De La Salle University – Dasmariñas
GRADUATE PROGRAM

THE LEARNING ENVIRONMENT, STUDENTS' ATTITUDE AND MATHEMATICS ACHIEVEMENTS IN COLLEGE ALGEBRA OF FIRST YEAR STUDENTS OF DE LA SALLE UNIVERSITY-DASMARIÑAS, SY 2004 - 2005

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ABSTRACT

Name of Institution:	De La Salle University-Dasmariñas
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Title:	**The Learning Environment, Students' Attitude and Mathematics Achievements in College Algebra of First Year Students of De La Salle University-Dasmariñas, SY 2004-2005**
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STATEMENT OF THE PROBLEM:

The study ventured to determine the relationship between the learning environment and students' attitude, students' attitude and mathematics achievement in College Algebra, and learning environment and mathematics achievement in College Algebra of first year students of De La Salle University-Dasmariñas (DLSU-D), school year 2004-2005.

Specifically, this study answered the following questions:

1. What is the perception of the students of their preferred and actual learning environment in terms of:

    1.1 Student Cohesiveness?

1.2 Teacher Support?

1.3 Involvement?

1.4 Order and Organization?

1.5 Task Orientation?

1.6 Cooperation?

1.7 Equity?

2. Are there significant differences in the perception of the respondents of the preferred and actual learning environment based on the aforementioned variables?
3. What is the level of students' attitude towards College Algebra in terms of:

   3.1 Confidence?

   3.2 Usefulness?

   3.3 Mathematics as a male domain?

   3.4 Teacher perception?

4. Is there a significant relationship between students' perception of the learning environment and students' attitude?
5. What is the mathematics achievement of the students in College Algebra?
6. Is there a significant relationship between students' attitude and mathematics achievement?

7. Is there a significant relationship between students' perception of the learning environment and mathematics achievement?

SCOPE AND COVERAGE:

This study was conducted at DLSU-D in Dasmariñas, Cavite using the first year students enrolled in College Algebra during the first semester of school year 2004-2005 as respondents. The variables under consideration were the learning environment, students' attitude and mathematics achievement in College Algebra.

METHODOLOGY:

This study used the descriptive method using the survey and correlation analysis. This research method described the degree to which the learning environment and students' attitude is related, the degree of relationship between students' attitude and mathematics achievement, and the degree to which learning environment and mathematics achievement is related.

MAJOR FINDINGS:

1. The p-value of all the scales of the learning environment was 0.000 between the preferred and the actual learning environment which showed that there was a highly significant difference in all the scales of the learning environment between the preferred and actual learning environment.

2. The p-value between the actual learning environment and students' attitude was 0.000, which showed that there was a highly significant relationship between the actual learning environment and students' attitude. The scales of student cohesiveness, teacher support, involvement, task orientation, cooperation and equity had a p-value of 0.000 which showed that there was a highly significant relationship between the six scales of the learning environment and students' attitude. The scale of order and organization had a p-value of 0.030, which showed that there was no significant relationship between this scale and students' attitude.
3. The p-value between students' attitude and mathematics achievement was 0.000 and it showed that there was a highly significant relationship between the two variables. The four subscales of the modified Fennema-Sherman attitude scale of confidence, usefulness, mathematics as a male domain, and teacher perception had a p-value of 0.000, which showed that all subscales had a highly significant relationship with mathematics achievement.
4. The actual learning environment and mathematics achievement had a p-value of 0.000 between them, which showed that the actual learning environment had a highly significant relationship with mathematics achievement. The scales of student cohesiveness, teacher support, involvement, and cooperation had a p-value of 0.000 when correlated to

mathematics achievement and therefore the four scales of the learning environment had a highly significant relationship with mathematics achievement. The remaining scales of order and organization and task orientation had a p-value of 0.085 and the scale of equity had a p-value of 0.097 when correlated to mathematics achievement. There was no significant relationship between the scales of order and organization, task orientation, and equity and mathematics achievement.

CONCLUSIONS:

Based on the aforementioned findings, it can be concluded that:

1. There was a significant difference for all seven learning environment scales between the preferred learning environment and the actual learning environment wherein the students preferring a more positive learning environment than the one they presently have.
2. The relationship between the actual learning environment and students' attitude was positive and highly significant and the entire learning environment scales accounted for the significant relationship except for the scale of order and organization.
3. The relationship between students' attitude and mathematics achievement was positive and highly significant and all the four subscales accounted for the significant relationship.
4. Generally there was a significant relationship between the actual learning environment and mathematics achievement and only four:

cohesiveness, teacher support, involvement, and cooperation, out of seven scales account for the significant relationship.

RECOMMENDATIONS:

On the basis of the aforementioned findings and conclusions, the following recommendations are offered:

1. There is a need to improve the learning environment with the view of improving student attitude and mathematics achievement. The administrator can look into this direction wherein they can come out with a comprehensive faculty development program where learning environment is included.
2. The study provides important practical information for teachers where they can adapt to change the dimension of the learning environment to closely match the environment preferred by the students and thereby improve students mathematics achievement.
3. Similar studies may be conducted by researchers using larger samples and in other mathematics subjects so that a more general conclusion may be formed from the relationship between the learning environment, students attitude and mathematics achievement.