# STRUCTURAL ECONATION MODELING OF JEACHING EFFECTIVENESS OF THE FACULTY MENABERS OF DEPARTMENT OF PHOSICAL SCIENCES

THESIS

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## STRUCTURAL EQUATION MODELING OF TEACHING EFFECTIVENESS OF THE FACULTY MEMBERS OF DEPARTMENT OF PHYSICAL SCIENCES

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#### **ABSTRACT**

CISNEROS, CHARLES VINCENT C., SANGO, CRIZZIA MAE B.. Structural Equation Modeling of teaching effectiveness of the faculty members of Department of Physical Sciences. Undergraduate Thesis. Bachelor of Science in Applied Mathematics with specialization in Statistics. Cavite State University, Indang, Cavite. May 2019. Adviser: Mr. Antonio V. Cinto.

This study was conducted to evaluate the teaching effectiveness of the faculty members of Department of Physical Sciences. Specifically, it aimed to (1) determine the level of teaching effectiveness of the faculty members of Department of Physical Sciences in terms of: Commitment, Knowledge of Subject, Teaching for Independent Learning, and Management of Learning; (2) confirm the factors of teaching effectiveness in terms of: Commitment, Knowledge of subject, Teaching for independent learning, and Management of learning; (3) determine if there are possible factors of teaching effectiveness; and (4) construct a structural equation model of the factors of teaching effectiveness.

There are a total of 856 students-respondents evaluated the faculty members of the Department of Physical Sciences. The Faculty Evaluation Instrument (QCE of the NBC No.461) was adopted to evaluate the faculty members' level of teaching effectiveness. The level of teaching effectiveness in terms of commitment and knowledge of subject got a scale of "outstanding" while teaching for independent learning and management of learning got a scale of very satisfactory. From four factors of teaching effectiveness, after conducting confirmatory factor analysis, only one factor was extracted from the Instrument for Instruction/Teaching Effectiveness and this factor was

used to construct a structural equation model. Different goodness of fit was verified with structural equation model.

The researchers recommended that teachers may focus on teaching for independent learning and management of learning, particularly their lack in encouraging students to think of their way on how to understand the topics to be tackled and also lack in instructional materials or visual aids for teaching. It seemed like there was an effect on the students if the professor was not using any materials for teaching to reinforce learning process for the students.

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# STRUCTURAL EQUATION MODELING OF TEACHING EFFECTIVENESS OF THE FACULTY MEMBERS OF DEPARTMENT OF PHYSICAL SCIENCES

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#### INTRODUCTION

Students are actively engaged in thinking, making sense of ideas in applying better understandings, and tackling increasingly complex tasks while teachers are coaching, providing clear and descriptive feedback that supports and enhance student knowledge to build new ideas regarding subject matter taught by their respective teachers. Teachers are illustrating, elaborating, explaining, modeling, guiding, and assessing. Teaching is delivered by a teacher to improve the amount of studies of a learner. It is important to have cooperation between the teachers and the students, to make learning more meaningful, understandable and productive to a learner to have an effectiveness teaching techniques,

Teaching effectiveness is a very important aspect of education because effective teaching helps student learn as well as to enhance the student's academic performance or achievement. It has become even more important to emphasize the quality in higher