

## PERCEIVED USEFULNESS AND EASE OF USE OF THE MASSIVE OPEN ONLINE COURSES AS A TEACHING TOOL

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**Abstract:** *In 2018, Ministry of Higher Education Malaysia (MOHE) has set a standard that every public university in Malaysia is required to upgrade the use of Massive Open Online Courses (MOOCs) to at least 20% in all the courses offered in the institutions. In polytechnics specifically, MOHE has targeted 40% of the total number of students to use MOOCs through 70 courses offered beginning 2018. Thus, MOOCs have received wide publicity that many institutions are investing in it in order to create self-centered learning among their students. At the same time, lecturers are also involved in making sure the success of online learning such as MOOCs is achieved. With the introduction of MOOCs among the English lecturers of polytechnics in Malaysia, the lecturers' teaching practice with the element of automated instructions could be changed and upgraded for the betterment of English Language education. In this research, Technology Acceptance Model (TAM) is used in order to find out on the perceived usefulness and ease of use of the MOOCs among the English Language lecturers in one of the polytechnics located in the east coast of Malaysia. The finding shows that the lecturers indicated positive feedbacks towards MOOCs. However, concerns were still located among them if MOOCs are used in the future, covering all topics in the English Language subjects. Therefore, the use of MOOCs among the lecturers should be encouraged further to develop a better understanding and openness of MOOCs for English language education.*

**Keywords:** *MOOCs, Technology Acceptance Model, Self-centered Learning, Automated Instruction, Online Learning, English Language Education.*

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## Introduction

Technology has been used for so many years in education. Technology allows its user to become more independent and aggressive in finding knowledge. For the past few years, Massive Open Online Courses (MOOCs) have received special attention in the world of education. The unlimited boundaries of knowledge-searching have definitely made MOOCs as one of the choices in learning and teaching online as it is an online learning course that is open freely. Although there are many challenges in adapting MOOCs into the education world, one prominent challenge comes from the Key Performance Indicators (KPI) set by the Ministry of Higher Education of Malaysia (MOHE). As MOOCs Malaysia is the Ministry's priority agenda under Surge 9: Globalized Online Learning under the Malaysian Education Development Plan (Higher Education) 2015-2025, MOHE has announced that beginning 2018, every public university in Malaysia is required to upgrade the use of MOOCs to at least 20% from the whole courses offered. The KPI set by the ministry is a minimum of two General Education Subjects must be taken and fulfilled by the students using MOOCs. Specifically, for polytechnics, MOHE has targeted 40% of all polytechnic students to use MOOCs through 70 courses offered beginning in 2018. One of the subjects selected is DUE3012; Communicative English 2.

Although online learning is always with the acceptance from the students, not many of us pay attention to the struggle the educators must face when using these online teaching methods. The impacts on pedagogical practice are huge and at the same time, they provide a new method in the teaching process among the educators. With the introduction of long lists of technology for education, MOOCs might seem to be another platform to highlight the use of technology in teaching. The perceptions of identifying the use and recognizing the functions of MOOCs have been a never-ending fight for the educators. Thus, it is not clear on how familiar the educators are with MOOCs concept, the technology used and how it may be beneficial and functioned in the teaching process.

Another area that should be considered is the promotion of automated instruction to the educators that allows connections between the educators and the learners, hence filling in the gap throughout the teaching-learning process. Automated instruction is a process where the content is provided to students using a preprogrammed automated system rather than through a live instructor (Cook, 1964, cited in Cole, 2015). This provides space for both educators and students in dealing with the teaching-learning process. At the same time, self-centered learning that has been promoted to students is achieved.

This research interest would be in the studying the acceptance of teaching online with the help of MOOCs. The results would be beneficial in promoting and supporting teaching methods using MOOCs, also for the educators to be more open and ready in using technology in teaching.

## **Problem Statement**

Although much argument surrounds around the idea of MOOCs, they are becoming central in the online Higher Education by attracting thousands of students. With MOOCs being the current obsession in education nowadays, it is already having a fair show despite posing challenges for both lecturers and students. From the perspective of the lecturers, they need to put in hard work and time to implement MOOCs in the existing curriculum, and to equip themselves with technical proficiency to use MOOCs in their teaching.

With the growth of online learning in the market, in 2016, Department of Polytechnic Education (DPE) has introduced MOOCs and DUE3012; Communicative English 2 was selected as the first subject to be introduced with MOOCs. This eventually caused concern between the lecturers. As stated by Sunil Kumar in <https://elearningindustry.com/>, there are some common concerns or challenges faced by the lecturers in using MOOCs in classes in which they need to be solved through proper ways for the future benefits. These challenges include adaptability struggle, technical issue, computer literacy, time management and self-motivation. From the given list, lecturers in Politeknik Sultan Haji Ahmad Shah are facing such challenges that they must endure in order to fulfill the requirement of MOOCs. With the use of Technology Acceptance Model (TAM), this research will identify whether the challenges really contribute to a major role in accepting MOOCs in the teaching method.

## **Research Scope**

The purpose of this study is to identify the acceptance of MOOC's platforms used in the subject DUE3012; Communicative English 2 among the English Language lecturers that will support pedagogical components based on the TAM model. It will be helpful to understand how lecturers use MOOCs platform for teaching and what factors encourage and hamper their involvement in self-teaching and learning through MOOCs. Therefore, it can help the MOOCs providers design a better MOOCs platform that can enhance connection, interaction, and collaboration for an improved online learning.

Lecturers' experiences of teaching through the MOOCs can have important insinuations in the MOOCs context concerning a student-centered learning platform design in order to promote a collective, self-centered and creative learning.

## **Literature Review**

Knowles describe Self-Directed learning (SDL) in broadest meaning as “a process in which individuals take the initiative, with or without the help of other, to diagnose their learning needs, formulate learning goals, identify resources for learning, select and implement learning strategies, and evaluate learning outcomes” (Knowles, 1975) while others describe this process as self-planned learning, inquiry method, independent learning, self-education, self-instruction, self-teaching, self-study, and autonomous learning. These labels seem to imply learning in isolation, whereas Knowles pointed out that SDL usually takes place in association with various types of helpers, for example, teachers, tutors, mentors, and peers.

With the incorporation of ICT in the teaching of the subject, it is important to ensure that the courseware really supports the students' learning as a learning tool; and whether the use of courseware is a benefit for a long-term investment (Chua, 2009; cited in Melor, 2010). However, educators cannot simply assume that the techniques, approaches, and strategies that worked well in the traditional learning environment of the classroom can simply be successfully used in the environment of the ICT (Melor et. al., 2009). There is a consensus that MOOCs, if correctly deployed, do offer education institutions a useful lever for restructuring and transition, in a report by the Department for Business Innovation and Skills, UK (Haggard et. al., 2013).

This study discussed the perception of English Language lecturers of Politeknik Sultan Haji Ahmad Shah, Kuantan Pahang on the implementation of MOOCs in the institution. Understanding the reasons behind the rejection of new information in technology has been the utmost challenge in the study of technology (Park et. al., 2007). Technology Acceptance Model (TAM) introduced by Davis (1989) is considered as one of the most cited theoretical frameworks and therefore used in this research. The model is an attempt to derive the determinants of computer acceptance that is general, capable of explaining user's behavior across a broad range of end-user computing technologies and user populations, while at the same time trying to be parsimonious and theoretically justified (Melor et. al., 2010). The model also suggests that user's perceptions of usefulness and ease of use determine attitudes towards using an online tool (Jowaty, 2014). By using TAM, it could help to determine the success or failure of MOOCs as an online tool to support teaching English subject from the point of view or Perceived Usefulness and Perceived Ease of Use.

### Conceptual Framework of Study

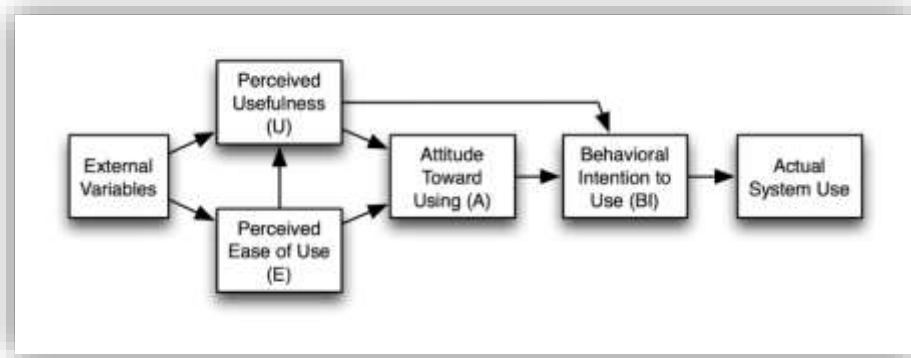


Figure 1: Technology Acceptance Model (adapted from Davis et. al. 1989)

Technology Acceptance Model was developed by Fred D. Davis (1989). Since its inception, it is widely used to explore technology adoption in a variety of contexts and use. There are two focus points used for this research; Perceived Usefulness and Perceived Ease of Use. According to Davis (1989), perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her job performance. Perceived ease of use, alternatively,

is the degree to which a person believes that using a particular system would be free of effort. In other words, the effort is easy with limited difficulties.

## **Methodology**

This study appointed a qualitative design in nature using semi-structured investigation on how the English lecturers of Politeknik Sultan Haji Ahmad Shah perceive usefulness and ease of use of Massive Open Online Courses (MOOCs) platform as a method in teaching the subject DUE3012 Communicative English 2. The Technology Acceptance Model (TAM) introduced by Davis (1989) was chosen as the theoretical framework in this study. According to him, the model is an effort to derive the elements of computer acceptance that is general, capable of explaining user's actions across a broad series of end-user computing technologies and user populations, while at the same time trying to be parsimonious and theoretically justified. Six female lecturers with experience teaching the subject and use MOOCs were selected as the respondents for this study. All of them possess a minimum qualification in Teaching English as a Second Language (TESL) as their degree, while five out of six have master's degree.

## **Findings**

The findings were recorded through interviews with the respondents selected. The areas of the interview were mainly based on Perceived Usefulness and Perceived Ease of Use. In each division, the areas cover a few sub-topics; independence, nature of knowledge, flexibility, environment, and opportunities.

### **Area 1: Perceived Usefulness**

#### **Independence**

Miss Mia stated that MOOCs provide a selection of the knowledge-sharing method. She said that the students can learn on their own, and this highlighted the purpose of independent learning and self-centered learning among students. She also mentioned that lecturers could also use the lessons provided in MOOCs later in class.

Miss Kay added that with provided manual, the students can browse through the platform from the information given from the manual. The students can refer to the manual if they have problems regarding MOOCs. They could also ask their respective lecturer if a problem arises. This indicated that learning and using MOOCs, equipped with sufficient information, could make a learning to become independent.

Miss Mai further discussed the content of MOOCs. She referred to a few samples of activities in the subject DUE3012. She said that the instructions are very clear and the students had minimum problems completing the task. However, a few other activities should be simplified to reduce redundancy and unnecessary information. Example of activities mentioned by Miss Mai is stated below.

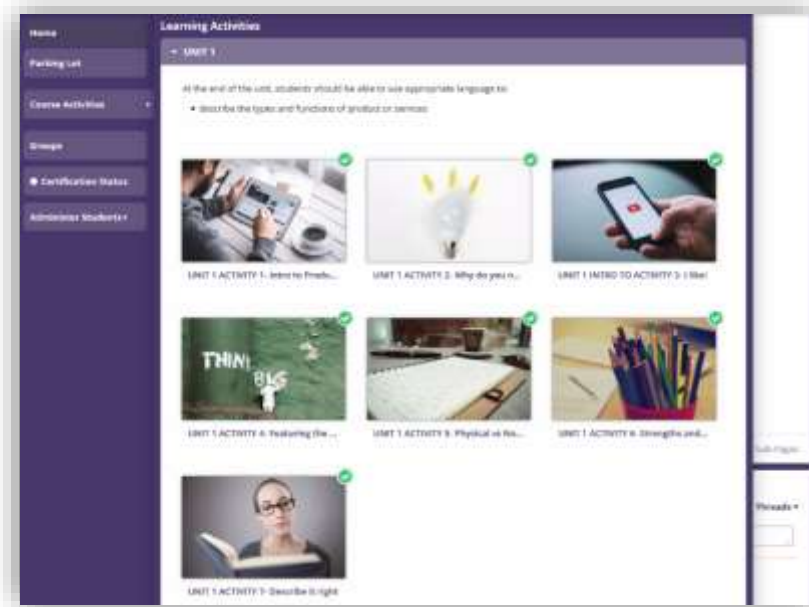


Figure 2: Activities provided in MOOCs for DUE3012, Communicative English 2

### Nature of knowledge

Miss Wan indicated that the use of MOOCs was relevant and valuable. Activities such as videos, audios, e-notes and online digitals are very useful and comprehensive. Miss Mla agreed with this statement by adding that the information in MOOCs helps the students to understand the topics clearly. Miss Kay explained that the content posted in MOOCs are relevant and related to the subject she teaches. The lessons are based on the syllabus and this helps her students in learning the subject in a more creative way. She explained that MOOCs help the lecturers and the students to understand the topics clearly without having to refer to any modules regarding the subject. However, she indicated that some topics in MOOCs should be reviewed because she found them very challenging for the students to learn independently. Therefore, completing the task becomes more challenging.

Interactive videos were found relevant and informative. Posting videos and audios by the students added to this value of knowledge. The students were required to actively participate by posting their own videos based on the activity provided. This inculcated the independent learning among the students and the lecturers could identify language proficiency among the students.

Another point discussed was the improvement in the language proficiency. Miss Rin clarified that MOOCs are potential tools for the students to improve their language proficiency. The activities listed in MOOCs are developed in such a way that the students will have to learn new vocabulary and sentence structure. The students need to write their answers and therefore they will indirectly learn the language. Miss Mla expressed her agreement that MOOCs are able to cover all the four skills in English Language education; listening, reading, writing and speaking skills, as well as the content area of the topics in

DUE3012, from all the activities listed in MOOCs. This will further enhance the motivation among students that learning English could be embedded through online learning.



Figure 3: A Sample Video for Student's Guide

## Area 2: Perceived Ease of Use

### Flexibility

In this sub-topic, all the lecturers interviewed agreed that MOOCs provide flexibility in their teaching. Miss Rin said that monitoring of student's progress could be done anytime anywhere. Therefore, in terms of making sure that the students use MOOCs for the subject, supervision and monitoring were done with minimum difficulties.

However, Miss Mla raised the issue of internet connection. Problems occurred when the internet connection was poor. This caused both the lecturers and students to not able to log on to MOOCs and complete their task. The poor connection sometimes hampered the process of teaching and learning. The process of monitoring the students' progress was also interrupted. The loading time was sometimes poor and this caused a waste of time for both parties. Miss Mai added that sometimes she became frustrated due to this unforeseen matter. Consequently, due to the fact that the task could be done anytime and anywhere, given the specific time constraint, this problem seemed to be minor and could be resolved.

Another point discussed by the respondents were the use of non-native speakers in the videos and the audios in MOOCs. They said that with the use of Malaysian speakers, the students tend to be at ease because they are able to grasp the meaning easily. To their hearing, the use of non-native speakers is more friendly and flexible. However, Miss Nad

indicated that the use of native speakers is also a must so that the students are exposed to different types of accent and pronunciation.

The respondents were asked whether MOOCs provide interesting tools in teaching the subject DUE3012. All of them agreed that MOOCs give a new meaning to new teaching approach, compared to the conventional way of teaching. Miss Rin described that the platform is suitable for the students to learn in a different way, showing them that there are a lot of choices they could use when learning the English language. MOOCs could be the newest interest for the students as they are well-exposed in technology.

Miss Nad pointed out no matter how the platform could be very interesting, if the lecturer is not knowledgeable about the technology used, the teaching process will not be smooth. She added that as a lecturer, she needs to equip herself with adequate information regarding MOOCs in order to have the lesson runs efficiently for both the lecturer and the students.

### **Environment**

All lecturers agreed that the environment that MOOCs offer is suitable in today's world. As it could be accessed from mainly everywhere using any tools (computers, tablets, smartphones etc.) added that there is an internet connection to it, the association to MOOCs is unstoppable. They unanimously agreed to the fact that MOOCs make the environment of teaching and learning to be interesting, interactive and fun. However, these results are based on the interest in the course content or type of learning experience. By exploring how growing learning platforms are equipped with new technologies and digital content that may benefit modern education environments, such as teaching and learning in MOOCs, it will help the lecturers to accept MOOCs openly.

### **Opportunities**

When asked whether the lecturers will be using MOOCs in other subjects they teach, only a few gave positive feedbacks. Miss Kay said that learning on how to handle MOOCs for this subject DUE3012 gave her a clear perspective that online learning is a vast area and there are a lot of things to explore. Given proper guidance and time, she positively said that she could create another platform in MOOCs for other subjects that she is teaching. This statement was agreed by Miss Mai. She added that MOOCs taught her a lot of things pertaining to online learning. MOOCs are suitable to be used in other English subjects if the problems related to MOOCs such as internet connection, are swiftly resolved. The other lecturers had a second thought when asked if they could build their own MOOCs platform in the future.

### **Discussion**

This study suggests that teaching experience does contribute to teacher's English language teaching using technology where the more experience a teacher is, the less anxiety he/ she experiences. The best practice that can be highlighted is a continuous and extended use of English language in and beyond the classroom (Norkumala et. al., 2017). As it is evident that experience does affect a teacher's English use of technology, one should be willing to encounter more English language education tools. It is important to develop confidence and self-esteem, and a relaxed environment reduces anxiety, which in turn improves motivation and confidence (Smith & Strong, 2009).



From this study, it is clear that the respondents are positive about using MOOCs in the subject DUE3012, Communicative English 2. Despite the fact that there are a few issues in using MOOCs, such as the internet connection speed and the technical proficiency one has, the implementation is fulfilled and future activities regarding MOOCs could be applied. As the education is rapidly going towards online learning, educators should prepare themselves mentally and physically in coping the challenges in the future.

## Conclusion

Most of the researches done on perceived usefulness and ease of use of MOOCs particularly related to the success of its method suggests that educators who are attracted to this type of teaching share certain common characteristics, including that they are voluntarily seeking further education, are highly motivated, have high expectations, are more self-disciplined, are independent, are active learners, possess good organizational and time management skills, and can adapt to the new learning environments. They are working on more flexible schedules. The study done revealed that the most popular factors in choosing MOOCs course were as follows: (a) It justifies the need for increased flexibility; (b) It encourages teaching-learning independence; (c) Web-based environment can possibly offer many opportunities for augmenting the teaching and learning process and, (d) MOOCs ensemble the rapidly changing nature of knowledge. There is a lot of information that could be gathered from MOOCs, with so many rooms for improvement. MOOCs help the educators in expanding their teaching experience and methods. However proper guidance and motivations need to be implemented in order to fulfill the use of MOOCs among educators reaches the highest peak.

A further research is highly recommended to make certain of the stability of MOOCs for the subject DUE3012 Communicative English 2. This will also ensure that the subject will be taken positively by the lecturers as well as the students. Continuation of a future research will encourage the improvement of the MOOCs and therefore will expand the lifespan of MOOCs.

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