Evaluation Criteria of a Blended Massive Open Online Course Model in the Iraqi Universities

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ABSTRACT: A blended Massive Open Online Course (bMOOC) model in Higher Education Institutions (HEIs) in Iraq aims to improve the education of the Iraqi students and develop HEIs in the Iraq. It changes the trend of the traditional MOOC environments from only watching the video lectures passively by learners to a more flexible interaction in the learning process. In return, it solves the problem related to the lack of communication between classroom (face to face) and MOOC courses at the same time. This study describes the evaluation process of the Iraqi-bMOOC platform based on six criteria (blended learning, flexibility, high quality content, instructional design, network learning, and openness. Thus, this study has applied a survey to the Iraqi students to show their experiences in using the proposed model in two of the Iraqi universities (Tikrit & Bahgdad). Moreover, the results unveil that the learning activities are satisfying in the Iraqi-bMOOC courses.
KEYWORDS: MOOC, bMOOC, UX, Traditional Learning, Online Learning, HEIs.

INTRODUCTION

The students at Higher Education Institutions HEIs in Iraq are looking for using new learning methods in the MOOC to help reintegrate the civilian life and to continue their education depending on their needs (Bonk, 2013). In addition, Iraq has a great deal of universities around 25 universities with 234 colleges in various specializations (Zwain, 2012). The traditional learning approach in the Iraqi universities face many challenges such as learning management, activities, teaching methods and learning methods. In addition, the lecturers and learners face many challenges in the traditional learning such as information retrieval learning in real-time, interaction, collaboration and many other challenges (Anter, 2014; Al-alak, 2013). Besides, IT facilities are available in each Iraqi university such as computer, Internet laboratories, learning facilities, multimedia tools. Therefore, the universities need to develop and manage the aspects of effective learning environment to reduce the resources of the traditional learning

and increase the level of online learning environment (Anter, 2014; Al-alak, 2013).

The phenomenon of MOOC is understood as a possible solution to overcome the traditional learning challenges in (HEIs) such as learning management, activities, teaching methods and learning methods, and cost. This fact is clarified via many advantages in the MOOC which help the learners to understand the study materials at anytime and anywhere (Singleton, 2013; Daniel, 2012). This is considered an important advantage to decrease the tuition fees and get rid of problems in the traditional learning environment of the Iraqi students. Besides, it promotes the students to study inside their countries and not to study in universities abroad (Alajmi, 2012 & Abbad, 2011).

Therefore, much has been stated on components of MOOCs to provide opportunities for exploring new pedagogical strategies and business models in higher education. Most of the existing MOOCs are especially sources of high quality content which depend on components of MOOC such as video lectures, testing, forms of

discussion, assessments, assignments, feedback, material and other key elements of MOOC. However, one important obstacle that prevents MOOCs from reaching their full potential is rooted in the behavioral learning theories. In other words, the current MOOCs so far still follow the centralized learning model (i.e. the traditional teacher-centered education) that controls the MOOCs and their key elements. Efforts in student-centered MOOCs, based on connectivism and constructivist principles that emphasize the role of collaborative and social learning, are exceptions but are not the rule (Yousef et al., 2014b). Other criticisms have been raised concerning the use of these key elements, they are: (a) assessment and feedback (Hill, 2013), (b) the lack of interaction around video content (Grünewald et al., 2013), (c) the ignorance of face-to-face communication (Schulmeister, 2014), (d) the lack of integration among the MOOC courses and the campus learning system (Griffiths et al., 2014; Ghadiri et al., 2013), (e) the dates of MOOCs are rarely suitable for the semester schedule (Loviscach, 2013), (f) the provided syllabus has not covered the required university curriculum for credit (Griffiths et al., 2014), (g) the current learning follows a teacher-centered model (Yousef et al., 2015a; Griffiths et al., 2014), and j) despite the point that efforts have been exerted to understand the user experiences (UX) (Zheng, 2015; Zaharias, 2012; Müller, 2010; Schaik, 2009; Martin, 2008), still there are questions on how these courses can satisfy the students' needs based on (UX), as is evidenced by very high dropout rates.

Research also reveals that there are some differences among the students with regard to their perceptions of online learning via MOOC based on the cultures of their countries (Asiri, 2014 & chew, 2014). In particular, language is a barrier (Nkuyubwatsi, 2013) in MOOCs which restricts the user interaction (Asiri, 2014; Koutropoulus et al. 2012; deWaard et al., 2011; Kop et al., 2011; Fini, 2009). Moreover, the learners in MOOCs participate from all over the world. They speak English in different levels based on their different cultures. Hence, the examples used in MOOCs should be presented

in such a way that they can be understood by everyone regardless of the cultural background. Also, developers should consider the variety in the cultural values such as everyday objects, animals, symbols and food (Jona & Naidu, 2014; Yousef et al., 2014c). In addition, the level of language skills can be a source of misunderstanding in the video content in the courses (Hollands & Tirthali, 2014; Yousef et al., 2014c). All these criticisms on these models indicate that the current models lack an effective educational design (Creed, 2013; Conole, 2013).

Therefore, this study aims to fill the gaps by proposing a blended MOOC model for HEIs based on these criticisms. Thus, this study has applied a survey to the Iraqi students to show their experiences in using the proposed model (Iraq-bMOOC) in two Iraqi universities (University of Tikrit & University of Bahgdad). Moreover, it determines the difficulties these students face in their studies via the traditional classroom. Overall, the results revealed that the majority of users are satisfied on the criteria and learning activities (Components) in the Iraqi-bMOOC platform. This is confirmed by the participants who have shown positive acceptance towards the proposed Model.

METHODOLOGY

This study is conducted on different colleges at Tikrit & Baghdad Universities. In the first semester, a questionnaire is distributed to all learners who are undergraduates at these universities. This is because the university students are stakeholders and must be homogeneous in age and education (Peterson & Merunka, 2014). For research validity purposes, the selected participants are learners from the same specialization and class. Then a group of students are divided based on each class in the college. These learners have access to Iraqi-bMOOC website as a blended learning resource. The researchers have visited the colleges and distributed fifty questionnaires to the participants at the aforementioned universities. That is, twenty-five copies are distributed in each university. The total number of participants in the experimental test is fifty undergraduate learners from different colleges. Therefore, the

participants' number of this study is adequate for the quality and evaluation of Iraqi-bMOOC model to obtain reliable results in the statistical tests (Sekaran & Bougie, 2016). To avoid misunderstanding and bias statements, it is important that the questionnaire be in a written form in Arabic and English (Distributing Dual Language). This is because Arabic is the first language of the participants and using it helps them to avoid misunderstanding and attract their attention for answering the questions. Table (5.1) and Figure (5.2) show the distribution of the sample in the blended course levels. The participants represent different undergraduates' levels (Classes) from the first year until the fourth year at the universities of Tikrit and Baghdad. Each university has 50% of the participants' total number and they are divided into four levels based on their classes.

Table 1: Undergraduates' Level

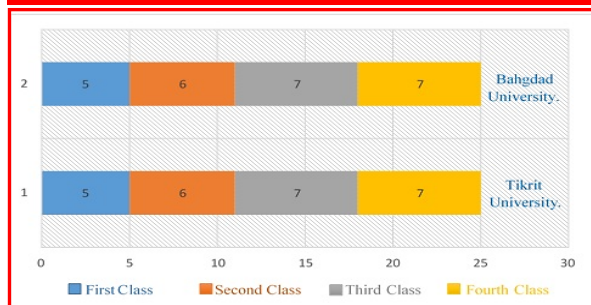| Classes	Uni.Tikrit (Frequency)	Uni.Bahgdad (Frequency)	Total	Percent %
First	5	5	10	20%
Second	6	6	12	24%
Third	7	7	14	28%
Fourth	7	7	14	28%
Total	25	25	50	100 %

Figure 1: Undergraduates' Level

Then, the experimental group in each college is instructed to evaluate their experience about the blended learning criteria that are available in Iraqi-bMOOC (such as Blended Learning, Flexibility, High Quality Content, Instructional Design and Learning Methodologies, Network Learning, and Openness). This is conducted by filling the questionnaire at Tikrit and Baghdad universities. After collecting the data and coding

the database in SPSS (Version 23), each item in the questionnaire is analyzed by using descriptive statistics and standard deviation.

FINDINGS

Iraqi-bMOOC model evaluation is based on six criteria (i.e. design dimensions): Blended Learning, Flexibility, High Quality Content, Instructional Design and Learning Methodologies, Network Learning, and Openness.Thus the user-centered evaluation method is selected to test the Iraqi-bMOOC. Blended learning environment dimension determines and assesses the level Iraqi-bMOOC model allows learner to increase the interaction with the lecturers and peers to improve the learning inside the classroom. Then, a flexibility dimension evaluates how the Iraqi-bMOOC is flexible for its users. Meanwhile, high quality content dimension evaluates whether the content has high quality and well designed to empower and engage the students' universities in Iraq to participate in the blended learning. Subsequently, the Instructional Design and Learning Methodologies dimension measures its effect on increasing the interaction and motivation among learners in the learning process. Also, Network Learning dimension assesses how the network learning is allowed for learners to work together, discuss and explore knowledge, and share ideas for their learning. Finally, Openness dimension determines and evaluates the level Iraqi-bMOOC provides learning for a large number of students in Iraq regardless of their location and level of education as shown in Table 2 & Figure 2.

Table 2: Evaluation Criteria

Criteria & Components Evaluation in Iraqi-bMOOC			
No	Evaluation Item	Mean	St.div
1	Blended Learning Environment	4.4	0.56
2	Flexibility Environment	4.5	0.51
3	High Quality Content Environment	4.5	0.50
4	Instructional Design and Learning Methodologies Environment	4.4	0.52
5	Network Learning, and Environment	4.4	0.52
6	Openness Environment	4.4	0.51
Average		4.4	0.50

Scale: Strongly Disagree = (1.00 – 1.79), Disagree = (1.80 – 2.59), Neither agree nor disagree = (2.60– 3.39), Agree = (3.40 – 4.19), Strongly Agree = (4.20 – 5)
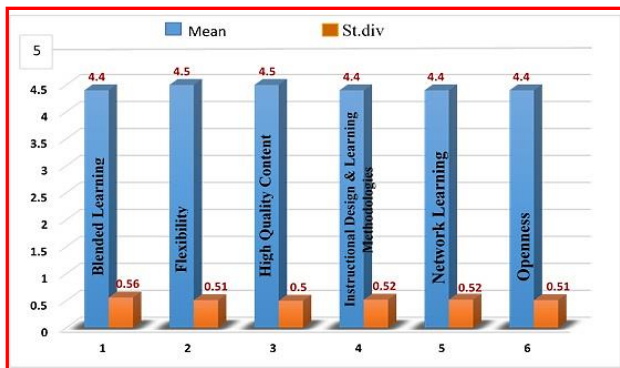**No of Respondents** : 50

Figure 2: Evaluation Criteria

The design of blended learning environments integrates together face-to-face approach with online learning approach. This can be an effective and flexible model to enhance the classroom learning and improve the interaction with the lecturers and peers (Bruff et al., 2013). The participants are asked to view the lectures video online and use the Iraqi-bMOOC courses to discuss the lecture content. The face-to-face classroom is then used to explain more about the concepts presented in the video lecture. Therefore, the final result of mean score is (4.4) for blended learning environment part. This finding is consistent with Bruff et al.'s (2013) finding. In return, it unveils that MOOC can improve the learning process outcome because the participants in bMOOCs can benefit from certain opportunities such as independent learning, increased engagement, motivation, and flexibility of bMOOCs.

Moreover, Flexibility is one of the important factors in MOOC (Tschofen et al., 2012). Most of the participants in Iraqi-bMOOC courses have answered by mean (4.5) as a final result of the flexibility part. This result unveils that the participants have confirmed that the learning activities are very flexible & satisfying in the courses (such as learning activities and lectures, the learning tools, the learning materials, website content, and the social media.), this shows the effect of language and culture on the learning process.

Besides, the High quality content is one of the important factors to empower and engage the learners to participate in the MOOC all over the world (Yousef et al., 2014c). Moreover, the learners give a great value for MOOC courses where the content is well designed and interactive as well as the content of the subject is clear and at the right length (Shee et al., 2008). In relation to the findings stated in high quality content environment, the final result of mean score of this part is (4.5). This finding means that most of the participants have agreed on the quality of courses contents. These courses contents (such as course materials content, discussions, comments, feedback, search options, and quality of learning material) are very helpful to better understand the course concepts in the Iraqi-bMOOC. In particular, viewing a video lecture helps the learners to receive suggestions and comments on the lecture. In return, this helps improve the quality of the course content. In addition, the instructional design and learning methodology affect positively on the learning process as they increase the interaction and motivation for the learners (Yousef et al., 2015a). Overall, the participants are positive towards the instructional design & learning methodology (such as, defined lecture objectives, clear structure, the learning tools, interaction with the lecturer, assessment, and learning activities). Therefore, the final result of mean score of this part is (4.4). The good instructional design increases the students' interaction in the class and also saves their time to understand the learning concepts.

Concerning network learning environment (Connectivity), it is very important in online learning environments (e,g. Blended MOOCs) (Chatti et al., 2014). In this part, the mean average is (4.4) and it is high. This refers to the

effectiveness of the Iraqi- bMOOC in supporting the network learning & connectivity. The participants have agreed on that the interaction and communication possibilities are offered in Iraqi-bMOOC. For instance, video lecture comments, discussion forums, email, social media, and collaborative comments allow the learners to interact and share knowledge. They also allow the learners to discuss and exchange experiences, collaborate, and construct knowledge in addition to receiving feedback and support from peers and lecturers.

Finally, Openness is one of MOOC criteria. It provides learning with a large number of participants around the world regardless of their level of education and location (Daniel, 2012). Therefore, the result average of openness part has mean score (4.4). Most participants have highly agreed on that the openness system in the Iraqi-bMOOC is advantageous. For instance, registration, academic requirements, learning material, support and feedback, adapting with the learning material, and access to course lectures are useful for them to determine the learning resources in an efficient way.

The results reveal that the majority of users are satisfied on the criteria and learning activities (Components) in the Iraqi-bMOOC platform that include video lectures, discussion forums, assessment, assignment, email, social media, and collaborative comments. Finally, the majority of participants have approved on Iraqi-bMOOC which means that everything is on the right way currently and there is no reason to make changes to the system.

CONCLUSIONS

This study highlights the blended learning experience that focuses on the student's experiences during the learning process. It creates opportunities for the student to communicate with others in the learning environment. This draws on a rich set of learning resources that can be achieved based on interactions between the student-peers and instructors who are available in the blended learning and the traditional learning environments at the same time. Therefore, the

results of this study show that the participants have highly agreed and satisfied on the criteria & components of the Iraqi-bMOOC platform. That is, they are positive as they highlight the need of the Iraqi Higher Education Institutions for blended MOOC to support the traditional learning. The results display that the majority of the participants need the blended learning to reduce the obstacles and challenges in the traditional learning and current MOOCs models. The findings also disclose that the students prefer learning through blended learning based on their environment (language and culture) rather than the current MOOCs courses. Consequently, this preliminary study provides evidences that show that there is a big need to use the blended learning in Iraq.

However, there are certain limitations that should be taken into account in this study. These include few aspects that are suggested for improvements. First, while conducting the experiment, only 12 models are covered. The selection represents the design model and methodologies of the last 8 years ago (i.e. 2008-2015). Therefore, a future research can be carried out to further analyze other new models and framework related to blended MOOC development and user-centered methods. Second, despite the issue that the implementation of proposed model is conducted successfully, it has been applied at the natural setting of few colleges in two Iraqi universities only. Hence, this study suggests that the proposed Iraqi bMOOC can be applied to more Iraqi universities in future to develop the blended environment in Iraq. Third, the participants' past experience with MOOC & traditional learning has been taken into account only rather than blended learning. This indicates that a future study can deeply reveal the way the existing and previous experience in blended MOOC influences the users' perception and attitude towards Iraqi-bMOOC model. Finally, a future study can be carried out to associate the proposed model with new learning components that suite with blended MOOC environment in Iraq. In conclusion, it is hoped that this study does not only demonstrate the potential and impact of blended MOOC in technology-

enhanced and student-centered learning, but also provides a capstone for MOOC research in the field of blended learning and education technology.

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