

IMPACTS OF ONLINE FORMATIVE ASSESSMENT ON EFL STUDENTS' WRITING ACHIEVEMENT

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ABSTRACT

There have been a number of studies on the effects of formative assessment on Learning Management System on EFL writing achievement. Nevertheless, in the context of Vietnam, little research has been done on education technology that enhances online formative assessment in teaching writing. In an attempt to further the previous research nationwide and worldwide, this study examined the impacts of formative assessment on students' writing achievement in a writing course of Learning Management System Schoology. A quasi-experimental design was carried out among two groups of fifty undergraduate Vietnamese students over a fifteen-week writing course using the main activity named online discussion board. The data analysis from the writing test scores suggested that there was statistically significant difference between treatment group and control group of participants. It is recommended that teachers should employ online formative assessment in teaching writing to help improve writing achievement among EFL learners in Vietnam and similar contexts.

Keywords: Formative assessment; Online discussion board; Students' writing achievement.

1. Introduction

Formative assessment has been proved to be an effective tool in improving learners' use of language (Bachman, 1990; Bell and Cowie 1999; Cheng et al., 2004; Chappuis & Chappuis, 2007; Yu & Li, 2014). Investigating formative assessment studies helped encourage students' achievement (Hattie, 2009; 2012); or enhance students' performance when integrated into teaching (William et al., 2004). Importantly, employing different formative methods to assess the students during the course would both enhance students' success and encourage their motivation and self-assessment (Black & William, 1998). Especially, in teaching writing, this type of assessment can help teachers "to gauge the

effectiveness of their instructional practices, modify instructions as needed, and provide students with feedback on writing strengths and areas in need of further development" (Graham, Harris, & Hebert, 2011, p. 5). Nowadays, with the advancement and proliferation of cyber applications, and learning management systems bound up with Web 2.0, educators and researchers are greatly aware of how computer-assisted assessments can benefit their teaching and evaluation process. Several researchers have noted the advantages of online formative assessments over traditional classroom assessments. A web-based formative assessment strategy can allow students to assess their own progress and understanding at any time. It can also help

foster a learner and assessment centered focus through formative feedback and enhance learner engagement with valuable learning experiences (Gikandi, 2011).

Despite the increasing application of Web 2.0 in recent years, EFL teachers in Vietnam seem not to make use of the benefits offered by the LMS system. There is still a lack of research on education technology that enhances online formative assessment in teaching writing. In an attempt to further the previous research nationwide and worldwide, this study aims to explore the impacts of formative assessment on students' writing achievement in a writing course on Learning Management System Schoology.

2. Literature review

2.1. Formative assessment

There are numerous definitions of formative assessment by different aspects. According to Black and Wiliam (1998), formative assessment was defined as all activities performed by the teacher and his students in assessing themselves, which are feedbacks to "modify teaching and learning activities" to meet students' needs. Cowie, & Bell (1999) also emphasized formative assessment as the process used by teacher and students to recognize, respond to and improve students' learning. Gipp (1994) defined formative assessment as the process of appraising, judging or evaluating students' work or performance to shape and improve their competence. Furthermore, Kahl (2005) claimed that unlike a simple evaluation device marking the end of instruction used by teachers to measure student grasp of specific topics and skills, a formative assessment is an effective tool to identify misconceptions and mistakes made by students during the learning process.

According to Clarke (2005b), a formative assessments has many key features other than simply good teaching practices. These features mainly focus on the process of students developing their learning and being critical

about their goals and abilities. First of all, teachers have to take time to clarify and share learning objectives with students; share knowledge of success criteria and encourage students to be autonomous learners. Next, they provide students with effective, useful and personalized feedbacks. Finally, they promote students' self and peer evaluations.

Based on the above features of formative assessment, Harsch, C. (2014b) proposed the aims of formative assessment as follows:

- a. Feedback and information about the learners' level and learning progress
- b. Diagnosis of strengths and weaknesses
- c. Exploring learners' potential
- d. Feedback on teaching effectiveness, for planning and modifying next steps
- e. Reflection by all participants
- f. Motivation and improvement/development
- g. Autonomy and learner participation

As the purposes of formative assessment, Irons (2008) and Harsch (2014b) offered some suggestions for the format of formative assessment feedback including annotated scripts, feedback sheets, marking grids, model answers, statement banks, demonstrations, peer feedback, tutorials, journals and observations. Li's (2012) study mentioned the four types of formative assessment namely self-assessment, peer assessment, teacher assessment and collaborative assessment. Besides, Black & Wiliam (1998) emphasized that formative assessment activities were tools to provide feedbacks for teachers and students to modify teaching and learning activities they took part in. In this study, the researcher tries to explore just two types of formative assessment called peer-assessment and self-assessment.

Self-assessment is one of the key elements in formative assessment because it stimulate students to think about the quality of their own work rather than relying on their teacher as the sole source of evaluative judgments. It is really "a necessary skill for lifelong learning" (Boud,

1995, p.13). In self-assessment, students assess their learning directly. They self-reflect their study results, evaluate their present performances and set their future goals. Obviously, students have to make their own decisions in their EFL learning.

Peer-assessment allows students to compare their work with that of their peers, and thus helps students to evaluate mutual achievements and outcomes. When permitted to see the strengths and weaknesses of their friends, students are likely to gain more confidence and reduce anxiety in making mistakes.

These two formative assessment activities were mainly adopted to design writing assignments for students during the course. The effects of online formative assessment tool were carefully discussed in the next section.

2.2. Impacts of online formative assessment on EFL students' writing achievement

Formative assessment has been emphasized as a feasible way of developing achievement in college English teaching (Li, 2012). In the field of language learning, there are numerous studies exploring the impacts of formative assessment on EFL students' writing achievement.

In an experimental research conducted in Egypt, Aliweh (2011) examined the effects of electronic portfolios on enhancing Egyptian EFL college students' writing competence and autonomy. Accordingly, sixty-four college students were randomly split into two groups: experimental and control groups. Members of the control group developed traditional paper portfolios whereas their counterparts of the experimental group used the Internet and online resources to develop and present the same essay portfolios. The impacts of the electronic portfolio were measured using the Writing Competence Rating Scale and the Learning Autonomy Scale. The findings revealed that online portfolios did not yield significant effects on students' writing

competence and learning autonomy because of different uncontrollable variables on the online environment. Some possible interpretations were given about the distinct characteristics of the Egyptian educational system and students.

Another study in Iran by Ghadi (2016) examined the effects of employing electronic peer assessment on 90 Iranian EFL learners' writing ability and autonomy. Data analysis from questionnaires showed that electronic peer assessment had significant effects on Iranian EFL learners' writing ability. Results of semi-structured interviews indicated that the subjects had positive beliefs about the implementation of electronic peer assessment and they felt more responsible to read and assess their classmates' writing. The study finally suggested some pedagogical implementation of using electronic peer assessment in EFL setting.

In 2017, Zainnuri and Cahyaningrum carried out a case study to investigate the effectiveness of online peer review through discussion via Schoology in enhancing the proficiency of EFL college students' argumentative writing at Sebelas Maret University. The findings indicated that online peer review through discussion via Schoology can help improve students' proficiency in higher education about argumentative writing. The results of previous studies showed that formative assessment via virtual environment increasingly draw the attention of EFL researchers from different learning setting worldwide. This study aims to examine the effects of online formative assessment on EFL learners in Vietnamese context with a hope to maximize its benefits in foreign language teaching and learning.

2.3. Formative assessment on Schoology Platform

2.3.1. What is Schoology?

Schoology is a website and an app used by teachers and students to share information, resources and files. Initially designed by four

college students in 2007, it has become one of the most popular learning management systems which provides digital medium to foster student-to-student and student-to-teacher interactions within a classroom network. This cloud-based platform is accessible via websites (www.Schoology.com). It is considered as the best education solution for K-12 and higher education, and learning management system categories and as the finalist of best K-12 course or learning management solution and best post-secondary learning management solution categories in 2015 (Schoology, 2015).

In Schoology, students are able to access their assignments, grades, teaching materials, attendance records and teacher feedback on the electronically-submitted task. Communication between teachers and students increased by the access to this information and held students' academic responsibilities. By using Schoology, teachers can make collaborative groups, discussion questions or assignments to provide a dynamic interaction between them and their students. For example, students participating in a writing assignment can ask questions and post comments on their classmates' work. They can also provide feedbacks on any of their friends' writing. Teachers can monitor discussions and give corrective feedbacks on students' assignment.

2.3.2. Formative assessment on Schoology Platform

As a learning management system, Schoology provides a variety of educational tools, such as text/ quiz, online discussion board, assignment or reflective journal. It helps teachers manage media learning material systematically and create dynamic assessments and assignments using a rubric or a checklist (Ardi, 2017). In this study, the main formative assessment tool is the online discussion board.

Discussion board on Schoology is a tool for the teacher to create assignments in the form of discussion. The online discussion

provides students a chance to self-assess their writings, find out their mistakes and self-correct the mistakes. When students join a course on Schoology, they are able to get access to their assignments, grades, materials, attendance records and teacher's feedback on their online tasks. The students are introduced a rubric to self-assess their work and their peers' work. By using this activity, the teacher can stimulate students' peer-assessment and self-assessment in their learning process.

From the discussion in Writing 3 online course, the teacher designed homework assignments on the Schoology platform after each chapter. The students were given an access code to join the course. The teacher-researcher introduced the platform and train the students how to use it effectively in their learning. They know how to post their writing, how to interact with their friends and how to use the rubric to self-evaluate their work. On the discussion, students and their classmates had an interaction like a forum, they were able to comment on their peers' work and make modification for their writing. With the prompt replies from peers and many writing works from other students in the course, students can make their self-assessment and peer-assessment for their learning writing, and thus, improve their writing achievement. Therefore, for an examination about the effects of formative assessment on students' writing achievement, the main activity would be the online discussion board.

For a better understanding of the impacts of formative assessment on students' writing achievement in online courses, this study addresses the following research question:

What are the impacts of online formative assessment on students' writing achievement?

3. Methodology

3.1. Participants

The target population of this study was fifty EFL third-year students at Kien Giang University, Vietnam. They were selected

from two major English classes with the ages ranging from 19 to 23. Their English proficiency is generally expected to achieve B1 level in the Common European Framework of Reference for Languages (CEFR). Both groups learnt Writing 3 with the teacher-researcher. The students had two weekly sessions of 100 minutes with the researcher.

3.2. Research design

This study employed a quasi-experimental design. Accordingly, two intact groups of students were invited to participate in the study with two different learning conditions, with and without online formative assessment's implementation. With this design, the implementation of online formative assessment was undertaken in the experimental group. The impacts of this treatment were then measured by comparing both groups' results from Pre-test and Post-test scores on students' achievement in learning essay writing. To avoid the differential selection caused by major dissimilarities between two groups, the students were selected based on their comparable results in the pre-test at the beginning of Writing 3 course. In terms of class size, both groups are equal with 25 students each.

Firstly, the two groups including the treatment group (TG) and control group (CG) were selected by the researcher. Then, TG and CG students' writing pre-test scores were compared to examine any differences between the two groups before the intervention. Then TG and CG students' writing post-test scores were

compared to explore differences in writing performance of students from both groups.

At the beginning of the course, the teacher introduced the two groups the scheme for formative assessment in Writing 3 course including 5 chapters which they had to study during the course namely *Writing essay*, *Comparison/contrast essay*, *Advantages/disadvantages essay*, *Cause/effect essay* and *Problem/solution essay*. In class, both groups were asked to discuss some questions relating to the topic. Teachers gave both groups the same lessons in the classroom and the same homework assignments. Before delivering the homework to students, the teacher let students discuss suitable writing skills and provided them with some grammar structures and necessary vocabulary. Then the rubric of each specific essay was introduced. Students had to complete the writing task based on the proposed rubric on the due day. TG students had to submit their assignments onto Writing 3 course on Schoology whereas CG students submitted their paperwork to the teacher or simply wrote their essays on the poster and ticked on the board for correction. After self-assessment at home, students would get immediate peer-assessment from their classmates, and then get the final feedback on their writing from the teacher. The assignments of the online discussion board take up 50 % of the total scores in the course. The other 50% percent of the marks belong to the final test held by the Faculty.

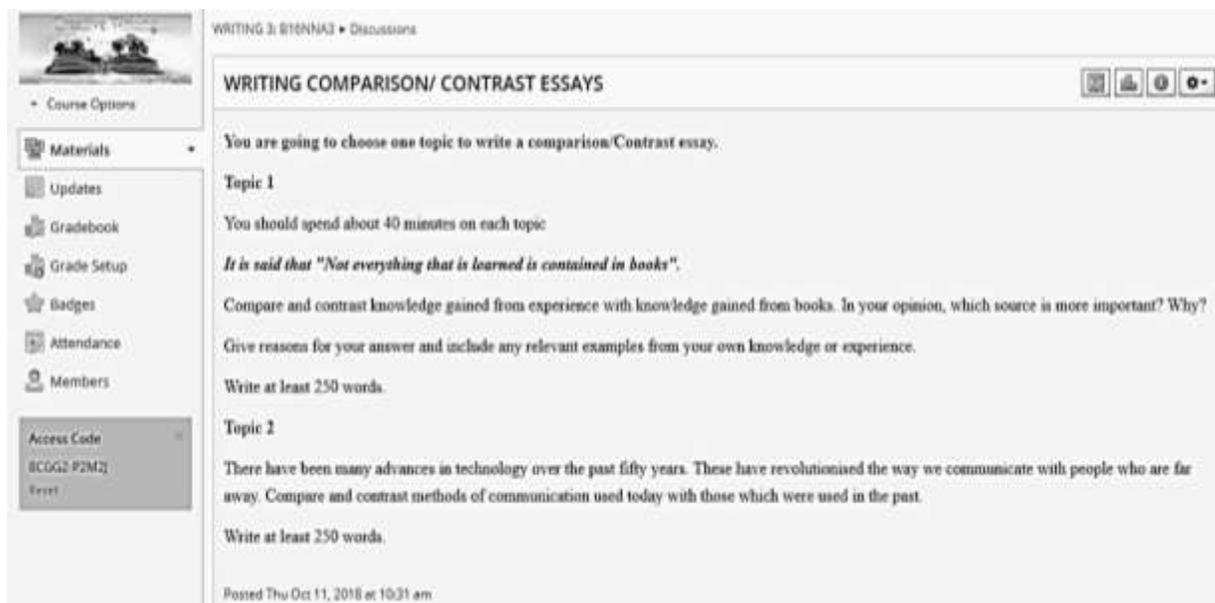


Figure 1. A snapshot of the discussion board on Writing 3 course

3.3. Platform and Development Process of formative assessment for TG

The main online formative assessment tool was online discussion board to support students’ writing activities during the course. Each entry in the discussion thread was used to collect students’ work in each unit of the course. There were a total of 5 discussions for writing different kinds of essays during the whole course. Through the discussion board, the teacher-researcher designed specific writing tasks and students used the tool to peer-assess and self-

assess their own work during the course. In terms of the 5 writing tasks, the teacher marked students’ work based on the rubric. Feedbacks and corrections were also posted to the discussion thread and discussed later in class. The platform of online formative assessment is the web page [http:// schooly.com](http://schooly.com) whose operations are empowered by the learning management system Schoology. The scheme for implementing online formative assessment using discussion boards is featured in Table 1 below.

Table 1

The scheme for the implementation of online formative assessment using online discussion boards

Week	Classwork	Week	Classwork
1	Introduction to the course Introduce the Schoology platform and the discussion board	9	Chapter 4: Cause/ effect essay Activity 4: Write a cause/ effect essay
2	Chapter 1: Essay writing How to write an outline of an essay	10	Chapter 4: (continued) Self and Peer correction, teacher’s feedback
3	Chapter 1(continued) How to write an essay Training in self-reflection, and peer-reflection using rubric Activity 1: Work in group to write an essay	11	Chapter 5: Problem solution essay Activity 5: Write a cause/ effect essay

Week	Classwork	Week	Classwork
4	Chapter 2: Comparison/ contrast essay Activity 2: Write a comparison/ contrast essay	12	Chapter 5: (continued) Self and Peer correction, teacher's feedback
5	Chapter 2: (continued) Self and Peer correction, teacher's feedback	13	Revision
6	Chapter 3: Advantages/disadvantages essay Activity 3: Write a comparison/ contrast essay	14	Revision
7	Chapter 3: (continued) Self and Peer correction, teacher's feedback	15	Final examination
8	Mid-term test		

Each post of students' essay can be followed by multiple reply posts making room for peer-reflection and self-reflection. There are 5 assignments corresponding to 5 chapters of the course program. There is one writing homework assignment every two weeks.

The assignment requires students to write one essay about a given topic, post peer-reflections on the assigned classmate's writing, and their self-reflection on their own writing (following the rubric of each essay type).

WRITING COMPARISON/ CONTRAST ESSAYS				
Posted Thu Oct 11, 2018 at 10:31 am				
Criteria	Grading Scale			
Organization	20 The introduction is inviting, states the main topic, and provides an overview of the paper. Information is relevant and presented in a logical order. The conclusion is strong.	15 The introduction states the main topic and provides an overview of the paper. A conclusion is included.	10 The introduction states the main topic. A conclusion is included.	5 There is no clear introduction, structure, or conclusion.
Introduction	20 The introduction is inviting, engaging and effective. It provides an overview of the paper.	15 The introduction states the main topic, it is logical and complete.	10 The introduction is underdeveloped or unclear.	5 The introduction is missing or overly brief.
Body paragraphs	20 Supporting paragraphs are relevant and logical.	15 Supporting paragraphs are generally related and logical.	10 Supporting paragraphs are not always relevant or logical.	5 Supporting paragraphs are off topic or incomplete.
Conclusion	20 The conclusion is strong and effective.	15 The conclusion is rather strong and acceptable.	10 The conclusion is included.	5 The conclusion is unclear.
Sentence Structure, Grammar, Mechanics, & Spelling	20 All sentences are well constructed and have varied structure and length. The author makes no errors in grammar, mechanics.	15 Most sentences are well constructed and have varied structure and length. The author makes a few errors in grammar, mechanics.	10 Most sentences are well constructed, but they have a similar structure and/or length. The author makes several errors in grammar.	5 Sentences sound awkward, are distractingly repetitive, or are difficult to understand. The author makes numerous errors.

Figure 2. A snapshot of the rubric of comparison/ contrast essay

Table 2

Differences in the requirements for TG and CG students to submit and reflect on writing assignments.

	Control Group (CG)	Treatment Group (TG)
Assignment submission	Some students prepared their writing assignment and submitted their work to the teacher.	Students prepared their writing assignment and post it onto Writing 3 course on Schoology website at http://schoology.com
Peer-assessment	Some students were invited to peer-review on their peers' writing.	Students were assigned to prepare peer-assessment the writing of their peers The comments were posted in reply to their classmate's essays.
Self-assessment	Student self- assess their writing after listening to peer-feedback. The students: + self-evaluate their writing + re-write their essay and resubmit it.	After receiving peer-feedback, students: + self-evaluate their writing + re-write their essay and posted again.

3.4. Instruments

This study employs students' writing pre-test and post-test as instruments to collect data and examine the impact of online formative assessment on students' achievement in learning writing skills.

3.4.1. Writing pre-test and post-test

The writing pre-test was the final test of Writing 2. The students were asked to write a paragraph about 150-200 words in 30 minutes. Two raters were invited to mark the students' writing using the a 5-criteria rubric of paragraph writing including topic sentence, supporting detail sentences, concluding sentence, sentence structures, mechanics and grammar. The post-test was the final test of Writing 3 and students had 50 minutes to complete the test. As required by English Department, the writing task was rated by two scorers using holistic scoring rubric. It was composed of the six categories such as

organization, introduction, body paragraphs, conclusion, sentence structure, grammar & mechanics and spelling. Students' writing was assessed and rated on a scale of even scores from zero to five (0-5 scale). TG and CG students' pre-test and post-test scores were then inputted into SPSS software version 22.0 for further statistical examination and analyses.

3.4.2. Statistical methods for students' writing pre-test and post-test

First, reliability of students' writing pre-test and post-test was checked by the Kappa measure on SPSS. Results of Kappa statistic measure let the researcher know the level of agreement between the two scorers of the writing tests, and whether data obtained from those writing tests were reliable for further statistic tests. Then two independent sample Tt-tests were conducted on TG and CG students' scores of their writing pre-test and post-test. Specifically, an independent sample t-test was used to examine differences

between TG and CG students’ writing achievement before applying online formative assessment. Then another independent sample T-test was conducted on TG and CG students’ writing posttest scores to examine whether there was statistically significant difference between TG and CG students’ writing achievement after implementing the online formative on Schoology. In other words, this test was to understand the impact of online formative assessment on students’ achievement in the writing course.

4. Results

4.1. Inter-rater reliability of TG and CG students’ scores rated by two scorers in writing pre-test and post-test

Inter-rater reliability analyses using the Kappa statistic were performed to determine consistency between the two scorers, that is the agreement level between the scorers in the writing pre-test and post-test for both groups – treatment group (TG) and control group (CG). Table 3 and 4 below presents the Kappa values of the analyses.

Table 3

Inter-rater reliability of TG and CG students’ scores rated by two scorers in writing pre-test

Symmetric Measures						
Inter-rater reliability			Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
TG’s writing pre-test	Measure of Agreement	Kappa	.815	.081	11.456	.000
	N of Valid Cases		25			
CG’s writing pre-test	Measure of Agreement	Kappa	.719	.095	9.436	.000
	N of Valid Cases		25			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

The inter-rater reliability of TG students’ scores in writing pre-test, CG students’ scores in writing pre-test had Kappa values of 0.81 and 0.71, respectively ($p < .0001$), 95% CI (0.504, 0.848). As argued by Landis and Koch

(1977), a Kappa value from 0.7 is preferred by most statisticians as a good level of agreement. Hence, TG and CG students’ scores in these two tests were considered reliable for further analysis.

Table 4

Inter-rater reliability of TG and CG students' scores rated by two scorers in writing post-test

Symmetric Measures						
Inter-rater Reliability			Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
TG's writing post-test	Measure of Agreement	Kappa	.855	.075	10.508	.000
	N of Valid Cases		25			
CG's writing post-test	Measure of Agreement	Kappa	.761	.087	9.449	.000
	N of Valid Cases		25			
Total	Measure of Agreement	Kappa	.817	.056	16.330	.000
	N of Valid Cases		50			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Similarly, the inter-rater reliability of TG students' scores in writing post-test, TG students' scores in writing post-test, and CG students' scores in writing post-test had Kappa value of 0.85 and 0.76 which is considered a high agreement level. Hence, TG and CG students' scores in these two tests were considered reliable for further analysis.

4.2. The impacts of online formative assessment on students' achievement in writing skills

To investigate the impacts of online

formative assessment on students' writing achievement, TG and CG students' writing pre-test and post-test scores were compared. First, the study tries to examine the statistically significant differences (if any) between TG and CG's writing pre-test scores before the treatment so that the difference between the two groups in the post-test scores was valuable. Table 5 shows the means of 2.74 and 2.93; and the standard deviations of 0.84 and 0.81 for TG and CG students' writing pre-test scores, respectively.

Table 5

Mean difference of two groups' scores in writing pre-test

Group	N	Mean	Std. Deviation	Std. Error Mean
TG	25	2.74	0.84	.16
CG	25	2.93	0.81	.16

As presented in Table 6, the independent sample t-test yielded $t(48) = -.81, p > .05,$

illustrating that TG and CG students' writing scores did not differ prior to the intervention.

Table 5

Comparison of TG and CG students' Writing Pre-test Scores

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Pre-test	Equal variances assumed	.010	.920	-.812	48	.421	-.3800	.4682	-1.3213	.5613
	Equal variances not assumed			-.812	47.956	.421	-.3800	.4682	-1.3213	.5613

Then, the results of the independent sample t test on TG and CG's writing posttest scores showed the means of 3.85,

and 3.35; and the standard deviations of 0.71 and 0.87 for TG and CG, respectively (see Table 7).

Table 6

Mean difference of two groups' scores in writing post-test

Group	N	Mean	Std. Deviation	Std. Error Mean
TG	25	3.85	0.71	.14
CG	25	3.35	0.87	.17

Then, the independent sample t-test yielded $t(28) = 2.15, p < .05$, suggesting that there was statistically significant difference between TG and CG's writing test scores after the course (see Table 4.6). In other

words, in the final writing test of the course, TG students who learned with online formative assessment on Schoology outperform CG students who learned with traditional assessment method.

Table 7

Comparison of TG and CG students' Speaking Post-test Scores

		Independent Samples Test								
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Post-test	Equal variances assumed	1.021	.317	2.154	48	.036	.9720	.4513	.0645	1.8795
	Equal variances not assumed			2.154	46.323	.037	.9720	.4513	.0637	1.8803

5. Discussion

The finding revealed that online formative assessment had positive effects on students' learning outcomes. The implementation of online formative assessment, specifically using online discussion board in the writing course could stimulate students' self-assessment and peer assessment and thus improve their writing achievement. First, peer-assessment among the students via the directly comments on their peers' writing on the course helped students recognize their mistakes. It also foster students' motivation in learning as they get prompt replies from their peers. Next, from the correction learning from peer-assessment, students can reflect their own work and make correction by themselves. Self-assessment on the discussion board might also trigger students' outcome and learner autonomy in their learning process.

The result was in line with Ghadi's study (2016) when Iranian EFL learners in the experimental group had outperformed in both writing and autonomy scale administered at the end of the study. The participants also showed

their positive beliefs about the implementation of electronic peer assessment and web-based tools. Similarly, this finding seems to accord with the outcomes of Zainnuri & Cahyaningrum (2017)'s experimental English classes which employed online peer review through discussion via Schoology to enhance EFL college students' argumentative writing. The subjects from the interview agreed that online peer review through discussion board can help enhance their proficiency of argumentative writing. Similar to the students of that research, participants of the current study experienced significant changes in their ability to use written English. More specifically, the activities assigned to them including self-assessment and peer-assessment on the discussion board have encouraged them to think more critically. It may be suggested that online formative via Schoology help develop student's writing skills. However, the research finding was inconsistent with prior research by Aliweh (2011) as the online portfolios did not yield significant effects on students' writing competence due to the

interference of different variables which are the least controllable in online research.

6. Implications and Conclusion

The current research revealed the effectiveness of formative assessment on virtual learning environment in enhancing students' achievement in their writing learning. The findings also suggested several implications for the implementation of formative assessment in teaching writing at tertiary level.

First, peer-reflection and self-reflection guidelines provided to students at the beginning of the course possibly clarified how students could identify the requirement of their writing assignments, the rubric for their essay, as well as how to self-assess their postings. Therefore students could engage more in completing their writing assignments. Students' increased involvement in learning could probably lead to their improved achievement after the course.

Second, the requirement for using English constantly on online discussion board could help the participants write English better. They have time and room to find their mistakes due to their peer-assessment and the existent of their postings on the course. When students can self-evaluate their work and read their peers' writing on an online course, they might find it more convenient and interesting than doing the

similar work in the traditional class. They can learn much from modifying their own word and comparing it with their peers' work. As a result, their writing will be improved gradually.

Third, the internet-based course helps students save time to approach their friends' writing through the internet. They found discussion board useful when they could not meet face-to-face to discuss and share ideas, which could be suitable with their busy schedule.

However, so as to encourage all students to engage with the online discussion board, teacher should establish mandatory condition (Weisskirch & Milburn, 2003). This includes the number of postings, responses as well as the deadline for each specific assignment. Furthermore, the support and intervention of the teacher during the course is really significant. Prompt reply and encouragement from the teacher may help students realize the value of their contribution. The students who actively participate in the online discussion board tend to achieve a better final grade.

In conclusion, on the learning management system Schoology, formative assessment can help EFL students improve their writing achievement and be more involved in their learning process ■

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