THE RELATION OF TEACHING STYLES, PERCEPTIONS ON SELF-EFFICACY AND LEARNING STYLES TOWARDS ACADEMIC PERFORMANCE OF STUDENTS IN SCIENCE

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by

MARILYN M. EBARDO
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APPROVAL SHEET

This thesis titled **THE RELATION OF TEACHING STYLES, PERCEPTIONS ON SELF- EFFICACY AND LEARNING STYLES TOWARDS ACADEMIC PERFORMANCE OF STUDENTS IN SCIENCE** prepared and submitted by **MARILYN M. EBARDO** in partial fulfillment of the requirements for the degree **Master of Arts in Education** with Specialization in **Science Education** has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

AIDA V. PEGUIT
Adviser

APPROVED in partial fulfillment of the requirements for the degree **Master of Arts in Education** with specialization in **Science Education** by the Oral Examination Committee.

ELVIRA V. CHUA, Ph.D.
Member

ROSE D. ARQUION, MAEd
Member

ADELYNE M. COSTELO-ABREA, Ph.D.
Chair

ACCEPTED in partial fulfillment of the requirements for the degree **Master of Arts in Education** with specialization in **Science Education.**

ZENAIDA L. PLAZA, MAEd
Coordinator, Graduate Studies

_____
Date

AIDA V. PEGUIT
Officer- In-Charge
Department of Science

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MME

DEDICATION

This work is dedicated to the Lord,
the source of everything,

to my understanding Tatay Jake,

to my Mama Marilou,

Em-em, Dodong, Eric, Bosel, Bong

to my nephews and nieces, Baby Eli , Lj,

Joan, Glydel, Justine , Taikee, Chucay and others,

to my uncles and aunts, to my friends near and far.

Marz

ABSTRACT

Title : THE RELATION OF TEACHING STYLES, PERCEPTIONS ON SELF- EFFICACY AND LEARNING STYLES TOWARDS ACADEMIC PERFORMANCE OF STUDENTS IN SCIENCE

Researcher : MARILYN M. EBARDO

Degree : Master of Arts in Education with Specialization in Science Education

Oral Examiners :
Chairperson : Dr. Adelyne M. Costelo-Abrea
Members : Dr. Elvira V. Chua
Prof. Rose D. Arquion

Adviser : Prof. Aida V. Peguit

Date : February 12, 2014

Key Concepts : Teaching Styles
Learning Styles
Teachers' Self Efficacy

Problem

The study dealt with the relation of teaching style, teachers' perception on self-efficacy and learning styles towards academic performance of students in Science.

Specifically, it attempted to answer the following questions:

1. What is the level of teaching style of Grade 8 Science Teachers in the following categories:

    1.1 Expert;

    1.2 Formal Authority;

1.3 Personal Model;

1.4 Facilitator;

1.5 Delegator?

2. What are teachers' perceptions of self-efficacy in teaching Grade 8 Science in terms of the following dimensions:

2.1 Personal teacher efficacy;

2.2 Teaching outcome expectancy-belief?

3. What is the level of students' learning style of Grade 8 Science in the following categories:

3.1 Independence;

3.2 Dependence;

3.3 Avoidance;

3.4 Collaborativeness;

3.5 Competitiveness;

3.6 Participation?

4. What is the academic performance of students in Grade 8 Science?
5. Is there a significant relationship between teachers' teaching styles and students' academic performance?
6. Is there a significant relationship between perceived levels of self-efficacy in teaching Science and students' academic performance?

7. Is there a significant relationship between students' learning styles and students' academic performance?

Findings

Based on the stated problems, findings on the analysis of data revealed that:

1. Grade 8 Science teachers had *high level* on different teaching modalities (Expert, Formal Authority, Personal Model, Facilitator and Delegator).

2. Teacher's self-efficacy in teaching science indicated *moderate level* in their personal efficacy and *high level* on their outcome expectancy belief.

3. Among the learning styles, grade 8 students had *high level* on *collaborative* and *competitive* learning styles, and generally *moderate level* on *independent, avoidant, dependent, and participant* learning styles.

4. Generally, grade 8 students had an average of *82.119* with the descriptive rating of *Approaching Proficiency (AP)*.

5. There was a *significant relationship (a negative correlation) between Personal Model teaching style and students' academic performance*. However, there was *no statically significant*

relationship on other four teaching styles (expert, formal authority, facilitator, and delegator).

6. There was *no significant relationship* on perceived levels of self-efficacy in teaching Science and students' academic performance.

7. Lastly, there was *statistically significant relationship* between learning styles like *avoidant, collaborative, dependent, participant,* and *competitive learning styles* towards students' academic performance. Moreover, among the learning styles that showed significant relationships towards students' academic performance, only avoidant indicated negative correlation and the rests with positive correlations. On the other hand, there was *no significant relationship* between *independent learning style* and students' academic performance in Science.

Conclusions

1. Different teaching modalities are dominant among grade 8 Science teachers. Teaching styles generally are not related to the students' performance. The correlation analysis between personal model teaching style and students' performance showed statistically high significant relationship with negative correlation.

2. Teacher's self-efficacy in teaching science indicated no significant relationship to students' academic performance.
3. There was statistically significant relationship between collaborative, dependent, participant, and cooperative learning styles with positive correlations. On the other hand, there was statistically high significant relationship with negative correlation between avoidant learning style and students' performance.

Recommendations

Based on the findings and conclusions, the following recommendations are offered by the researcher.

To the *teachers*:

1. Since analysis between personal model teaching style and students' performance showed negative correlation, it is recommended that all teachers should be cautious enough to limit the use of this teaching style since this approach focused on teacher-centered. Thus, it is highly recommended that learner-centered teaching methods should be implemented, and teachers should put more emphasis on interaction among students and guide their

students by asking divergent questions and develop students to think critically.

2. Moreover, since analysis between avoidant learning style and students' performance showed negative correlation, it is therefore recommended that teachers must have a thorough plan how to deal with avoidant students. Since avoidant learners are not enthusiastic about learning content and attending classes, they should be motivated to reveal their interests in a way that it avoids anxiety and tension towards them. Teacher must prepare enjoyable tasks for the avoidant learners but having the goal towards serious steps in improving this group of learners.
3. In addition, since other learning styles such as collaborative, dependent, competitive, and participant showed positive correlations toward students' academic performance, teachers are recommended to sustain the learner-centered approach in teaching Science and provide activities to develop these groups of students. Inquiry method is also helpful since it encourages students to investigate and construct scientific knowledge by allowing them to test their explanations and compare

them with their existing conceptions. Thus, students should be encouraged also to develop their capacity in order not only to improve their Science performance, but also their learning in general.

4. Moreover, teachers are encouraged to diagnose the individual learning styles of each student then prepare a profile of the class based on the findings of the diagnosis made. Using the profile, teachers should assess current teaching methods and strategies to decide if they are relevant or if it needs to be modified.
5. Lastly, teachers have to make the necessary adjustments so that all students will have many opportunities to meet or exceed their academic goals in all arenas. In order for teachers to meet their learners' expectations, they must be aware of their own teaching styles, levels of self-efficacy and students' learning styles.

To the *Science department heads, school heads and Division Science coordinator*:

1. Since awareness of a teacher's teaching styles, self-efficacy and students' learning styles brings understanding of the elements in students' learning

processes (Nielson, 2007; Rosenfeld & Rosenfeld, 2007); thus, it is recommended that careful monitoring of their learning plans/lesson plans and actual classroom observations must be taken into account. With this, it is critical for teachers to self -reflect and examine their delivery of instruction and their cognitive styles so they can teach in a manner that respects learners' diverse learning styles and different learning situations (Conti & Wellborn, 1989).

2. The *Division Science coordinator* through *school heads and school department heads* must look into the existing teaching styles, self-efficacy and learning styles of students. Student success is and has always been critical in the evaluation of school initiatives; therefore, collaboration between teachers and administrators helps to maintain effective and necessary staff development that promotes a clear vision necessary to increase student achievement.

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