2D ANIMATIONS IN LEARNING THE OPERATING SYSTEM CONCEPTS : DEVELOPMENT & EVALUATION

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Sir,

**RESEARCH REPORT: 2D ANIMATIONS IN LEARNING THE OPERATING SYSTEM
CONCEPTS: DEVELOPMENT & EVALUATION**

Above-mentioned matter refers.

Herewith, we would like to submit a report on "2D Animations in Learning The
Operating System Concepts: Development & Evaluation" for your references.

Your guidance, contribution and attention in the completion process of this project
are very much appreciated. Thank you.

Yours truly,

ADELINE ENGKAMAT
Project Leader

TABLE OF CONTENT

ABSTRACT

This research investigated the difficulties faced by students when they are taught subjects that involved processes and abstract theoretical concepts, such as Operating System Concepts. Based on the interview conducted in UiTM Sarawak, it shows that students are not satisfied with the manual teaching methods. Students also have troubles in understanding and visualizing the processes and abstract theoretical concepts. Consequently, there is a need to enhance the manual teaching methods to achieve the teaching and learning objectives. Animations can be seen as one of the approach to satisfy this need. Therefore, this research is done to evaluate the users' satisfaction towards 2D animations in the multimedia application for learning Memory Management topic in Operating System Concepts. A multimedia application with 2D animations is used by the students. Then, the evaluation is done by using a questionnaire after the users have used the application. Notably, the research revealed that the implementation of 2D animations has produced significant positive effects on the students' satisfaction perception within their learning experiences. Most of the students were more interested and motivated to interact with the application and at most of the time, they were satisfied with the usability of the application as it was equipped with 2D animations.

CHAPTER 1

INTRODUCTION

1.1   Background

Nowadays, the number of courseware developed to assist teaching and learning activities has increased tremendously. The implementation of courseware in variety of subjects can be found in schools and universities, especially in teaching conceptual understanding. This is because visualizations and animations can help to increase students' motivation and understanding (Murray & Guimaraes (2008)).

Moreover, the use of multimedia application in higher education is growing because the nature of higher education itself is changing. Education has appeared in many forms. Some of the elements of education are recognized in a form of intellectual exploration and others in experimental form. Instructors or educators, too, have always put their efforts to produce the desired and diversified teaching and learning methods which includes elements of sound, text, graphic and animation in order to provide a better learning approach. These elements have been proven to be more interactive, therefore multimedia learning will improve students' performance and enhance the teaching and learning process. (Nott, Nott & Lee (2000)).

Most researchers seem to agree that 2D animations in a courseware will hold an important role in education. Courseware which consists of multimedia elements is