

## INTERGRATING ONLINE ASSESSMENT INTO BLENDED TRAINING FORM: A CASE STUDY AT LAC HONG UNIVERSITY

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### ABSTRACT

*This paper presents a method to integrate online assessment into blended training form. Based on the Bloom Taxonomy, this study supports digital tools and methodology for assessment online based on the blended training form. Furthermore, ePortfolio has applied to assess the soft skill and knowledge during time students study the course. From the results, this paper found the benefit of student and lecturer in teaching and learning activities based on the blended learning form including assessments online such as: (1) the benefit and challenges of blended training method, (2) the benefits and challenges of online assessment (3) developing the assessment model for blended method, and (3) proposing suitable digital tools for assessment online.*

**Keywords:** *ePortfolio; assessment online; blended training form.*

### 1. INTRODUCTION

The theme of this paper is the relevance of blended learning in higher education. The emergence of online and blended learning has transformed traditional classrooms into more student-centered learning environments. Blended learning training form is a planned integration of classroom practices with the use of online learning tools to facilitate learning and teaching processes. Both traditional and online learning are widely adopted in higher education; thus, planning for a blended methodology course should be an integral element of the curriculum design. It is inevitable that campus-based higher education institutions will adopt blended learning approaches in a significant way. Blended learning can begin the necessary process of redefining higher education institutions as being learning centered and facilitating a higher learning experience (Learning, 2007). The impact of online and blended learning has revolutionized the roles of educators in the classroom focusing on choosing relevant and useful online assessment methods and tools to support this trend in education.

Online and blended learning have become common educational strategies in higher education. Lecturers have to re-theorise certain basic concerns of teaching, learning and assessment in non-traditional environments (Baleni, 2015). In order to meet this demand, educational institutions are anticipated to revise their educational program by integrating blended learning in a classroom environment.

In recent years, many researchers have studied online assessment (Robles & Braathen, 2002; Vonderwell & Alderman 2007; Blender, 2012; Swan et al, 2006; Kulkarni et al, 2013). These researches suggest online assessment methods, but these studies have not analyzed compliance with higher order thinking and lower order thinking levels. This study focuses on how blended learning benefits students and lecturers. In addition, this research starts with a discussion of two important assessment components: planning a blended methodology course and the methods for assessment online. Furthermore, online tools and model assessment are introduced. This is followed by a description and discussion of

the methods of data collection and data analysis adopted. Finally, there is a discussion of the major findings, implications of this study.

## 2. METHODOLOGY

### 2.1 Blended training method

Blended learning can be defined as a combination of classroom learning and e-learning (Kim, 2007). For the blended learning method, teacher embedded some contents on a digital platform in a face-to-face class and/or before face to face as a flipped classroom. With this approach, the instructors need to design these teaching and learning activities online and face to face lessons so that the combination achieves the course learning outcomes. Table 1 shows an example of planning a blended methodology course.

*Table 1. An example of planning a blended methodology course*

Week	Online activities	Face to face activities
Week 1	Synthesis document; brainstorming ideas	
Week 2		Team discussion; determine target ideas
Week 3	Synthesis document; sharing solution	
Week 4		Team discussion; analysis problem
Week 5	Reflection	
Week 6		Report

In Table 1, we designed the class as a flipped classroom model. The knowledge in the form of synthesis we let students synthesize and post to the LMS system (Moodle or Google classroom tool) when we organized the face to face activities, we made

a title for group discuss, the results of the discussion of student, we let students share the results through digital tools as Padlet and/or LMS system (Moodle).

### 2.2 Online assessments

Online assessment is a method of using web-based digital tools to measure students' achievement against a subject's learning outcomes. Teachers have many challenges in designing online assessments. One of the challenges is how to ensure the fairness and validity of the exam questions. Besides, the lecturers' skill in using digital technology also affects the effectiveness of the online assessment method. In this study, the method for assessment online is introduced as shown in Table 2.

*Table 2. Method for assessment online*

Methods	Advances
Portfolios (Yulian & Yuniar, 2020)	to assess writing skill by applying portfolio assessment as it is compatible with the intended learning outcomes expected in the writing skill. to observe the progress of students' writing skill in the sustained period of time as in line. to reflect the thinking about the subject
Video presentations (Jones, 2014)	to assess oral communication skills. to reflect upon their performance
Self-reflection (Jones, 2014)	to involve evaluating the amount of time taken, effort expended, strategies and learning aids utilized in the performance of a particular skill to identify a three-step process of active reflection: identifying past/current experiences; perceiving the gap between past and future behaviors; and employing specific strategies to bridge this gap

### 2.3 Digital tool for assessment online

The assessment of online courses is very different from the traditional course, so it is necessary to design appropriate assessment methods. Online assessment has been defined as a method of using computers to deliver and analyses tests or exams. According to which the proposed method of designing

online course assessment are online literature search, essay, quiz, case study and presentation. Depending on the level of awareness and objectives of the subject, the teacher will design an appropriate assessment method. In this study, a method assessment for higher order thinking and lower order thinking is proposed as shown in Figure 1

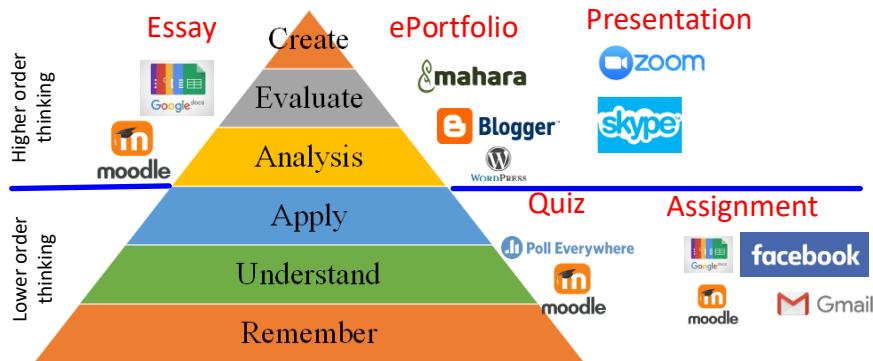


Figure 1. The method for assessment online and digital tool

In the past, online assessments in LHU were primarily for low order thinking when switching to distance online teaching, a combination of lower order thinking and higher order thinking have been used. Besides, in a small survey the results showed 100% lecturers using quiz and 44% of teachers using homework for lower other thinking assessment. In addition, essays, ePortfolio and online report methods applied for higher thinking are only 22.5 %.

### 2.4 The model assessment for Blended training form

In this research, the assessment model has been developed for the blended training form. In this form, the lectures use the online assessment methods as well as distance training method and / or assessment online in class as shown in Figure 2.

According to the Figure 2, the lecture chooses an assessment form suitable to the teacher's goals. Teachers will decide when to conduct assessment online in a distance learning training form and in class online assessment methods to increase interactivity as well as test knowledge in class.

### 3. APPLY THE ASSESSMENT ONLINE IN LAC HONG UNIVERSITY

In the past, online assessments in LHU were primarily for low order thinking when switching to blended online teaching, a combination of lower order thinking and higher order thinking have been used. Besides, in a small survey the results showed 100% lecturers using quiz and 44% of teachers using homework for lower order thinking assessment. In addition, essays, ePortfolio and online report methods applied for higher thinking are only 22.5 %.

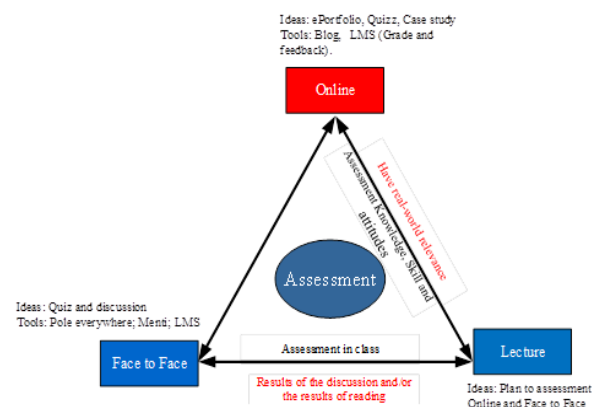


Fig 2. The assessment model for Blended training form

In this study, the course in this study was designed to allow students to apply clinical knowledge, skills, and attitudes for English writing skill and Electrical supply. For the

English writing skill, we designed the hybrid assessment including the online and traditional assessment method. The method of assessments is shown in Table 3.

**Table 3.** The assessment method and digital tool for English writing course and Electrical supply course

Grade scale	Online/traditional	Method	Digital tool
<b>English writing course</b>			
10% (Attitude)	Online and traditional	Quizzes Multiple Choice Discussion	LMS (Moodle) Kahoot Zoom
30% (Midterm)	Online and traditional	Quizzes Essays Presentation	LMS (Moodle) LMS (Moodle) Zoom
60% (Final Exam )	Traditional	Paper test	-
<b>Electrical supply course</b>			
10% (Attitude)	Online and traditional	Quiz / multi choice; group discussion	LMS (Moodle)
30% (Midterm)	Traditional	Paper test	-
60% (Final exam)	Online	ePortfolio	Blogger

Table 3 presents that Moodle was mainly used as an online formative assessment tool for this blended learning form. For 12 weeks, quizzes, multiple choices, matching types, sentence completions and essay were used to assess their performance in understanding, applying and creating the principles learned from this course. In addition, Zoom was used in order to facilitate brainstorming, presentation, discussion, and suggestion. At the end of the course, a paper test was administered as a summative assessment.

Furthermore, the electrical supply course used ePortfolio method to assess students' analytical and effective communication skills through 4 articles, each article is 3 weeks apart.

We make the rules about articles such as quoting, synthesizing data and drawing clear charts and especially analyzing and making conclusions for each article.

#### 4. DISCUSSION

It is necessary to find out the benefits and challenges of the integrated training

approach. In this study, after applying the blended training form for one semester we surveyed 117 lectures and 1640 students, of which over 90% shared the benefits and challenges of blended methods as shown in Table 4.

**Table 4.** The benefits and challenges training form

Benefits	Challenges
Flexible space and time	Lecturers need to be trained skills and methods for effectively teaching online
Easy access to the material	The internet unstable
structure and learners become good at digital technology	Students haven't sufficient equipment to support online learning

For the assessment online, after one semester of applying the online assessment, we surveyed 50 students of an electrical supply course and 50 students of a writing English course the benefits and challenges we found as listed in Table 5.

**Table 5.** The benefits and challenges of assessment method

Courses	Benefits	Challenges
<b>Writing English</b>	Flexible space and time Develop lexicon Active learning	Internet connection Background noise Need time to adapt
<b>Electrical supply</b>	Deep learning Flexible time Flexible thanking Reduce exam pressure	The internet connection Need time to adapt. Digital tool skill

From the survey results, we found that the benefits of online assessment are very suitable for learners' preferences and changes such as flexibility in space and time, reducing pressure on semester exams etc. In addition, portfolios method is a great assessment method; ePortfolio is an excellent assessment method for integrated training. Research also shows that in order to

effectively integrate online assessments, there is a need for digital skills support for faculty and students through online ecosystems. It needs to be deployed regularly for teachers and learners to adapt to new assessment methods.

## 5. CONCLUSION

This paper presents a method to integrate assessment online into a blended training method. From the practical analysis, this study proposes a digital tool and method for assessment online based lower order thinking and higher order thinking. From practical perspectives, the research shows the following advantages: (1) the benefit and challenges of blended training method, (2) the benefit and challenges of online assessment (3) developing the assessment model for blended method, and (3) proposing suitable digital tools for assessment online. The results of this study may serve as the basis for other studies to integrate the digital pedagogy in Vietnam and this result proves that it is an example to expand the technology in educational development in Vietnam.

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