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**USER INTERACTION IN IRAQI BLENDED MASSIVE OPEN
ONLINE COURSE MODEL**



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Abstrak

Walaupun terdapat bukti nilai didaktik *Massive Open Online Course* MOOC, kebanyakan cendekiawan tidak menekankan interaksi pengguna (UI), pengalaman pengguna (UX), dan teknik reka bentuk MOOC yang menampung komponen utama dan kaedah reka bentuk MOOC berdasarkan budaya dan bahasa pelajar yang berbeza. Akibatnya, terdapat kecenderungan untuk membentangkan MOOC sebagai pendekatan yang mencabar dan tidak praktikal. Pada asasnya, model dan kaedah konsep yang menyusun teori penting, komponen, teknik, teknologi, dan proses MOOC yang sistematik secara komprehensif adalah kurang. Kajian ini mencadangkan model MOOC teradun (bMOOC) untuk merancang, melaksana, dan menilai platform Iraq-bMOOC. Untuk mencapai objektif ini, beberapa sub-objektif telah dibentuk: (1) untuk menentukan kekangan semasa dan cabaran MOOC dalam konteks pendidikan tinggi dari perspektif pelajar Iraq, (2) untuk mengenal pasti dimensi reka bentuk dan komponen model bMOOC, (3) untuk membina dan membangunkan model bMOOC berdasarkan objektif 2, dan (4) untuk menilai prototaip bMOOC dari segi interaksi pengguna berdasarkan pengalaman pengguna. Kajian ini menggunakan kaedah Penyelidikan Sains Reka Bentuk sebagai rangka kerja proses penyelidikan. Aktiviti pembinaan model Iraq-bMOOC termasuk kajian literatur, kajian perbandingan dan analisis kandungan model sedia ada, dan perundingan pakar. Hasil kajian mendedahkan bahawa majoriti pengguna berpuas hati dengan aktiviti pembelajaran di platform Iraq-bMOOC. Hasil daripada ujian interaksi pengguna menyimpulkan bahawa model Iraq-bMOOC yang dicadangkan dianggap memberikan pembelajaran interaktif yang berkualiti sebagai sumber pembelajaran teradun untuk pelajar universiti. Kajian ini juga mendapati bahawa model yang dicadangkan ini diterima baik oleh para pakar. Empat sumbangan utama teoretikal, praktikal, empirikal dan pendidikan diperolehi daripada kajian ini: (i) mengumpul dan menganalisis karya yang telah dijalankan di MOOCs antara tahun 2008 dan 2016 untuk mendapatkan kefahaman yang mendalam dan lebih baik daripada pihak berkepentingan MOOC dan tingkah laku mereka, (ii) menyediakan pemahaman baharu tentang komponen dan kriteria utama (Dimensi Reka Bentuk) persekitaran bMOOC yang berkesan yang akan memberikan manfaat kepada pembangun untuk membina MOOC teradun dalam konteks pendidikan tinggi secara analitikal, (iii) meningkatkan interaksi pelajar-pelajar Iraq dengan bahan pembelajaran dalam persekitaran pendidikan tinggi melalui Iraq-bMOOC, dan (iv) memecahkan halangan pendidikan tradisional dan MOOC untuk sesiapa sahaja, di mana sahaja, dan bila-bila masa.

Kata kunci: MOOC, MOOC Teradun, Interaksi Pengguna, Pengalaman Pengguna, Institusi Pengajian Tinggi.

Abstract

Despite the evidence of Massive Open Online Course (MOOC) didactic values, most scholars do not emphasize user interaction (UI), user experience (UX), and MOOC design technique that accommodate the interrelated key components and design methods of MOOC based on different learners' cultures and languages. As a result, there is a tendency to present MOOC as a challenging and impractical approach. Essentially, there is a lack of conceptual models and methods that comprehensively structure the crucial theories, components, techniques, technologies, and systematic processes of MOOC design. Within this context, this study proposes a blended MOOC (bMOOC) model in order to design, implement, and evaluate the Iraqi-bMOOC platform. To accomplish this, a number of sub-objectives are formed: (1) to determine the current limitations and challenges of MOOC in the higher education context from the perspective of Iraqi students, (2) to identify the design dimensions and components of a bMOOC model, (3) to construct and develop bMOOC model based on objective 2, and (4) to evaluate the user interaction of a bMOOC prototype based on the user experience. This study adopts the Design Science Research methodology as the framework of the research process. Activities of Iraqi-bMOOC model construction include a literature review, a comparative study and content analysis of the existing models, and an expert's consultation. The proposed model is evaluated through an expert's review, an experimental test, and user interaction. The results reveal that the majority of users are satisfied with the learning activities in the Iraqi-bMOOC platform. The results from the user interaction testing conclude that the proposed Iraqi-bMOOC model is perceived as significantly providing quality interactive learning as a blended learning resource for university students. This study also finds that the proposed model is well-accepted by the experts. Four major theoretical, practical, empirical, and educational contributions are obtained from this study: (i) collecting and analyzing the literature that has been conducted on MOOCs between 2008 and 2016 to get a deep and better understanding of the MOOC stakeholders and their behaviors, (ii) analytically providing a new understanding of the main components and criteria (Design Dimensions) of effective bMOOC environments that would be of value for developers to construct blended MOOC in the higher education context, (iii) increasing the interaction of Iraqi learners with the learning materials in a higher education environment via the Iraqi-bMOOC, and (iv) breaking down obstacles of traditional education and MOOC for anyone, anywhere, and anytime. In conclusion, it is hoped that this study does not only demonstrate the potential and impact of blended MOOC in technology-enhanced and student-centred learning, but it also provides a capstone for bMOOC research in the higher education context.

Keywords: MOOC, Blended MOOC, User Interaction, User Experience, Higher Education Institutions.

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CHAPTER ONE

INTRODUCTION

This chapter presents an introduction of this study. It highlights the motivation, statement of problem, the research gaps, the research questions and the research objectives, the proposed solution, and the scope and contributions. It further produces the theoretical framework.

1.1 Motivation

A massive open online course (MOOC) is a free distance learning program that is intended to engage a great number of geographical scattered learners (Zheng, 2015). MOOC courses are a recent expansion in online learning with distant learning that has experienced fast growth and development (Knox, 2014). Therefore, MOOCs started to become a part of the context of Higher Education institutions (HEI). As a result, many universities have directed their aims to create MOOC courses. However, MOOC courses creation has shown to be an expensive activity and they have challenges for HEI. For this reasons, and to get rid of MOOC challenges in HEI context, many universities have started to develop and experiment the blended MOOC as an approach for education that combines between the online learning and the traditional learning (classroom methods). Thus, the new design of bMOOC courses can be a solution to resolve the obstacle that faces MOOC courses (Bruff, Fisher, McEwen, & Smith, 2013). Actually, the bMOOC model has the potential to bring human interactions into HEI environment, foster student-centered learning, provide feedback, support the interactive design around video content, and consider the different patterns of learners in MOOC courses based on their cultures (Yousef, Chatti, Schroeder, & Wosnitza, 2015d).

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Appendix A

1) Preliminary study (Interviews)

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Interviews (English)

Dear Participant,

We appreciate your participation in this survey. This study aims to proposing Iraqi Blended Massive Open Online Course (bMOOC) Model for the institutions in Iraq. Through examine whether Iraqi Higher Education Institutions need blended MOOC to support the traditional learning. The researcher believes that the outcome of this study will be of a great importance to improve the performance in higher educational system as a whole in Iraq. Your effort in answering the questions in this interview is highly appreciated because your answers would provide a distinguished quality to the research. In addition, the information you provide below is only to be used for this study and is to remain confidential. Through the following points:

1. Your participation in this research is voluntary. You may withdraw and discontinue participation at any time without penalty. If you decline to participate or withdraw from the study, no one in my campus will be told.
2. If you feel uncomfortable in any way during the interview session, you have the right to decline to answer any question or to end the interview.
3. The interview will last approximately 30-60 minutes. Notes will be written during the interview.

4. Your identity will be confidential in this study. The researcher will not identify your name in any reports via using information obtained from this interview and thus your confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

5. I have read and understand the explanation provided to me depending on the points above

6. I have answered all the questions with satisfaction and I voluntarily agree to participate in this study.

Please indicate your consent to participate in the interview:

I agree. I do not agree.



Please answer the following by either writing responses to the required information or by ticking (✓) in the box

Section 1: Includes Q1-Q6 to collect the demographic data about the participants:

Q1	Gender:	Male (), Female ()
Q2	How old you:	() Years
Q3	Nationality	Iraqi students () International ()
Q4	Your language?	Arabic (), English (), other ()
Q5	Specialty	
Q6	Occupation	

Section 2: Interview Guidelines

The purpose of this interview is to examine whether Iraqi Higher Education Institutions need blended MOOC to support the traditional learning. You are kindly to be honest as much as possible when you answer this interview because your responses are valuable to this study. Please pay attention to each question and answer as truthfully as possible. In the following section, please answer the intended information.

Section 3: Interview Questions:

1. What challenges or obstacles have you encountered in the classroom or with your lecturers? (Can you cite some specific instances of these obstacles?)
2. Do you use social media or internet technology to discuss the learning material with your friends or lecturer (Email, viber, whatsApp and facebook)?
3. How do you describe the current MOOC courses? Explain the positive and negative issues, please?

4. Do you think the blended learning via MOOC will help you to manage your time, information, plan and resources, and evaluate your own work?
5. Do you support the existence of blended learning in your university based on language and cultural factors? (Please clarify your opinion on this issue).
6. Do you agree the design of blended MOOC courses in your university that can help you to increase the interaction with your friends and other learners from other universities in Iraq? (Please explain your opinion on this point).



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عزي لمشارك ،

نحن نرحب بمرشرك في هذا التحدث هدف هذه الدرلة الى اقتراح نموذج للدورالشمامل الفموضحة لى
الترنت (bMOOC) العراقية لؤسس انتفيل عراق. من خالفحص ما اذا كنت مؤسس استئملعلي مالعلي
العراقية فحاج اللى MOOC مدمج فلدعم الفمطلق لى دي يتعالي باحث أنتلج هذه الراس ستكون ذات
أهية لغير فحسين ادا في نظام الفمعلي مالعلي لكف افيل عراق. إن مودلفي ابة لى سلفي
هذه الامله مومض صقير لغير إج ابله ستوفر جودة نهي لقله بلفن افه الى ذلك يتامست خدام
العمل وماللت يتفورها أن افقطل هذه الدرلة هي يتمال فضاظ لى سلفها. من اللق اطلالتالي:
1. مشركك في هذا الحثتطوحيه لى فنك ان سحاب والتقف عن المشركك في أيوقت دون عرقه. إذا
رفضت المشركه أو ان سحاب من الواسه فلفي لمخبار أي شخ صرفي ال حرم لجامعي.
2. إذا لقتش عرب عدم اتوي اخفي أيوقت لجلسه الامله فلفي كالحقف يرفض ابة عن أي
سؤال أو لاه الامله.

هتستغرق الامله حوالي 03-63 دقيقة. يبيت مانتبه ال ت الامله.

0. هتستكون سرفي هذه الدرلة. لن زي حدال باحث اس ملفي أيتق اير يعراست خدام العمل ومات
التي يتمال حصول عليها من هذه الامله بل تتللي ستق يس يتك كمشركك في هذه الدرلة أنه سوفت خضع
ات خدامات قة واليان استللي اسات بلت خدام ليل ات الق اساسي لقت يت حمي إقباء هية افراد
ولؤسس ات.

4. لقق درأتوف همتل شر حال قلد لي حسب اللق اطلال مذكورة أع

5. لقق دأجت لى جيع ا قبلتوي ا وألق طواحيه لى المشركك في هذه الراسه.

يرجى ا لى موفقتك لى المشركك في الامله:

() أنا اوفق. () أنا اوفق.

2) Method of Preliminary study

This study is conducted in different colleges at Tikrit & Baghdad Universities. The participants of this study consist of 18 respondents. They are as follows: (a) 12 undergraduates, (b) 1 MA and 2 PhD postgraduates, and 3 lecturers. All of them are native speakers of Iraqi Arabic. The researcher has posted an announcement in the colleges of Tikrit & Baghdad universities about blended MOOC. The interviews are semi-structured. They are conducted with the interviewees by face to face, viber, facebook and skype. The researcher has gathered a demographic information about each participant (e.g., gender, age, occupation and specialty) as stated in Table (1.1).



Respondents	Occupation	Gender	Age	Nationality	Interview	Specialty	Traditional learning subject
R1	Undergraduate Student	M	22	IRAQI	Fact to Face	Computers science	Java programming
R2	Undergraduate Student	F	23	IRAQI	Skype	Computers science	Human Computer Interaction (HCI)
R3	PhD student	F	30	IRAQI	Fact to Face	Accounting	financial
R4	PhD student	M	34	IRAQI	Fact to Face	Economy	International economy
R5, R6, R7	Prof, Ass. Prof, Ass. Lec.	M,M,F	38,36,29	IRAQI	Fact to Face	Business Computers science Pharmaceutics	Management, Networking, Pharmaceutics
R8	Undergraduate Student	F	22	IRAQI	Whatsup	Business management	Human Resource Management
R9	Undergraduate Student	F	22	IRAQI	Skype	Computers science	Social Network Analysis
R10	Undergraduate Student	M	23	IRAQI	Fact to Face	Computers science	Basic JavaScript
R11	Undergraduate Student	F	21	IRAQI	Fact to Face	Mathematics	statistics
R12	MA student	M	27	IRAQI	Fact to Face	Computers science	IT (Research methodology)
R13	Undergraduate Student	M	22	IRAQI	Facebook	Engineering	architectural design
R14	Undergraduate Student	F	22	IRAQI	Fact to Face	Computers science	Web Development
R15	Undergraduate Student	M	24	IRAQI	Viber	Engineering	Communication
R16	Undergraduate Student	M	21	IRAQI	Fact to Face	Computers science	Database (sql server)
R17	Undergraduate Student	M	22	IRAQI	Fact to Face	Computers science	Java programing
R18	Undergraduate Student	F	23	IRAQI	Fact to Face	English	Grammar

Furthermore, the researcher has interviewed the participants to investigate the needs of Iraqi Higher Education Institutions for blended MOOC to support the traditional learning. Each interview took around thirty minutes to an hour. All of the interviews are written. The interviews have provided rich information about the respondents' opinions based on six questions as reported in Table (1.2).

Table 1.2. Interviews Questions

Issues	Factors	NO	Questions
Classroom Challenges	1. Fulfilling Current Needs	Q1	What challenges or obstacles have you encountered in the classroom or with your lecturers? (Can you cite some specific instances of these obstacles?)
	2. Connecting with Others	Q2	Do you use social media or internet technology to discuss the learning material with your friends or lecturer (Email, viber, whatsApp and facebook)?
Current MOOC Challengings	1. Course Content 2. Lack of Pressure 3. Communicating with Community	Q3	How do you describe the current MOOC courses? Explain the positive and negative issues, please?
Blended MOOC as an Opportunity	1. Manage Learning time	Q4	Do you think the blended MOOC will help you to manage your time, information, plan and resources, and evaluate your own work?
	2. The bMOOCs as in Classroom	Q5	Do you support the existence of blended MOOC in your university based on language and cultural factors? (Please clarify your opinion on this issue).
	3. Interaction with Peers	Q6	Do you support the design of blended MOOC courses in your university that can help you to increase the interaction with your friends and other learners from another universities in Iraq? (Please explain your opinion on this point).

1.3.2. Findings

This section shows the findings of the interviews which highlight the main issues arised from the interviewees' responses based on the following six questions:

(I) CLASSROOM CHALLENGINGS

1. Fulfilling Current Needs

Q1/ What the challenges or obstacles have you encountered in the classroom or with your lecturers? (Can you cite some specific examples of these obstacles?)

Traditional learning content is often difficult and fast-paced by lecturers. This might make it difficult for the student to keep it up. bMOOCs can cover the areas of similar themes to provide high-level overview that helps the students to understand the content of their college material more quickly. For instance, R1 has taken the Java subject. He has stated that he finds it difficult to completely understand the program concepts during the period of the traditional education. Thus, he is encouraged to engage in MOOC, to help him succeed in the Java programming. He has stated that,

"The traditional education in the college, cannot cover all the knowledge in particular and the students have their own perspectives about the subject content. Thus, we need an approach parallel to the traditional study to help us understand the class material more accurately" [R1].

"إن العلى يملك أي ديف على الكلية ي يمكن أي شمل جيجي عال معارف فحى وج هال خصوص لى دى ال ب وج هانتن ظرهم
ال خصرة حول مضموى الموضوع على التلى ،ن حرنب حارة لى ن هج موازى لى الواسن تولى لى بي ظلمس اعكن ا فحى فهم ال مواد
الصفى بيشركل أفتر دقة" [R1]

In addition, some students have noticed that the content of the subject in class does not meet their needs well enough and they want to know more about it. A case in point is R2 who is an undergraduate student who has taken HCI subject in the classroom. She has stated that, *"I do not understand some of the concepts in the subject HCI, so I need to repeat the lecture again until I can understand the other concepts and this is not always available in the classroom."* [R2].

"أن أفهم بعض الفمادهى فى الموضوع HCI ،لذلك أحتاج إلى تكرر ال مخررة مرة أخرى حتى أتمكن من فهم
الفمادهى م ا رى وهذا يتوفر على ففى الفصل لدراسى" [R2].

2. Connecting with Others

Q2/ Do you use social media or internet technology to discuss the learning material with your friends or lecturer (Email, viber, whatsApp and facebook)?

Most of the participants have illustrated that they prefer to ask questions, search for answers, help others, or cooperate with the members of the group through the tools or the internet sites without depending on Facebook, Viper, whatsApp. This is due to the issue that these tools are not suitable for learners. For example, R14 is an undergraduate student who has stated that, *"When I encounter a problem in my studies, I search in Google first. If there is no answer, then I use Facebook or Viber to communicate with my friends. This is mainly due to the absence of some means (such as MOOC or bMOOC) whereby one can*

communicate with others in spite of the availability of the internet and all the means of information technology such as laboratories, computers and others in the university” [R14].

معندما أواجه كل شيء سراتي، أقوم بالبحث في Google أو . إذال متكن فياك إجلاء في ندي ناست خدم Facebook أو Wiber لتوصل مع الخلق أي وي رجع ذلك للربس اللى في اسباب عرض الوسائط (مثل MOOC أو bMOOC في العراق محبشي لكل مرءا لتوصل مع ا ين لقي الارغم من تنفور ا تنرت و جيجي عوسر ل لتلفن لوجي ال عمل ومات مثل الم تقبرات وأج هزة الكسبي وتروغي رهفي لاج امعة " [R14]

Also, R9 is an undergraduate student who has used YouTube and observed lectures on Monday morning. She solved the exercises during the lecture in the classroom, but faced some problems such as the different concepts in networks between YouTube and lecture in class. Thus, she participated in one of MOOCs or bMOOC to get knowledge in networking.

(II) CURRENT MOOC CHALLENGINGS

1. Course Content

Q3/ How do you describe the current MOOC courses? Explain the positive and negative issues, please?

The common motivation for students to enroll in MOOC is the current conventional completion that are taken by that. For instance, R9 has clarified that, *"I was so excited to resolve exercises during the lecture. I do not know some of the concepts in the social network analysis, but recently I have enrolled to the one of MOOC courses. Based on this course, I am able to solve some of the duties and discussions at the same time. Yet, not everything available in MOOC is linked to my classroom. In addition, I look again to participate in*

one of MOOCs such as coursera and EDX courses, but I'm afraid of the problems I might face with regard to different lecturers and language" [R9].

لقد كنت متحمسة جدا لحل التمارين خلال المحاضرة لكنني أعرف بعض الفهماء في فهمت للبرامج التي كانت اتم اعادة
لكنني بقيت مؤخر بالتمسح في دورة MOOC ولتتقنا الى هذه الدورة ، لتطبع أن أحل بعض التمارين ولا يوجد
ولكن ليس كل كل شيء يتم في دورات MOOC التي تتطلب للعصف حول الالوانية الى خص قبي بلضافة الى ذلك ،
تطلب مرة أخرى لمشاهدة في إحدى دورات MOOC مثل لتوسيرا ودورات EDX ، لكنني أخشى من المشكل
التي أواجهه في فهم قيات المخلصين للغة" [R9]

Through the survey of this study, the researcher has found also that some participants have already joined the MOOC; yet, they have left some courses after few days. This is because they are too hard to follow due to certain reasons such as the language, the high level of the courses, time constraints, and they are not linked to the traditional academic classroom in Iraq.

R15 has joined one of the MOOC courses (communication) and he states that, "*I joined the communication course in one of MOOC courses, but after a week I decided to discontinue with this course. This was attributed to some reasons such as travelling, preparing for the final exams during the final weeks of the semester, and there was no link between the traditional classroom in my college and the MOOC course. In addition, I was suffering from the language differences and the high level of the course*" [R15].

لقد كنت متحمسة جدا لحل التمارين خلال المحاضرة لكنني أعرف بعض الفهماء في فهمت للبرامج التي كانت اتم اعادة
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التي أواجهه في فهم قيات المخلصين للغة" [R15]

2. Lack of Pressure

The other reason for leaving MOOC is the absence of pressure or urgency to complete the free course. That is, there is no link between MOOC course and classroom. For instance,

the learners who joined a one-time MOOC can usually access to study materials at any time and even after the formal course. They do not need to finish the course in the limited time if their goal is to learn a certain issue. R16 has illustrated that, *"I joined the database course in the MOOC, and you know that the video does not disappear if you miss the deadline of the course. You still have access to it. There is no pressure by the lecturers in the semester to fulfill this course, so I feel free to join or not join this course."* [R16].

"أضمدت إلى دورقوا عدالهيان اتقني MOOC ، تعلم أن فالدييو . يتغني إنك انك ال موع بالنهاى إلى دورتات دهيية . يزال البالمكن انك لوصول إلى ه . يوجد أيض غط من قبل ال مخصري في ال دراسيتك ، تخيق هذه الدورة ، إنك أش عربال حوية أو عدم ال إلى هذه الدورة تدهيية . " [R16].

Furthermore, most of the participants have decided to leave the MOOCs because they have no effect on their academic marks at the college, or they do not provide an assessment on their jobs at the college also. Besides, they find that there is no need to complete the course and there is no connection between these courses and the classes at the college, which will be a strong factor to leave the course content. Besides, R17 has illustrated that, *" I joined the MOOC as nobody asks you to complete the course. In addition, the results of the session do not affect the outcome of the GPA at the college and the reward in these courses is just a certificate at the end of the day"* [R17].

أضمدت إلى MOOC حيت أحيطل ب فأك كمال الدورة وببض افة إلى ذلك فإبتعج الدورة تشرعلى نبتعج GPA على كايية ، ولا جوت نفي هذه الدورات هي مجرد شهانفيين طي ال يوم " [R17].

3. Communicating with Community

The sense of community helps the students to be involved in a particular session and to strengthen the ability of learning (Kizilcec, et al., 2013). In this respect, **we** have also found that the lack of community interaction may lead to a lack of education. For example, R18

has demonstrated that, "When you answer the question correctly, the instructor will praise you (encourage you) in the classroom. Also when you do an excellent work to achieve a particular task, all the friends in the class will provide comments to encourage you. Besides, when you have a good idea, you will feel proud of it. Yet, you feel nothing in the current MOOCs because you are alone" [R18].

"عن دمت يجب لي حال سؤال شك كل صحيح، سوف نقين علي كمال مدرسيك جعك في الفصل الواسي. أيضا عن دم تقو ب عمل متازك، تحيق م مهمة معينة، سيقدم جيع ا صدق ا في الفصلك عليك اتكش جي عنك ب افضالة الى ذلك، لويك فلكرة جيدة، سيشعر بال فخر بها، وم عنك فأت تشعرب أي شي في MOOCs الحللي نك وحك" [R18].

However, the majority of respondents stated that they do not feel that there is a sense of community when they join the MOOC. Therefore, most of the participants would like to find a bMOOC to connect between the classroom and MOOC.

(III) BMOOCs AS AN OPPORTUNITY

Many exciting learning patterns from the interviews have showed that different participants may have different motivations to take any particular MOOC. Some participants prefer that bMOOCs be a regular classroom and in the same college timetable. Other participants prefer to have an appropriate blended of learning (bMOOCs) based on their current needs.

1. Manage Learning Time

Q4 / Do you think the blended MOOC will help you to manage your time, information, plan and resources, and evaluate your own work?

There is another motivation to the interview which is more typical for the PhD and MA students and others to gain knowledge that will allow them to achieve the best for the current study. For example, a new project or an innovative idea may require a new kind of skill or

need the use of a new tool to create specialized and detailed data analysis environments. Participants felt that the material available on the internet were more effective and efficient to acquire knowledge.

Two rationale issues underlie this motivation: (a) although the students join regular classes to acquire the necessary knowledge, but the traditional classroom requires a lot of time and effort. For example, R3 is an employee who is a PhD student and works in the university at the same time. She needs to learn the statistical analysis to analyze the data of her study. She joined the class of statistics, but she abandoned it in the second week because the class required her to attend three times a week. That is, she needed to spend 60 minutes to go to each class. After the end of the school day, she needed to return to work in the campus quickly to manage the work and meetings for her work. The time was running out very fast, so she abandoned the group and bought a book of statistics to learn and rely on herself. In addition, she used the internet to get information quickly. She has clarified that,

"Currently, I study in a college to learn something on my research, but the classroom lecture does not answer all my questions and the time passes quickly. So I use the internet materials (Google Search) on the basis of research needs to learn whatever I want. Many of my friends (they are also PhD students) use the internet for research purposes, but there is no link between the internet and the lecture at the college. So I encourage to use the blended learning by MOOC." [R3].

أنا أدرس في الكلية لتعلم شيء ما، ولكن من خلال الفصل الدراسي، تحتاج إلى جمع كل شيء في وقت واحد، لذلك كنت أستخدم مواد من الإنترنت (Google) لتعلم أساسيات التي أحتاجها، على ما عرفت أي شيء فأريده، الكثير من أصدقائي (وهم أيضا) يستخدمون الإنترنت لغراض البحث، ولكن يوجد رابط بين الإنترنت ولم أتمكن من تعلم كل شيء، لذلك كنت أستخدم مواد من الإنترنت، على ما عرفت كل شيء، لذلك كنت أستخدم مواد من الإنترنت MOOC" [R3].

Moreover R4 is also a PhD student who has stated that, *"I always use the internet (Google) to find concepts about my research in international economy. Yet, not all the concepts are available in the internet; therefore, I ask my friends or go to the library to find the information I need. This takes time for collecting the information. I'm looking forward to shorten my time through designing a model on Internet for connecting all the students in the college to share their ideas and opinions, and this will help us to get the information we need"*[R4].

"نستخدم أستاخدم الإنترنت (Google) للعثور على مفاهيم حول بحثي في تصادد الدولي. ومع ذلك ، تتوفر جميع المفاهيم في الإنترنت ؛ لذلك أبحث عن المفاهيم التي أحتاجها في الإنترنت أو أذهب إلى المكتبة أو أذهب إلى المكتبة للعثور على المعلومات التي أحتاجها في الإنترنت. وهذا يستغرق وقتا لجمع المعلومات ، وأننا نخطط إلى الاستفادة من قوتها من التصدي من نموذجي في الإنترنت لربط جميع الطلاب في الكلية بظواهرك أفكارهم وآرائهم ، وهذا سيساعدنا في الحصول على المعلومات التي نحتاجها". [R4].

(b) With regard to blended MOOC, learners and lecturers tend to blended MOOC but on condition that the blended MOOC lecturer is the same lecturer of the traditional classroom. This encourages the learners to learn and it provides them with confidence for developing their skills and accomplishing better results in their universities.

Prof, Ass.Prof, and Ass. Lec. are lecturers at Tikrit & Bahgdad University. They have clarified that, *"We are unable to explain and cover all the details of the material in class because the time is limited. So, we recommend that the blended MOOC supports the traditional learning in the classroom"* [R5, R6 and R7].

نحن نرى أن الطلاب والمدرسين يميلون إلى التعلم في بيئة مختلطة ولكن على شرط أن يكون المدرس في بيئة التعلم المختلطة هو نفس المدرس في بيئة التعلم التقليدية. هذا يشجع الطلاب على التعلم ويوفر لهم الثقة لتطوير مهاراتهم وتحقيق نتائج أفضل في جامعاتهم. لذلك نوصي بأن تدعم بيئة التعلم المختلطة التعلم التقليدي في الفصول الدراسية". [R5 و R6 و R7].

2. The BMOOCs as in Classroom

Q5 / Do you support the existence of blended MOOC in your university based on language and cultural factors? (Please clarify your opinion on this issue).

Students strongly support the existence of blended MOOC within their university or other universities. This is what has been identified in most of the interviews conducted in this survey. This is due to the issue that language and culture factors have an important role in the learning process. Students wish to have lectures in the same language (Arabic), which in turn will increase the interaction in the classroom and gain knowledge more quickly.

Furthermore, blended MOOC supports the traditional learning in the classroom particularly when it links with language and cultures. Hence, blended can be used to build a successful hybrid between traditional learning and bMOOC. This type of learning (i.e. blended MOOC) helps the lecturer to take advantage of the lecture time to discuss practicably, identify and clarify misconceptions, or guide the students' concepts based on their language. In contrast, it solves the problems related to the limited interaction and increases the participation in the traditional classroom. On the other hand, it sheds light on the use of social media to support the education because the social media allows the creation and exchange of information among the educators. This facilitates the interaction on the basis of the learning interests.

In some cases, the participants prefer to learn something in terms of their specific needs such as understanding the basic concepts, learning a specific algorithm, getting a general idea about a particular subject, or simply learning new material. For example, R10 only needs to know the basic concept of JavaScript. He has stated that, "*I just want to learn the*

basic rules of JavaScript in Arabic without participating in competitions, duties, and discussions. This is because I need to learn in the classroom. So I just want to watch the lectures and understand the Java basic. That's all." [R10].

أري فقط في الملق وواع ا ي قل بغ اسك وبتبلال غة ال عربية دون المش ارك في المسابقات والواجبات ول في شات . هذا ن ن ي ب حاجة ل ال تعلم م طي الفصل ال دريل ي اذل ك اري فقط م ش ادة ال م حضرات و ف هم أسهل يات لغا . هذا كل شيء " . [R10].

At the same time, R11 is an undergraduate student and she has also illustrated that, "*I need to learn the linear regression but in Arabic language from another resource to support the traditional learning in order to analyze the data only*". [R11]

لغت ا ج ك في م موضوع ا ن ح دار ل ا خطي و ل ك ن بلال غة ال عربية من مورد آخر ل دعم ال في مطلق اي دي من أ ج ك حل ال البيانات [R11].

2. Interaction with Peers

Q6/ Do you support the design of blended MOOC courses in your university that can help you to increase the interaction with your friends and other learners from another universities in Iraq? (Please explain your opinion on this point).

Some participants feel lonely when studying in the classroom, so they prefer to organize their own local study groups. For instance, there is a group of postgraduates from different departments such as Computer Engineering, Chemistry and Science information and technology. All these students have a same subject in their study (Research Methodology). A case in point is that R12 joined a study group consisting of 12 friends (MA Students). He has stated that, "*I organized a study group and sent an e-mail to all members to meet at the university library for studying the research methodology. We always meet to discuss the*

research methods, but every time someone from the group does not attend the meeting. Thus, I hope that if there is a way via internet we can meet by without bothering ourselves to attend the meeting ". [R12].

أقمت تنظيم مجموعة قدراسة أوصل ترسالة لغيره في كل مرة أجمع أعضاء نقا في لمتابعة الراجاع لدراسة فيه حجة
البحث في طريقه لاقش أسئلة بالبحث، ولكن في كل مرة يرضى في هاشخص من الراجاع. أملا إذا
كان فيك طريق يصير أترتت لجننا من أن يضمع دون أن حمل أنفسنا عناء الراجاع. [R12].

Moreover, R13 is another example who studies the subject of architectural designs systems. He has stated that, "*I organized a study group of friends in the classroom. Architectural designs systems require to solve the assessment every day, so I invite all members of the group to my home to discuss the exercises. We hope that this meeting can be conducted through the Internet, rather than bothering friends to meet at home or anywhere else to learn something.*" [R13].

أقمت تنظيم مجموعة قدراسة من أصدقائي في فصلنا بطلب أنظمه لمتابعة الراجاع. أملا إذا
أدعو جميع أعضاء الراجاع في كل يوم لاقش أسئلة بالبحث، ولكن في كل مرة يرضى في هاشخص من الراجاع. أملا إذا
أصدقائي أجمع أعضاء الراجاع في كل يوم لاقش أسئلة بالبحث، ولكن في كل مرة يرضى في هاشخص من الراجاع. أملا إذا
[R13]

One of the important topics is that the learners are encouraged to engage in bMOOCs sometimes to find peers with common interests. This is attributed to the point that meeting someone with someone else has the same mutual interests can make the learners feel happy.

R8 is a student who studies in the College of Management and Economics to get a Bachelor degree. After she had finished her study, she felt that she had a lot of spare time at her home and she felt that she was isolated from her friends. She had a friend in the same classroom

and college, but in a different university and city. She was looking forward to share her knowledge with her friend by any way. She has demonstrated that *"My education by the traditional way was not enough to answer certain questions in my mind. At the same time I know some friends in other universities, and we have some interesting discussions by e-mail, Viber, Facebook, and WhatsApp. Yet, all of these tools are not sufficient in our scientific discussion and they are tiring at the same time. So I would be very happy to share my thoughts with another person through the educational means via the internet such as discussion forum."* [R8].

"سراتي ببال طريقيته لئلا يبي قل متافك افية بة لئيب عرض ا قفي ذهني. فوي الوقت تفنسه ، أعر فب عرض
الصق افية ال اجامعات ا رى ، ليعين ب عرض ال نقش ات ال بخيرة تمام عن طريقي بليري ا قفون ي ، فوي ب ،
و فب ب و ك ، و WhatsApp. ولكن كل هذه ا دوات ليس ب كافية فبين اق فتزال على هية وهي ب صج قفي فب سال وقت ، ل ذا
سك ونس عي ببال غلي فم ش ارك فف اف اري م عش خص آخر من للوس طال بل على عاي هية ب صر ا ت برنت بمل فب دى ال اق شه .
" [R8].

A preliminary study was showed conducted and that the majority of the interviewees need the blended MOOC to reduce the obstacles and challenges in the traditional learning. The findings also disclose that students prefer learning through blended MOOC 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 MOOC in Iraq. Thus, it displays that a further study should be carried out in understanding the learners approach in blended MOOC.

Appendix B

Expert Consultation Form

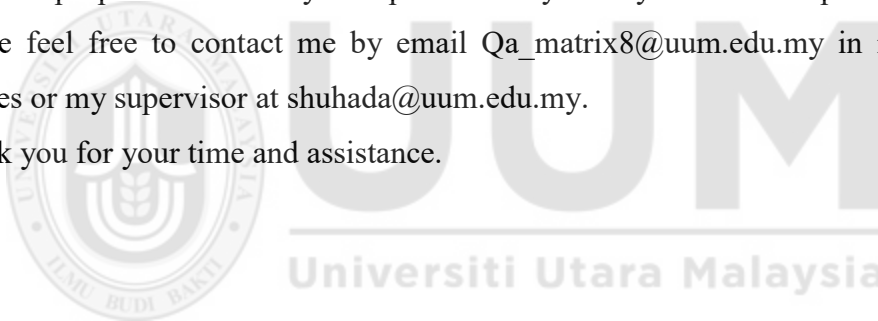
I am Qusay Abboodi Ali and I'm currently pursuing PhD study in Multimedia at Universiti Utara Malaysia (UUM) Malaysia. My PhD research proposes the Iraqi Blended Massive Open Online Course Model (bMOOC) which aims to provide a systematic method for learners to increase interactions with learning materials and gain knowledge.

You will see that the question below give you ample opportunity to use your expertise, experiences, interests and creativity. It would be greatly appreciated if you could complete the form.

The information supplied will be treated as confidential and will be used for Research purposes which may be reported anonymously in academic publications.

Please feel free to contact me by email Qa_matrix8@uum.edu.my in regards to any queries or my supervisor at shuhada@uum.edu.my.

Thank you for your time and assistance.



Q1/ What are the phases, and tasks involved in developing online learning or blended learning via MOOC based on your experience?

Q2/ What are the components, and features involved in developing online learning or blended learning via MOOC based on your experience?



Q3/ What are the learning activities involved in developing online learning or blended learning via MOOC based on your experience?

THANK YOU

Appendix C

Expert Review Form

I am Qusay Abboodi Ali and I'm currently pursuing PhD study in Multimedia at Universiti Utara Malaysia (UUM) Malaysia. I am delighted to inform you that you have been exclusively selected to participate in this research.

My PhD research proposes the **Iraqi Blended Massive Open Online Course (bMOOC) Model**, which aims to provide a systematic method for learners to increase interactions with learning materials and gain knowledge.

The target users of the proposed model will be undergraduate students who will use the blended MOOC as strategy to support their learning and knowledge in the traditional learning. This is because the university students are stakeholders in this research. Hence, to evaluate the proposed Iraqi-bMOOC model, you are invited to review the proposed model according the items as listed in the review form. Your review is important to determine the main components, features and learning activities in model for learners to develop traditional learning in Iraqi higher education institutions. Therefore, based on your knowledge, expertise, skills, and experiences in online learning design and development, it would be greatly appreciated if you could complete this evaluation form. The information supplied will be treated as confidential and will be used for research purposes which may be reported anonymously in academic publications.

Please feel free to contact me by email (Qa_matrix8@yahoo.com) in regards to any queries or my supervisors (shuhada@uum.edu.my).

Instruction

Please read all the items carefully (Rate the Relevance of the components and features as a learning activities). Once this is done, with the expertise you possess, please provide feedback for all questions by filling in the provided spaces.

Queries or Concerns

Please feel free to contact me by email (Qa_matrix8@yahoo.com) in regards to any queries or my supervisor at shuhada@uum.edu.my.

Thank you for your time and assistance.

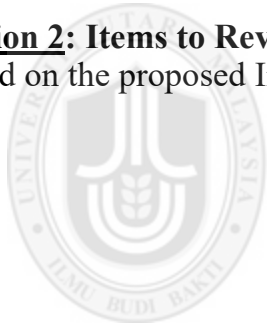
In the following section, please answer the personal information:

Section 1: Please answer the following by either writing responses to the required information or by ticking (√) in the box

Expert Information	
Gender:	Male (), Female ()
How old you:	() Years
Degree professor	Prof (), Assist.Prof (), Lect. (), Assist. Lect ().
Academic Qualification	
Univirsity	Bahgdad (), Tikrit ()
Years of Experience	() Years

Section 2: Items to Review

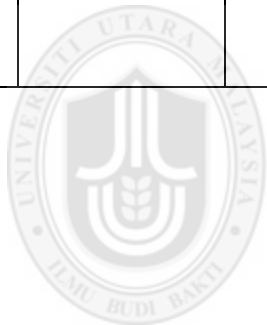
Based on the proposed Iraqi-bMOOC model, please tick (√) on your choice.



(1) Are the following proposed components (system modules), functionality & features (and the learning activities within them) relevant to represent the phases of **Admin component development into Iraqi-bMOOC?**

No	System Modules	Functionality	Features	Essential	Useful	Not Useful
1.	Manage Universities	Add uni	University Code			
			University Name			
			University address			
			About University			
		Manage uni	Upload Picture			
			Update			
			Delete			
			Sort by (name, type & date)			
2.	Manage Colleges	Add college	College Code			
			College Name			
		Manage college	Update			
			Delete			
			Sort by (name, type & date)			
3.	Manage Department	Add Department	Department Code			
			Department Name			
		Manage Department	Update			
			Delete			
			Sort by (name, type & date)			
4.	Manage Subject	Add subject	Subject Code			
			Subject Name			
		Manage Subject	Update			
			Delete			
			Sort by (name, type & date)			
			Search by (name, type & date)			

Are the following proposed components (system modules), functionality, & features (and the learning activities within them) relevant to represent the phases of Admin component development into Iraqi-bMOOC?						
No	System Modules	Functionality	Activities	Highly Useful	Useful	Not Useful
5.	Manage Lecturers	Add lecturer	Lecturer Name			
			Address			
			University			
			College			
			Department			
			Name of subjects			
			Update			
			Delete			
		User name & Password				
		Manage Lecturer	Update			
			Delete			
			Sort by (name, type & date)			
			Search by (name, type & date)			



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(2) Are the following proposed components (system modules), functionality, & features (and the learning activities within them) relevant to represent the phases of **Lecturer** component development into Iraqi-bMOOC?

No	Learning Activities	Functionality	Features	Highly Useful	Useful	Not Useful
1.	Manage Materials	Add Materials	Material title			
			Name of subjects			
			Type of Material			
			Upload Material			
		Manage Materials	Update			
			Delete			
			Sort by (name, type & date)			
Search by (name, type & date)						
2.	Manage Assignments	Add quiz/ assignment	Title assignment			
			Name of subjects			
			Type of Material			
			Upload Material			
		Manage Quiz/ Assignment	Update			
			Delete			
			Sort by (name, type & date)			
			Search by (name, type & date)			
View Submission	Subject Name					
3.	Manage Assessments	Add Assessments	Subject Name			
			Mark			
			Assessment			
			Student Matric NO			
		Manage Assessments	Update			
			Delete			
			Sort by (name, type & date)			
Search by (name, type & date)						
4.	Forum	Discussion forum	Subject Name			
			Title Chat			
5.	Message (E-mail)	Send /Received Message	Search message			
			Delete message			
			Sort email by (Name, date and type)			
			Update lecturer information			

Are the following proposed components (system modules), functionality, & features (and the learning activities within them) relevant to represent the phases of Lecturer component development into Iraqi-bMOOC?						
No	Learning Activities	Functionality	Features	Highly Useful	Useful	Not Useful
7.	Lecturer Information	Update/ View Lecturer Information	Lecturer Name			
			Address			
			University			
			College			
			Department			
			Name of subjects			
			Username			
			Password			
Upload Lecturer Image						



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(3) Are the following proposed components (system modules), functionality, & features (and the learning activities within them) relevant to represent the phases of **Student component development into Iraqi-bMOOC?**

No	Learning Activities	Functionality	Features	Highly Useful	Useful	Not Useful
1.	Registration	Enter basic information	Student Name			
			Student ID			
			University			
			College			
			Department			
			Name of subjects			
			Matric			
			Password			
			Upload Image			
2.	Login	Sign in	User name & Password			
			University			
			College			
			Department			
3.	View Materials	Select Subject	Open / download lecture (text, video lecture, audio)			
			Add / view lecture comments			
			Search materials by(Name, date and type)			
			Sort lectures by (name, date and type)			
4.	View Quizzes/ Assignments	Select Subject	Open /download assignments (text, video, audio...ect)			
			Search assignments (Name, date and type)			
			Sort assignments (name, date and type)			
		Upload Solution	Select file			
			Upload file			
5.	View Assessments	Select Subject	View mark			
			Search Assessments by (name, date and type)			
			Sort Assessments by (name, date and type)			
6.	Forum	Discussion Forum	Subject Name			
			Title of discussion			

Are the following proposed components (system modules), functionality, & features (and the learning activities within them) relevant to represent the phases of Student component development into Iraqi-bMOOC?						
No	Learning Activities	Functionality	Features	Highly Useful	Useful	Not Useful
7.	Message (E-mail)	Send/ Received Message	Search message			
			Delete message			
			Sort email by (Name, date and type)			
8.	Student Information	Update / View Student Information	Student Name			
			Student Id			
			University			
			College			
			Department			
			Name of subjects			
			Matric			
			Password			
Upload student Image						

(4) The connections and flows of all the components are logical?

Yes (), No ().

(5) The Iraqi-bMOOC model is usable to the development of traditional learning?

Yes (), No ()

(6) The terminology used in the Iraqi-bMOOC model is understandable?

Yes (), No ()

Appendix D

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E-mail: Qa_matrix8@yahoo.com



Appendix D: Experimental Testing Questionnaire

Dear Participant,

We appreciate your participation in this survey. This study aims to design Iraqi Blended Massive Open Online Course (bMOOC) Model for the institutions in Iraq. The researcher believes that the outcome of the study will be of a great importance to improve the performance in the higher educational system as a whole in Iraq. Please answer the whole questions completely. Your effort in filling the questionnaire is highly appreciated because your answers will contribute in providing a distinguished quality to the research. You can quit any time from the survey and you have the right to skip any question that you do not want to answer because your participation is voluntary.

Researcher
Qusay Abboodi Ali
PhD. Student
University Utara
Malaysia

Please indicate your consent to participate in this survey:

I agree.

I do not agree.

Please answer the following by either writing responses to the required information or ticking (√) in the box:

Section 1:

Q1	Gender:	Male (), Female ()
Q2	How old you:	() Years
Q3	Univirsity	
Q4	Class	
Q5	Academic study	Bachelor (), Master (), PhD. ()

SECTION 2: Criteria Evaluations Form

Instruction: Please answer the following Questions by ticking (√) on the appropriate scale for each item to evaluate the criteria of Iraq-bMOOC.

Blended Learning Evaluation in Iraqi-bMOOC						
No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q6	Blended MOOC approach helps me to improve my academic achievements outcome.					
Q7	Blended MOOC approach increases my motivation to share and discover new ideas.					
Q8	Blended MOOC approach enables me to accomplish tasks more quickly.					
Q9	Blended MOOC approach can be used to enhance the traditional classroom approach.					
Q10	I am satisfied with this blended MOOC environment.					



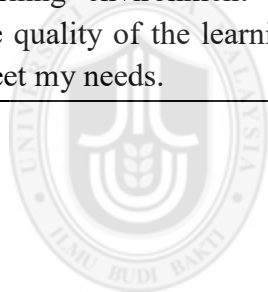
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Flexibility Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q11	I can access to lectures and learning activities anytime and/or anywhere that is suitable for me					
Q12	The learning environment provides me with a wide range of learning tools that allow the learners to quickly access the required information and materials (e.g. assignment due date, grading system, exams, etc.).					
Q13	I am able to access the learning materials with no much difficulty.					
Q14	The website content makes me explore the course further.					
Q15	I can access to the social media as part of the learning process such as twitter and Facebook.					
Q16	The learning environment allows me to use the video lectures based on the lectures in classroom.					
Q17	The learning environment provides the learners with examples that can be understood by everyone based on the Iraqi-Arabic language and culture.					
Q18	The learning environment provides me with adequate communication channels with the lecturer and with other learners (e.g., email, forum, video comments).					
Q19	I am very comfortable with the flexible design to upload and download the files in my own devices easily (Computer, Mobile), such as Video, doc, ppt, pdf and xlsx and etc.					

Quality Content Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q20	The presentation of the subject content is clear.					
Q21	The easy design helps to structure the learning content for different learners.					
Q22	The interactive material comments (video, audio and text) help improve the quality of the					
Q23	The information presented in the discussions comments helps me to better understand this					
Q24	The feedback from my lecturer and other learners helps me to understand the lecture content.					
Q25	The search options in the system help me to find specific learning resources.					
Q26	This learning environment enables me to adapt the quality of the learning materials to better meet my needs.					



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Educational Design Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q27	The learning objectives and scope are clearly stated in the online lecture.					
Q28	The structure of this course keeps me focused on what is to be learned.					
Q29	Blended MOOC approach can be used to supplement the traditional classroom					
Q30	The various learning tools in this environment are effective.					
Q31	I have the possibility to ask my tutor about what I do not understand.					
Q32	The lecturer responds promptly to my queries.					
Q33	The lecturer sends me comprehensive feedback on my assignment.					
Q34	The approach of this blended MOOC environment encourages me to contact the teaching team in this course when needed.					
Q35	The assessment in this course improves my learning process.					
Q36	Different types of questions help me to provide specific and quick answers (e.g. short answers, essay, matching, Multiple Choice question and True/False question).					

Cooperative learning Environment in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q37	I can interact with other learners and with the lecturer synchronously and asynchronously.					
Q38	It is easy to work collaboratively with other learners involved in a course.					
Q39	The communication tools enhance my interaction and collaboration with my course mates.					
Q40	I share what I have learned in this course with others outside of the learning environment such as learners from other universities.					
Q41	The cooperative learning helps me receive support and feedback from other participants.					
Q42	The blended MOOC environment encourages me to collaborate and share ideas with others.					
Q43	The blended MOOC environment increases my motivation to participate in class activities.					
Q44	I am satisfied with this cooperative learning environment.					
Q45	The discussion forum of this course is effective.					
Q46	The use of email in this course is effective.					
Q47	The use of the lectures' comments in this course is effective.					
Q48	The interaction (i.e. content, lecturer, and peers) is effective.					
Q49	I can interact with other learners and lecturers from other universities.					
Q50	Feedback from the professor is timely.					

Openness Environment in Iraqi-bMOOC						
No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q51	The blended MOOC system allows the student to register free of charge.					
Q52	There is no academic requirements for registration in the system, i.e., it is open for all					
Q53	The learning material is available for free downloading.					
Q54	This learning environment helps the learner to learn and receive support and feedback from					
Q55	This learning course enables me to adapt with learning material at any university.					
Q56	I can access to lectures and learning activities from anywhere and anytime.					



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اسبتي الختبار لدراسة تجريبية

عيزي لمشارك ،

نحن نقدر مشاركتك في هذا التحدث. هدفنا من هذه الدراسة هو تطوير نموذج Iraqi Blended Massive Open Online Course (bMOOC) Model لخدمة المجتمع في العراق. نحن نأمل أن تكون هذه الدراسة مفيدة لك. نحن نأمل أن تكون هذه الدراسة مفيدة لك. نحن نأمل أن تكون هذه الدراسة مفيدة لك.

الباحث

قصي عودي عوي

طالب الدكتوراه

جامعة اوتارا الماليزية

يرجى ا لى موفقتك لى المشارك فى ا بتيان:

() أنا اوفلق. () ان ا اوفلق.

يرجى ا بة على م لى ا ملبقتبة ردود لى ال علوم ا المطلوبة ا بوضع مة (لى ال ا لى الص م ح :
ل ق س م 1 بيش مل س 1 - س كل جم ال ا لى ا لى موع لى ا لى مة حول المش ا لى ا لى ا لى ا لى ا لى ا لى ا لى ا لى ا لى a

س1	ال ا لى ا لى ا لى ا لى ا لى ا لى ا لى ا لى a	ا لى ا لى a (, لى ا لى a)
س2	ا لى ا لى a	(ا لى a)
س0	ا لى ا لى a	
س4	ا لى a	
س5	ا لى a لى a لى a	ا لى a لى a لى a (, ا لى a لى a) (ا لى a لى a)



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القسم 2: نموذج تقييم الامعير

لتعيرات بيرجى بة لغى سرلل قاتلقة عن طريق وضع مة (لغى القعاس المنلرب

لتقييم معير Iraqi-bMOOC:

Blended Learning Evaluation in Iraqi-bMOOC لبلقة لمموظفى دورة Iraqi-bMOOC						
وافقشدة	وافق	معيد	غير وافق	فواق بشدة	القة قلات	NO.
					يس اعنى الاموك الامدمج لغىت حرىن تلج الفرجات الكابفة	س1
					ان الاموك الامدمج يبد من فلع لمشاركة ولكش افلكار جفة .	س2
					وملغنى الاموك الامدمج من ان جازالم هام سرعة الفبر	س0
					لمكن ملت خدامن هج bMOOC كم الن هج لصل للدرلر للقلدى	س4
					لاراض عنقفة bMOOC مده	س5

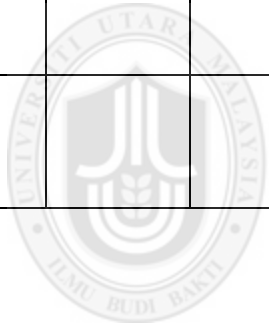
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Flexibility Evaluation in Iraqi-bMOOC
لمؤلفي نموذج Iraqi-bMOOC

NO.	أ لة (لقرات)	فوق بشدة	غير وافق	مجد	وافق	وافق شدة
1س	يؤمني الوصول إلى الامحضررات وارشطة التوفيقي أي وقت و من أي مكان فبلب بي					
2س	توفر لي بيبية التعلم مجموعة لغيرة من أدوات التعلم التي تسهم في التعلم الوصول بسرعة إلى المحتوى و امتوال مواد لطلبه على سبيل المثال بتاريخ لم هام , نظام الدرجات , ا , نتبارات , إلخ					
0س	ان ادر على الوصول إلى الامواد التعليمية دون صعوبة					
4س	حتوى الاموق عي علمني لتكشش فالدورة ألتشر					
5س	يؤمني الوصول إلى و يرطال ا ع م اضم ا عي ك جزء من ع لية التلوم بثلت بيتر في سبوك.					
6س	بيلة للتعليمي حل لي لتخدم محضررات في بي بي اء على الامحضررات في الوصول لدرلية.					
7س	تفويديلة التلوم التلومين لطي لي كن ب هم ها من قبل لاجي على ناس اللغة و لتقللة الاعبية العربية					
8س	توفر لي بيلة التلوم و اتتصل المنلبة مع الامحضرر و مع التلومين ا خين بثل : لبيد القتروني , لبيدي متفوقات في بيو.					
9س	أ ا محتاح جدا مع لتصميم لمرن لتحميل و تنزيل لفي انفي ا ج متي لخصه بس ملة الاكسيوتر , لجال , بثل في بيو , doc , ppt , pdf و xlsx و غير ه.					

Quality Content Evaluation in Iraqi-bMOOC
محتوى لجودقي نموذج Iraqi-bMOOC

وافق شددة	وافق	محميد	غير وافق	وافق بشدة	المرات (المرات)	NO.
					عرض محتوى الموضوع ووضوح	س1
					يساعد المتعلم على فهم الموضوعات التي يتناولها محتوى التعليم الإلكتروني بشكل جيد	س2
					تساعد تعليقات المواد المتعلمين على فهم الموضوعات الصوتية والنص (على سبيل المثال) جودة محتوى التعليم الإلكتروني	س0
					يساعد المتعلم على فهم الموضوعات المتعلقة بالبرامج التعليمية على دورته .	س4
					تساعدني التعليقات الممتدة من المحاضرين والتعلميين الآخرين في فهم محتوى المحاضرة.	س5
					تساعدني في اتخاذ القرارات التحفيزية للطلاب في الشغور على صناديقهم في مجموعة محددة	س6
					مذهلة للغاية للتعليقات التي أتت من المتعلمين من حيث جودة المواد التعليمية التي أتت من أعضاء هيئة التدريس.	س7



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Educational Design Evaluation in Iraqi-bMOOC
لتصميم التعليم في نموذج Iraqi-bMOOC

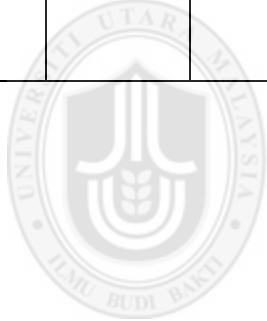
وافق بشدة	وافق	محايد	غير موافق	فوق بشدة	الأسئلة (الأسئلة)	NO.
					تمت جيداً أهداف التقييمية وللتطابق وضوح بيد للمخرجة عبر الإنترنت.	س1
					تربط هذه الدورة بتقني مركز على ما يمكن ان تعلمه	س2
					يمكن استخدام النهج المدمج ببولطة MOOC لتكملة نهج الاتصال التدريسي قائدي	س0
					أدوات التعلم التكنولوجية هذه هي فعالة.	س4
					لدي الخبرة أن أسأل لتأذي حول ما تقدمه.	س5
					يحب للمخرجة تقني للصور سيفس ارثي.	س6
					يرسل للمخرجة تقني اتش الة حول مهمي.	س7
					إن مخرجة MOOC للمدمجة هذه يشجعي تقني اتصال التقني لتدريسي هذه الدورة تعدل حاجة.	س8
					يعمل التقني في هذه الدورة على تحسين عليه لتقوم بالخطا تقني.	س9
					نفس اعزني لأواع اسئلة للمصنعي تقني إجبات محددة وسيرة (تقني سويل للتحال ، إجبات قصيرة ، استيرات بتعدد ، وسؤال صواب / خطأ).	س13

Cooperative learning Evaluation in Iraqi-bMOOC
استطلاع للمتعاون في نموذج Iraqi-bMOOC

NO.	الأسئلة (الأسئلة)	فائق بشدة	غير موافق	محايد	موافق	وافقت بشدة
س1	يتمتع المتعلمون بالفاعلية مع التعلم التعاوني أكثر من غيرهم.					
س2	من السهل العمل مع شركائنا في التعلم التعاوني.					
س0	أدوات التعلم والتواصل تحسن من تعلمنا في التعلم التعاوني.					
س4	أشارك في هذه الدورة مع زميلاتي من جامعات أخرى.					
س5	يساعدني التعلم التعاوني في تحقيق أهدافي.					
س6	تسمح بيئة MOOC بالدمج بين التعلم التعاوني والتعلم الذاتي.					
س7	تسمح بيئة MOOC بالدمج بين التعلم التعاوني والتعلم الذاتي.					
س8	أنا راض عن بيئة التعلم التعاوني هذه.					
س9	تتمتع بالفرصة في هذه الدورة.					
س13	تتمتع بالفرصة في هذه الدورة.					
س11	تتمتع بالفرصة في هذه الدورة.					
س12	تتمتع بالفرصة في هذه الدورة.					
س10	يتمتع المتعلمون بالفاعلية مع التعلم التعاوني.					
س14	ردود الفعل من المتعلمين.					

Openness Evaluation in Iraqi-bMOOC
افتتاحي فتي ن نموذج Iraqi-bMOOC

وافق بشدة	وافق	محايد	غير موافق	فوق بشدة	الأسئلة (الأسئلة)	NO.
					ليس من نظام ال MOOC لأمم وطلب طلب الأسئلة من أجل.	س1
					توجد متطلبات أكاديمية في لفتس في لفتي النظام , أي أن طلبت وفتح لفتس	س2
					المواد التعليمية تمت اح قلة تنزيل الم جلي	س0
					هذه الهيئة التعليمية يتقاسم اعد التمتع في ن على الفتح من توافقي الدعم وردود لفتس من أي جامع في لفتس.	س4
					هذه الدورة التعليمية تتم لفتس من الكافي مع المواد التعليمية في أي جامعة	س5
					يتم تنزيل لفتس لفتس لفتس لفتس لفتس لفتس الفتس لفتس لفتس لفتس لفتس لفتس لفتس	س6



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Appendix E

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E-mail: Qa_matrix8@yahoo.com



Appendix E: User Interaction

Dear Participant,

We appreciate your participation in this survey. This study aims to design **Iraqi Blended Massive Open Online Course (bMOOC)** Model for the institutions in Iraq. Please answer all questions. You can quit any time from the survey and you have the right to skip any question that you do not want to answer because your participation is voluntary.

Researcher
Qusay Abboodi Ali
PhD. Student
University Utara
Malaysia

Universiti Utara Malaysia

Section 1: Please indicate your consent to participate in this survey:

() I agree.

() I do not agree.

Section 2: User Interaction Evaluation Form

Instruction: Please answer the following Questions by ticking (√) on the appropriate scale for each item to evaluate the user interaction.

User Interaction Evaluation in Iraqi-bMOOC						
No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Q1	The peer feedback helps me to recognize the errors in my own work.					
Q2	The received comments from peers' feedback help me to improve the quality of my work.					
Q3	The received feedback helps me to get more information about the learning topic.					
Q4	Reviewing others' work helps me to reflect it on my own work.					
Q5	The peer interaction helps me to learn how to give constructive feedback to peers.					
Q6	The lecturer interaction helps me to come up with new ideas.					
Q7	The interaction with lecturer increases my ability in organizing ideas and contents in my work.					
Q8	The lecturer enhances my satisfaction on this course.					
Q9	I am satisfied on my interaction with the course content.					
Q10	Content of course allows me to engage in the learning activities.					
Q11	Course content enhances interaction between the lecturer and the learners.					
Q12	Course content provides me with adequate communication channels with the lecturer and peers (e.g., email, forum, comments, etc.).					

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أسبتي اتفاعل مستخدم

عيزي لمشارك ،
نحن نرحب بمرشركنا في هذا است عت هدف هذه الدراسة الى تصميريم Iraqi Blended Massive Open
Online Course (bMOOC) Model للؤسس انت الخليم ال عراق في ال عراق. يرجى ا بة في جيع
ا ة. لمؤنك لواء أي وقت من ا ت ع ، وليك ال حق فيت خطي أي سؤال تريدا ا بة عليه
مشاركتك طوعية.



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الباحث

قصي سعودي في

طالب لتورا

جامعة اتار اللميزية

يرجى ا لى مؤقتك في المشاركون في ا بتيان:

() أنا اؤلق. () انا اؤلق.

للمسم 2: نموذج في يتم فعالم مستخدم

لعملى مات يرجى ا بة في ا ة التلية عن طريق وضع مة (بى ال مبع.

User Interaction in Iraqi-bMOOC نشاط التفاعل في نموذج Iraqi-bMOOC						
NO.	الدرجة (القياسات)	فوق بدرجة	غير موافق	مجهول	موافق	موافق بشدة
1س	تسارعني م حظرات لازم هي لتعرف على ا خطافي علمي					
2س	س اعني التعليق اتل م بتل مة من لازم على تحسين جودة علمي					
0س	س اعني التعليق اتل م بتل مة في الاحول على مؤيد من ال عمل ومات حول موضوع التعلم					
4س	مراجعة عمل ا يدي س اعني في عكس ذلك في علمي الخاص.					
5س	يس اعني التفاعل لازم ء في تعليم في إعطاء م حظرات من اقل قران.					
6س	يس اعني التفاعل لازم في الخروج بفكار جيدة.					
7س	التفاعل مع الام حاضري في تنظيم افكار ولام محتوى علمي.					
8س	الام حاضري عزز ابي احيفي هذه الدورة					
9س	ان ارض عنيف في مع مستوى الدورة التدريسية هذه					
13س	مضوى للدور في مرحلي ن خراطي أشدة للتعليم.					
11س	مضوى للدور في عزز للتفاعل الام حاضري والتعلم.					
12س	يفرلي مضوى للدور في واتصال الفني مع الام حاضري و قران على سويل البحال ، للهيد الالكتروني ، اليتدي ، تتبعات الفوترة ، ومالى قك).					

Appendix F

Expert Review of Instrument for Iraqi Blended Massive Open Online Course Model

Researcher's Name: Qusay Abboodi Ali

Supervisors : Prof. Dr. Norshuhada Shiratuddin

Department : School of Multimedia & Communication Technology, Universiti Utara Malaysia

Introduction and Background

Thank you for your interest to review the proposed instrument. My PhD research proposes the Iraqi Blended Massive Open Online Course Model (bMOOC) which aims to provide a systematic way of developing the traditional learning in Iraqi higher education institutions. One part of this research is to construct an instrument in a form of questionnaire to evaluate the proposed model. Therefore the items asked in the questionnaire seek to identify the significance of proposed model in serving as an educational model that enables the students to increase interactions with learning materials and gain knowledge.

Instruction

Through this review, I sincerely require your expertise to assess the content validity of the questionnaire. Based on your knowledge, expertise, skills, and experiences in online learning design and development, it would be greatly appreciated if you could review the validity of the items in the given questionnaire.

Please “circle” the appropriate scale for each item, and fill in the (Remarks) sections of the evaluation form. Please indicate whether the items of instrument in the model meet the appropriate standards of blended MOOC accurately. And you will see that the review questions give you ample opportunity to use your expertise, experiences, interests and creativity. It would be greatly appreciated if you could complete this evaluation form.

Consent

The information supplied will be treated as confidential and will be used for research purposes which may be reported anonymously in academic publications.

Queries or Concerns

Please feel free to contact me by email (Qa_matrix8@yahoo.com) in regards to any queries or my supervisor at shuhada@uum.edu.my.

Thank you for your time and assistance.



1. Blended Learning in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q1	Blended MOOC approach helps me to improve my academic achievements outcome.	1	2	3	4	5	
Q2	Blended MOOC approach increases my motivation to share and discover new ideas.	1	2	3	4	5	
Q3	Blended MOOC approach enables me to accomplish tasks more quickly.	1	2	3	4	5	
Q4	Blended MOOC approach can be used to enhance the traditional classroom approach.	1	2	3	4	5	
Q5	Blended MOOC enables the instructor to address individual student's needs effectively.	1	2	3	4	5	
Q6	I am satisfied with this blended MOOC environment.	1	2	3	4	5	

2. Flexibility Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q7	I can access the learning activities at any time convenient to me.	1	2	3	4	5	
Q8	The learning environment provides me with a wide range of learning tools that allow the learners to quickly access the required information and materials (e.g. assignment due date, grading system, exams, etc.).	1	2	3	4	5	
Q9	I am able to access the learning materials with no much difficulty.	1	2	3	4	5	
Q10	The website content makes me explore the course further.	1	2	3	4	5	
Q11	The learning environment allows me to focus on the learning activities suitable to me.	1	2	3	4	5	
Q12	I can access to the social media as part of the learning process such as twitter and Facebook.	1	2	3	4	5	
Q13	The learning environment allows me to use the video lectures based on the lectures in classroom.	1	2	3	4	5	

2.Flexibility Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q14	The learning environment provides the learners with examples that can be understood by everyone based on the Iraqi-Arabic language and culture.	1	2	3	4	5	
Q15	The learning environment provides me a wide range of materials that I can choose from.	1	2	3	4	5	
Q16	The learning environment provides me with adequate communication channels with the lecturer and with other learners (e.g., email, forum, video comments).	1	2	3	4	5	
Q17	I am very comfortable with the flexible design to upload and download the files in my own devices easily (Computer, Mobile), such as Video, doc, ppt, pdf and xlsx and etc.	1	2	3	4	5	

3. Quality Content Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q18	The presentation of the subject content is clear.	1	2	3	4	5	
Q19	The easy design helps to structure the learning content for different learners.	1	2	3	4	5	
Q20	The interactive material comments (video, audio and text) help improve the quality of the	1	2	3	4	5	
Q21	The information presented in the discussions comments helps me to better understand this	1	2	3	4	5	
Q22	I always know where I am in the course.	1	2	3	4	5	
Q23	The feedback from my lecturer and other learners helps me to understand the lecture content.	1	2	3	4	5	
Q24	The search options in the system help me to find specific learning resources.	1	2	3	4	5	
Q25	This learning environment enables me to adapt the quality of the learning materials to better meet my needs.	1	2	3	4	5	
Q26	The content of this course keeps me focused on what is to be learned.	1	2	3	4	5	

4. Educational Design Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q27	The learning objectives and scope are clearly stated in the online lecture.	1	2	3	4	5	
Q28	The structure of this course keeps me focused on what is to be learned.	1	2	3	4	5	
Q29	Blended MOOC approach can be used to supplement the traditional classroom approach.	1	2	3	4	5	
Q30	The various learning tools in this environment are effective.	1	2	3	4	5	
Q31	I have the possibility to ask my tutor about what I do not understand.	1	2	3	4	5	
Q32	The lecturer responds promptly to my queries.	1	2	3	4	5	
Q33	The grading criteria were clearly communicated at the beginning of the course.	1	2	3	4	5	
Q34	The lecturer sends me comprehensive feedback on my assignment.	1	2	3	4	5	
Q35	I can approach the teaching team in this course when needed.	1	2	3	4	5	
Q36	The assessment in this course improves my learning process.	1	2	3	4	5	

4. Educational Design Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q37	Different types of questions help me to provide specific and quick answers (e.g. short answers, essay, matching, Multiple Choice question and True/False question).	1	2	3	4	5	



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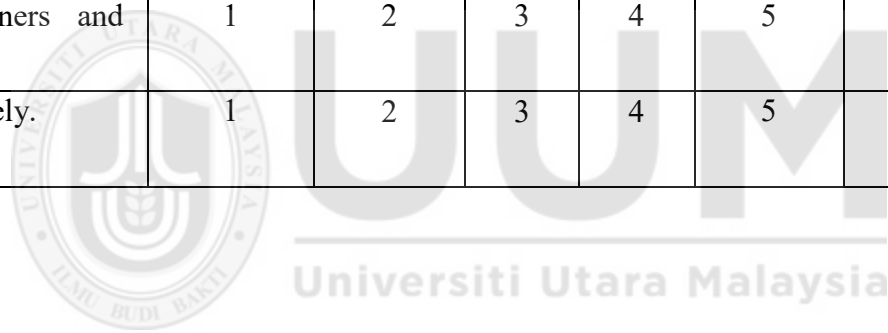
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5. Cooperative Learning Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q38	I can interact with other learners and with the lecturer synchronously and asynchronously.	1	2	3	4	5	
Q39	It is easy to work collaboratively with other learners involved in a course.	1	2	3	4	5	
Q40	The communication tools enhance my interaction and collaboration with my mates.	1	2	3	4	5	
Q41	I share what I have learned in this course with others outside of the learning environment such as learners from other universities.	1	2	3	4	5	
Q42	The cooperative learning helps me receive support and feedback from other participants.	1	2	3	4	5	
Q43	The blended MOOC environment encourages me to collaborate and share ideas with others.	1	2	3	4	5	
Q44	The blended MOOC environment increases my motivation to participate in class activities.	1	2	3	4	5	
Q45	The interaction environment encourages the learner to invite participants from outside the university.	1	2	3	4	5	
Q46	I am satisfied with this cooperative learning environment	1	2	3	4	5	
Q47	The discussion forum of this course is effective.	1	2	3	4	5	

5. Cooperative Learning Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q48	The use of email in this course is effective.	1	2	3	4	5	
Q49	The use of the lectures' comments in this course is effective.	1	2	3	4	5	
Q50	The interaction (i.e. content, lecturer, and peers) is effective.	1	2	3	4	5	
Q51	I can interact with other learners and lecturers.	1	2	3	4	5	
Q52	Feedback from the professor is timely.	1	2	3	4	5	



6. Openness Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q53	The blended MOOC system allows the student to register free of charge.	1	2	3	4	5	
Q54	There is no academic requirements for registration in the system, i.e., it is open for all	1	2	3	4	5	
Q55	The learning material is available for free downloading.	1	2	3	4	5	
Q56	This learning environment helps the learner to learn and receive support and feedback from	1	2	3	4	5	
Q57	This learning course enables me to adapt with learning material at any university.	1	2	3	4	5	
Q58	I can access to lectures and learning activities anywhere.	1	2	3	4	5	
Q59	I can access to lectures and learning activities any time.	1	2	3	4	5	

Appendix G

User Interaction of Instrument for Iraqi Blended Massive Open Online Course Model

Researcher's Name: Qusay Abboodi Ali

Supervisors : Prof. Dr. Norshuhada Shiratuddin

Department : School of Multimedia & Communication Technology, Universiti Utara Malaysia

Introduction and Background

Thank you for your interest to review the proposed instrument. My PhD research proposes the Iraqi Blended Massive Open Online Course Model (bMOOC) which aims to provide a systematic way of developing the traditional learning in Iraqi higher education institutions. One part of this research is to construct an instrument in a form of questionnaire to evaluate the proposed model. Therefore the items asked in the questionnaire seek to identify the significance of proposed model in serving as an educational model that enables the students to increase interactions with learning materials and gain knowledge.

Instruction

Through this review, I sincerely require your expertise to assess the content validity of the questionnaire. Based on your knowledge, expertise, skills, and experiences in online learning design and development, it would be greatly appreciated if you could review the validity of the items in the given questionnaire.

Please “circle” the appropriate scale for each item, and fill in the (Remarks) sections of the evaluation form. Please indicate whether the items of instrument in the model meet the user interaction in blended MOOC accurately. And you will see that the review questions give you ample opportunity to use your expertise, experiences, interests and creativity. It would be greatly appreciated if you could complete this evaluation form.

Consent

The information supplied will be treated as confidential and will be used for research purposes which may be reported anonymously in academic publications.

Queries or Concerns

Please feel free to contact me by email (Qa_matrix8@yahoo.com) in regards to any queries or my supervisor at shuhada@uum.edu.my.

Thank you for your time and assistance.



User Interaction Evaluation in Iraqi-bMOOC

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q1	The peer feedback helps me to recognize the errors in my own work.	1	2	3	4	5	
Q2	The comments I received from peer feedback helped to improve the quality of my work.	1	2	3	4	5	
Q3	The received feedback helps me to get more information about the learning topic.	1	2	3	4	5	
Q4	Reviewing others' work helps me to reflect it on my own work.	1	2	3	4	5	
Q5	The peer interaction helps me to learn how to give constructive feedback to peers.	1	2	3	4	5	
Q6	The feedback I received from peer was valid.	1	2	3	4	5	
Q7	The lecturer interaction helps me to come up with new ideas.	1	2	3	4	5	
Q8	The interaction with lecturer increases my ability in organizing ideas and contents in my work	1	2	3	4	5	
Q9	The lecturer enhances my satisfaction on this course.	1	2	3	4	5	
Q10	I am satisfied on my interaction with the course content	1	2	3	4	5	

User Interaction

No.	Items/Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Remarks
Q11	Content of course allows me to engage in the learning activities.	1	2	3	4	5	
Q12	Course content enhances interaction between the lecturer and the learners.	1	2	3	4	5	
Q13	Course content provides me with adequate communication channels with the lecturer and peers.	1	2	3	4	5	



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