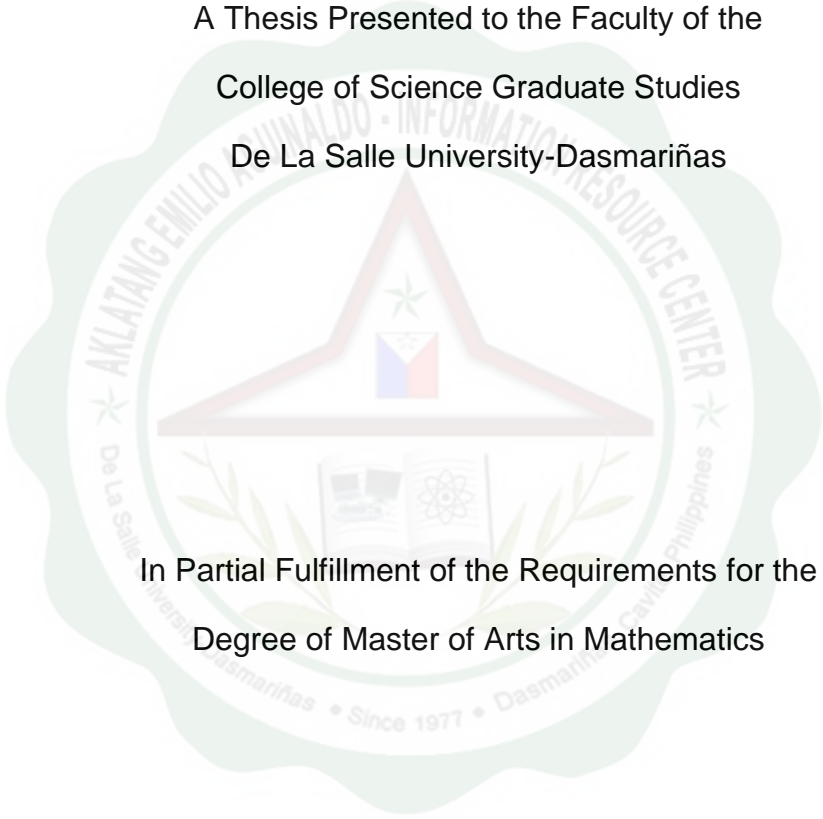


**EFFECTIVENESS OF THE BLENDED E-LEARNING STRATEGY  
ON THE STUDENTS' ACHIEVEMENT  
IN TRIGONOMETRY**

A Thesis Presented to the Faculty of the  
College of Science Graduate Studies  
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## ABSTRACT

This was an experimental study conducted to determine the effectiveness of blended e-learning on students' achievement in Trigonometry. The respondents of the study belonged to two intact classes consisting of 52 first year Electronics and Communications Engineering students of De La Salle, Lipa, Lipa City, who were enrolled in Trigonometry during the first semester, school year 2010-2011. Using the respondents' average of college admission test and the validated diagnostic test in Algebra, 26 matched pairs were formed for the control and experimental groups.

The respondents were given the pretests and posttests using a validated teacher-made test. The results were tested for significant difference using the t-tests for dependent and independent samples. No significant difference existed between the results of the pretest mean scores of the control and experimental groups indicating that the two groups were statistically equal in terms of prior knowledge at the beginning of the experiment. Significant difference was noted in the pretest and posttest mean scores of each group which implies that learning took place among the respondents. There was no significant difference in the posttest mean scores of the two groups indicating that the traditional face-to-face method and blended e-learning were equally effective in teaching Trigonometry. Teachers could use blended e-learning as an alternative strategy to enhance the students' learning experience.