

**THE STUDY OF STUDENTS' PERCEPTIONS ON THE
INCORPORATION OF COMPUTER-AIDED LEARNING (CAL)
MATERIAL FOR MEDICINAL CHEMISTRY TEACHING IN
THE ENDOCRINE SYSTEM & PHARMACOTHERAPEUTICS
SUBJECT**

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ABSTRACT

THE STUDY OF STUDENTS' PERCEPTIONS ON THE INCORPORATION OF COMPUTER-AIDED LEARNING (CAL) MATERIAL FOR MEDICINAL CHEMISTRY TEACHING IN THE ENDOCRINE SYSTEM & PHARMACOTHERAPEUTICS SUBJECT

This thesis is written in order to explore students' perceptions on the incorporation of Computer-Aided Learning (CAL) material into the current Medicinal Chemistry. CAL is identified not to replace but to complement the lecture-based learning that we are currently practiced in teaching Medicinal Chemistry. It is a type of teaching method which is flexible, self-accessed and self-instruction to provide students with the knowledge of Medicinal Chemistry in animations and audio. After analyzing the feedback questionnaires, it can be concluded that the material can be incorporated in Medicinal Chemistry teaching, but only after few improvements on the material is done. The improvements may include, the incorporation of more animations, graphics and audio into the program, the incorporation of instructions on how to use the programs, besides improving the buttons so that students will not have problem when using the program. The incorporation of quizzes and tests in the program should be implemented to assess students' understanding, besides adding in more information, and avoiding technical errors by increasing the number of personnel involved in preparing the material.

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Recently, information technology is getting more advanced. There are many hardware and software that have been developed in regards to our needs. Due to the advanced technology, students nowadays do not need to depend solely on books and libraries to gain information; everything is at our fingertips. Information can be gained from the internet easily. Not only that, the technology affects our teaching method as well. Many computer-aided programs have been developed to assist our teaching. The programs are not meant to replace the traditional method but as a complement to it (Ruiz, Mintzer, & Leipzig, 2006).

Medicinal Chemistry involves a team from various disciplines such as chemistry, biology, pharmacology, and others which leads to the design and discovery of new drugs (Thomas, 2008). Medicinal Chemistry as a subject is one of important knowledge pharmacy or pharmaceutical sciences students should have. Currently, the teaching of Medicinal Chemistry in Pharmacy schools involves the lecture-based learning (LBL).