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A Peer Assessment Approach to Project Based Blended Learning Course in a Vietnamese Higher Education

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Abstract

This article presents a model using peer assessment to evaluate students taking part in blended - learning courses (BL). In these courses, teaching activities are carried out in the form of traditional face-to-face (F2F) and learning activities are performed online via the learning system tools (LMS) Moodle. In the model, the topics of courses are built as a set of projects and case studies for the attending students divided into groups. The result of the implementation of projects is evaluated and ranked by all course participants and is one of the course evaluation criteria for lecturers. To assess learners more precisely, we propose a multi-stage assessment model in evaluating all groups and the group members. The result of each student in the group based on their evaluations, evaluations of the team members, the faculty and all students in the course. Project and assessment are implemented by assignments and workshops of LMS. We tested the model in the course of information technology for students of a university specialized in technology, with the participation of 107 students divided into 20 groups which implemented the project in groups and individual exercises. The results of student's feedback suggested that the usage of various peer assessment created positive learning effectiveness and more interesting learning attitude for students. A survey conducted at the end of the course showed that students were satisfied with our approach.

Keyword: peer assessment, blended learning, many phases assessment, learning activities

Introduction

Teaching in the form of integrated BL in the educational process is the inevitable trend in education and training. BL can commonly consider as a combination of traditional teaching and online E-Learning (EL). BL inherits the advantages of both F2F and EL; in other words, BL is an actual reform of teaching methods with the flexibility, interactivity, self-learning capacity and its effectiveness, helping to innovate teaching methods, to improve and enhance the quality of comprehensive training. Guzer Bayram and his colleagues said: "Blended learning have been become the center of attention at the beginning of the 2000 as an eclectic approach while scholars are debating on the best environment for students. In blended learning, the main idea is to benefit of both approaches on good sides." ([Güzer & Caner, 2014](#)). Currently, BL has proved its superiority in comparison with another learning method that finds out in published studies (Porter, Graham, Spring, & Welch, 2014; Tambouris, Zotou, &

Tarabanis, 2014; Tayebinik & Puteh, 2012). Research of Osguthorpe & Graham (Osguthorpe & Graham, 2003) has pointed out six reasons to choose the design or usage of a BL system, including the abundance of pedagogical content; approaches to understanding, social interaction, personal agency, cost effectiveness and easy to modify. The effective implementation of BL usually can be done in several stages: making acquaintance, designing and testing, sharing and application, evaluation, and adjustment.

One of the crucial stages is the assessment of learners - how to effectively assess learners participating the course in the BL model. Recent studies have shown that there are two common forms of assessment: formative assessment and summative assessment (Strijbos & Sluijsmans, 2010). Summative assessment separated from the learning process with a personal evaluation; the assessment usually is made by the teacher, being less dependent on contextual factors and usually happens once when students finish the course. Formative assessment associated with the learning process, especially learning activities, assessing the full academic progress of students through several evaluations, tied to contextual factors to make a broader assessment of different aspects of the learner rather than simply only evaluating learner's knowledge. For BL courses, formative assessment is very effective because it not only assesses and promotes the learners but also collects feedbacks from them that help to improve the quality of the course in this form (Gaylard Baleni, 2015). This kind of assessment shows its superiority increasingly upon the support of computers which diversify the methods of making an assessment, and online assessment allows students to communicate with other members of the course, receiving comments, feedbacks and editing their works (Yang & Tsai, 2010). With supporting tools, teachers easily monitor the participating progress of students and make a more favorable evaluation (Lin, Liu, & Yuan, 2001).

Another effective assessment in this form is a peer assessment. Topping Keith defined " *peer assessment* is defined as an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status." (Keith, 1998). Topping Keith has developed 17 attributes of peer assessment, and many forms of using peer assessment have been deployed such as grading, analysis, feedback, conferencing and revision (Reinholz, 2015). In this study, we propose a model using peer assignment with following forms: grading, wikis, group work and feedback for BL courses which were designed in the form of project-based learning (English & Kitsantas, 2013; McDonald, 2008). In this model, the topics of the courses are built as a set of projects and case studies, which are implemented by attending students divided into groups. Results of the implementation of the projects are evaluated and ranked by all course and are used as evaluating criteria for teachers. We propose a two-phase model for evaluating groups and members of the groups. In this study, we use the LMS Moodle to support the implementation of learning activities and assessment by Moodle is one of the solutions for flexible and friendly opened

learning management. Moodle has very useful documents and strong supports for governance and security of learning system, and Moodle is developed according to the IMS/ SCORM standards. With a large number of modules and plugins, Moodle can support the deployment of a variety of learning activities and assessment forms.

Problem Statement

UET is a public four-year university specializing in technology with the following main majors: Information Technology, Electronics and Telecommunications, Engineering Physics and Nanotechnology, and Engineering Mechanics and Automation. Each year, 550 specialized courses are available for about 2500 students to select. In recent years, UET has been more interested in e-learning courses, especially beginning in the academic year 2010-2011. Up to now, there were about 442 courses (~20%) in the Information Technology and Electronics and Telecommunications major that applied the teaching/learning process in the form of blended learning. Although there were many difficulties in the application process, the initial results proved that the blended-learning approach could be expanded to all the courses in the university.

During implementing the BL course, the application of the model and technology for evaluating students attending the course has become an urgent need for the university instead of using the summative evaluation at the end of each course, where students often have complaints about the results after knowing the score. Besides, to ensure the fairness in the assessment of the members of the working group model is a matter of concern: how correctly to assess the contribution of each member in the group. This study aims to find solutions to improve the efficiency of the assessment of learners participating in BL courses.

Research Objective

Since this research aims to build effective evaluation solutions of learners through learning activities in the BL course in UET in Vietnam, therefore, it strives for achieving following objectives:

- 1) Building a multi-phase evaluation model through peer assessment activities to help teachers to evaluate students more precisely focusing on collaboration and communication learning elements.
- 2) Providing solutions to assess the contribution of each member in group working environment.
- 3) Testing the multi-phase evaluation for participating groups and each group member

Significance of the Study

The study aims to find out solutions which support teachers to evaluate learners in BL courses more

precisely, especially in project-based learning course emphasizing the teamwork ability, cooperation and exchange between members. Besides, the study also encourages teachers to use LMS tools in the design and implementation of learning activities in BL courses in Vietnam, where the traditional form of learning and assessment is still popular. Also, the research aims to promote the use of classes that focuses on improving the skills of teamwork, cooperation and exchange between the participating students – all the weak skills of the majority of students. Recommended improvements of the multi-phase assessment of peer assessment activities help teachers to evaluate each learner more accurately, especially more efficiently for large classes and students feel more responsible for their group's work.

Related Literature

Liu et al. (Lu & Law, 2012) examined the effects of online peer assessment, grading in the form of peer and peer feedback. Their research has shown the benefits of online peer review on learning performance of the students. With project-based learning courses, Hwei-Tse Hou (Hou, Chang, & Sung, 2007) conducted a study analyzing the content discussed in the form of peer-assessment of students. This experimental research showed that before the intervention of teachers, the students demonstrated a certain level of discussing behavior related to the formation of knowledge, which promoted their self-study ability. Study of Falchikov pointed out that student implemented peer-assessment activities in teamwork in higher education relevant to their future careers. These activities played a role in promoting the lifelong learning skills, including reflection, autonomy, communication, problem-solving and responsibility (Falchikov, 2007). However, teachers often have difficulties in assessing the contribution of each participating in group's projects because they did not involve in the implementation process of the students and depended on the peer assessment. Some forms of assessment are applied as marking/grading, analysis, feedback, conferencing and revision. With peer grading, teachers give students the criteria to evaluate other members. This is a fairly reliable and popular assessment (Jonsson & Svingby, 2007). Use of member's feedback on the results of the work is the solution that many researchers believe that it is more effective than peer grading because of helping students to know clearly pros and cons of their work through specific suggestions instead of scores (Xiao & Lucking, 2008). Recent assessment with the use of the Wiki, suitable for the development of writing skills, is concerned. The research results of Galini Rekalidou (Rekalidou, Prentzas, & Karadimitriou, 2015) showed that students not only applied their knowledge in the evaluation process but also developed skills in the course of constructing documents. However, before conducting self-assessment process by students, teachers should provide them examples, instructions of using evaluation tools as well as strategies to improve the reliability and accuracy of evaluating the process (Thomas, Martin, & Pleasants, 2011). Many tools have been implemented, one of which is the Moodle system because of its superiority and it not only supports teachers in preparing learning plans, providing teaching materials and exercises but also effectively supports assessment activities such as

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peer assessment, workshops, test, forum, etc. (Al-Ani, 2013). Also, Moodle is an open sources product so that it is easy to be installed and deployed on a large scale.

Research Questions

With the goal of building multi-phase evaluation model through peer assessment activities to help teachers to assess students more precisely, focusing on the assessment of learning collaboration and communication. This study was conducted to answer the following questions: (1) How accurately and efficiently to assess the individual participation of the group in the BL course? (2) Evaluate the impact and influence of peer assessment to the students participating in the BL courses? (3) Whether the use of LMS tools to design learning activities in the BL courses encourages students to work in groups to solve the problem or not?

Method

Participants

107 students registered to participate in the case study. The 3rd-year student of information technology took part in the course entitled "web application development" which consisted of 3 credits. The students were randomly divided into 20 groups of at least five members up to six members to implement the projects and case studies relating to the subjects. Tests were carried out between semesters, and the teacher evaluated final examination. All component assessments during the course were conducted by using peer assessments.

Design and procedure

Course Design

The course was implemented in 15 weeks, including two forms of offline learning and online learning. With offline learning, lecturers taught in class. The theoretical lessons were implemented in compliance with the content and process in draft course plan approved by the scientific council of the university. After the first class, teachers divided students into groups to implement group learning activities. After participating in classroom activities in the form of F2F, students carried out online learning activities and implementation of group activities as depicted in Figure 1. Also, students must do a midterm test and a final exam, in which online activities implemented as follows:

Week 1: First individual assignment, submitted in week 2

Week 2: Group exercises Project 1 done in groups, submitted in week 5

Week 3: Group exercises Project 2 with making documents in the form of Wiki, submitted in week 8

Week 4: Second Individual assignment, submitted in week 5

Week 7: Mid-term exam, online test

Week 8: Group exercises Project 3, submitted in week 9

Week 13: Third individual exercise, submitted in week 14

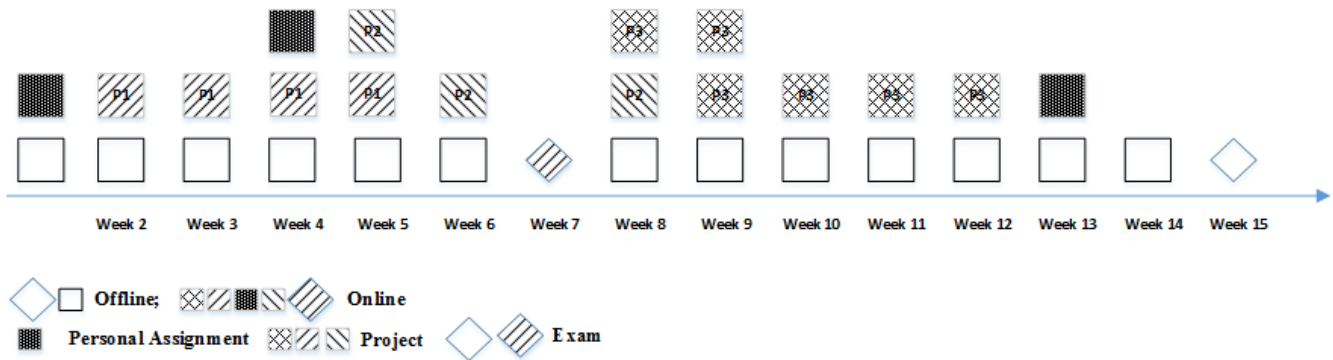


Figure 1. Learning activities of the project based blended learning course.

Course Grading

The evaluation of student's completion of the course was done by giving scores. Students were evaluated according to a scale of 10, in which the proportion of component scores was calculated in Table 1. In particular, the necessary activities required students to attend were two of the three individual assignments, two of the three projects, 01 mid-term exams, and the final exam.

Table 1. Point value for grading

Learning activity	Point value (%)
Attending to LMS	2%
Personal assignment one	2%
Personal assignment two	3%
Personal assignment three	3%
Project 1	5%
Project 2	10%
Project 3	10%
Midterm test	10%
Final exam	55%

Using three types of peer assessment

Individual assignments for peer assessment

In the model, individual assignments were assignments for students to complete a period of one week. Students must submit their work through the LMS system. Individual exercises were evaluated by the teacher's assistant and at the same time exercise of each student was assessed by other students randomly selected in the class with criteria made by teachers. In this experimental course, individual assignments of week 1 required of students writing an essay about the "History of web development," each student was asked to write a 500 words essay, then groups conducted repairs and submitted the final version. The participants of the course evaluated essays of 14 groups on a scale of 1-5, including their own group's essay through the exploration of Google form.

Đánh giá bài tập Tuần 1

*Bắt buộc

Bài tập nhóm 1 *

1 2 3 4 5

Bài tập nhóm 3 *

1 2 3 4 5

Bài tập nhóm 4 *

1 2 3 4 5

Bài tập nhóm 5 *

Figure 2. The survey form for students to assess group assignment

Evaluation scores of each member shall be based on the assessment of teachers and the group. In this assignment, the team members had equal scores. Individual assignments No. 2 and No. 3 tested programming skills of the students. The students completed and submitted assignments through the LMS system. Teachers gave criteria; each one had a different level of maximum points for evaluating the program code.

Group exercises for peer-assessment:

Exercises were done in groups; each group consisted of about 5 to 6 members selecting one project, the execution time of approximately 4 to 5 weeks. Assessment of project performance was conducted in three stages: (1) The members of the group conducted their self-assessments based on its level of contribution to the joint work, the team members classified the levels A, B, C, D respectively. (2) The groups discussed and concluded a final assessment for each member of the group, with the consensus of the whole group in the minutes certified by each member. The results of the peer assessment of group members were considered valid when the members had different levels of assessment, in other words, the assessments of groups at the same degree A, B, C or D were not accepted. In fact, this is quite natural because almost there are no equal contributions of all group members. (3) The results of group assignments were reported in class in offline form, where teachers evaluated project performance through scores by the criteria in the project requirements. Students in the other group filled out the

rating forms of all groups after hearing all group presentations.

Mapping group peer assessment to personal grade

The final scores of teachers consist of the evaluation score of teachers and equivalent score from rating forms of all members after hearing the reports presented by groups. The basis of scoring for the group members according to the following principles: The final grade will be the average of individual scores of the members, allowing minimum deviation 0.25 point on a scale of 10 points. For example, the discussion report of a group had the evaluation results for five students as follows: A, B, B, C, C. The evaluation score of the teacher for the group project was 7.0. The group project was ranked the third in twenty groups by voting of group evaluation (the highest ranking team receives 1 point, the third place receives 0.8 points). As results, the average score of members was 7.8. Therefore, the members received C had 7.6 points; B received 7.85 points, and A had 8.0 points respectively.

In the experimental course, Project No. 1 was an exercise in which groups learned about the common framework for developing web applications recently. The groups had the task of building an instruction video of that framework. In addition to the submission of the project through the LMS system, these videos were required to be uploaded to YouTube, then the number of viewers and likes were considered as a group ranking basis.

With project No.2, groups were required to implement a project of building a small-scale software; the reports were applications installed on the server so that members of the class could use and evaluate. Project No.3 asked groups to develop more advanced features of the project No.2 and to use workshop in Figure 3 of the LMS to implement the mutual evaluation.

Constructing documentation wiki and peer-assessment

Teacher's assistants evaluate assignments and at the same time each student's work is assessed by other k students who are randomly selected in the class by the criteria made by the teachers. Thus, each student will evaluate a minimum of k members in the class ($k \leq n$) and be also evaluated by other k members. The process of randomly selecting members to evaluate is carried out by the Moodle workshop as showed in Figure 3.

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Bài tập thực hành, đánh giá chéo

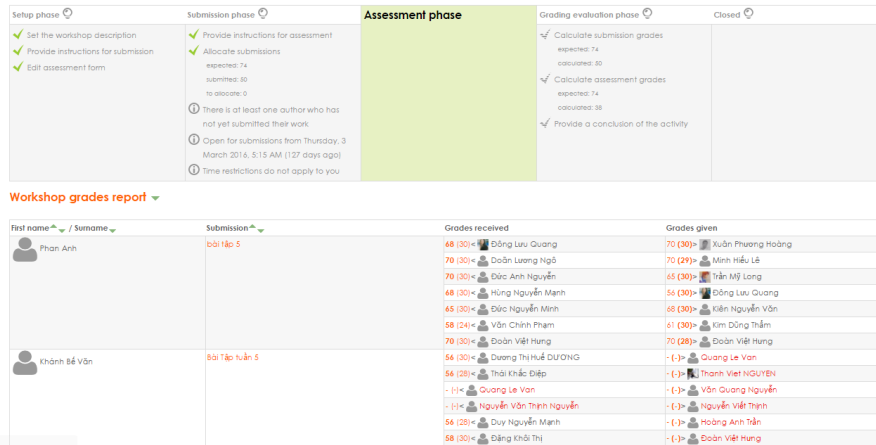


Figure 3. student's work is assessed by other k students who are randomly selected in the class
 In this course, students were required to prepare materials in the form of a wiki, learning the framework for the current development of the popular web. Moreover, implementation of the assessment with the results showed in Project 3.

Instrumentation

At the end of the course, the students were asked to answer the survey consisted of 18 quantitative questions, using Likert scale with five values in the range 1 to 5. These observation variables aim to assess the level of satisfaction of the students participating in the experimental course.

In order to know whether the evaluation of the working results of each students in the group in stages was reflected exactly or not, we observed the variables: Self-assessment of the student about his contribution for group work (SA), level of agreement with the evaluation of the team members (GPA), degree of agreement with the assessment of the teacher for the group (TA), level of agreement with assessments of other colleagues in the class for the results of group members (OSPA), level of student's satisfaction with the scores of group exercises (RPA), degree of agreement with the assessment (TPA).

To assess the impact of used peer assessment forms, we explored these factors from students: The level of interest in the course using a combination of evaluation forms (LCPA), in the used form of the assessment, knowing the level of satisfaction with the assessment (personal assignment for peer assessment - PPA, group assignment for peer assessment - GSPA, Wiki assignment for peer assessment -WPA). The degree of the evaluation for other members (AOS), whether the evaluation form promoted student's group work or not (GW), whether the combination of the evaluation forms accurately reflected learning results of students or not (ER). Satisfaction level of students when they used the combined assessment forms through learning activities (ATPA).

To know whether the use of LMS tools to design learning activities in the BL courses actually
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encourages the students to work in groups to solve the problem or not, these factor should be explored from students: difficulties in performing the online learning activities (DLMS), the support of teachers and teaching assistants in the implementation of learning activities (TS); Students have enough time to complete course assignments or not? (ET). Students are interested in participating in cross-assessment activities, assessment through LMS (IPA).

To assess the level of satisfaction, (Y) is the average of the dependent variable (TPA, ATPA, IPA), we consider the following factors: Form of assessment of the group (X1) is the average of the variables (SA, GPA, TA, OSPA, RPA), satisfaction of combined evaluation forms (X2) is the average of the variables (LCPA, PPA, GSPA, WPA), use of tools to conduct online activities (X3) is the average of the variable (DLMS, TS, ET)

Results

Statistical result of observed dependent factors as shown in Table 2. The results showed that students relatively agreed with the assessments of the members of the group (3:13), the majority of students agreed with the evaluation of teachers (3:50), but not agreed with assessments from other members in the class for their group (2.80). The use of the group assignment for peer assessment was largely supported by students as majority selected the answer "Agree" (3.73)

Table 2. Descriptive Statistics of major variables

	N	Mean	Std. Deviation
SA	107	3,79	1,035
GPA	107	3,13	,982
TA	107	3,50	,851
OSPA	107	2,80	,995
RPA	107	3,23	1,033
LCPA	107	3,50	,985
PPA	107	3,50	,884
GSPA	107	3,73	,957
WPA	107	3,30	,892
AOS	107	3,21	,753
GW	107	3,24	,950
ER	107	3,23	,917
DLMS	107	3,61	,909
TS	107	3,54	,904
ET	107	3,18	,878

TPA	107	3,21	1,055
ATPA	107	3,51	,945
IPA	107	3,54	,827
Valid N (listwise)	107		

Exploring the correlation of the observed independent variables of the form of group assessment results in Table 3 showed the linear correlation between the variables GPA, TA, OSPA with satisfaction with the kind of group assessment.

Table 3. Correlations between observed variables and satisfaction factor with multi-stages assessment for group assignments

		TPA	SA	GPA	TA	OSP	RPA
		A					
	Pearson Correlation	1	,127	,264*	,290*	,265*	,360*
TPA	Sig. (2-tailed)		,191	,006	,002	,006	,000
	N	107	107	107	107	107	107
	Pearson Correlation	,127	1	,538*	,417*	,382*	,204*
SA	Sig. (2-tailed)	,191		,000	,000	,000	,035
	N	107	107	107	107	107	107
	Pearson Correlation	,264*	,538*	1	,498*	,452*	,276*
GPA	Sig. (2-tailed)	,006	,000		,000	,000	,004
	N	107	107	107	107	107	107
	Pearson Correlation	,290*	,417*	,498*	1	,584*	,447*
TA	Sig. (2-tailed)	,002	,000	,000		,000	,000
	N	107	107	107	107	107	107
OSP	Pearson Correlation	,265*	,382*	,452*	,584*	1	,513*
A							

Sig. (2-tailed)	,006	,000	,000	,000	,000	,000
N	107	107	107	107	107	107
Pearson Correlation	,360*	,204*	,276*	,447*	,513*	1
RPA Sig. (2-tailed)	,000	,035	,004	,000	,000	
N	107	107	107	107	107	107

Considering the satisfaction of the students, we conducted regression analysis on factors of the forms of group assessment, the combination of forms of assessment using tools to implement online learning activities. Table 4 showed that the correlation coefficient R had been proved not to decrease according to the independent variables in the model. Parameters mentioned above can explain $R^2 = 0.853$ show that model is true, adjusted R^2 had the value of 0.847 showing the high compatibility of the model with observations, and the dependent variable of student's satisfaction.

Table 4. Correlation coefficient of student satisfaction with factor variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,917 ^a	,849	,842	,176	
2	,922 ^b	,853	,847	,173	1,638

Test results F in Table 5 had minuscule sigα, indicating that the model was appropriate.

Table 5. Analysis of variance ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	9,972	3	3,324	15,932	,000 ^b
1 Residual	21,488	103	,209		
Total	31,460	106			

Small variance inflation

factor of about 1,000 to 1,300 in Table 6 showed that the multicollinearity of the independent variables was not significant, and independent variables in the model were acceptable.

Table 6. Variance inflation factor of independent variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	,401	,445		,900	,370		
1							
X1	,049	,068	,065	,720	,473	,816	1,226
X2	,516	,106	,437	4,857	,000	,821	1,218
X3	,323	,082	,322	3,942	,000	,993	1,007

Discussions

Results of exploring the evaluation of each student in the group suggested that the majority of students usually appreciate his contributions to the team more highly in comparison with the other member's assessments for him. The results are reasonable because students psychologically often want their results to be the best possible assessment. This conclusion was also shown in the results of the research (Hou et al., 2007; Lu & Law, 2012). The students were satisfied with the evaluation of the members of the group and the assessment of teachers that can be understood as a group member often knows more clearly about the work of groups and other members of his team. This form of assessment could indicate differences in the contribution of each for the group work; each student had different scores though they did for teamwork. In fact, It is hard to find a group in which the contribution of all members was the same. Making each member to be satisfied is better than giving them only the same scores in the same group (Kennedy, 2005; Lejk & Wyvill, 2001). The contribution of each member also helped the work of the whole team because the completion of the work was difficult for each member (Moccozet, Tardy, Opprecht, & Leonard, 2013).

However, survey results showed that many students did not agree with the assessment of the other members of the class of his group's results. It was also reasonable because when the students evaluated

the results of other groups, they always wanted to appreciate their groups highly. The classification of the group by the point of view of each was relative because each had his perspective on how to evaluate. Research on survey results also showed that students were satisfied with multi-stages assessment as being tested. With multi-stages assessment, students can involve in and to know the evaluation results of each stage. The assessment becomes more transparent than only being evaluated by teachers. Students can fully predict their performance after knowing the results of each review period. Besides the advantages of this assessment model, the response of the students showed that this approach required students to spend much time for self-study activities and group work, making someone unsatisfied.

The survey results revealed that students were interested in the implemented form of assessment. Students not only received the evaluation of teachers and other members but also directly gave assessments for the other students. Moreover, the students said that the form of a group assignment to peer assessment made the results more clear and positive, promoting self-study and active participation in the group. Why could this approach promote learning endeavor of individuals? This is logical because if team members have the same evaluation results, it does not encourage learning activities when members are contributing more or less, get the same results. With a multi-stage assessment, individuals who contribute more for the common group work will be evaluated by the whole team. Although the implementation of evaluation process faced many obstacles especially in classes with a big number of students (Kulkarni et al., 2013; Suen, 2014). Conducting many assessments with many stages, the workload of teachers and students increased. The survey results showed that students relied on the accuracy of evaluations and were satisfied with this approach, and the majority of them felt excited after finishing the course.

The use of supporting tools of LMS systems such as group, assignment, and workshop of Moodle, helped students to implement projects as well as to participate in other learning activities. Also, thanks to the supporting tools, online learning activities were easily conducted with the right monitoring tools supporting teachers in evaluation and learning process. However, there should be a guidance that supports students in online learning activities because quite a lot of students also have difficulties in using BL environment.

Some obstacles in the implementation of the model are (1) the difficulty of designing course's content with multiple projects and learning activities. They are only useful for academic topics, which are suitable for project-based learning orientation, so it requires to select appropriate subjects for designing courses with multiple assignments for assessment. According to our opinion, the model should be applied to practical subjects, with many activities designed for group work such as the natural areas, the technology. (2) Students have difficulties in the use of learning environment with multiple skills of

computers and the Internet, so to effectively participate in the course, in the beginning, it is necessary to spend some time for helping them to become familiar with the model. Another problem is that students have to spend more time for activities and evaluation exercises. Therefore, the number of exercises, evaluation forms and the level of difficulty of the activities for students should be considered to help them feel unpressured in the course (3) teachers have to spend a lot of time and effort to carry out the assessment and to monitor learning activities of students in the large class.

Conclusions

In this study, we focused on finding solutions to evaluate learners during work group process and the practical use of peer assessments for the small-scale courses in the form of BL; then we evaluated solutions for application in large scale. We proposed a model combining forms of evaluation and multi-phase peer evaluation to offer more accurate assessment solutions than participating individuals made in group learning activities. Results of student's assessment were aggregated based on self-assessment, group assignment for peer assessment, wiki assignment for peer assessment. With this evaluation model, to get the best results, the learners must actively and initiative participate in the learning activities. The test results showed that this approach was acceptable by students, and they were excited and interested in participating in the courses. This approach also encouraged students to study and to learn the course content, as well as skills of working in groups. Although, the trial of the application was only on a small scale, but the results showed that it absolutely could be replicated on a larger scale. For an effective course in this form, it should be focused on the following steps: firstly, to design diversified learning activities to combine forms creating excitement for students; secondly, to fully inform provisions on the assessment and scoring for students at the beginning of the course. Besides, it is necessary to set up principles, rules for students working in the group to comply with. Moreover, monitoring learning activities of groups through tools needs to be strengthened. In the next study, we will evaluate the influence of this peer assessment model for the acquisition of knowledge and development of student's skills.

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