

# EVALUATING THE EFFECTIVENESS OF BLENDED TEACHING METHODS IN MOODLE SYSTEM FOR TRADE MARKETING AND TOURISM ECONOMICS CLASSES

Nguyen Thi Mong Ngoc

Faculty of Tourism and Hospitality, HUFLIT

*ngocntm@huflit.edu.vn*

**ABSTRACT**— This action research described how a university lecturer applied the blended learning approach in the learning management system of Moodle in her theoretical foundation Trade Marketing and Tourism Economics classes. Data collection from the specific teaching context of the researcher revealed better in-class engagement, higher attendance rate, and skills developing as positive learning outcomes when various blended learning techniques and tools were integrated into both in-class and out-of-class activities.

**Key words**— blended learning, Moodle, theoretical subjects, action research, in-class engagement.

## I. INTRODUCTION

Since the Covid-19 pandemic, the blended learning method has been increasingly applied worldwide in different levels of education. In Vietnam's higher education system, the Higher Education Law No. 08/2012/QH13 dated June 18, 2012 and Circular No. 12/2016/TT-BGDĐT dated April 22, 2016, which regulates the application of information technology in online teaching, and Circular No. 08/2021/TT-BGDĐT dated March 18, 2021, issued by the National Assembly and the Ministry of Education and Training on online teaching and learning methods among higher education institutions. Together with other higher education institutions in Vietnam, Ho Chi Minh City University of Foreign Languages - Information Technology (HUFLIT) also activated the blended learning approach from the school year of 2022-2023 in the learning management system of Moodle. As a university lecturer, one of my interests is gaining and applying different teaching techniques for my professional growth and joy beyond teaching. Along with that personal passion, being responsible for theoretical foundation courses in Business Management and applying the blended learning in the courses at HUFLIT (the University) accordingly are the reasons the researcher desired to examine how to effectively apply the blended learning approach to engage students in theoretical foundation subjects by conducting this action research. Moreover, the study also aims to understand if there are any challenge(s) to both academic practitioners and learners that may occur when implementing the blended learning approach for such theoretical foundation subjects.

## II. LITERATURE REVIEW

### A. ACTION RESEARCH METHOD

Action research method was referred to as a type of qualitative research with applied approach to examine and find better solutions for researcher(s)' daily work in certain context. As being indicated by a number of authors since 2000s, action research has been recognized as a common practice in education, besides health care, business and management with various industries and business functions, etc. Within education, by conducting action research through "learning by doing" approach, teaching practitioners understand clearly problems in their daily teaching context, developing most appropriate solutions to solve such problems for their professional development as well as practice sharing within education community [1],[2].

Going back to the origin of the active research method, Kurt Lewin, a social psychologist, was believed as founder since his first applying this research style in 1946 as a pilot design to link theory to practice solving some practical problems in organizations and social relationships [3].

Regarding the process of an action research project, it was reported that no certain recommendation on how specific action research was carried out [1]. Since Lewin's first action research design with a four-step model [3], it has been developed overtime to a six or seven-step design from different perspectives of various individual researchers. However, the existing studies captured four crucial steps in a simple action research process that included 1) planning, 2) plan execution, 3) observation and 4) reflection that are shown in Figure 1. The four steps were reported as repeated actions in circles in an on-going spiral movement with the purpose of throughout examination for self-learning process and finding better solutions to some work-related issues especially the classroom setting issues [1],[2].

In connection with research instruments, qualitative data from interviews, observations, reflection of research participants and researcher(s) were reported as most popular tools of action research. In addition, a project

might also include quantitative data from primary and secondary sources that researchers were said to be accountable for to find desired answers to their research problems [1],[4].

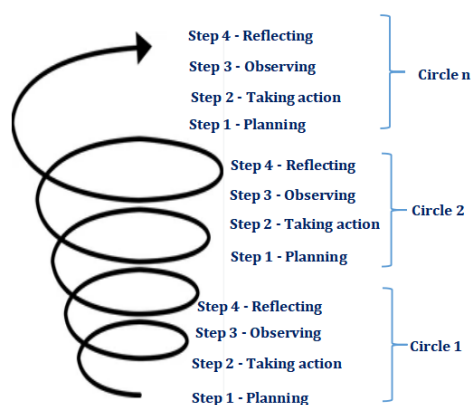


Figure 1. Simple four - step action research process

### **B. THEORETICAL SUBJECTS AND EXISTING CHALLENGES OF TEACHING THEORETICAL SUBJECTS IN HIGHER EDUCATION**

Theoretical subjects in higher education are courses providing academic knowledge such as abstract principles, concepts, frameworks, etc. from textbooks mainly that students are required to obtain as fundamental knowledge for practical dimension of the courses as well as any further subjects related to their majors. The theoretical subjects prove to be very important to students when they can understand theories, knowing how to apply relevant theories to explain, analyze existing phenomena in the real world or even develop new ideas. This prepares for their professional development and employability after graduation to meet social needs and labor market requirements [5]. The common physical classroom arrangement for theoretical subjects was confirmed as large class set up in which number of students vary between 60 and 100 or more students per class [6], [7]. Regardless of this universal practice, [8] pointed out that the large class size was criticized for certain challenges that educators should have paid close attention to. For example, fixed classroom sitting was found as a barrier to any activities that need physical interactions among students or between students and lecturers. This was proved to be the cause of low student participation and low student concentration in the classroom which are additional difficulties lecturers face within a large class. Moreover, the traditional lecture has been proved by a great deal of research for its predominant teaching method to teach theoretical subjects in higher education level [7], [9]. Finally, the challenge with today's learners that has been one of the trending topics in the research community [5], [10]. Majority of today's university students are individuals from Generation Z who were born in between 1990s and 2000s. As being identified as "tech-savvy" learners in all education levels, they were also confirmed to prefer digital communication, online learning or self-discovery. They have the least ability to remember, memorize and think critically. Put differently, they have completely different learning preferences compared with other generations that today's educators have been dealing with.

### **C. STUDENT ENGAGEMENT**

According to Krause [11], learner engagement is the willingness of students to interact with other students and instructor and participate in any in-class or out-of-class study related activities, such as completing a quiz in the classroom or working at home for some pre-class tasks; or actively getting involved in non-study related activities in the educational environment such as joining a school student club. Exeter et al. [12] consolidated the definition by highlighting students' positive energy, effort, and emotions in their learning process. To put it differently, engaged learners or students show their high degree of attention and passion to the course content in either in-class or out-of-class environment, their willingness to connect and collaborate with peers and instructors, and their positive emotional reactions, such as happiness, satisfaction, or excitement. The engagement outcomes were then grouped as the four key dimensions of student engagement by [13, 15] that include "academic engagement", for example, on time task completion; "behavioral engagement," for example, in-class attendance and participation level; "cognitive engagement", such as self-discipline in doing homework; and "affective engagement", with the example of learning motivation and having a sense of belonging with the group and the class overall. Indeed, the subject has been received strong interest in research community for decades in regard to introducing definitions from different perspectives and analyzing engagement practices in different teaching subjects or different education levels and contexts such as the findings that [8] emphasized the importance of pre-class preparation activities in the blended teaching approach to engage students in active

learning before coming to class; [12] examined how to engage medicine university students in large lecture-based courses; [14] explored the relationship between active teaching strategies and student engagement in large business classes and [15] confirmed again the positive relationship between blended teaching and effective student engagement through their systematic review of 15 articles related to blended teaching environments and student engagement.

#### **D. BLENDED LEARNING AND ITS BENEFITS**

Through an analysis of global institutional web pages that mentioned blended learning application, [16] confirmed there were 76 universities and colleges in the world that described the blended learning approach in their curriculum. However, the researchers claimed that it was really a challenge to find a universal definition of blended learning. For example, while [17] focused on “blended” as “different technological tools, pedagogic strategies, and learning experiences,” [18] and [19] used the terminologies of “synchronous” and “asynchronous” and emphasized the integration of technological activities and online media into in-class sessions and out-of-class sessions in which students access their learning materials from different locations and at different times. Moreover, [20] detailed blended learning as the combination of traditional in-person classes in which both lecturers and students are in physical classrooms and “e-learning” activities through multimedia tools such as “videos,” “pre-recorded lectures or images” for students’ self-paced learning through a specific learning management system.

Regardless of a universal definition, the existing findings in the research community and communications from higher education institutions confirmed the blended learning’s benefits included, but were not limited to: 1) meeting the “special learning needs of 21st century learners”; 2) engaging students in the classroom better; 3) having better academic performance among students; and 4) developing 21st century skills for university students such as self-learning skills, technological skills, problem solving skills and critical thinking.

Regarding how the blended learning is performed in higher education, like its definition, the existing research and educational institutions confirmed that there was no “one size fits all” blended learning technique or tool. For example, according to [13], instead of exploring which blended activities are most effective for higher education, the institution emphasized the importance of connecting all online and offline teaching content, and all teaching materials of a single teaching course to ensure a strong coherence to achieve desired learning outcomes regardless of any specific technology-based tools or electronic learning resources for lecturers to apply. Moreover, [12] highlighted the following key factors that drive lecturers to design, select, and use various but suitable blended learning techniques and tools in their own teaching situations:

- Subject matters such as theoretical or hands-on subjects.
- Specific teaching context, such as large class, small class, or classroom time.
- Desired learning outcomes of each teaching unit, such as the ability to work in a group and to debate or demonstrate what students have learned.

The university also underlined the features of “experimentation” and “adaptation” in determining the best blended learning techniques and tools that work in particular teaching situation. The following Figure 2 demonstrates the blended learning activities that have been integrated into each teaching session by the University of Monash.

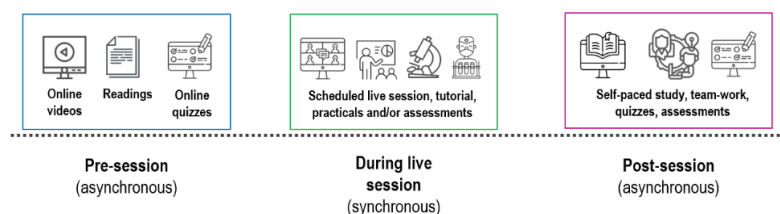


Figure 2. *Integration of blended in-class and out-of-class activities*

#### **E. MOODLE**

Moodle is one of the online, open-source learning management systems that has been widely used in institutions at different education levels, from elementary to higher education [12], [13], [15] [16]. In the specific action research context, Moodle has been developed and upgraded since the Covid-19 pandemic to be the official platform for the blended teaching approach at HUFLIT from the school year 2022-2023 [20].

### **III. METHODOLOGY**

#### **A. RESEARCH MODEL AND RESEARCH OBJECTIVES**

The qualitative research method with the typical action research type was employed to explore how the blended learning design in Moodle engages the students better with two different theoretical management foundation subjects, Trade Marketing and Tourism Economics, when today's learners have different learning preferences than other times and there is an increasing, changing demand from the labor market and society in general towards university graduates.

The qualitative action research method followed Lewin's simple four-step research model (Figure 1) to describe the process of how the researcher has applied Monash's blended learning design in Moodle [13], observing, and analyzing the outcomes between the two modules' classes to explore how the blended activities in Moodle would lead to effective student engagement among the students, which is one of the desired outcomes in the findings presented by [15]. The following Figure 3 summarizes the research framework that guides this action research through the fundamental action research process of applying, observing, analyzing, evaluating, adapting and then applying the adapted techniques again to gain the desired outcomes. The research framework was adapted from (1) the framework that [15] applied to review the studies related to the positive relationship between blended learning and student engagement and from (2) the integrated blended learning in the Moodle that has been deployed by [13]. In addition, the qualitative action research method was selected to narrate the gradual changes in teaching practices that the researcher has gained from applying the specific learning design to drive the desired teaching-learning outcomes. Furthermore, there would be valuable teaching experience sharing with other education practitioners to enhance professional practices at the university level.

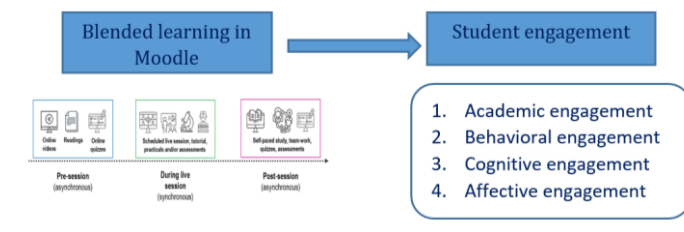


Figure 3. Adapted research framework

### B. RESEARCH SETTING, PARTICIPANTS AND INSTRUMENTS

The research took place at HUFLIT where the researcher has served as a full-time lecturer and been assigned fundamental business management modules such as Fundamentals of Management, Fundamentals of Marketing, Trade Marketing, Organizational Behavior and Human Resources Management modules for sophomore and junior students majoring in Tourism and Hospitality, Faculty of Tourism and Hospitality (FOTH) and Public Relations, Faculty of International Relations and Communications (FIRC).

With this action research, one class of the Trade Marketing (TM) module for 79 Public Relations majored students and one class of Tourism Economics (TE) module for 63 Tourism Management majored students in the 2nd Semester of the school year of 2023-2024 were selected as experimental classes applying different blended learning techniques in the Moodle. Selecting these two different subjects with different majors is also the intention to explore any difference(s) in applying the blended learning techniques in Moodle to modules with different summative assessment methods. The below Table 1 and 2 provides a summary of the module description, including the module format and the summative assessment method.

Table 1. Course structure - Trade Marketing subject

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Format of the course    | <ul style="list-style-type: none"> <li>3 credits, 45 periods of 50 minutes, 12 sessions</li> <li>Blended teaching approach: 12 in-class sessions x 2.5hours/session and 03 self-study sessions in LMS/Moodle</li> <li>Teaching language: English - level 2 (50% English language usage in key text books and teaching-learning materials such as content PowerPoint, quizzes, written assignment, etc.)</li> <li>Standard teaching method: lecture</li> <li>Class size: 60 - 80 students</li> <li>Physical classroom set up: traditional set up with rows of fixed seating</li> </ul> |
| Structure of the course | <ul style="list-style-type: none"> <li>One mid-term examination</li> <li>Oral and written group assignments</li> <li>One final examination: group essay on some trade marketing plan for a real-world product brand in Vietnam</li> </ul>                                                                                                                                                                                                                                                                                                                                             |

Table 2. *Course structure - Tourism Economics subject*

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Format of the course    | <ul style="list-style-type: none"> <li>• 3 credits, 45 periods of 50 minutes, 12 sessions</li> <li>• Blended teaching (hybrid teaching): 12 in-class sessions x 2.5hours/session and 03 self-study sessions in LMS/Moodle</li> <li>• Teaching language: English - level 2 (50% English language usage in key textbooks and teaching-learning materials such as content PowerPoint, quizzes, written assignment, etc.)</li> <li>• Standard teaching method: lecture</li> <li>• Class size: 60 - 80 students</li> <li>• Physical classroom set up: traditional set up with rows of fixed seating</li> </ul> |
| Structure of the course | <ul style="list-style-type: none"> <li>• One mid-term examination</li> <li>• Oral and written group assignments</li> <li>• One final examination: closed book 60 multiple choice questions / 60 minutes</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                        |

Data of this project was collected through (1) in-class observations, (2) online anonymous informal questionnaire developed by the lecturer and (3) online formal satisfaction survey of HULIT. In order to get genuine feedback from the students on their learning experiences with the blended learning techniques, the students were not informed that they were observed, or their feedback were collected as this action research' participants. This approach is one of characteristics of the action research that was mentioned in the above Literature Review part. In addition, to design a friendly questionnaire to the students, the online anonymous informal questionnaire to the classes were conducted in Vietnamese with the six Liker scale questions and one open-ended question designed in Google form (Table 3).

The data was recorded by the researcher as an on-going teaching journal during the semester. Furthermore, data retrieval from the course-related documents such as the online assignment completion report from Moodle and attendance records of the classes were also recorded to confirm the effectiveness of the blended learning in Moodle. With the lecturer herself, she also had her own reflective teaching diary to note students' attitudes and reactions when they were working together in sessions with the designed activities, their response and evaluation of each class period and the overall module compared with their previous learning experiences. The lecturer also recorded her feelings before, during and after each class period. In addition, she also documented what she did well in accordance with the plan or if she had to deal with some in-class problems ad hoc and made some adjustments to the next class periods.

Table 3. *The questions used in the informal student surveys by the lecturer*

| No. | Content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Level of agreements<br>1- Strongly disagree<br>2- Disagree<br>3- Neutral<br>4- Agree<br>1- Strongly agree |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Q1. | <p><i>The design of module introduction files, the ground rules, the grading criteria, final exam format, etc. in the Moodle helped me setting right learning objectives and ready for the course</i></p> <p><i>Việc những tài liệu hướng dẫn nội dung học, quy định lớp học, tiêu chí chấm điểm, hình thức thi cuối kỳ, link tài liệu tham khảo v.v. được đăng tải trên Moodle trong buổi học đầu tiên theo từng mục đã giúp tôi hiểu rõ mình cần học môn này như thế nào cho hiệu quả</i></p> |                                                                                                           |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                            |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Q.2  | <i>The design of pre-class activities in the Moodle have motivated my self-learning time.</i><br><i>Việc giảng viên thiết kế nội dung phần chuẩn bị bài mới trên LMS/Moodle đã tạo điều kiện cho tôi chủ động trong việc tự học</i>                                                                                                                                                                                                                                                                              |                            |
| Q.3. | <i>The design of in-class activities in the Moodle have engaged me during the class time</i><br><i>Việc giảng viên thiết kế nội dung các hoạt động học tập trên LMS/Moodle đã giúp tôi tập trung hơn trong giờ học</i>                                                                                                                                                                                                                                                                                           |                            |
| Q4.  | <i>The design of post-class activities in the Moodle have motivated my self-learning time and final examination preparation.</i><br><i>Việc giảng viên thiết kế nội dung hoạt động bài tập nhà, thảo luận nhóm trên Moodle đã giúp tôi củng cố kiến thức, chuẩn bị hiệu quả cho kỳ thi cuối kỳ.</i>                                                                                                                                                                                                              |                            |
| Q.5  | <i>The quiz design as competitive game in Moodle were very interesting and useful for me.</i><br><i>Phần thiết kế câu hỏi ôn tập kiến thức trên Moodle dưới trò chơi rất thú vị và đã giúp tôi ôn tập nội dung lý thuyết rất hiệu quả</i>                                                                                                                                                                                                                                                                        |                            |
| Q.6  | <i>With key terminologies and lecture slides posted in the Moodle, I was more engaged in group discussions to understand as well as remember the key lecture points through in-class discussions instead of listening to the terminology lecture during the class.</i><br><i>Nội dung lý thuyết đã được đăng tải trước trên Moodle đã khuyến khích tôi chủ động tham gia vào các hoạt động thảo luận tích cực tại lớp để hiểu và nhớ những điểm lý thuyết thay cho hoạt động thuyết giảng nội dung liên quan</i> |                            |
| Q.7  | <i>Which of teaching-learning activities in a class session that you like most?</i><br><i>Bạn thích nhất hoạt động nào trong một buổi học cụ thể?</i>                                                                                                                                                                                                                                                                                                                                                            | <i>Open-ended question</i> |

#### IV. FINDINGS

##### A. BENEFITS OF COMMUNICATING THE BLENDED ACTIVITY DESIGN IN MOODLE WITH THE STUDENTS

In the first session of both TM and TE modules, I introduced the subjects, the class schedule, how the students' performance was assessed with which grading criteria and learning activities that the students were expected to complete as after class activities. Especially, I explained the importance of the module and content introduction. I also pointed out how and why the modules were designed in Moodle and the connection between Moodle activities and in-class activities that students were expected to collaborate with the lecturer to achieve our designed outcomes. Figure 3 demonstrated all relevant files and documents were posted in Moodle in the first-class period so that the students managed to read again after the first class or even in case they were absent from the first class.

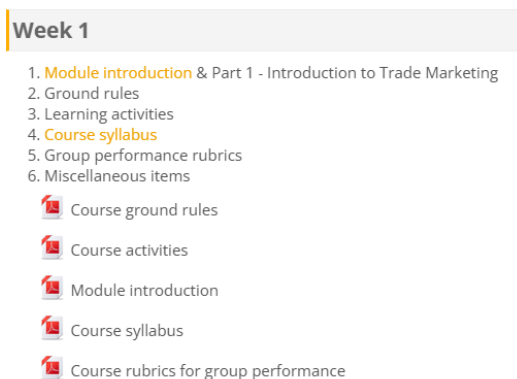


Figure 4. Design of week 1 in Moodle - TM and TE modules

Through the informal Likert Scale questionnaire to the TM and TE classes (Table 3), with the Question 1, among 61 / 79 answers from the TM class and 59/63 responses from the TE class, at least 45% of the responses totally agreed that the blend learning design in Moodle was useful for their learning process (Figure 4 and Figure 5)

Question 1: *The design of module introduction files, the ground rules, the grading criteria, final exam format, etc. in the Moodle helped me setting right learning objectives and ready for the course*

61 responses

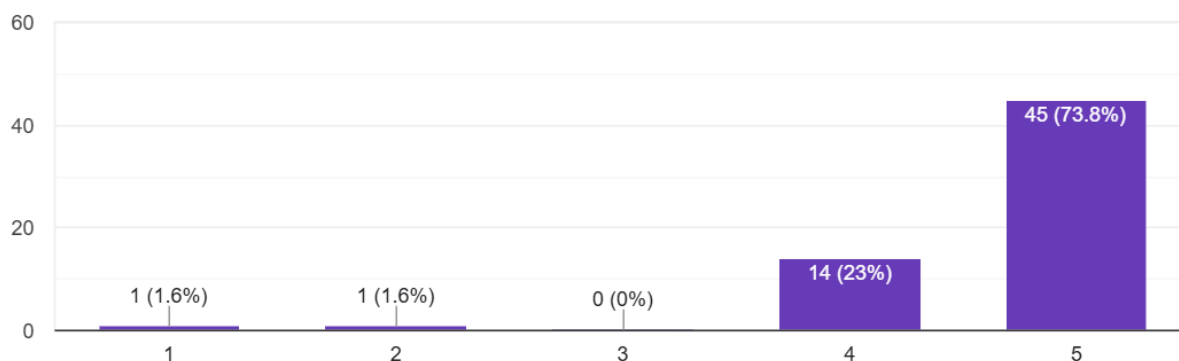


Figure 5. Students' evaluation on the blended learning design in Moodle – TM class

59 responses

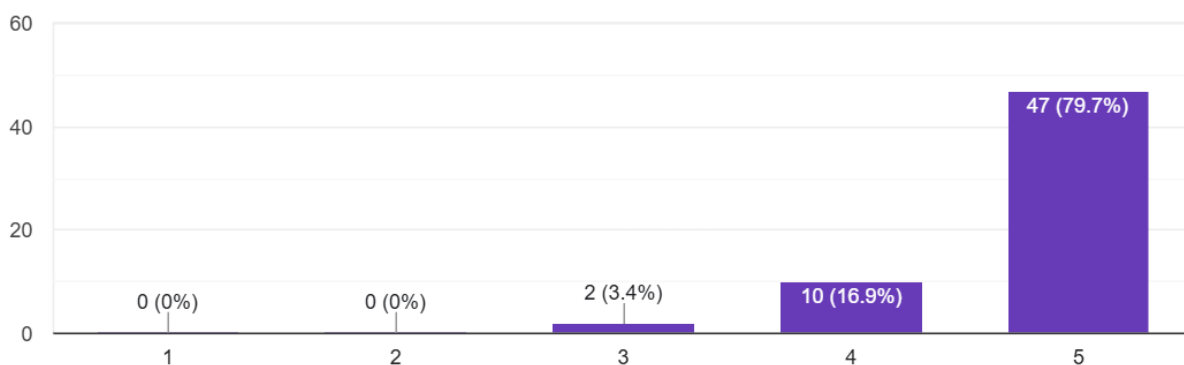


Figure 6. Students' evaluation on the blended learning design in Moodle – TE class

## B. BENEFITS OF THE BLENDED ACTIVITIES IN MOODLE: ENGAGING LEARNERS BETTER



From the 2<sup>nd</sup> class session of both TE and TM modules, the students were required to complete some pre-class reading and / or quizzes in the system to get familiar with fundamental conceptual understanding before joining the physical in-class session. For example, after reading the glossary designed as the online self-learning activity, the students were required to vote in Moodle for any concepts or terms they needed to be explained further in class. This allowed the lecturer to check students' self-study performance in advance and identify which theoretical points could be focused on in class. Then the in-class lecturing time would be minimized by just focusing on what the students need further assistance, and the class discussion time would be increased much more than the one in the first phase of the project. Attendance check was another point that the lecturer handled in this 2<sup>nd</sup> school year differently with the involvement of Moodle and technology. Besides traditional roll call attendance, the activity was designed as an online one-question quiz at the beginning of the class to ask about the previous lesson that students were expected to log in to Moodle to complete as attendance evidence. Sometimes the attendance check was designed in Google Forms with QR code attendance scanning that was integrated into Moodle as a requisition before moving on to other in-class activities in a class session.

Then, during the class, the lecturer spent more time on different blended teaching techniques that were deliberately selected for different classes. For example, with the TM class, the students were divided into groups themselves for in-class group presentations. All the in-class group presentation topics, together with academic content guidelines, were shared in advance in Moodle so that the groups could access them beyond the class time. Then, the remaining groups followed the performance guidelines and grading criteria, which were also posted in the Moodle as a compulsory in-class activity to give constructive feedback on their classmates. The feedback activity was designed to help students remember the theoretical points and know how to apply relevant points to real world case analysis. This also helped develop the skills of giving constructive feedback to colleagues, which is also a part of the critical thinking process. (Figure 4).

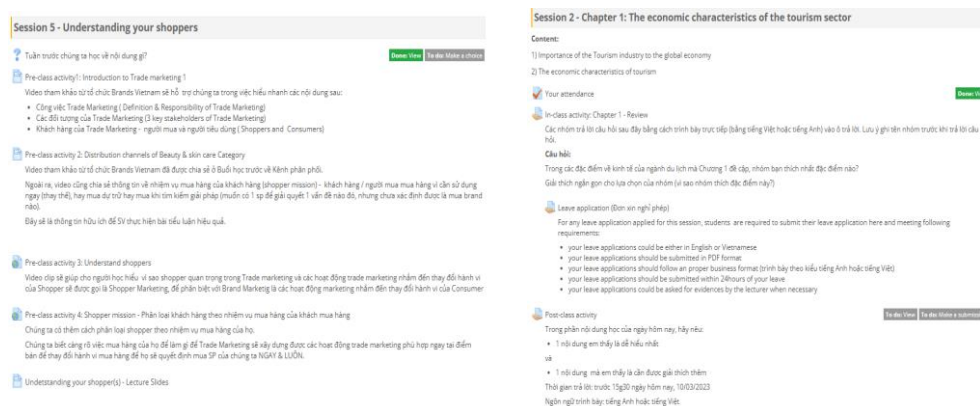


Figure 7. Integration of in-class and out-of-class activities in one TE and TM class session in Moodle

Along with lecturing times, the lecturer introduced real-world cases in local and global regions, for which students were asked to work together in their groups to find answers to specific questions by applying the theories they had just been introduced to. The students were encouraged to use ChatGPT or Google Gemini or similar AI tools to find answers. The cases were posted in Moodle in PDF version and the groups' answers were required to be submitted in the system as another in-class activity within a predetermined timeline with in-class contribution mark earnings. Meanwhile, groups were randomly selected by Wheel of Names to share their answers in class. The activity design with the online random name picker tool aimed to get the students' attention and participation among students in a fun and fair way.

With the ongoing learning assessments, short quizzes with five to ten multiple choice questions per quiz were developed as both in-class group activities and post-class individual homework integrated into the system to let students take more accountability for their study during the physical class time as well as beyond class time. This also aimed to assess students' understanding, giving feedback to the lecturer on making any reasonable adjustment to help the students with better academic outcomes. Students were allowed to do the quizzes as many times as possible but would be recorded as quiz completion when achieving a required passing grade per quiz. Students who completed all the required quizzes successively would earn 10 points as an individual grade. To prepare for the final examination, together with weekly quizzes in the system, question design in Blooket as individual or team games as post-class activities (homework) with some pre-determined deadline and mark earning or in-class activities to engage the students in reviewing all key concepts, terminologies, etc. (Figure 5). Meanwhile, with TM classes, in order to meet the learning outcomes of writing a trade marketing plan, informal learning assessments were designed through peer group review assignments that students are required to give



feedback on their friends' written assignment. Evaluation criteria were communicated in the 1<sup>st</sup> session and posted in Moodle before a specific class session. Students were encouraged to work in groups to apply relevant theoretical points to evaluate their friends' assignments, and those review results were expected to be posted online as another post-class activity (Figure 6).

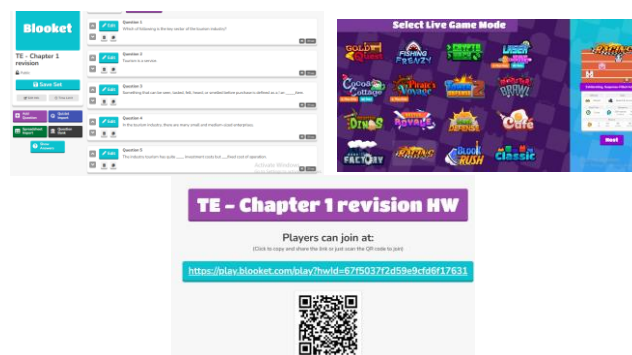


Figure 8. Quizzes design in Blooket integrated in the Moodle

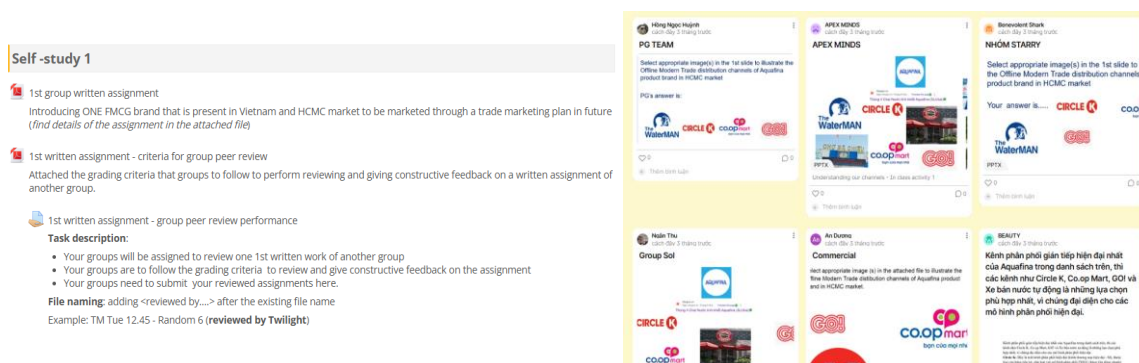


Figure 9. Peer group review activity integrated in the Moodle as both in-class and post-class activity

From the informal questionnaire to the two classes, most the informal survey responses from the two classes also indicated the students' satisfaction with the blended activities in Moodle during the courses (Figure 9).

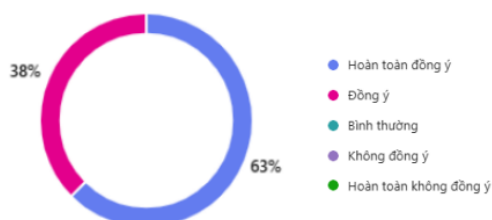


Figure 10. Illustration of students' response on the effectiveness of pre-class, during-class and post-class activity design in Moodle

When being asked about the benefits of activities integrated in the Moodle to students, all students agreed that the activities in Moodle supported the theoretical concepts, remembering especially the final examination preparation for the Multiple-choice question final examination of TE class. In addition, when the students were asked what they liked most in each class period, 74% of 125 TE students' response was the quizzes in Blooket and only 15% of the responses supported the lecture times (Figure 10 and Figure 11).

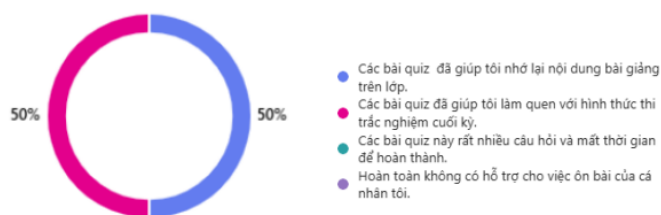


Figure 11. Illustration of students' response on the effectiveness of quizz design in Moodle

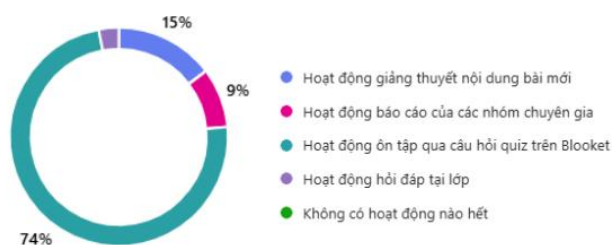


Figure 12. Illustration of students' response on the effectiveness of pre-class, during-class and post-class activity design in Moodle

Results from both official student feedback survey questions from the university and the two unofficial ones from the lecturers showed positive student response towards the blended classes. Specifically, all the official surveys from the University presented a higher satisfaction rate of 83% which was recorded in Figure 12.

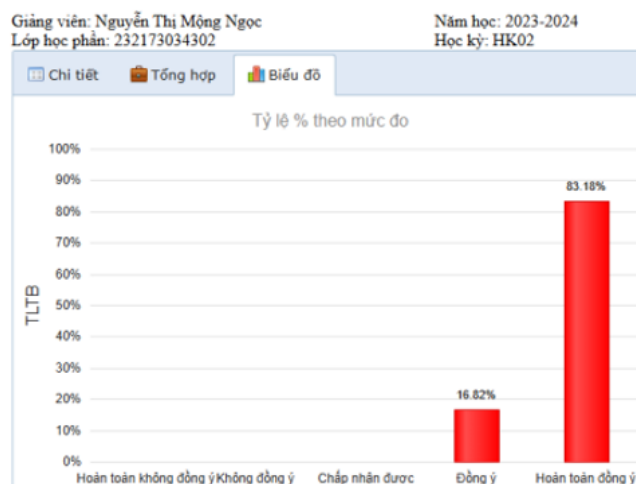


Figure 13. Illustration of student satisfaction level of TM module with blended teaching design in Moodle

The second data which was student performance analysis from Moodle also showed a good performance rate among classes of TM and TE in between two phases of the project. The following Figure 12 presented a high activity report in the system from the maximum 1,600 views in the TM classes in the first school year to the maximum 1,800 views in the second phase. Similarly to the TE classes, the Figure also exhibited a maximum of 3,500 to 5,000 views in the latter year. The data revealed an overall high student commitment to their self-study in the system. This also confirmed the way the blended activities were merged in one united flow in the system certainly interested students.



Figure 14. *Students' performance analysis - TM and TE classes*

The additional data source from the reflective teaching journal showed students' enthusiasm for voluntarily participating in the activities in each class period. For example, with the quizzes to review the theoretical points in the TE classes that were designed as in-class group competitions in Moodle, the students were very excited to join the games and asked to play again several times. They enjoyed the moments when their group names were listed as winners in Blooket.

### C. CHALLENGES OF THE BLENDED TEACHING DESIGN IN MOODLE

However, the class observation, student response and Moodle task completion reports underlined some challenges that need some further consideration for better results:

- A desire for longer online task completion timeline, as students had similar online Moodle tasks from many subjects in one semester.
- The fact of unstable system connection and login issues due to server overload affected the student performance within the required timeline.
- The fact of different types of technological devices used by the students affected the students' ability to actively join any internet-based activities.
- These issues above also affected the lesson planning time, as the lecturer spent more time designing back up activities in every class period.
- The fact that there were still several students who failed to complete any Moodle activities showed the low level of students' awareness of the importance of self-study activities in Moodle to their skills development.

## V. CONCLUSION

The results from the qualitative action research provided similar findings to the current studies on the blended learning benefits to learners. The outcomes of high attendance rate, high satisfaction level, and high task completion rate implied that the university students have high interest in theoretical foundation subjects with the blended learning approach, especially technological based activities and self-paced learning opportunities. I believe that the blended learning activities in Moodle would be designed differently to meet certain learning outcomes, but when they are well incorporated as a united system in both Moodle as out-of-class activities and traditional in-class activities, they could increase students' enthusiasm for learning theoretical foundation subjects. This study also created opportunities for my pedagogical skills development. It also revitalized my excitement to teach the same subjects in the course of time. The challenges encountered in this study indicate some need for future research in how to manage the challenges in blended learning applications to maximize student learning experiences and sharpen teaching skills among academic facilitators.

Completing this action research allowed the lecturer to review her classes and the teaching pedagogic strategies and techniques to maximize learning benefits for the students, gradually developing her academic professionalism while meeting the compulsory blended learning deployment from the university. The action research has highlighted the benefits of blended learning to teach theoretical subjects in the learning management system of Moodle. The results of this study are consistent with existing studies on blended learning and one of its specific outcomes as student engagement although no research model was officially

recorded regarding how to use the blended learning to teach theoretical foundation subjects, in higher education. Limitations of the study included a small scale of two theoretical foundation subjects and an individual experiment by the lecturer herself would indicate some biased results. Further research with additional academic practitioners joining in would contribute more objective results for the education community.

## VI. REFERENCES

- [1] Azulai, A. (2021). Are Grounded Theory and Action Research Compatible? Considerations for Methodological Triangulation. *The Canadian Journal of Action Research*. Vol. 21, No.2, pp. 4-24. DOI:10.33524/cjar.v21i2.485
- [2] Walker, K. and Phu Vu (2023). Structured Student Conversations and their Impact. *The Canadian Journal of Action Research*. Vol. 23, No.1, pp. 43-67. DOI: <https://doi.org/10.33524/cjar.v23i1.622>
- [3] Adelman, C. (1993). Kurt Lewin and the Origins of Action Research. *Educational Action Research*. Vol.1, No.1, pp. 7-24. 4, DOI: 10.1080/0965079930010102
- [4] Semathong, S. (2023). Participatory Action Research to Develop the Teachers on Classroom Action Research. *Shanlax International Journal of Education*, Vol. 11, No. 3, pp. 29-36. DOI:<https://doi.org/10.34293/education.v11i3.6118>
- [5] Ordóñez-López, P. and Agost, R. (2014). An empirical Study of Students Views on Theoretical Subjects: The Role of Theory in Translation Degrees at Spanish Universities, p. 22 DOI: 10.4018/978-1-4666-6615-3.ch017
- [6] Wang, L. and Calvano, L. (2022). Class size, student behaviors and educational outcomes. *Organization Management Journal*, Vol. 19, No. 1, pp 126-142. <https://doi.org/10.1108/OMJ-01-2021-1139>
- [7] Rani, P. (2023). Effective Teaching Methods at Higher Education Levels. *International Journal of Advances in Engineering and Management*. Vol. 5, No. 1, pp. 647-653.
- [8] Kerr, A. (2011). *Teaching and Learning in Large Classes at Ontario Universities: An Exploratory Study*. Toronto: Higher Education Quality Council of Ontario.
- [9] Klein, K. et al. (2023). Evaluating active lecture and traditional lecture in higher education. *Journal on Empowering Teaching Excellence*, Vol. 7, No. 2, DOI: <https://doi.org/10.26077/ba42-a5cc>
- [10] PwC Vietnam, (2021). How digital ready is Generation Z? Findings from PwC Vietnam's Digital Readiness Survey 2020. <https://www.pwc.com/vn/en/publications/2021/pwc-vietnam-digital-readiness-gen-z-en.pdf>
- [11] Krause, K. (2007). Beyond Classroom Walls: Students' Out-of-Class Peer Experiences and Implications for Teaching and Learning. *Nagoya Journal of Higher Education*, 7, pp. 301-318.
- [12] Exeter, D., et al. (2010). Student engagement in very large classes: The Teachers' perspective. *Studies in Higher Education*. 35(7), pp. 761-775.
- [13] Appleton, J.J., Christenson, S.L., Kim, D. and Reschly, A.L. (2026). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. *Journal of school psychology*, 44(5), pp.427-445.
- [14] Arjomandi, A., Seufert, J., O'Brien, M. and Anwar, S. (2018). Active Teaching Strategies and Student Engagement: A Comparison of Traditional and Non-traditional Business Students. *e-Journal of Business Education and Scholarship of Teaching*, 12(2), pp.120-140
- [15] De Bruijin-Smolders, M. and Prinsen, F. (2024). *Effective student engagement with blended learning: A systematic review*. 10(23), <https://doi.org/10.1016/j.heliyon.2024.e39439>
- [16] Armellini, A. and Padilla Rodriguez, B. (2021) Active blended learning: Definition, Literature Review and a Framework for Implementation. Cases on Active Blended Learning in Higher Education. *Advances in Educational Technologies and Instructional Design*. IGI Global. pp.1-22). DOI:10.4018/978-1-7998-7856-8.ch001
- [17] Stanford University, (2025). *What is Blended Teaching?*, <https://teachingcommons.stanford.edu/explore-teaching-guides/blended-teaching-guide/getting-started-blended-teaching/one-central-question>, Accessed date: Jan 22, 2025
- [18] University of Monash (2025). *Blend synchronous and asynchronous teaching*, <https://www.monash.edu/learning-teaching/teachhq/Teaching-practices/Blended-and-online-teaching/how-to/Modes-of-delivery>, Accessed date: Jan 22, 2025
- [19] Victoria Department of Education and Early Childhood Development (2012). *Blended learning A synthesis of research findings in Victorian education 2006-2011*. Melbourne.
- [20] HUFLIT (2021). The Decision no. 378/QĐ-ĐNT dated Oct 18 2021 about the blended learning deployment
- [21] Moodle (2025). Moodle LMS The best LMS for personalized learning, <https://moodle.com/products/lms/> Accessed date: Jan 22, 2025

# ÁP DỤNG ĐÀO TẠO KẾT HỢP (BLENDED LEARNING) TRÊN MOODLE ĐỂ GIẢNG DẠY HỌC PHẦN LÝ THUYẾT Ở CẤP BẬC ĐẠI HỌC: DỰ ÁN NGHIÊN CỨU THỰC TIỄN TẠI HUFLIT

**Nguyễn Thị Mộng Ngọc**

**TÓM TẮT**— Qua bài viết này, tác giả áp dụng phương pháp nghiên cứu thực tiễn (action research) để tìm hiểu việc áp dụng đào tạo kết hợp (blended learning) trên nền tảng Moodle trong việc giảng dạy các học phần lý thuyết ở cấp bậc đại học. Kết quả nghiên cứu thực tiễn tại HUFLIT đã khẳng định rằng mặc dù các chuẩn đầu ra tương ứng của từng môn học lý thuyết có thể có sự khác biệt nhưng nếu các hoạt động giảng dạy kết hợp (blended activities) được thiết kế lồng ghép theo các giai đoạn tự học và học tại lớp trên hệ thống Moodle đã làm tăng sự quan tâm của sinh viên đối với học phần lý thuyết. Và sự quan tâm của sinh viên đối với các học phần lý thuyết đã thể hiện rõ nét qua mức độ tương tác tích cực tại lớp của sinh viên, chủ động học tập nhiều hơn trên hệ thống Moodle cũng như tham gia lớp học trực tiếp chăm chỉ hơn.

**Từ khóa** — đào tạo kết hợp (blended learning), Moodle, học phần lý thuyết, phương pháp nghiên cứu thực tiễn (action research), mức độ tham gia học tập.



**Nguyen Thi Mong Ngoc** currently is lecturer at the Faculty of Tourism and Hospitality. Her research interests are applied business management in Tourism and teaching innovation in education.