

SUPERVISOR'S APPROVAL

‘I hereby declared that I have read this thesis and this research is sufficient in terms of scope and quality. This project is submitted to Universiti Teknikal Malaysia Melaka as requirement for completion and reward Bachelor Degree in Technopreneurship with Honours (BTEC)’.

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THE PERFORMANCE OF BUSINESS SCHOOL STUDENT USING MASSIVE
OPEN ONLINE COURSE (MOOC) IN FACULTY OF TECHNOLOGY
MANAGEMENT AND TECHNOPRENEURSHIP (FPTT).

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DECLARATION

“I hereby declare that this research paper is the result of my own and independent work except the summary and experts that have been specifically acknowledge.”

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DEDICATION

This paper is wholeheartedly dedicated to my beloved parents and families who have been my main sources of inspiration and support throughout my whole life, I am very much thankful and blessed with the enormous love from my family.

I owe my deepest gratitude to my respect supervisor and panel for the continuous guidance, persistent help and immense motivation to me in completing my research.

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ABSTRACT

Over the years, there has been a tremendous growth in online social networking which contributed to the revolution of higher education's learning environment. This research consists of five main objectives that look into the performance of business school student using massive open online course (MOOC) in Faculty of Technology Management and Technopreneurship (FPTT). There are five main objective which is firstly, to determine differentiation between of learning design, learning attitude and learning outcome with students' performance based on demographic factors. Second, to determine the relationship between learning design and student performance enhancement in teaching and learning. Third, to determine the relationship between learning outcome and student performance enhancement in teaching and learning. Fourth, to determine the relationship between learning attitude and students' performance. Lastly, to identify the main factors that contribute to student performance enhancement in teaching and learning. Other than that, researcher also studies the relationship between three independent variable and dependent variable. The independent variable which is learning design, learning attitude and learning outcome. While the dependent variable is student performance enhancement in teaching and learning. To collect the data and information, researcher has used quantitative method in this study and also distribute the questionnaires as a method. In this research there are several research methodology that had been used such as sampling technique which is probability sampling.

Keywords: MOOC, learning environment, learning design, learning attitude, learning outcome, students' performance, demographic factors.

ABSTRAK

Selama bertahun-tahun, terdapat pertumbuhan yang besar dalam rangkaian social dalam talian yang menyumbang kepada revolusi persekitaran pembelajaran pendidikan tinggi. Penyelidikan ini terdiri daripada lima objektif utama yang meninjau prestasi pelajar kolej perniagaan dengan menggunakan kursus dalam talian terbuka secara terbuka (MOOC) di Fakulti Teknologi Pengurusan dan Technopreneurship (FPTT). Terdapat lima objektif utama yang pertama adalah untuk menentukan perbezaan antara reka bentuk pembelajaran, sikap pembelajaran dan hasil pembelajaran dengan prestasi pelajar berdasarkan faktor demografi. Kedua, untuk menentukan hubungan antara reka bentuk pembelajaran dan peningkatan prestasi pelajar dalam pengajaran dan pembelajaran. Ketiga, untuk menentukan hubungan antara hasil pembelajaran dan peningkatan prestasi pelajar dalam pengajaran dan pembelajaran. Keempat, untuk menentukan hubungan antara sikap belajar dengan prestasi pelajar. Akhir sekali, untuk mengenal pasti faktor utama yang menyumbang kepada peningkatan prestasi pelajar dalam pengajaran dan pembelajaran. Selain itu, penyelidik juga mengkaji hubungan antara tiga pemboleh ubah bebas dan pemboleh ubah bergantung. Pembolehubah bebas yang merupakan reka bentuk pembelajaran, sikap belajar dan hasil belajar. Sementara itu, pemboleh ubah bergantung ialah prestasi pelajar. Untuk mengumpul data dan maklumat, penyelidik telah menggunakan kaedah kuantitatif dalam kajian ini dan juga menyebarkan soal selidik sebagai kaedah. Dalam kajian ini terdapat beberapa kaedah penyelidikan yang telah digunakan seperti teknik pensampelan yang merupakan teknik sampling.

Kata kunci: MOOC, persekitaran pembelajaran, reka bentuk pembelajaran, sikap pembelajaran, hasil pembelajaran, peningkatan prestasi pelajar dalam pengajaran dan pembelajaran, faktor demografi.

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LIST OF ABBREVIATIONS

MOOC	Massive Open Online Course
SPSS	Statistical Package for Social Science
UTeM	Universiti Teknikal Malaysia Melaka
FPTT	Faculty of Technology Management and Technopreneurship
LD	Learning Design
LO	Learning Outcome
LA	Learning Attitude
SP	Student Performance Enhancement in Teaching and Learning

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CHAPTER 1

INTRODUCTION

1.1 Introduction And Background Research

Massive Open Online Courses (MOOCs) is an online course with a free and open enrolment option, public curriculum areas. MOOCs is an online programme with no fees and with no special requirement besides having access to the internet (Kay, Reimann, Diebold & Kummerfeld, 2013). MOOCs assemble and integrates a social network, an easily accessible to online resources, and facilitated by leading practitioners in the field of study. The most significant, MOOCs build student engagement that makes their own participation in the learning goals, prior knowledge and skills, and mutual benefit. MOOCs will enhance the learning experience and lead to quality enhancement of these types of courses (Conole 2013). In addition to traditional training materials such as videos, reading, and problem, MOOCs give users an interactive forum that helps build a community for students, professors and teaching assistants (TA).

Nowadays, MOOC is the most learning platform that been used at the public university in Malaysia. The Ministry of Higher Education (MOHE) today announced the launch of 60 Massive Open Online Courses (MOOCs) offered by 20 public universities in Malaysia (New Straits Times, September 10, 2015). There are a lot of benefits that this platform provided such as implementation of technology in learning style for the student and also by using this platform it learning session will be more

interactive and openness of learning environment. It also enhances students programming skills and diversifies their existing programming knowledge (Colman, 2013). MOOCs use a variety of materials such as readings, videos and problems, to provide user build learning community for students, teaching assistants and professors (Pappano, 2012).

1.2 Problem Statement

According to Johnson, (2013), Massive open online courses (MOOCs) are online platform courses that providing free high-quality education to an unlimited number of learners. MOOCs learning has been integrate in several elements into campus courses in the form of blended learning to make the most of classroom time for activities such as discussions, hands-on activities or working in a group project (Chen, 2013). MOOCs systems can influence and shape or structure students approaches to learning and may stimulate class communication. It also can provide large data sets which can be analyzed by the researcher and used to investigate more deeply the processes of learning and learner behavior.

There are several problems regarding the MOOCs learning that needed to carry out which is according to Kyle Williams et al., (2018), many questions remain about student performance, MOOCs best serves and what constitute learner success. Based in this problem, completion rates, a common metric of student success, remain low, averaging less than 8% and may be misleading measures of success unless the learner intention are consider. According to Watters (2013), the subject of learning through MOOCs is one of the most discussed topics in recent higher education, with supporters stating that MOOCs can make traditional and outdated brick universities that maintain a high rate of shifts and quality measures that make MOOCs do not work on learning platforms.

In addition, nowadays, many students are interesting in using the electronic devices such as smart phone. They prefer to learn new knowledge by reading online than textbook. All the electronic devices are connected to the wireless internet.

MOOCs learning are the e-learning platform that provides free high-quality education to an unlimited number of learners. Although MOOCs have a large number of participants, but also have decreased participant's activity and low completion rates. Typical rates for learners who have logged into the platform at least once and then go on to complete the course is between 5 to 10 percent of active learners (Gillani & Eynon, 2011). This is because lack of awareness regarding this platform from the University. The study findings indicate that awareness of these courses in the faculty is very limited, with only 18.52% aware in years 2015 (Dhanani, et. al, 2015).

Online discussion forum has the potential to add value to the overall learning environment in distance learning. According to Agarwal, et. al (2012), the main areas of problem for lecturers associated with MOOC learning are lack of time, lack of interest or motivation, lack of co-operation, compensation system does not take into account specific MOOC learning and lecturers worry about the quality of teaching in the virtual environment. Lecturer or tutors need to apply another technique or method learning practice such as be more creativity and combine the technology in education to attract students. Lecturer need to give exposure during teaching student on how to use MOOCs. Generally, the challenge of teaching MOOCs include the following, the lack of student attitudes in online discussions, a sensation of speaking into a vacuum due to the absence of student immediate feed-back, heavy time and money demand and issues about assessing student work. (Allon, 2012).

Therefore, in this study, students' performance among technology entrepreneurship students was explored with the aim to identify the effects of MOOC's learning content on the students' grade. This study is important to determine the relationship between the MOOC's learning content and students' performance. Moreover, the research was intended to find out the performance of technology entrepreneurship student using MOOC at Universiti Teknikal Malaysia Melaka.

1.3 Research Questions

This research consists of five main research questions that look into the performance of business school student using massive open online course (MOOC) in Faculty of Technology Management and Technopreneurship (FPTT).

There are three main research questions which is;

- 1.3.1 What is differentiation between learning design, learning attitude and learning outcome with student performance enhancement in teaching and learning based on demographic factors?
- 1.3.2 What is the relationship between learning design and student performance enhancement in teaching and learning?
- 1.3.3 What is the relationship between learning outcome and student performance enhancement in teaching and learning?
- 1.3.4 What is the relationship between learning attitude and student performance enhancement in teaching and learning?
- 1.3.5 What is the main factors that contribute the student performance enhancement in teaching and learning?

1.4 Research Objectives

This research consists of five main research objectives that look into the performance of business school student using massive open online course (MOOC) in Faculty of Technology Management and Technopreneurship (FPTT).

There are three main research questions which is;

- 1.4.1 To determine differentiation between of learning design, learning attitude and learning outcome with student performance enhancement in teaching and learning based on demographic factors.
- 1.4.2 To determine the relationship between learning design and student performance enhancement in teaching and learning.

- 1.4.3 To determine the relationship between learning outcome and student performance enhancement in teaching and learning.
- 1.4.4 To determine the relationship between learning attitude and students' performance.
- 1.4.5 To identify the main factors that contribute to student performance enhancement in teaching and learning.

1.5 Scope and Limitation of Study.

The scope of this research is to identify the performance of business school student using massive open online course (MOOC) in Faculty of Technology Management and Technopreneurship (FPTT). This study is conduct in Faculty of Technology Management and Technopreneurship (FPTT). The respondents were collected from students in FPTT campus starting from first year students until forth year students.

Firstly this study focused only in Universiti Teknikal Malaysia Melaka and focusing on students in FPTT campus for examine the performance of business school student using MOOC in their learning session. Secondly, the research assuming the respondents answers with logical and honestly. The time given also one of the limitation in order to finishing this study.

1.6 Important of Study.

This study was intended to find out performance of business school student using massive open online course (MOOC) in Faculty of Technology Management and Technopreneurship (FPTT). This study was beneficial to the students to find out the learning content of MOOC that influence students' performance in the university. Hence, indirectly improve their learning style in the era of technology and implement it in their study.

Besides, MOOC learning is important because students can implement the blended learning in their job environment and give the advantages to them to improve their skills and knowledge. With this blended learning technology it can increase the attractions of student in study and decrease the number of unemployment rate in Malaysia.

1.7 Summary

This chapter included the background of the study, problem statement, research objective, research question, scope and limitations of the study and important of study. This research is well explained in chapter 2 that is the literature review.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter provides further explanation on the performance of business school student using massive open online course (MOOC) in Faculty of Technology Management and Technopreneurship (FPTT). It also will explain each independent variables and dependent variable that consider about the factors, which the student performance enhancement in teaching and learning using MOOCs in their learning session according to supported articles. Besides that, this chapter will explaining how the MOOCs platform influence the student performance enhancement in teaching and learning and learning environment. The last part of this chapter is about the summary of the literature review. In addition, some related theories or models from previous research will be cover in this chapter.

2.1 Learning Environment.

The learning environment refers to the different places, situations and communities in which students learn. Since students can learn in different settings and modes of education, such as areas outside of university, social environments, and approaches to learning.

Various teaching types are more likely to increase student performance, heterogeneity, and interest in economics, according to Becker and Watts (2010). Through changing the forms in which it is learned, economics can be made accessible to more categories of students. The most innovative training can be to create the learning environment of students in a particular course or curriculum. Numerous education models are available from simple learning, project-based learning, personal coaching, peer-to-peer learning, school-to-school learning, eLearning, online learning, and flipped classroom.

Therefore, the learning environment can be conceptualized in their academic environments as a subjective perception of teachers or students. This contemporary approach has proven to be a very useful and subjective environment linked to a variety of significant student outcomes. Various studies clearly show that both the learning environment and the emotional and social environment are particularly relevant for students (Anderman, 2011). In fact, it is the expectations of students about the learning environment that determine how a student learns, not simply the meaning itself (Entwistle 2006). For each form of learning to succeed, there are several criteria. A positive learning environment depends on whether all members involved in group activities contribute to co-operation. To create an effective collaborative learning environment, there are some important things (Nam and Zellner, 2011).

Nonetheless, this component's learning environment is a much broader term. Components and importance of an effective learning environment such as the characteristics of learners, learning and teaching goals, learning-enhancing activities, evaluation strategies driving and measuring learning, and culture directly infusing a learning environment, (Heick, 2018). Usually the cognitive skills of the student are greatly influenced by the personal, economic, physical, emotional or cultural factors present in the learning environment. If the learning environment is not conducive to the acquisition of new knowledge or skills, students will have difficulty staying involved or engaged.

2.1.1 Traditional Learning

Traditional learning is the face-to-face learning interactions that are common in physical locations such as college campuses, and occurs in situations where students primarily learn from the instructor and resources such as books, newspapers, and audio and videotapes. According to Barindra De (2018), learners can interact with other people of their own age in traditional learning, be better disciplined, follow a regular schedule, and improve their physical fitness and mental alertness. Students can also share their views openly with the teacher and explain their own questions, so that their questions can be answered promptly (Giuseffi, 2017).

In a central location, traditional students or students who are usually conducting classroom classes or discussions. Students have face-to-face relationships with educators. According to Staker and Horn (2012), although these relationships that consist of one teacher met by many students. In combination with textbooks and laboratory work, educational experience. Occasionally physical teachers go to the place of the pupil. According to Jones et al. (2010), but the normal atmosphere is for students attending classes in the house of the teacher, school or university. This is traditional education's main feature.

There are also several types for traditional training techniques such as method of introduction, hands-on approach and method of team construction. In comparison, MOOCs redefine traditional methods, results, and partnerships for teaching between students and teachers. MOOCs actually transform traditional teacher-qualified education into virtual education (Kizilcec et al., 2013)

2.1.2 Distance Learning

Distance learning is a groundbreaking academic approach. It is possible to provide educational opportunities by distance computing for individuals who are physically displaced away from the traditional classroom environment.