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Instructional Design Theory on Teaching Delivery and Evaluation Online for Graphic Design Courses

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Abstract

This research identified the perusal of instructional design theory on teaching delivery and online evaluation for Graphic Design courses. For this online teaching and learning development, lecturers and students must be able to access a teaching and learning framework, which is effective, easy to use and accessible. Through a conducted teaching and learning program which involved a series of online and offline delivery trials to a small group of students located in the Graphic Design Department, Faculty of Art & Design Universiti Teknologi MARA UiTM) attempted to achieve a new approach of how the teaching and learning environment for Graphic Design normally using face-to-face teaching, can be appropriately instructed into online delivery. A website was established which provided the students with a series of lessons according to the instructional design theory which included formative appraisal. Each topic was accompanied by multimedia element in order to have better understanding and learning experience. Hyperlinks to various related resource materials were provided throughout the program to encourage non-linear access to knowledge, to enhance repetition and to encourage independent learning. The study was able to conclude that, the perusal of instructional design theory will drive online learning as an effective medium for delivering graphic design course is successful.

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1. Introduction

The increase in student enrolment for graphic design programs has forced institutions to spend millions of Ringgit to fulfill the needs of students in terms of placement, lecture rooms, studios, computers, maintenance and many more. Therefore, the use of technology in education can help to alleviate some of the problems due to the influx. Nowadays, new technologies support new ways of learning. According to Ally (2004), online learning is the use of Internet to access learning materials, to interact with the content, instructor, and other learners, and to obtain support during a learning process. Some institutions have created an online learning in their teaching and learning system through a Learning Management System (LMS). In addition, the explosive growth of technologies has created a new global awareness and culture, and offers an ideal framework for developing new levels of opportunity for learning. However, the preparation of teaching materials that involves technical skills which involve Learning Course Management System (LCMS) still needs a more detailed study. According to Hamat & Mohamed Amin (2009), educators need to start by understanding the technology and its features and the benefits they bring to them. Teaching and learning skills through a screen requires an effective instructional theory so that they facilitate the understanding and beneficial to all parties.

2. Objectives

According to Malaysia Thesis Online (Perpun, 2011), there are no records for research on instructional design for the development of graphic design courses. It is hope that the findings of this research will serve as a good reference on the development of online graphic design courses. Furthermore, it is hope that the study could also assist graphic design lecturers to actively engage or involve in designing and developing more online learning materials for the learners. This research is conducted to:

1. Identify the appropriate instructional design theory to be implemented to develop online learning material.
2. Ascertain the feasibility of online learning materials (LCMS) as an enhancement supplementary instructional tool for graphic design courses.
3. Identify the effective online appraisal method to evaluate the online courses.

3. Significance of The Study

In the age of science of technology and e-knowledge, the online learning materials are highly sought after in the acquisition of knowledge and skills. In the graphic design learning, the interactive online learning materials are highly recognized to be able to enhance teaching and learning processes. This research involves a development, analysis and study of instructional design theory on online learning, which is currently not available in the Graphic Design Courses at Universiti Teknologi MARA (UiTM).

The online learning materials will be developed by the researchers of this project, to supplement conventional teaching and learning method of the graphic design courses in UiTM. It seeks to tap into the impact and advantages of electronic or digital devices and technologies, especially in the aspect of visual-audio enhancement, as well as provides an alternative for conventional teaching and learning method in order to produce effective and motivated learning results.

When the feasibility of this online learning materials is proven, with its strengths and weaknesses fully assessed, the research findings will provide some relevant reference for the establishment of a fully interactive online learning materials as supplementary learning materials that create learning in mobile, or

flexible learning for learner who are learning Art and Design in UiTM. By looking into the benefits of providing online delivery of graphic design teaching and learning, the researchers also hope to enhance students' motivation and confidence level in the graphic design technology. The positive perceptions of students towards learning will further impact their motivation and increase students' competency. Furthermore, an online teaching and learning environment can bring a lot of benefit in terms of space, time, cost and manpower.

4.0 Problem Statement

Realizing its economic and pragmatic values, many are keen to learn graphic design today. In Malaysia, the waves of graphic design are noticeable where this course has become one of the most popular in local university currently. In UiTM (Universiti Teknologi MARA) alone, there are around 1500 students learning graphic design course each semester.

The number of students increases every year and there is a great demand for graphic design program in the university. Throughout the years, the traditional approach has been the most preferred teaching method among graphic design lecturers in UiTM. With the maximum 30 contact hours per week to learn graphic design and the big number of students in a classroom (most of the classes have 30 students above), it is a rather challenging task to allow each student to have the chance to engage and interact in the learning process. Thus, there is always an issue of why the majority of students still cannot produce a high standard and quality artwork. Garrison & Anderson (2003) indicated that even though e-learning has numerous advantages such as learners self-paced, increased personal communication between instructors and learners, increased flexibility in time and place, these websites are not as popular as the founders have expected. Liu mentioned that teachers are not familiar with modern technologies. The situation is common in Malaysia. On the other hand, the demand of learners or students to learn graphic design is increasing every day. A majority of them are looking out to attain any extra learning material that would enhance their learning.

In the case of UiTM, the learners have only 3-5 contact hours for each course. Outside the classroom, they are all alone to do their development. Obviously, they are in need of supplementary materials that would help them master their skill. In comparison with the course materials designed for traditional classrooms, online learning materials are still lacking for graphic design courses. The challenges facing online teaching are, among many, the insufficiency of teaching resources, and non-classification of raw teaching materials. According to Hall (2005), the best way to make online resources sharing possible is to let teachers participate in courseware designing activities.

5. Literature Review

The rapid use of computer technology has offer great flexibility in education to cater for the increase in learners' diversity in a classroom. Since computers offer great flexibility in the type of resources to learners, it has become an increasingly common tool used for enhancing and enriching the teaching and learning process. But in the electronic world, it is important that educational organizations implement online learning successfully to meet student's needs. According to Apedoe & McGee (2005), they suggest that a Course Management System should include more tools for learner-oriented activities. According to Associate Prof. Dr. Mustaffa Mohamed Zain, Deputy of Vice-Chancellor Universiti Teknologi MARA (Academic and International), in a International Conference on e-learning (UICeL) 2007, he said that all the institutions have to think about the development on teaching module for the vocational education which involve skill development.

According to the then Ministry of Education, Datuk Sri Hishamuddin Tun Hussein, he said educators must improve teaching and learning delivery approach to enhance our national education towards

globalization (BPPDP, KPM, 29 MAR 2006). This statement is to persuade all the researchers in Malaysia to take the opportunity to enhance Malaysian educational teaching and learning system.

However there is still a missing gap in knowledge for the vocational and skill-based education program. According to the e-learning centre of UiTM namely the i-Learn Centre, their Learning Management System records show that 1.2% out of 200 courses offered in the Art & Design faculty implemented online delivery and 0% conducted full online delivery.

6. Methods

This research adopts a qualitative ethnographic approach involving undergraduates from graphic design students from the Art & Design Faculty, UiTM. The sample comprised first year graphic design students and anyone taking one of the identified courses. Due to the evolving nature of qualitative research that allows for constant admission of newly derived criteria and issues selection, sample selection was also based on participants of face-to-face and online modes. Data for the study will be collected using observation, interview, testing and content analysis.

6.1 Observation

According to Lofland (1971) cited from (Paton, 1990), observation refers to “the circumstances of being in or around an on-going social setting for the purpose of making a qualitative analysis of that setting”. In this study, the participants’ usage of a graphic design course through the face-to-face mode for one group and online for another group is observed. Throughout the study, the researchers take into consideration the physical and virtual setting to see, hear and experience the course as practiced and their association with the behavior, cognitive and constructivist achievement.

6.2 Interviews

The aim of the interview is to find out what is in the interviewee’s mind. In this study, interviews allowed the researcher to enter the interviewee’s realms as regards their use of needs and references to better understanding of these from their point of view. The main concern of the qualitative interviewing in this research is to understand how the participants viewed the online learning environment and captures the complexities of their individual perceptions and experiences (Paton, 1990). Such information would be inaccessible or impossible to comprehend with the use of other types of data gathering tools such as questionnaire or observation. According to Paton (1990), the qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable and able to be made explicit.

6.3 Content Analysis

Another particularly important data collection tool that provides more comprehensive outcome both in terms of theory and practical skill aspect is content analysis. This kind of data collection provided with the necessary rich source information about the online learning environment especially for graphic design courses. The content analysis will look at the type of interaction and to look at the roles that both tutors and learners play in online environments especially for psychomotor skill development. Through reading and excerpt or an entire passage of the messages and quotations posted by the participant, the researchers will able to analyze better the views, feelings and justifications of the participants.

7. Scope and Limitation

This research will specifically focus on online learning for one course. This study will cover for online & offline learning testing. Online learning testing will use the Learning Content Management System, and the offline learning testing remain as current practice. The tests will be conducted for a duration of one semester at the Graphic Design Department, Art & Design Faculty, Universiti Teknologi MARA to review the achievement.

8. Conclusion

In conclusion, conventional learning has become mainstream and detached from the learning system of the past. Computer and internet usage nowadays is seen as universal media, spanning social class, gender, race and age. The introduction of online learning enables students to enhance learning and to be more skilful, innovative and have a better understanding of the course. This will allow them to manage their learning time and to be prepared for a more responsible role in student-centered learning. As the online learning system continues to develop, devices will also evolve rapidly to include many new features and functionalities. The result of this fusion of online learning can be used in many ways we never thought possible before. As a clear education trend, more and more students and educators will be integrated into online learning, making them the most versatile application for effective teaching and learning.

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