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Stakeholder Perceptions towards the Quality of Coursera MOOCs Blended Learning in Vietnam: A Qualitative Study

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Abstract.

Coursera MOOCs blended learning (CMBL) has been implemented at a Vietnamese Higher Education Institute (HEI) since the Fall 2019 semester. Our case study, which shows how Coursera MOOCs and the traditional classroom may work together, is unique in the context of Vietnamese higher education. In this case, students must complete the courses and earn certifications through Coursera MOOCs to qualify for the HEI's offline final examinations. Meanwhile, students also engage in offline mentoring sessions with their classmates and lecturers (mentors). By employing the Service Quality (SERVQUAL) and 3P models, the research was conducted to explore how key factors might influence the quality of CMBL. This research conducted semi-structured interviews and employed thematic analysis with thirty interview participants, including ten administrators, eleven lecturers, three curriculum developers, and six students across four campuses of the HEI. We found that assessment, learning outcomes, learning content, Coursera staff's responsiveness, offline mentors' responsiveness and assurance, interaction, and student satisfaction might have considerably significant relationships with the quality of CMBL. On the other hand, Coursera instructors and offline mentors' reliability have insignificant relationships with the quality of CMBL. This study has both theoretical and practical implications for universities and academics. Regarding the theoretical implications, this qualitative study provides critical criteria to measure the quality of the CMBL. Regarding the practical implications,

it provides implications for curriculum development, teaching and learning, and assessment to improve the quality of CMBL. However, the authors could not travel across Vietnam to conduct face-to-face interviews in 2021 due to the COVID-19 pandemic. Therefore, twenty-eight online interviews were conducted via Microsoft Teams and two email interviews. A downside of an online interview is that personal qualities that are critical to a study may be amended during the interview, forcing the researcher to rely on the participant's words. Additionally, unlike a face-to-face interview, an email interview lacks simultaneous communication between the interviewer and the interviewee.

Keywords: Higher Education Institution (HEI), blended MOOCs, Coursera MOOCs Blended Learning (CMBL), Coursera MOOCs, offline mentoring, sustainable development

1. Introduction

Soyele et al., (2019) highlighted some key reasons for why blended learning should be adopted and applied in society for sustainability development as follows: (i) It has evolved into the ideal platform for delivering the processes of education, learning, and sustainable development; (ii) It enables lecturers, students and other members of society access to information-rich resources at any time and place, which will aid in sustaining the nation's development, and (iii) It can supplement traditional classroom courses, thereby liberating important resources and increasing the number of campus-based students served. Especially, it can reach those who were previously refused access, such as users with physical disabilities.

In Vietnam, several higher education institutions (HEIs) have adopted the blended learning model. As for the pedagogies, teachers may be able to meet a variety of students' learning needs, scaffold learning processes, and promote active, reflective, and collaborative learning by employing a blended learning mode (Hoang, 2015). Blended learning also aims to enhance learning activities in face-to-face classrooms and personalize the online learning for students (Tang & Tien, 2020). At the same time, blended learning may promote both "independent and collaborative learning experience" (Rafiola et al., 2020, p. 2) Therefore, the Vietnamese HEI introduced in this study has deployed the Coursera MOOCs blended learning (CMBL) model since the Fall 2019, in which students' qualification for the final exam lies in their Coursera MOOC's completion certification.

To the current literature review, prior research mostly touches on the benefits and challenges of MOOCs while there is little research done on the CMBL model. Further, there has been a lack of empirical research on the criteria to evaluate the quality of CMBL. Therefore, this study's objective was to explore the critical factors to evaluate the quality of CMBL. The Service Quality (SERVQUAL) and 3P models were used to investigate the influence of these factors on CMBL. Semi-structured interviews with thirty participants from different stakeholder groups including administrators, lecturers, curriculum developers, and students are conducted. From that, it shows how Coursera MOOCs and the traditional classroom may work together, as well as provides practical implications to improve the CMBL model in terms of teaching and learning, curriculum development, and assessment.

2. Literature Review

2.1. Theoretical underpinnings

Previous studies have mentioned various ways to measure the quality of teaching and learning process. In this study, we mainly refer to the SERVQUAL and 3P models in measuring the quality of teaching and learning.

SERVQUAL model

Proposed by Parasuraman et al. (1988, p.23), the SERVQUAL model has five dimensions of service quality, which are tangibles, reliability, responsiveness, assurance, and empathy.

3P model of teaching and learning process

However, Stodnick and Rogers (2008) claim that the SERVQUAL model focuses mostly on the process portion of service delivery and needs more structural elements for comprehensive service quality evaluation. Therefore, to better measure the quality of blended MOOCs, the 3P model developed by Biggs (Gibbs, 2010) is taken into consideration. The 3P model includes three variables: presage, process, and product (Hood & Littlejohn, 2016).

3. Methodology

3.1. Research design

Due to the lack of details or depth on the quality of Coursera MOOCs blended learning being investigated, the present study has to employ interviews to correct this limitation. Fraenkel and Wallen (2000) states that interview plays a critical method for collecting data as it assists the researcher in identifying the appropriateness and verifying and responding to study results gathered from other sources. SSIs are also helpful to getting data that can be compared in a study as all interviewees answer the same questions (Fraenkel & Wallen, 2000). As a result, interviewer bias is reduced in this approach (Patton, 2002). The present study utilized semi-structured interviews (SSIs) with open-ended questions to explore the perspectives of HEI stakeholders on the quality of CMBL.

3.2. Research site

The HEI officially implemented Coursera MOOCs Blended Learning (CMBL) in 2019. CMBL is the blending of Coursera MOOCs and HEI offline mentoring in this study context. For such a new educational approach, it is necessary to understand the effects of its quality-related factors for better implementation in the future. As blended MOOCs is the combination of face-to-face instruction and open online courses (Bogdan et al., 2017; Israel, 2015), the quality of Coursera MOOCs blended learning in this case is the quality of MOOCs and the quality of offline mentoring.

3.3. Instrument for data collection

The interview protocol was employed as an instrument for data collection. There were two sections in the interview protocol. Part 1 is to explore the interviewees' background information such as the campus, the position, and the academic degree/program. Part 2 is composed of open-ended questions relating to the two perspectives of Coursera MOOCs blended learning implementation in HEI: (i) the quality of Coursera MOOCs, and (ii) the quality of offline mentoring.

3.4. Sampling

Patton (2002) states that purposive sampling is an approach commonly utilized in qualitative research to identify and select 'information-rich cases' for using limited

resources in the most effective manner. Creswell & Plano Clark (2011) also highlights that purposive sampling is related to pointing out and choosing individuals that are mainly 'knowledgeable' about or have had experience with a 'phenomenon of interest'. Therefore, purposive sampling is quite reasonable for selecting interview participants in this study.

3.5. Data collection

The interviews were conducted in the Spring, Summer, and Fall semesters of 2021 at the HEI. Due to Covid-19, we could not travel across four campuses in Vietnam to conduct the face-to-face interviews. Therefore, we completed twenty-two online interviews via Microsoft TEAM, six online interviews via Google Meets, and two email interviews.

3.6. Data analysis

The present study employed thematic analysis for the qualitative data obtained from the interviews. According to Bryman (2016), thematic analysis illustrates the data in more details and addresses diverse subjects via interpretations. Most importantly, Alhojailan (2012) notes that thematic analysis provides an accurate determination of the relationships between concepts, then makes a comparison between these concepts and the replicated data. Consequently, the implementation of thematic analysis makes it easier for the participants to connect the different concepts and ideas, and compare these with the data gathered in different situations at different times during the project (Alhojailan, 2012, p.40).

4. Results

4.1. Descriptive characteristics of the interview participants

After conducting the online interview within the Spring, Summer and Fall semesters of 2021 across four campuses located in Hanoi, Ho Chi Minh, Da Nang and Can Tho, we received 30 responses as follows: ten administrators (one Vice Rector, two Academic Directors and seven Head of Departments), three staff from the Curriculum Development Office, eleven lecturers and six students.

4.2. Themes and sub-themes

We identified themes and sub-themes based on the SERV QUAL and 3 P model. Four themes and twenty-two sub-themes in Table 1 were listed as the criteria to measure the quality of Coursera MOOCs blended learning (CMBL). Within the scope of this study, we just selected and analyzed some critical sub-themes.

Table 1: Quality of Coursera MOOCs blended learning.

Theme	Sub-theme
Theme 1: Learning outcomes for successful blended learning via MOOCs	Sub-theme 1.1: The alignment – learning results and learning outcomes
	Sub-theme 1.2: The alignment – learning outcomes, teaching & learning activities, and assessment
	Sub-theme 1.3: The alignment- Coursera MOOCs and traditional courses
Theme 2: Critical outcomes for blended learning teaching and learning processes	Sub-theme 2.1: Assessment
	Sub-theme 2.2: Course selection and course evaluation
	Sub-theme 2.3: Interaction
	Sub-theme 2.4: Curriculum
	Sub-theme 2.5: Pedagogy
	Sub-theme 2.6: Student development
	Sub-theme 2.7: Learning progress
	Sub-theme 2.8: System
Theme 3: Learning content development for effective blended learning implementation via MOOCs	Sub-theme 3.1: Overview of content feedback
	Sub-theme 3.2: Reading materials
	Sub-theme 3.3: Videos
	Sub-theme 3.4: Delivery mode
	Sub-theme 3.5: Classroom activities
Theme 4: Assurance, Responsiveness, Reliability and Satisfaction of blended learning via MOOCs	Sub-theme 4.1: Offline mentors' assurance
	Sub-theme 4.2: Offline mentors' responsiveness
	Sub-theme 4.3: Coursera staff' responsiveness
	Sub-theme 4.4: Offline mentors' reliability
	Sub-theme 4.5: Coursera instructor's reliability
	Sub-theme 4.6: Student satisfaction

4.3. Theme 1: Learning outcomes for successful blended learning via MOOCs

Sub-theme 1.2: The alignment – learning outcomes, teaching & learning activities, and assessment

The Senior Curriculum Developer (CD1) highlights that the quality of the MOOCs based curriculum might be achieved, as there is an alignment between the learning outcomes and teaching and learning activities in that program.

"The learning outcomes of each course in the training program are aligned with the teaching and learning activities in IT programs." (CD1)

In the meantime, the Former Head of Curriculum Development office also states that there should be an alignment among different levels in a program as follows:

"There is the learning outcome alignment of curriculum-course-content-assessment." (CD3)

4.4. Theme 2: Critical outcomes for blended learning teaching and learning processes

Sub-theme 2.1: Assessment

In fact, the assessment in general and the final exams in particular are perceived to be very important to students by the HEI stakeholders.

"I have had no way to measure the quality except for trying my best to build up a test bank for the final exam that aims to measure students' real learning." (CD2, The Head of Curriculum Development Office)

"I think the final exam variable is the one that has the most effect. The final exam organized by our university verifies if we have real knowledge or we just temporarily learnt to get passed. I feel that after I studied on Coursera, I was able to do the final exam." (S3, The second year Multimedia Communications student)

However, there are positive and negative perceptions by lecturers and students towards the final exams in the HEI.

"*Current final exams are effectively conducted to evaluate the student's knowledge on the Coursera MOOCs." (L1, The Software Engineering lecturer)*

"When we study Coursera MOOCs blended learning, the luck factor plays a bigger role. It includes a multiple-choice test evaluated automatically by the system, and a writing part marked by the HEI lecturer. I think the progress assessment forces us to study harder. On Coursera, we are given assignments to do but it employs peer

assessment. I feel that this is not so useful." (S4, The final year Information Technology student)

Sub-theme 2.3: Interaction

The Vice Rector (VR) realizes the importance of interaction factor to the quality of CMBL, a combination of Coursera MOOCs and offline mentoring. She suggests:

"Evaluating the successful rate of students networking (interacting with instructors and friends)."

The English Linguistics lecturer (L2) in Ho Chi Minh Campus also agrees with the VR's suggestion. However, L2 also mentions about the currently limited interaction in offline mentoring:

"HEI lecturers only mentor but lack of in-class activities because of the low attendance. Only students who are diligent come to class. Students only come when they have questions and don't if there is no question, hence attendance is not taken."

The Multimedia Communications second year student (S3) in Ho Chi Minh campus also raises her voice about her preference to interact with Coursera than to interact with HEI lecturers.

"I think most of the MOOC courses selected by the university don't require too much interaction with the HEI lecturers, known as mentors. When we have any problem, we might contact Coursera staff. As I know, when we contact the lectures, they will contact Coursera staff too. They only help us partially. Even if it's too complicated, they don't know either".

Sub-theme 2.7: Learning progress

The Vice Rector (VR) considers the learning progress in Coursera MOOCs factor as evaluating of CMBL.

"Evaluating the percentage of students that meet the required learning progress."

4.5. Theme 3: Learning content development for effective blended learning implementation via MOOCs

Sub-theme 3.2: Reading materials

Both the Head of Computing Fundamentals department and the Management lecturer (L1) in Hanoi campus express positive aspects of Coursera MOOCs' reading materials including case studies.

"Case studies are really good!" (H1)

"Reading materials is diversified. Case studies are knowledgeable. Students have numerous chances to practice throughout the videos and readings." (L4)

However, "*Coursera MOOCs' textbooks have some limitations*." H1 says.

Sub-theme 3.4: Delivery mode

There are the mixed reviews on the delivery mode in this research.

The Management lecturer (L4) in Hanoi campus says:

1. *The diversification of many professors.*

2. *Having met different experts to gain knowledge. In videos, there are professional interviews with the key people of the big corporations. Normally, in traditional classes, it's hard to invite high-level managers.*

On the other hand, the English Linguistics (L2) in Ho Chi Minh campus mentions:

"*Because the instructors talk from 10 to 15 minutes in the videos, there are not as many diverse methods as learning in class*."

Sub-theme 3.5: Classroom activities

The role of HEI lecturer, working as a mentor, is critical not only to the quality of classroom activities in particular but also to the quality of CMBL in general. H3, L5 and L7 point out what the HEI lecturer should do to implement classroom activities effectively.

"The HEI lecturer shares with students about real cases related to the content of a specific subject." (H3)

"The HEI lecturer is focused on guiding and consulting students on how to deal with the issues on Coursera". (L5).

"The HEI lecturer deepens the knowledge." (L7)

Nevertheless, L5 also talks about the current drawback of classroom activities in the HEI during the CMBL implementation.

"Student attendance is not mandatory; so, it can lead class activities not to be effective in practice."

4.6. Theme 4: Assurance, Responsiveness, Reliability and Satisfaction of blended learning via MOOCs

Sub-theme 4.1: Offline mentors' assurance

From the perspective of the head of departments and lecturers in Hanoi and Can Tho campuses, offline lecturers have met the HEI requirement to mentor students. Therefore, there is a relationship between offline mentors' assurance and the quality of CMBL.

"*Evaluate whether or not the mentors have the appropriate Coursera certifications." (H4)*

"Instructors must have completed and got certified for the MOOCs in order to be allowed to teach the offline sessions." (L6)

From the perspectives of HEI students in Information Technology and Graphic Design programs, they have conflicting ideas on the significance of offline mentors' assurance.

"No, the mentor's assurance does not affect me much. They have good profiles but they don't provide good support. Consequently, they are still worse than others with normal profiles." (S6)

Sub-theme 4.2: Offline mentors' responsiveness

The mentors' responsiveness is significant for not only the quality of offline mentoring in particular and the quality of Coursera MOOCs blended learning in general. For blended MOOCs, HEI students study and complete their courses on Coursera. Thus, the head of different departments and lecturers from different programs describe that HEI lecturers work as mentors to support and consult for their students.

"Mentors' roles are to answer students' enquiries and to support them." (H1)

"Exploring the challenges that students are facing with: Currently, students don't want to raise questions. Lecturers have to ask questions over and over again and require students' presentation. Without grades for offline mentoring, students don't want to join. "(L4)

Interestingly, HEI students also confirm that the mentors' responsiveness is very important and helpful to them.

"The responsiveness of the teachers in offline class is also very important. Responsiveness here is not only about knowledge but also in other aspects. Many times, I messaged them after working hours, they still replied to me. The lecturers in our university are very responsive with texts. They are young, they have good social interactivity, I guess, that's why they are so quick in responding to students." (S5)

Sub-theme 4.3: Coursera staff's responsiveness

Regarding Coursera staff's responsiveness, the Head of Business and Management Department in Can Tho campus shares good comments as follows:

"*There's a policy on how long it must take for a Coursera issue to be solved. There haven't been any big issues as students' benefits are well-guaranteed. There're also policies about plagiarism and implementation. Good support!" (H6)*

Similarly, there are also supporting views of HEI students towards Coursera staffs' responsiveness as follows:

"*No, I don't need their support. Everything is smooth. But I notice that when my friends got flagged for plagiarism and they emailed the support team, they got replied right away. I find the support team quite efficient." (S4)*

Sub-theme 4.4: Offline mentors' reliability

In this study context, the HEI lecturers are not in charge of developing their own learning materials. The HEI signed the contract to utilize Coursera learning materials. As a result, HEI students mention that they will directly seek helps/support from Coursera for any issues related to Coursera MOOCs. Consequently, offline mentors' reliability in the HEI does not greatly matter to them.

"The reliability does not affect the quality of offline activities as the interactivity between teachers and students in class is not a great deal. About the knowledge from Coursera MOOCs, only if I cannot find the answers anywhere else, I will ask the instructor in class. However, in the subject, the lecturer only has certain knowledge and cannot cover every single detail of the courses on MOOCs." (S2)

Sub-theme 4.5: Coursera instructor's reliability

Three HEI students in Multimedia Communications and Business Administration mention that they don't know much about the profiles of instructors in charge of Coursera MOOCs. Therefore, they assume that the reliability of Coursera instructors is the same.

"The fact that the reliability does not affect, this applies to me too. First of all, Vietnamese students don't really know about it, only those who are interested will know the popular lecturers who teach me in the videos on Coursera." (S3)

Additionally, in this case, one student says that she would rather care about the Coursera instructors' delivery mode than his/her profile as concerning the quality of Coursera MOOCs blended learning (CMBL).

"This actually explains my case. I only check which university it is. I don't really investigate too much into the university's profile. As for the instructors in the Coursera videos, what I care about is their method of transmitting information." (S5)

However, the final year student in Information Technology program (S4) disagrees with S3, S5 and S6's comments on the relationship between Coursera instructors' reliability and the quality of CMBL.

"Whenever my teachers recommended a specific course, they always talked about who would be instructing the course, in which university that person was teaching, he or she was good or bad, and was the course worth taking or not. Those teachers suggested us what courses we should take. Thanks to them, we paid attention to the instructors of our MOOCs." (S4)

Sub-theme 4.6: Student satisfaction

Regarding the perceptions of the administrators (Vice Rector, Academic Director, Head of the departments), all of them realize that student satisfaction is considered to be the critical factor to evaluate the quality of CMBL. In the HEI, the student is considered to a customer and has his or her own voice to the HEI top management about the quality of CMBL implementation.

"Evaluating students' satisfaction with the course." (VR)

"Currently, I am not using any system to observe, but based on student feedback to evaluate the offline instructors." (H3)

"Surveying the students' feedback on the course." (AD1)

"Students' satisfaction evaluation: are they satisfied with this method of learning? Is this method interesting or not." (H7)

5. Discussion

5.1. Theme 1: Learning outcomes for successful blended learning via MOOCs

Our findings also confirm that the quality of CMBL has a considerable relationship with the learning outcomes. Similarly, the findings by Khan and Usman (2015) also indicate that the quality of education have a strong connection with learning outcomes. It is implied for HEI and the universities aiming for blended MOOCs that learning outcome - teaching and learning – assessment alignment from the curriculum level to the course level should be seriously done and gradually checked. This will enable students to gain actual learning results at school as well as achieve actual results at work in the future. This implication agrees with Biggs' 3P model, in which teaching setting and students' backgrounds (presage) impact students' approach to learning (process). "Effective learning outcomes in sustainability (product) should encourage students to reflect on the status quo, to reflect on their values and behaviors." (Kanashiro et al., 2020, p.678)

5.2. Theme 2: Critical outcomes for blended learning teaching and learning processes

Surprisingly, Yeung & Yau (2022) found that online students are concerned about the fairness of online tests due to the possibility of cheating and plagiarism. Whereby, a student-centered approach (blended MOOCs is an example) is encouraged to support students' learning and to promote students' learning, transparent assessment criteria. Therefore, this study has closely looked at the assessment to improve the quality of Coursera MOOCs blended learning (CMBL) in HEI. To the key stakeholder, the head of English Linguistics department, the curriculum developers and the Multimedia Communications student confirm that the assessment in general and the final exams in particular might influence the quality of CMBL implementation. More than that, the Information Technology student also complains about the offline final exam by the HEI and the assignments' peer assessment on Coursera. It is implied that the departments implementing the CMBL should review the content of the final exams including the multiple choices and open essays. More importantly, the HEI should hold a workshop that guides student how to do the peer assessment effectively per semester.

The top management of the HEI mentions that the interaction with their friends and lecturers should be a key factor to measure the quality of CMBL. This finding agrees with the study of Astleitner (2000). It is shown that 'learners' interactions with teachers and peers can make blended learning effective as its absence makes learners withdraw, Astleitner (2000, p.5). Due to the optional class attendance, HEI students only come to attend the offline mentoring sessions in case they need advice or have questions for their MOOCs. Thus, there are very few students in these sessions. Consequently, there might be not much offline interaction between students and their lecturers. These results align with the results of Yeung & Yau (2022) and Israel (2015). In the meantime, Israel (2015) also reported challenges in terms of student-instructor interaction in blended MOOCs implementation. It is implied that the to promote the effective interaction between lecturers and students, and between students and students, the studied HEI might consider the bonus grade participation for students interacting in the offline mentoring hours.

5.3. Theme 3: Learning content development for effective blended learning implementation via MOOCs

Through the previous studies, it is found that e-learning quality is directly and positively influenced by high quality learning content, learning materials (Pham et al., 2019).

Interestingly, these results completely match with these key findings of HEI student who perceives how the learning content significantly influences her learning experience. More importantly, the HEI student shares that the learning content might have an impact on her continuance intention and recommendation to others about CMBL. The learning content of MOOCs in this study is completely outsourced from Coursera. As HEI students and lecturers provide their feedback per semester, it is impossible for the HEI to fix the learning materials accordingly. Ultimately, it is strongly implied that HEI will review and select Coursera MOOCs seriously to map with their HEI program/course learning outcomes, and the previous traditional courses. In addition, HEI lecturers are proposed to update and supplement the knowledge and practices to deal with the limitations of Coursera learning materials that are mentioned in above findings.

5.4. Theme 4: Assurance, Responsiveness, Reliability, and Satisfaction of blended learning via MOOCs

HEI administrators, lecturers, and students perceive that the offline mentors' responsiveness and assurance, and Coursera staffs' responsiveness have great impacts on the quality of CMBL. On the contrary, HEI students state that the offline mentors' reliability and Coursera instructors' reliability do not influence the quality of CMBL. Our findings strongly agrees with the findings of Uppal et al. (2018) and Udo et al. (2011). Uppal et al. (2018) proposed an e-learning quality (ELQ) model, an extended model of the SERVQUAL model, and pointed out that assurance, responsiveness, and tangibles had a positive correlation with the student perception of ELQ. On the other hand, reliability is not expected by online students (Uppal et al., 2018). Similarly, Udo et al. (2011) also show that assurance and responsiveness determined the quality of e-learning, but reliability has an insignificant relationship with e-learning quality. It is implied that HEI should consider not only add the assessment portion for offline mentoring sessions but also check the student attendance in these sessions. Consequently, these actions might promote the role of HEI lecturers (mentors) and the value of offline mentoring.

HEI considers students as customers so their feedback on the courses and the program will be collected and reviewed periodically. More importantly, student satisfaction is proposed to be the factor to measure the quality of CMBL in HEI. Naaj et al., (2012) also highlights that student satisfaction is critical in blended learning because it affects motivation and hence, student success and completion rates. Moreover, institutions can also utilize satisfaction measurements to evaluate courses and programs (Naaj et al., 2012). Erdem-Aydin (2015) points out that learners are eager to attend MOOCs

provided they are centered on their interests. It is implied for curriculum developers and HEI departments to select appropriate MOOCs that meet students' learning needs.

6. Conclusion

Through the theme analysis, it is indicated that assessment, learning outcomes, learning content, Coursera staffs' responsiveness, and offline mentors' assurance and responsiveness, interaction, and student satisfaction may have significant correlations with the quality of CMBL. Coursera instructors and offline mentors' reliability, on the other hand, have no bearing on the quality of CMBL. For universities and academics, this research has both theoretical and practical implications. In terms of theoretical implications, this study identifies crucial criteria to measure the quality of CMBL. It also has practical implications for curriculum development, teaching and learning, and assessment in order to enhance the quality of CMBL. This study also highlights that as mentioned in the 4^{th} Sustainable Development Goals, blended learning is one of the critical approaches for guaranteeing equal quality education and providing various lifelong learning opportunities for students (SDG).

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