Massive Open Online Course (MOOC) Readiness of Pangasinan State University – Open University Systems Students

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Abstract

This study was conducted to determine the readiness of PSU-OUS students in Massive Open Online Course (MOOC) before its implementation in the institution. MOOC is an innovative online course available for anyone. It "provides an affordable and flexible way to learn new skills, advance student's career, and deliver quality educational experiences" (Mooc.org, 2009; Veermata Jijabai Technological Institute (VJTI, n.d. p.1) being utilized by prestigious institutions like UPOU and SEAMEO INNOTECH. Hence, MOOC's fusion to the different courses in PSU-OUS is promising and something to look forward to. The research used the descriptive method and the respondents were chosen through purposive sampling technique. To analyze and interpret the data gathered, the researcher used the weighted mean.

The majority of the students of PSU-OUS are female and are working in the government. Many of the respondents have less exposure to seminars relating to distance learning education while mostly of them are 21 – 30 years old, taking up Master of Arts in Education major in Educational Management and are receiving 21 – 30 thousand monthly.

The results reflected that students are slightly ready in downloading or installing programs or plugins such as Java, Adobe, Reader, Quick Time and etc., and they are also slightly ready in using Learning Management System like iFolio, SPIN, and Moodle. However, the results also showed that students are prepared on various aspects such as technology access, online skills, motivation, online audio/video and internet discussions. Therefore, the students of PSU-OUS are ready in the implementation of MOOC in the university.

Keywords: *MOOC, alternative learning, Massive Open Online Course, Open University, MOOC readiness*

Introduction

One of the best interesting innovations in online delivery learning is the Massive Open Online Course (MOOC). According to (Mooc.org, 2009; VJTI, n.d.), MOOCs are free online courses available for anyone to enroll and provides an affordable and flexible way to learn new skills, advance someone's career, and deliver quality educational experiences at scale.

The term MOOC was coined to as a course developed by Stephen Downes and George Siemens known as Connectivism and Connective Knowledge in 2008 (Siemens, 2004, as cited in Downes, 2012). Their intention was to exploit the possibility for interactions between a wide variety of participants made possible by online tools so as to provide a richer learning environment than traditional tools would allow. There were 25 students attended the course on the campus of the University of Manitoba, and a further 2300 from around the world participated online. MOOCs with an emphasis on interactions and connectivity are now called cMOOCS (Downes, 2012).

According Romualdo (2017), University of the Philippines Open University (UPOU) pioneered MOOCs in the Philippines. It was in July 2013—eight months after the New York Times dubbed 2012 as "The Year of the MOOC"—when the Faculty of Information and Communication Studies (FICS) – UPOU, in partnership with Smart Communications, Inc. (Smart), developed and offered

an introductory course on mobile application development using the Android platform to anyone who was interested, wherever they were in the world, free of charge (Romualdo, p. 21).

SEAMEO-INNOTECH also offers free courses via MOOCs such as Igniting Passion for Teaching and Teach On: Keeping the Passion Alive. In their website, they stated, (Seameo-Innotech, 2017, p. 2):

> "Teach On aims to rekindle and sustain teachers' passion for their profession. And while most continuing professional development opportunities focus on the tangible skills, the course provides an opportunity for teachers and educators to focus on and develop their soft skills. Learners will have the chance to cultivate their passion and love for the work they do thru the lessons and stories of fellow educators."

With the potential success and impact of MOOC in Open Distance Learning, it is high time that institutions like PSU-OUS take the initiative to embrace and adopt its system to be appreciated by online learners across the world. PSU-OUS is also aiming to adjust from blended learning program to fully online delivery, hence, this study is necessary to know whether or not the students are ready to online learning delivery through MOOC.

Statement of the Problem

This study determined the level of readiness of Pangasinan State University – Open University Systems students to Massive Open Online Course (MOOC).

Specifically, the researcher determined the following:

1. Profile of the faculty members in terms of:
   a. sex;
   b. age;
   c. course
   d. monthly salary/income
   e. work place
2. Number of seminars attended related to online distance education
3. Level of readiness in relation to :
   a. Technological Access
   b. Online Skills
   c. Motivation
   d. Online video/ audio
   e. Internet discussions
   f. Importance to success
   g. MOOC

Methodology

A two-part survey questionnaire was used in the study. The first part is the profile of the respondents and the second part is the level of readiness of students in MOOCs. Aside from written answers, the researcher also utilized a Google form that was transmitted through various social media platforms.

The respondents were chosen through purposive sampling techniques. To statistically analyze the results, the study used the weighted mean.

Profile of the faculty members

Out of 141 who were surveyed,102 or 72.3% of them were female PSU-OUS students while 39 or 27.7% were male. Most of them (46.1%) were 21-30 years old while some (34.8%) were in between 31-40 years old, 21 or 14.9% were in 41-50 years old, 5 or 3.5% were in 51-60 years old and only 1 (0.7%) is 60 and up years old. Master of Arts in Education had the biggest respondents with 66% followed by Doctor of Education 27.7%, and Master in Development with 6.4%. Moreover, majority of the respondents (39.7%) were receiving 21-3 thousand salary, 2.9% were obtaining 41-50 thousand salary, and the rest earn less than 10 thousand up to 40 thousand pesos. Majority of them around 103 or 73% were working in the government and 38 or 27% were in the private sector. There were more than half of the faculty (73%) who have a minimal number of seminars (less than five) attended related to online distance education while the rest (27%) had more than five seminars attended.

Overall, the level of readiness of PSU-OUS students in technology access (as an aspect of MOOC) is high with an overall mean value of (μ=2.89) as stated in Table 1.

Table 1. Level of Readiness of PSU-OUS students in MOOC (Technology Access)

Indicators	Mean	Description
1. I can use software such as Microsoft Office (e.g., Word, Powerpoint and Excel).	3.54	Very Much Ready
2. I can use a web-browser/search engine to navigate the Internet (e.g., Firefox, Safari, Internet Explorer, Google).	3.22	Ready
3. I can regularly access a computer or laptop each week for my course(s) (4 to 5 times a week).	3.21	Ready
4. I can access a printer instantly.	3.00	Ready
5. I can use headphones or speakers for courses that may have video conferences or require student-recorded presentations.	2.98	Ready
6. I can regularly access the Internet each week for my course(s) (4 to 5 times a week).	2.96	Ready
7. I can learn from various instructional formats (e.g., text, video, podcast, online discussions, video conferencing).	2.91	Ready
8. I can use a microphone for courses that may have video conferences or require student-recorded presentations.	2.73	Ready
9. I can use Learning Management System (iFolio, SPIN, Moodle, etc.)	2.20	Slightly Ready
10. I can download/install programs or plugins such as Java, Adobe Reader, Quick Time, etc.	2.18	Slightly Ready
Weighted Mean	**2.89**	**Ready**

The results in Table 1 indicate that the students are very much ready in the implementation of MOOC especially on technology access since they can use hardware (e.g. printer, speakers, computers for instructional formats such as video, podcasts, online discussion, video conferencing, etc.) and can operate software such as Microsoft Office, web browsers (Safari, Internet Explorers, Mozilla Firefox, Google, etc.), and search engines such as Google and Yahoo.

On the other hand, the results also show that the students are slightly ready in using Learning Management System (iFolio, SPIN, Moodle, etc.) ($\bar{x}$= 2.20) and in downloading/installing programs or plugins such as Java, Adobe Reader, Quick Time, etc. ($\bar{x}$=2.18).

Table 2. Level of Readiness of PSU-OUS Students in MOOC (Online Skills)

Indicators	Mean	Description
1. I know the basic skills to operate a computer (e.g. saving files, creating folders)	3.70	Very Much Ready
2. I can send an email with a file attached	3.70	Very Much Ready
3. I know the basic skills for finding my way around Internet	3.52	Very Much Ready
4. I can communicate effectively with others using online technologies (e.g. chat).	3.50	Ready
5. I can use a computer several times a week to participate in the online discussion.	3.30	Ready
Weighted Mean	**3.55**	**Very Much Ready**

Table 2 shows how ready the students to the implementation of MOOC when it comes to their online skills. With a weighted mean of $\mu=3.55$, the results show that the respondents are very much ready in knowing clerical work such as operating a computers (e.g. saving files, creating folders), sending an email with a file attached, and knowing the basic skills for finding my way around internet, and most especially ready in using online technologies (e.g. chat) and using a computer several times a week to participate in an online discussion.

While the results show that the students are skilled and thus very ready in MOOCs, an article review based on the data from a study of The Ohio State University shows otherwise. The result from this study states that since technological preparedness varies by race, class, gender, and academic background, college administrators must not assume student competence, but rather, should systematically assess incoming students and provide a variety of learning opportunities (O'Hanlon, 2018).

Table 3: Level of Readiness of PSU-OUS students in MOOC (Motivation)

Indicators	Mean	Description
1. I feel motivated when treated like unique individual with goals and interests during online discussions.	3.28	Ready
2. I feel motivated by relating something relevant in the news to the current lesson at hand	3.23	Ready
3. I can remain motivated even though the instructor is not online at all times.	3.15	Ready
4. I can complete my work when there are online distractions (e.g. friends sending emails or Websites to surf).	2.96	Ready
5. I can complete my work even when there are distractions in my home (e.g., television, children, and such).	2.94	Ready
Weighted Mean	3.11	Ready

Table 3 shows a positive result on motivation towards implementation of MOOC in PSU. The mean results show that they are motivated whenever treated like unique individual with goals and interests during online discussions, and whenever they contribute something relevant from the news to the current lesson. Also, despite the presence of online and home distraction and the absence of the online instructor, they are affirmative that they can still finish their work and perform their best in an online course. Thus, this indicated that their motivations towards online learning is high that they are ready for the implementation of the MOOC.

According to Littlejohn et al., (2018), learners' motivations and goals shape how they conceptualize the purpose of the MOOC, which in turn affect their perception of the learning process. The findings indicated a positive relationship between motivation gain, the number of messages posted to the online forums, and the number of members in the online study groups (Barak, Watted and Haick, 2016). Furthermore, the results imply that motivation as an aspect of MOOC, is somehow relevant to the learning process.

Table 4. Level of Readiness of PSU-OUS students in MOOC (Online Video/Audio)

Indicators	Mean	Description
1. I can open, share, download or upload an audio and video using the internet.	3.21	Ready
2. I can understand course related information when it's presented in video formats.	3.21	Ready
3. I prefer audio/video-enhanced lessons to make the learning experience much more robust, functional, and accessible.	3.05	Ready
4. I can relate the content of short video clips (1-3 minutes typically) to the information I have read online or in books.	3.01	Ready
5. I can use audio and video recording in reviewing missed and complicated lessons	2.99	Ready
Weighted Mean	3.09	Ready

As an important aspect of understanding MOOC, the researcher asked about how the respondent could understand and relate to videos/audios posted online. Based on the results (Table 4), they fully understand and relate on using videos/audios as a learning media format in online learning discussions; an indication they are ready to use MOOCs employing videos and audios as part of a teaching strategy.

Possible reasons on the very high readiness of students is the effect of video/audio discussion as stated other findings which learners reported that they tended to provide longer and more elaborate comments via audio/video discussion (Jolt.merlot.org, 2018). This finding supports prior research findings in the context of instructor offered audio feedback where instructors provided more examples (Merry & Orsmond, 2008) and richer language with more adjectives (Dagen, Matter, Rinehart, & Ice, 2008) in audio format than in written format.

The teacher's presence during the course his or her interactions with students and the quality of the videos presented are significant determinants of course completion (Gregori et al., 2018). Hence, the readiness of the students in the online video/audio in MOOC is significant.

Table 5: Level of Readiness of PSU-OUS students in MOOC (Internet Discussions)

Indicators	Mean	Description
1. I can carry on a conversation with others using the internet (e.g., internet chat, instant messenger).	3.33	Ready
2. I can follow along with an online conversation (e.g., internet chat instant messenger) while typing.	3.22	Ready
3. I prefer to have more time to prepare responses to a question.	3.12	Ready
4. I can learn writing skills in online discussions.	3.10	Ready
5. I can be comfortable having several discussions taking place in the same online chat even though I may not be participating in all of them.	3.08	Ready
Weighted Mean	3.17	Ready

Conceptual Framework

This research exposes the perceptions of students in three different points of distance education: teaching, learning materials, and student support. With their answers, we arrive to the conclusion towards a better understanding of student satisfaction and provide a better distance education

Table 5 is an indication that when it comes to online discussions, with a very high mean rate, the student are particularly ready to carry on with internet discussion since based on the results, they are comfortable and could learn in online conversation.

The readiness of the students is somehow high as disclosed from a finding that internet discussion forums are an easy-to-implement and didactically valuable supplement to classroom and electronic teaching concepts in pharmacology. They enable, particularly in a peer-teaching context, the active participation of students in teaching and thus are likely to improve the learning outcome of students (Sucha, Engelhardt, & Sarikas, 2013). On the other hand, other findings contradict as "online discussions with other students" and "email to and from other students" were rated low. This may reflect the traditional style of instruction, in which the instructor is the center of the learning experience, to which the students were accustomed (Services.unimelb.edu.au, 2018).

Meanwhile, in the results (Table 6), the students are very much ready in believing that frequent participation throughout the learning process is important to my success in online coursework and believing that prior experiences with online technologies (e.g., email, Internet chat, online readings) are important to my success in online coursework, both with x̄=3.53. Further the students are ready in believing that ability to immediately apply course materials is important to my success with online courses, believing that regular contact with the Instructor is important to my success in online coursework, and believing that quick technical and administrative support is important to my success in online coursework with mean values of 3.48, 3.45, and 3.35 respectively.

Table 6: Level of Readiness of PSU-OUS students in MOOC (Importance to Success)

Indicators	Mean	Description
1. I believe that frequent participation throughout the learning process is important to my success in online coursework.	3.53	Very Much Ready
2. I believe that prior experiences with online technologies (e.g., email, Internet chat, online readings) are important to my success in online coursework.	3.53	Very Much Ready
3. I believe that ability to immediately apply course materials is important to my success with online courses.	3.48	Ready
4. I believe that regular contact with the Instructor is important to my success in online coursework.	3.45	Ready
5. I believe that quick technical and administrative support is important to my success in online coursework.	3.35	Ready
Weighted Mean	3.47	Ready

Based on the results, the student believe that the success of the implementation of MOOC relies on the level of participation and to student's prior experiences with online coursework, it is an indication that they are very much ready of MOOC. On the other, they also believe that immediate application, regular contact with the online instructors, and a support from technical and administration is an important aspect in the success of implementation of MOOC.

The results may be explained from a finding which indicates that although graduate students learned using the same technological tools as undergraduates, they desired a deeper level of learning that requires more instructional forethought and planning; student experiences were consistent with the constructivist theory, and implications for improving teaching based upon the constructivist theory are highlighted (Tandfonline.com, 2018).

The overall mean of all the aspects in MOOC indicated that the students very much ready when MOOC is implemented especially on the aspect of online skills. Meanwhile, the level of readiness of students are very high (indication of being ready) on the aspects of success, internet discussion, motivations, use of audio/video, and technology access.

This supports a study of Rajabi and Virkus (2018) which indicated that both students and academic staff of TLU had positive attitude in spite of some deficiencies and constraints of MOOCs. In addition, it seems that TLU has good resources and potential in developing MOOCs. Another similar study from Ventayen (2018) focused on teachers' readiness in online teaching environment, found out that teachers are indeed ready. On the other hand, Ventayen, Salcedo & Orlanda-Ventayen (2019) studied the senior high school students' engagement and readiness in e-learning environment where the findings showed that the students were engaged and ready.

Table 7: Level of Readiness of PSU-OUS students in MOOC

MOOC Aspects	Mean	Description
b. Online Skills	3.55	Very Much Ready
f. Importance to Success	3.47	Ready
e. Internet Discussions	3.17	Ready
c. Motivation	3.11	Ready
d. Online Audio/Video	3.09	Ready
a. Technology Access	2.89	Ready
Weighted Mean	3.21	Ready

Conclusions

From the preceding findings, the following conclusions are drawn:

The majority of the PSU-OUS students were female taking up Master of Arts in Education and were employed in the government service. Most of the students were young with 21-30 years of age, receiving 21-30k monthly salary and have limited exposure to seminars related to open distance education.

Thus, it can be concluded that if MOOC is to be implemented in Pangasinan State University, the students are ready since the study shows that they are ready in all the aspects of MOOC.

Recommendations

Based on the above-mentioned findings and conclusions, the following recommendations are

hereby presented:

1. The students should invest in participating seminars and trainings related to online learning education.
2. Pursue MOOC in the Open Distance Learning of PSU-OUS.

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