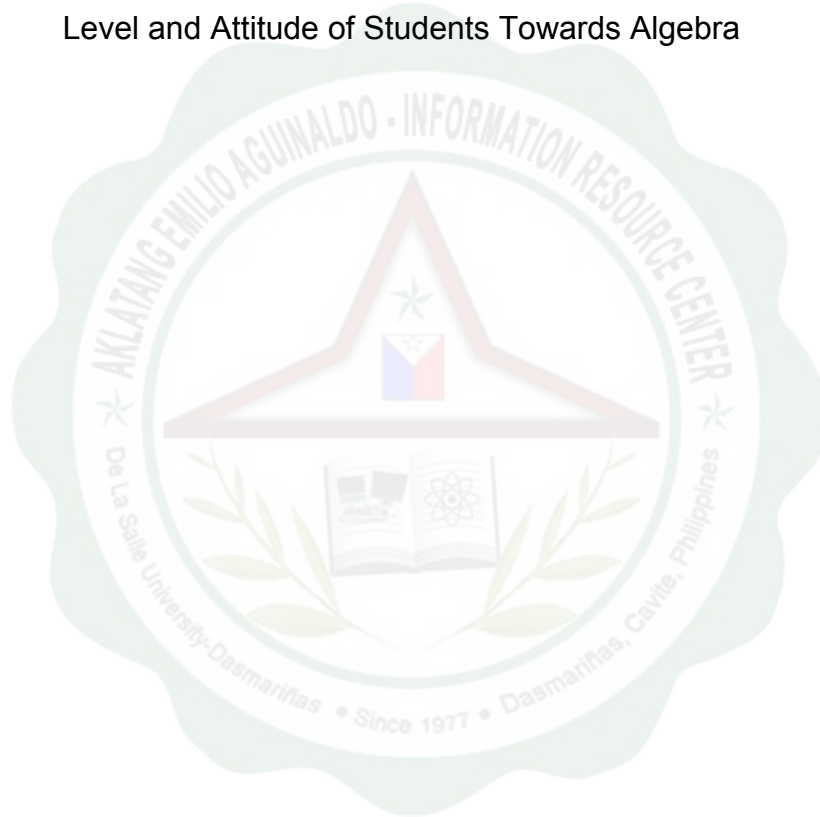
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