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## Challenges Faced by Students in Completing a MOOC

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### Abstract

This study was conducted to explore the challenges faced by students in completing a MOOC (Massive Open Online Course). Participants selected for this study were restricted to post graduate students only who came from Iraq, Malaysia, Somalia and Oman. The number of students selected for this research was 6 with two master's students and four PhD students. MOOC is having problem of low completion rates and this is a big issue all over the world now. Despite the growing interest in MOOCs, the vast majority of students who have enrolled in MOOCs do not finish the courses. Hence, the purpose of the study is aimed at looking at the challenges faced by students in completing MOOCs. Qualitative mode was used for this study and all the students were interviewed for data gathering. The results indicated that the problems students faced in completing MOOCs are in terms of MOOC content, MOOC activity, MOOC design, MOOC instructors, accessibility and cost.

**Keywords:** MOOC (Massive Open Online Course), challenges in MOOC completion, post graduate students, qualitative study.

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## **Introduction**

Massive Open Online Courses (MOOCs) are one of the most noticeable phenomenon in the midst of the recent shift in learning environment, Sari, Bonk, & Zhu, (2020). In 2012, massive open online courses (MOOCs) first captured global attention and advocates imagined a transformation in higher institution education with video lectures from the world's best professors were broadcasted to the farthest reaches of the networked world. In addition, even in remote places with limited access to traditional education, students could do advanced computer-graded assessments, Reich and Ruipérez-Valiente, (2019). The variety of online tools, online spaces, social media and online activities is growing rapidly, with online learning and learning opportunities as an essential part of this universe. Over the last decade or so a lot of institutions of higher education have offered easier access to learning for the masses of students both locally and at a distance through MOOCs (Massive Open Online Courses). Learning through MOOCs are mainly free and this development also means a growing population of students for the institutions, Jacobsen (2019).

However, MOOC is having problem of low completion rates and this is a big issue all over the world now. Despite the growing interest in MOOCs, the vast majority of students who have enrolled in MOOCs do not finish the courses. In addition, the majority of students who have stated that they intend to complete a MOOC, also do not finish the course, Yeomans & Reich, (2017). There were several studies conducted in many countries on the issue of low completion problems and dropout problems. In Europe, although the public is enthusiastic of MOOCs, MOOCs seem to have serious problems which are enormous dropout rates, Bartolomé and Steffens (2015). A study conducted by University of Pennsylvania, showed that only 4% of students attending Coursera MOOCs for their university, completed their courses, Armstrong, (2014). In addition, according to Eriksson, Adawi & Stohr (2017), over 90% of MOOC learners never finished the courses. With thousands and even hundreds of thousands of students that enrolled, which showed that enrolment of MOOCs is enormous, but the percentage of students that completed any particular MOOC was often fell below 10%, Breslow, Pritchard, DeBoer, Stump, Ho, & Seaton, (2013). Hence, this research is done to look into the challenges faced by the students in their journey of completing a MOOC.

## **A Brief Overview of Massive Online Open Courses (MOOCs)**

According to Kelleher (2017), public and private sector organizations are embracing MOOCs. The MOOC concept was started in the West and now it is popular in Asia too. The characteristics of MOOCs are massiveness, openness and connectivity. MOOCs could be accessed by massive number of people from all over the world. Therefore, no one is excluded from accessing MOOC despite reasons of time, geographical location and financial hardship. Taking part in MOOC is voluntary and it also depends on the learner's motivation and interest, Bailey, Cassidy & Breakwell, (2014). This is asserted by Subhi et al., (2014) who mentioned that MOOC participation is no longer limited by time of day or geographic location. According to Mcauley et al., (2010), MOOC learners are self-organized in their participation depending on the learners' learning goals, prior knowledge and skills and their common interest. MOOC is also really popular among western universities. Zhong, Zhang, Li & Liu (2016) claimed that Coursera, one of the MOOC providers has more than 100 university partners including Princeton, Brown, Columbia, Duke, Stanford, John Hopkins and others, with a registration of 22 million participants who come from 190 different countries. Students who come from all over the world that use Coursera platform have posted more than 590 thousand topics and edX which is also another MOOC provider, has provided more than 300 courses in many areas of study. There are 38 members of edX consortium including MIT, Harvard University, University of Toronto, University of Tokyo, The Hong Kong University of Science and Technology, Peking University, and Tsinghua University. As of December 2019, Class Central which is a website that provides a listing of online courses reported that MOOC had 110 million students around the world with more than 900 universities that offered 13,500 courses, Mc Klusley, (2020).

### Objective

The objective of the study is:

1. To investigate the challenges faced by postgraduate students in their journey of completing a MOOC.

### Research Question

The research question of the study is:

1. What are the challenges faced by students in completing a MOOC?

### Methodology

The data was gathered qualitatively through semi-structured interviews that were carried out with the postgraduate students who had successfully completed at least a MOOC on their own.

### Sampling

The students were post graduate students who had completed at least a MOOC voluntarily who came from Iraq, Malaysia, Somalia and Oman. Purposeful sampling was used to select students for this study. Justification for the selection: the post graduate students were selected because according to Czerniewicz, Deacon, Small & Walji (2014), MOOCs support students entering postgraduate studies with “research orientation, writing practices, and the development of specialist skills. There is a high demand for more flexible forms of postgraduate study, especially for those in fulltime employment” (p.131). In addition, individual support for postgraduate students by their supervisors is limited, thus they are often prepared for self-directed learning in MOOCs. Bailey, Cassidy & Breakwell, (2014) stated that 47% learners who completed MOOCs possessed a post-graduate qualification which suggested that perhaps the MOOC format is more suitable to the students who already have the skills to be self-directed learners like the post graduate students. The post graduate students have to do everything independently or search for information on their own, thus many post graduates study MOOCs to develop knowledge on their own. Hence, that is the reason the post-graduate students were selected because they were able to study and complete MOOCs voluntarily.

### Results and Discussions

Students face some challenges in completing a MOOC and the challenges that the students face are in terms of MOOC content, MOOC activities, MOOC design, MOOC instructors, accessibility and cost. The names of participants used in the transcript of the interview are not their real names. Table 1 below shows challenges faced by students in completing a MOOC.

**Table 1:** Challenges faced by students in completing a MOOC.

	PROBLEMS FACED BY STUDENTS IN COMPLETING MOOC
MOOC content	Boring MOOC content
	Lack of information in the content
	Unsuitable level of content
MOOC activity	Platforms do not have social factors to communicate with other users
MOOC design	Time is too long
	MOOC that stops suddenly without informing the students
MOOC instructors	Accent
	Instructor unavailability
Accessibility	Internet connection
Cost	Pay for complete access
	Expensive

## **MOOC Content**

The problems that the students face in MOOC content are sometimes the content is dry or boring, lack of information in the content and unsuitable level of content.

### **1. Boring MOOC content**

Firstly, the problem that the students face is dry or boring content. In addition, the MOOC content is also too academic because it has a lot of unfamiliar jargons which would be difficult for those who do not have prior knowledge of the MOOC content. This could make them feel bored to learn and also demotivate them to finish MOOC. As narrated by a participant (Zana/ not her real name), some MOOCs were linear and dry (boring). She stated that sometimes the courses looked interesting and she would want to learn about it, however, when she started learning the MOOC, she realized that it was boring. As narrated by Zana:

*..And third is that some of the courses are actually very linear (boring). Sometimes some of the courses are interesting and I wanted to learn about it. But when I go to learn about it, it's something very dry (boring)..(I2DU54 Zana)*

Saadah also added that the problem with some MOOCs was the content of the course was boring. She further explained that some MOOCs were very academic. What it means here is the MOOC had a lot of jargons which were good but to some students who didn't have prior knowledge of the MOOC topic and seeing all the jargons for the first time would demotivate them from learning the MOOC. Hence this clearly shows that MOOC content that is too academic with unfamiliar jargons, would demotivate people from studying or completing a MOOC.

*.. Erm... problems. Can I say it has to be the contents? The contents have been very dry., (I2DU70 Saadah)*

*..It sounds very interesting and I want to learn about it but it sounds very dry..(I2DU72 Saadah)*

*..It is very academic. It has a lot of jargon. And it's good. But when somebody who doesn't have prior knowledge about that thing and want to learn about it. And then you see all of these jargons and you say 'no, I don't want to do this.' Ha-ha.. (Info 2DU74 Saadah)*

The boring MOOC content problem is supported by Goh, Wong, & Ayub, (2018) who stated that there were only text and long video in the MOOC which made the learning content very dull and boring.

### **Lack of information in the content**

Another challenge in completing a MOOC is sometimes there is lack of information in the content. A student who was interviewed in the study, Aiman, stated that the only problem that he found in the MOOC was lack of information in the MOOC. However, he further stated that, that was the first MOOC that he had completed and maybe the following MOOCs he will study might not have less content like the first MOOC. According to Aiman:

*...only problems that I have found in MOOC is less information because it was my first time I have involved before for MOOC so maybe the next is that I will get... it will be easier for me, insyaallah.. (I3DU99 Aiman)*

### **Unsuitable level of content**

In addition, based on the findings of the study, another challenge faced by students in MOOC completion is MOOC also has unsuitable level of content because the MOOC designer does not consider about the different level of learners from different background such as beginner, intermediate and advance because

it would be easier for the learners to understand and follow the MOOC if it is according to level. A student by the name of Ana mentioned that the MOOC designer did not consider about the different level of learners from different background. She also explained that she preferred a MOOC that labelled the level of materials for different level of learners such as beginner, intermediate and advance. Thus she liked the MOOC that indicated the level of learners because it would be easy for the learners to understand and follow the MOOC which could lead to MOOC completion. According to Ana:

*...Sometimes those who designed MOOC, they don't keep on mind that they got maybe different level of learners, different backgrounds. So I like in the MOOC that specially if they state the level of the materials like beginner, intermediate, advance. Like I know myself at the beginning I was complete beginner. But then I found so many stuff like names, theories, that got no introduction. Okay, okay, still part of my self-learning but then sometimes I go... what we call it? Cognitive learning? I cannot process anymore (laughing). So I appreciate that these MOOCs understand the level of the learners..(I6DU137 Ana)*

This is supported by Belanger & Thornton (2013) who also reported that not having enough background knowledge and skills was the reason for students not being able to complete MOOC. They stated that the students complaint it was assumed that they had knowledge base which was important to understand the course material, however, in reality, the students did not have sufficient background knowledge to understand the MOOC.

### **MOOC Activity**

Students also face problems in MOOC activity. Sometimes the platforms do not have social factor to communicate with other users.

### **Platforms do not have social factors to communicate with other users**

The students face problem when the platforms do not have social factors to communicate with other users. As narrated by Saodah, it depended on the platform that students used. Some platforms did not have social factor. For example, the students were only able to go through the articles, watched the videos but there were no options for them to highlight the notes. In addition, she added that there were no options for the students to talk to others. She also explained that the students had to do the course by themselves which she did not really like. She preferred platform where she could communicate, discuss with others and exchange insights which could lead to completing a MOOC. According to Saodah:

*...I think it depends on the platform that you use. For example, I have used many other platforms before like Coursera and Lynda and they have no social factor. For example, they have the sections, you just go through the articles, you just go through the videos but there are no options for you to highlight the notes. There are no options for you to talk to others about it. But on futurelearn there are those comment sections that you can speak to others in the comment sections and then exchange your insights. The social part of the platform despite everything, despite being isolated... virtual platforms... something that I look up to very much..(I2DU44 Saodah)*

*..Erm, okay. Basically I would ball down to a bit of user experience. Like I mentioned, Coursera and Lynda does not have the social factors that I like..(on completing a MOOC) (I2DU52 Saodah)*

*..I mean futurelearn has comment section where me and other learners can exchange conversation with each other but some of the platforms don't. You just do the courses by yourself. And that's all. (I2DU58 Saodah)*

## **MOOC Design**

Next, students have problems in MOOC design in terms of time is too long and a student came across a MOOC that stops suddenly without informing the students.

### **Time is too long**

Students face problem to complete a MOOC if the MOOC is designed for too long. As post graduate students, their time is limited because they have to do so much work, hence, a MOOC which is too long makes it difficult for students to complete even though the content is important. As narrated by a student, sometimes he did a MOOC that needed four and a half hours per day. As a PhD student, he didn't have that much time which made it difficult for him to complete a MOOC although the content was important. According to Ismail:

*..But the way they designed it, it was for 4 long and a half hours. And I did not have that much time in PhD... I mean because of the time, although the content was important..(I4DU79 Ismail).*

This is supported by Belanger and Thornton (2013) who also highlighted problems in student MOOC completion. Their study found that what prevented many students from completing the course requirements was a lack of time. They also reported students dropped out from MOOC because it took too much time to complete MOOCs. This is because too much time was needed for them to incorporate watching online lectures, completing homework assignments and quizzes into their schedules.

### **MOOC that stops suddenly without informing the students**

Next problem is, it is also difficult if a MOOC stops suddenly without informing the students that they have stopped and the reasons why they stop. A student, Izah stated that there was an Arabic MOOC that started the course but suddenly stopped without even notifying the students that they had stopped. She further added that there were no new lectures, no information and no reasons were given on why they stopped the MOOC. As narrated by Izah:

*...Another thing which is in one of the Arabic aaa... MOOC. Aaa... they will start the course and suddenly they stop without even saying that it will stop. So I'm following them and suddenly there's no new lecturers. No, nothing, no information. I don't like that. (I5DU145 Izah)*

## **MOOC Instructors**

The students also face problem in MOOC instructors in terms of accent used by the instructors and the unavailability of the instructors.

### **Accent**

Some students cannot understand what the instructors say because the instructors come from countries that have difficult English accent that can't be understood. As narrated by Saodah, some instructors had very difficult accent which was difficult to recognize and follow because they came from other countries that have difficult English accent that sometimes could not be comprehended. According to Saodah:

*...The second would be some of the instructors have very difficult accent..(I2DU52 Saodah)*

### **Instructor unavailability**

Another problem is unavailability of the instructor. MOOC instructors are not available when the students want to inquire or to discuss about some issues in MOOC. There are also not enough instructors in each MOOC to ask any questions. As stated by a student, Ismail, sometimes when he wanted to

enquire about some issues, the instructor was not available. For example, he wanted to discuss something about a MOOC on several researches with the MOOC instructor, but he was not available. Thus, it would be difficult to ask questions or to raise an issue as the instructor was always unavailable. As narrated by Ismail:

*...At times there was very limited instructor in case if you wanted to raise a point. For example, there was a MOOC on several research, I had to find an important person to discuss about whatever something. But the instructor was not available yet. But the way I looked at it they were not enough. So that is one issue, other than that not much..(I4DU89 Ismail)*

Khalil and Ebner (2014) reported that students complaint that they were not satisfied in a MOOC because of lack of instructor's interaction. The global time zone adds to students not receiving support they need in timely fashion which leads to a sense of isolation. A student posted that in a discussion thread, the instructor has no interaction with his students and he doesn't answer the students' questions or reply to their discussions. Goh, Ayub, Wong, & Lim (2018) conducted a study on the importance of teacher's presence and engagement in MOOC learning environment and their results showed that teacher's presence, training and support, interesting learning content, consistent feedback and interaction among facilitators are important in sustaining the students' engagement in MOOC. Firstly, in terms of teacher's presence, the result from students' focus group of their study indicated that they did not feel part of the learning community if when they were doing their own work, there was lack of interaction among the students and facilitator. They expressed that they hoped to be more engaged and involved with the facilitator. They also wanted to be able to ask any questions to the facilitator, and to get the feedback. In addition, Gregori, Zhang, Galván-Fernández, & Fernández-Navarro (2018) also found that MOOCs with teacher presence reported higher completion rather than MOOCs without teacher presence. In other words, it is important to have teacher's presence in MOOCs for course completion.

### **Accessibility**

Firstly, in terms of accessibility, if there is a problem with internet connection, students would have problems in completing a MOOC.

### **Internet connection**

Sometimes there is problem with internet connection. As narrated by Faridah, it caused a big problem for her when she had to do a final exam, but at that time, internet was down for the whole of her country. It was down for three days and even all the platforms from UK were not accessible at the time. At that point, she had to be online in order to answer the multiple choice questions that needed to be answered at real time. She further explained that she even emailed the course coordinator personally explaining the situation and even screenshot the newspaper article about the incident of internet problem due to a broken down water cable which caused the internet problem. This was because she didn't want the coordinator to think that she was lazy or purposely neglected her study or just didn't want to do the work given. However, the coordinator informed her the test was not able to be repeated. She was upset because she had followed the MOOC for 10 weeks already but due to the technical error of the internet, she was not able to do the test. According to Faridah:

*...Yes, this is a big problem for me. You know, first of all is our internet access. Because during my... we have a final exam, right, for the Manchester course. We have final exam answering ABC and so the short essay. The short essay we read the question and we submit later. For the ABC you have to be on time. I mean real time. Click in, and they will get our answer. Happened that, on that time, whole national Malaysia internet is down. I couldn't do that. That's my final exam. So what I did, I emailed the coordinator telling them this happened. It happens that I can't access your platform. Happen that all from the UK platform cannot be accessed during that time. Because our kabel bawah tanah bawah air (underground water cable was broken) whatsoever rosak. (broken) I gave them the screenshot of the newspaper, okay, it's okay. But*

*then 'I'm sorry', he said 'we can't repeat the objective test because only once, we can only help you on the short essay.' I was so angry for that because I have followed the MOOC for 10 weeks then suddenly during the final can't sit it because of the technical error which is out of my control. I made a complain to Unifi. I was so angry I called them 'why this have to happen?' I involved in study ninini yeah, I'm angry at that. I mean for the digital, for anything the Internet base learning to be success is the stability of the Internet.. (I1DU111 Faridah)*

...Yes, 3 days down. Internet down for 3 days. And it gave us... for the questions, they gave students 3 days to complete it. For example, I remember that because the new session will start every Saturday. Saturday, and you have another Saturday, Sunday, Monday the last deadline. Until the deadline I couldn't access the Internet. So just like gone with the wind. But I don't want the coordinator or the team of the MOOC portray me or view me as someone la. 'Dia ni malas' ( a lazy person) whatsoever. /Didn't do the work'. So I emailed them personally. Then I give them my report to the unifi, I mean this is not something because I neglect my study whatsoever but it's more because of technical error. I've been there.. (I1DU117 Faridah)

This is supported by Stokes, Towers, Jinks, & Symington, (2015) that stated internet access is increasing across all socio-economic groups all around the world which makes it easy for people to access MOOCs and according to Guo, (2017), internet users are allowed in studying and communicating on the internet at any time and as long as people have internet, they can access MOOC. However, if there is internet problem, students would have problem in accessing MOOCs.

### **Cost**

Next, students also have problem in terms of cost. Sometimes students have to pay for complete access and the cost of studying a MOOC is also expensive.

### **Pay for complete access**

Sometimes students have to pay for complete access. Some platforms require students to pay if they want to have access to a MOOC and also to complete a MOOC. Ismail mentioned that there were some cases where some platforms required students to pay if they wanted to complete a MOOC. He added that, there was a case where he wanted to complete a MOOC, to take all tutorials and to do all the assignments in the MOOC. However, the requirement was he must pay for the MOOC or they would not allow him to complete the MOOC and did whatever activities mentioned earlier. This would post a problem on students who want to complete a MOOC. According to Ismail:

*...The problem? Okay. There were some cases in which, for example Coursera, if I wanted to complete a MOOC, I wanted to take all tutorials, like you know... All the assignments and everything. But they would not allow it unless I pay for it..(I4DU81 Ismail).*

### **Expensive**

The next issue relating to MOOC cost is studying a MOOC is expensive. Some MOOCs require students to pay if they want access to lectures and on top of that, the price of a certificate is also expensive. As mentioned by Izah, when she started learning a MOOC, it was free. However, sometimes some courses required students to pay in order to see the lectures. She also mentioned that sometimes the price of a certificate was also expensive. But she also stated that she was willing to pay if the certificate was really good. According to Izah:

*...For example, it was free when I started, Then they put some price and it's very expensive for the certificate. And even for some courses we have to pay to show, to see the, the lectures. So this one I think , I, I don't want to pay except if I really want that certificate. If I feel like certificate is really good, I'm willing to pay. But if I don't know, I want to see it first, maybe take the exams and then I'll pay for that,.. (I5DU145 Izah).*

This is supported by O'Reilly (2013) as stated in Khalil and Ebner (2014) who mentioned that another problem of MOOC completion was certificate payment. In other words, the factor that made students not wanting to complete a MOOC was because they had to pay for the certificate. This is because not all students have the money to pay for the certificate.

## **Conclusion**

Problem with MOOC completion is a big issue worldwide. At present, MOOCs are valuable because the problem of coronavirus (Covid-19) that is spreading around the world which has led to schools and higher institutions reverting to online learning. Cornock, (2020) had written an article about "Scaling up online learning during the coronavirus (Covid-19) pandemic" and according to him, there is a need for support for education during coronavirus. Thus, students and educators are using online learning with their personal learning spaces which may be formal or informal in order to seek learning content to meet short-term learning needs. Hence, with the problem of coronavirus pandemic (covid-19), people are turning their attention to studying using MOOCs. Students are now searching for MOOCs as a great alternative of gaining knowledge and skills during the covid-19 pandemic, Newman (2020). Hence, as MOOC is valuable now, it is really important to know the challenges faced by students in MOOC completion. Based on the result of the study, it is hoped that this research will be able to assist MOOC developers in improving MOOCs so that students are more interested to complete them.

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