



THE EFFECTIVENESS OF MULTIMEDIA COURSEWARE IN
TYPOGRAPHY SUBJECT

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MASTER OF COMPUTER SCIENCE
(MULTIMEDIA COMPUTING)

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Faculty of Information and Communication Technology

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FIRDAUS BIN KAMARUDDIN

**A project submitted
in fulfillment of the requirements for the degree of Master of Computer Science
(Multimedia Computing)**

Faculty of Information and Communication Technology

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2016

DECLARATION

I declare that this project entitled “The Effectiveness of Multimedia Courseware in Typography Subject ” is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature :

Name : Firdaus bin Kamaruddin

Date :

APPROVAL

I hereby declare that I have read this project and in my opinion this project is sufficient in term of scope and quality for the award of Master of Computer Science in Multimedia Computing.

Signature :

Supervisor Name : Encik Ibrahim binAhmad

Date :

DEDICATION

Alhamdulillah

To my beloved Wife, Mother and Father, Daughter

Zulhilmi Khatam and Ifftisah Jamil

To my beloved Supervisors

To my beloved Lecturers

To my beloved friends

ABSTRACT

Computer based learning materials, particularly intuitive interactive media courseware are broadly utilized as a part of advanced education today. These advances permit learners to experience among others, virtual recreation situations, which are like true situations. The target of this paper is to highlight discoveries on the pedagogical capability of a sight and sound courseware on "Typography subject." This paper focus on e-learning for teaching a typography subject. A field study with trial approach was carried out on randomly selected students whereby a group of students was exposed to conventional learning, whereas the other group was aided with multimedia e-learning. It is expected that the final group showed significant improvement in attention, reaction and memory of the content.

ABSTRAK

Pembelajaran berasaskan media perkomputeran merupakan salah satu cara pengajaran yang semakin berkembang pada masa sekarang. Dengan perkembangan teknologi yang pesat pada zaman sekarang ia dapat memberikan pengalaman dan mewujudkan suasana yang baru didalam perkembangan pendidikan. Focus kajian ini dilakukan adalah untuk mengkaji keberkesanan penggunaan multimedia didalam pengajaran dan pembelajaran khususnya untuk subjek yang dipilih iaitu Typography.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

As the utilization of methods to backing educating and information turns out to be more far reaching, the need to make learning with PCs all the more genuine turns out to be more effective. The settlement of individual learning styles is regularly viewed as a method for developing learning productivity. The thought that we can group a learner and after that utilize techniques and exercises that match the way they like to learn is an effective one.

Multimedia is an influential tool for making presentations in the field of teaching. Multimedia enables us to deliver a way by which learners can practice their subject in a displaced way. The way to giving these encounters have synchronous illustrations, video and sound, and not in a way that succession. Sight and sound system are joining content, sound, video and animation. Learning through Multimedia empowers us to investigation, exploring, and experience. Technology has a place with the adapting needs of students. Interactive media empowers figuring out how to end up fun and user friendly, without failure. The principle objective of this paper is to watch how programming for instructing and learning (courseware) can move contrasts in favoured training style.

1.2 Background and Rationale

This study concentrates on one of the projects offered, which is the Diploma in Computer Graphic Design, diploma program offered by the Faculty of Multimedia Creative Kolej PolyTech MARA. One of the necessary courses is the course on Typography, which is offered for semester two students.. For this course, the print modules was given to the students together with multimedia software to enhance printed module. Both the print module and multimedia courseware were established in-house by the Subject Matter Experts and others graphic lectures at Kolej PolyTech MARA Batu Pahat. Development of the print module involves a team comprising a Subject Matter Expert or Writer, Instructional Designer, Graphic Designer, Language Editor and Desktop Publisher.

The substance of the module depends on the educational programs endorsed by the neighbourhood accreditation body. The sight and sound courseware for this course was created to accompaniment the substance of the print module utilizing a group containing a Subject Matter Expert, Language Editor and Multimedia Programmer. Realizing that learners who enrolled for this course are not required to go to any "hands on" research center commonsense sessions, the personnel felt that an intuitive mixed media courseware will compensate for the absence of genuine lab encounters.

1.3 Problem Statement

Mixed media courseware e-learning makes instructing and adapting more successful. In class practices led to construct the skills to utilize it. Level of understudies in this procurement can be support and improved through PC and web based instructing. Understudies can survey, see new material, evaluate the level of dominance, making preparing, empower memory and improve their proficiency.

Interactive media is the blend and coordination between content, design, sound, activity and video. This innovativeness idea has begun been given consideration and turn into a need in a product. The word media itself acknowledged the current changes, which is presently likewise regularly known as a sight and sound intuitive mixed media to show how intelligence is considered as one component that is emphasized in any mixed media application.

Interactive media innovation can be seen effectively through person that possesses an arrangement of PCs outfitted with CD-ROM drive, sound card and speakers. Absolute homes with sight and sound PC framework are much higher when contrasted with earlier years.

Media innovation can give successful results in educating and learning. This methodology is fit for exchanging a static data to the learning designs that are fascinating, powerful and intelligent. As interactive media is alert, so when it is inserted in instruction, another learning idea exists with a blend of education and entertainment approach called edutainment (education + entertainment).

In Kolej PolyTech MARA Batu Pahat the result showed that the student is feel more excited while the lecturer teach using interactive multimedia such as combination between, video, text, and animation compared with conventional technique. By using the module or text book the student will easily get bored and feel sleepy in the class. Focus on Typography subject in Computer Graphic course on semester two students of Kolej Polytech MARA Batu Pahat. The information collected through the survey among students in semester 2 course graphic design student found that the ability to remember the term, the types and functions of typography in design creative rather weak and misleading. Use of Typography weak concept among students is due to learning how to use the module rather dull and less interesting for students to learn one of the graphic design concept. The ability

to use an appropriate font family type by design will inhibit delivery of a message, especially through the design such as posters, advertising, etc. massmedia.

1.4 Research Objectives

The research objectives of this study are:

- i) To investigate the effectiveness of teaching Typography subject using courseware multimedia
- ii) To identify appropriate teaching methods to teach Typography subject
- iii) To develop multimedia courseware that arise in the teaching of Typography subject

1.5 Research Questions

The research questions for this study are:

- i) What is the effectiveness of using multimedia in teaching Typography subject?
- ii) What is the special method in teaching Typography among graphic student?
- iii) Can a multimedia courseware improve the student motivation?

1.6 Scope of Study

In the research study I will examine the adequacy utilizing the media courseware as a part of Typography subject among the students, particularly semester 2 graphic design students. The examination result previously, then after the result we use the courseware multimedia method to the students. Other than that I also will gather the outcome from the subject expert and lecturer about the outcome.

The quantity of respondents included in this study is just semester 2 students taking the subject of Typography.

In this project I will study the effectiveness of teaching through multimedia technology among students graphic. The courseware multimedia is divided into a combination of text, audio and video. The project results will be reflected in the final results of the students. The comparison of the teaching methods between the traditional approach to using multimedia for teaching Typography is also made.

1.7 Operational definitions

1.7.1 Typography

Typography is the art and system of organizing sort to make composed dialect intelligible, easy to read, and engaging when shown. The course of action of sort includes selecting typefaces, point size, line length, line-spacing (leading), letter-spacing (tracking), and altering the space inside of letters sets (kerning). The term typography is likewise connected to the style, course of action, and appearance of the letters, numbers, and images made by the procedure. Sort configuration is a firmly related specialty, in some cases considered some portion of typography; most typographers don't plan typefaces, and some sort planners don't see themselves as typographers.

Typography additionally might be utilized as an ornamental method, disconnected to correspondence of data. Typography is the work of typesetters, printers, typographers, visual originators, art directors, manga specialists, comic book craftsmen, graffiti craftsmen, and now any individual who masterminds words, letters, numbers, and images for production, showcase, or distribution from clerical workers and bulletin scholars to anybody independently publishing material.

1.7.2 Multimedia

Sight and sound is the reconciliation of numerous types of media. As per Ahmad Rizal Madar (2011) Computerized movement can be exhibited by second measurement or third measurement. Be that as it may, activities present in third measurement require higher and complex psychological force. As indicated by Shavinina and Loarer (Gertner,2011), normal interactive media application comprises of no less than 3 of these 7 parts:

1. Text (counting notes,captions, subtitles and different assets, for example, tables of substance, lists, word references and help offices)
2. Data, (for example, tables, diagrams, charts, spreadsheets, measurements and crude information of different sorts)
3. Audio (including discourse, music, air foundation clamor, and sound impacts)
4. Graphic (frequently running from conventional media, for example, drawings, prints, maps, and blurbs to pictures prepared or made altogether inside a PC)
5. Photographic pictures, from negatives, slides, prints, or even advanced cameras (which reord photographic pictures straightforwardly as PC design)
6. Animation (whether recorded on film or video, either changed over from simple film and video, or made totally inside PC).

In this study, media is a courseware which is uniquely worked with the end goal of showing visual expressions training, which likewise contains all the sight and sound components depicted previously.

1.8 Summary

In this chapter this paper research will focusing on studies involving the use of multimedia in teaching, especially in the subject typography. The choice of subject is as it should be delivered using methods that are more attractive and in line with modern times and also among students.

In the next chapter we will covered the method of data collection and review literature researcher from the others.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this study, the analyst looks at the adequacy of utilizing interactive media as a part of showing Typography subject. PC based learning materials, particularly intelligent sight and sound courseware are generally used as a part of advanced education today. These innovations allow learners to encounter among others, virtual recreation environments, which are natural to true situations. It additionally can convey the new experiences and open to the understudy about the vital the capacity of multimedia in their presentation. Through intelligent interactive media, the instructing and learning process have all the more attractive with writings, sound, activity, representation and recordings which include all human sensitivities.

As indicated by S.Malik and A.Agarwal (2012) It is most basically and joyfully portrayed as an assortment of instruments that may exhibit obliging in understudy focused learning, issue based learning or case-based learning. With the objective that we can see that the courseware is a technique that can be used as a medium to make an effective style of instructing. Intelligent media courseware is one of the game plan in overseeing understudies contrasts style in learning styles and learning establishment since it incorporates media segments that can attract human information recuperation procedures which are visual, sound-related, perusing and kinaesthetic (Syazwan nordin, Wan Fatimah Wan Ahmad, yew Kwang Hooi, 2011). As per Fazzlijan Mohamed, Adnan Khan and

Mona Masood (2015) Cooperative learning and authority learning are two of the most used learning methods which focus on particular parts of the teaching and learning frames.

Interactive media encourages mastering essential abilities of an understudy by method for drill and hone. It helps in critical doing so as to think by method for learning, understanding unique ideas, give upgraded access to instructors and understudies in remote areas, encourage individualized and agreeable learning, helps in administration and organization of classroom exercises and learning content, and simulate real life problem handling of situations. (S. Malik and A. Agarwal, 2012)

Courseware is genuinely similar to a traditional course book similarly as holding learning. Regardless, the ability to control the substance itself through an electronic device holds the potential for understudies to work with the media in this way allowing all the more alluring procedure diverged from standard note taking. According to S.Malik and A.Agarwal (2012) Multimedia courseware encourages and enhances learning as well as individual creativity and innovation.

2.2 Cognitive Theory of Multimedia Learning

Mayer (2010) claims that important gaining from words and pictures happens when the learner includes in five subjective procedures:

1. Selecting material words for handling in verbal working memory
2. Selecting fitting pictures for handling in visual working memory
3. Arranging chose words into a verbal model
4. Arranging chose pictures into a realistic model
5. Blending the verbal and pictorial representations with each other and with earlier learning.

2.3 Conceptual Framework

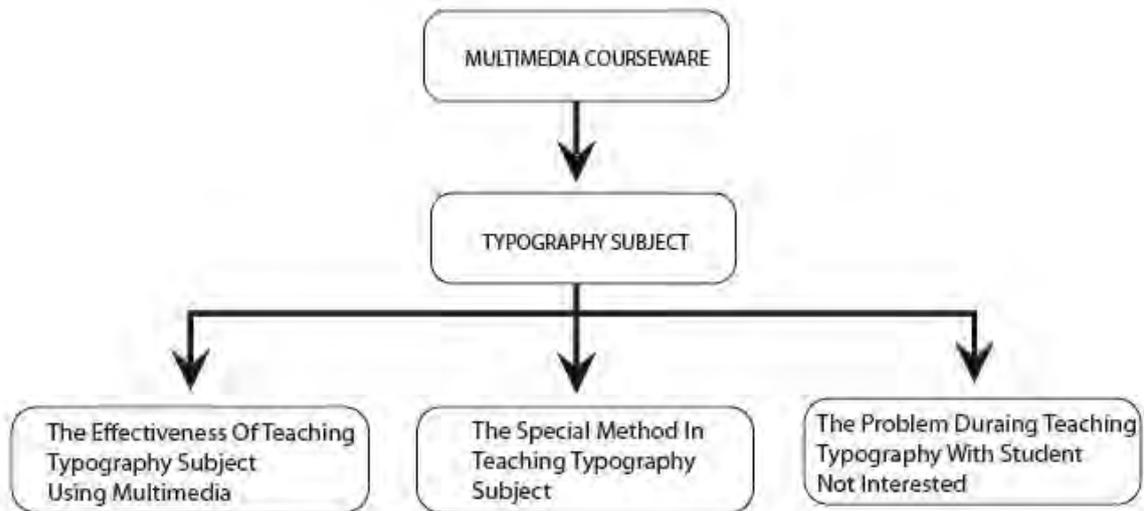


Figure 2.1

In the figure 2.1 above, it indicates what will be utilized as a part of this study. The study will included three primary issues, which are the benefit of utilizing sight and sound as a part of showing Typography, the unique technique in showing craftsmanship training