

The Effect of Flipped Learning Instruction on Tertiary English Learners' Writing Achievement

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Abstract

Flipped Learning (FL) instruction is flipping teaching where the learners study the contents at home by using technology equipment such as video, pods, e-books, websites, or blogs, and the classroom is used to do the assignment or homework to strengthen students' important knowledge understanding. The current tertiary students are the new generation who are so much interrelated with technology. This study investigated the effect of FL instruction on tertiary English learners' Achievement in writing. Two groups of 40 Diploma in Maintenance Engineering (DME) students (experimental and control) participated in this study. Moreover, the data were collected from the score of essay-writing tests (pre-test and post-test). The experimental group was taught through FL instruction while the control group was taught through the Traditional Method. Furthermore, the data were statistically tabulated by employing ANOVA in the Statistical Package of Social Science (SPSS). The result shows that the score mean of the experimental group was significantly higher than the score mean of the control

group. Accordingly, there was a significant effect of FL instruction on tertiary English learners' writing achievements. Hence, the implementation of the FL instruction is highly recommended for teaching writing at the tertiary level.

Keywords: *Flipped Learning, Writing, English Learners, Method of Teaching English, and Experimental Studies*

Introduction

English is a language used widely for communication between people who do not share the same first language. There are four skills that learners need to master in English language teaching and learning (ELTL). They are listening, speaking, reading, and writing. The most complex skill in English language teaching and learning (ELTL) is "writing" because the process of writing requires cognitive, linguistics, and resources (Hayes, 1996; Kellog, 1996). Furthermore, tertiary students are required to have writing skill because during the teaching and learning process, and at the end of the courses, the students are usually asked to do writing activities such as project paper, thesis, dissertation, and report writing. But in fact, writing skill is more challenging and more difficult compared to the other skills since there are many steps to complete the writing task such as thesis statement identification, composing supporting idea, reviewing and revising, and editing (Alsamadani, 2010).

Accordingly, students of Diploma in Maintenance Engineering (DME) at University College of Yayasan Pahang (UCYP) are learners of English as a second language and their achievement in writing scores based on the pre-test result was very poor (the mean was only 10.88 over 20). Moreover, based on a preliminary interview with the DME students' English lecturer, technology was hardly integrated into teaching and learning activities since the lecturer usually taught students only through the traditional method (teacher-centered learning) in which the lecturers deliver the knowledge through a presentation in class, give exercise in class and then give homework at the end of the class. Besides, lecturers have to spend most of their time in the classroom explaining the material in the classroom before the writing task, and in the end he lefts with no time to do the practice. Consequently, students have to finish writing tasks outside of the classroom without any assistance to solve the problems where they may find problems during the

writing task. On the other hand, lecturers find many difficulties to fulfill expectation individually in terms of way of learning (Muldrow, 2013)

To improve current tertiary English learners' achievement in writing, they need a relevant instruction or method so that teaching and learning of English are more valuable, meaning full, and beneficial. It is in line with Serquina & Batang (2018) who said that if quality education is to be achieved, it should therefore be a reciprocal relationship of the classroom and society. It is clear that teachers' instruction is not confined within the hour inside the classroom but should exceed before and after the instruction period and outside the classroom.

According to Demirel (2016), the most important thing for a modern learning instruction environment or method is full touch with recent technology. Due to the advancements in technology and social media application, ELTL has gone beyond the physical boundaries (Upadhyay, 2018). Accordingly, Brown (2007) said that to achieve good learning outcomes, recent English educators should develop valuable engagement both inside and outside the classroom by creating a student-centered learning environment.

Dudeny and Hockly (2012) stated that today's learners are digital natives who grow up using technology, unlike parents who are digital immigrants who come late to the world of technology. Accordingly, since the parents and the kids are so much different, the teaching instruction or model should not be the same.

Integrating technology in the teaching and learning process is said to promote active learning. Likewise, the concept of FL instruction is built within the view of active learning (Meyers & Jones, 1993) as the focus of FL instruction is to get students engaged in the learning process i.e. active learning and using technological tools in their learning process, which is the key concept in IR 4.0. FL instruction has helped eventually to shift the focus from the teacher to learners in the classroom to have effective learning outcomes. Instead of focusing on didactic instructions, in flipped learning students have more time for practical learning, and further, it transforms the educational experience, which allows differentiated learning.

Moreover, through FL instruction students have more opportunities to be engaged and motivated to increase their proficiency levels because FL instruction is more personalized and individualized as compared to the traditional learning model. Furthermore, educational transformation helps students to get direction to improve their learning, interests, and strengths thereby using face-to-face instructional time (Bergmann & Sams, 2014).

For that reason, further study needs to be conducted to find out the effect of Flipped Learning instruction on Diploma in Maintenance Engineering (DME) students at University College of Yayasan Pahang, Malaysia as based on the problem statement and students attitudes towards technology, FL instruction might positively affect the students' achievement in writing skill.

Literature Review

The Flipped Learning Network (2014) explained 'Flipped Learning' with a formal definition: "Flipped Learning is a pedagogical instruction in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter". Practically, FL instruction is flipping teaching where the learners study the contents at home by using technology equipment such as video, pods, e-books, websites, or blogs, and the classroom is used to do the assignment or homework to strengthen students' important knowledge understanding (Bretsmann, 2013; Tucker, 2012). In a simple way, Flipped Learning Network (2013) says, "Schoolwork at home and homework at school" (p. 05).

Flipped Learning Network (FLN) together with Pearson's School Achievement Service (2013) discovered the key features, or pillars, of Flipped Classrooms that allow Flipped Learning to occur. The four pillars are basically to help the teachers in setting teaching methodology with a clear set of rules in the Flipped Learning (FL) approach. The four pillars are Flexible Environment, Learning Culture, Intentional Content, and Professional Educators. There have been countless numbers of studies on flipped teaching in ESL and EFL classes on its effectiveness and students' perceptions.

Leis, Cooke, & Tohei (2015) studied the effects of flipped classrooms on English writing composition on university students in Japan. The researchers used two groups namely the flipped group and the regular group. The flipped group refers to the group of students where the flipped classroom was applied and the regular group refers to the group of students where the traditional Instruction was applied in the teaching and learning process. Since the researchers were studying the writing composition, writing activities and writing tests were involved. The effects were divided into sections; (1) the length and word counts, and (2) proficiency improvement. The study showed the length of study time before class in the flipped classroom environment was as expected

significantly more than that of the regular classroom. This is because the students had to watch an explanation on videos, look up vocabulary, and write drafts while the regular group was only required to do homework and look up vocabulary. The less hour of study time for the regular group might have been "a result of lack of understanding of the lesson content" (p. 46). However, the regular group studied more after class since they have to complete the writing composition whereas the flipped group had already completed the writing in the classroom. As for the word count, both groups showed no difference in the pre-test but, the flipped group showed an increasing number of word count compared to the regular group in their post-test. As for proficiency, both groups have basic proficiency.

Another study by Hsieh, Wu, & Marek (2017) investigated the effectiveness of using flipped classrooms in EFL learning. The result showed that generally, the flipped classroom did better than the traditional classroom. Post-test results from both groups were higher than the pre-test. However, comparing post-test results between the two groups, the flipped classroom was higher with the maximum score difference at 12 points. The results are very similar to other studies done by other researchers on flipped learning Instruction (e.g., Han, 2015; Hung, 2015; O'Flaherty & Phillips, 2015; Webb & Doman, 2016).

The audio/video provided to the students before class gave a stimulating and realistic English situation. Thus, making learning English effectively. The students admitted that they became less nervous conversing in English through the audios/videos provided to them. Nevertheless, Hsieh, Wu, & Marek (2017) found out that because of the hard work and more effort that had to put into flipped learning, students preferred the traditional classroom despite the higher results they get from the flipped learning method. All in all, most studies conducted on flipped learning reported that students benefit from the flipped learning Instruction and agreed that their performances increased (e.g., Evseeva & Solozhenko, 2015; Han, 2015; Hung, 2015; O'Flaherty & Phillips, 2015; Webb & Doman, 2016).

Furthermore, Sarpparaje, Jeyasala, Rathiga and Sasirekha (2018) did a systematic literature review on the effectiveness of flipped learning on English language teaching and learning (ELTL) and they reported that 29 studies/researches compared students learning in traditional classrooms to learning in a flipped classroom. 14 studies exclusively indicated that students in flipped classrooms out-performed their counterparts in the traditional classroom and from these 14 studies, six (6) studies reported the statistical significance of their findings. Four studies concluded a mixed

result in terms of learning gain. In eight other studies, researchers did not find any statistically significant difference between flipped and traditional approaches in terms of student learning. Two articles reported that students in the flipped classroom did not perform as well as their counterparts learning in the traditional environment. Then, one researcher did not find any difference or significant effect of the flipped classroom.

To sum up, there is no final result of the research on the effectiveness of the flipped learning in ELTL as some said significant effective, some said neutral and others said traditional was better. Therefore, the research on the implementation of FL instruction on ELTL is still suggested and open for future researchers as the result might be different due to the different of participants (students) of the research, language skill to be measured, method of the research, and condition of the institutions in terms of facilities and networking.

As per Bloom's revised taxonomy, students do the lower levels of cognitive (remembering and understanding) work out of the classroom whereas they focus on higher levels of cognitive (applying, analyzing, evaluating, and creating) work inside the classroom with the support of their peers and teachers, unlike the traditional model where students have 'first exposure' only in class via lecture.

Accordingly, this FL instruction evidently applicable for higher education or tertiary students within the lecturer-based course but the question is how relevant it is to more communicative courses, namely, to English as a second or foreign language teaching (Kvashnina and Martynko, 2016)

FL instruction theoretically is very relevant to DME students' needs in improving their writing skills as they were in touch with technology, wanted a flexible environment, and an attractive and innovative teaching methodology. Besides, we have realized from the course of English for Maintenance Engineering at University College of Yayasan Pahang, much of the course content can be flipped. Therefore, a study on investigating the effect of FL instruction on DME students' English writing achievement should be conducted.

Research Question

Research questions were formulated as below:

Does FL instruction significantly affect the English writing achievement of DME students at the University College of Yayasan Pahang (UCYP)?

Research Methodology

Design

This study had been conducted by using a quantitative research mode in which the participants of the research were divided into two groups namely the experimental group and the control group. Practically, both groups were administered two tests (pre – and post –). In this study, the experimental group was taught through Flipped Learning instruction and the control group was taught through the Traditional Method. The design is clearly described in the following table.

Table 1: *Research Design.*

Group	Number	Treatment	Test
Experimental	40	Flipped Learning	Pre – and Post –
Control	40	Traditional Method	Pre – and Post –

Participants

80 students have participated in this study. The students were separated into two groups namely experimental and control groups. Each group consisted of 40 students. Besides, the range of their ages was from 18 – 19 years old. The participants were selected from Diploma in Maintenance Engineering students at the University College of Yayasan Pahang (UCYP), Malaysia. Besides, the students were from the first and second semesters but they had the same English proficiency level, which was pre-intermediate level (A2) according to the result taken from UCYP-English Proficiency Test (UEPT). Accordingly, the students could be divided randomly into two groups. Furthermore, all students were learning English as a second language.

Materials

Video: a video was used to explain how to write a describing process essay. The video can be downloaded from www.engvid.com. In this video teacher, Emma who is a native speaker of English is explaining three important things in writing a describing process essay. They are 1) how to write down an introduction and overview from the question and diagram, 2) sequencers and 3) passive voice. Moreover, the duration of the video is 22 minutes 49 seconds. The video was uploaded in Google Classroom and the video was used before every meeting.

Online Quiz: In this study, four (4) video related quizzes were set up. There are 10 multiple questions for each quiz. The duration to do the quiz is only 20 minutes. The quiz was set up on Google form and uploaded in Google Classroom then distributed to students before each meeting.

In-class group online activity: questions for the group were set up in Quizlet.live apps. Through the apps, the students were arranged in-group then they answered the question in the online group. The questions are 20 questions, which are related to sequencers, passive voice, and vocabularies (synonym and paraphrasing). There is no duration of time in doing the activities but the students should complete the quiz as soon as possible to be the winner. This online activity was used in every meeting because this activity was not set up for one meeting only but multiple meetings (*in this study four (4) meetings*).

Worksheet: Four (4) different worksheets were set up to give more real practice to students about how to use sequencers, passive voice, and paraphrasing in describing process essays. Furthermore, the students wrote an essay based on the sequencers, passive voice, and paraphrasing. They wrote it in the final worksheet. One worksheet was given to students for each meeting (*four (4) meetings*)

Instruments

Composition test: pre-test and post-test were administered to both groups of students (experimental and control) before and after the treatments. The test is asking the students to write a describing process essay based on the diagram given (hydrologic cycle). Thus, the test is asking the students to summarize the information by selecting and reporting the main features and make comparisons where relevant but the students were only given 30 minutes to complete the writing task and they need to write a minimum of 120 words.

Writing Rubric: The rubric is taken from city & guild writing rubrics and developed by researchers. This rubric has five (5) indicators in assessing the describing process essay. They are task fulfillment, grammar, vocabulary, organization, and punctuation. The highest score for each indicator is four (4) and the lowest score is zero (0). Accordingly, the total highest score is 20 per each essay.

Validity

The composition tests (pre-&post- tests) had been examined by two lecturers who have been teaching writing subjects for more than ten (10) years in the University College of Yayasan Pahang, Malaysia, and they have reviewed and evaluated many of the students essay writing including descriptive writing. Therefore, the composition tests (pre- &post- tests) are intelligibly

valid since the tests have been examined by two (2) experienced and qualified lecturers. They concluded that the tests are relevant and valid as the tests ask the students to describe the process of the hydraulic cycle.

Reliability

The reliability of the composition tests (pre - & post - tests) was measured by using inter-rater reliability using three examiners. The examiners were two (2) English lecturers from the University College of Yayasan Pahang as the first and the second examiners and one from the researcher as the third examiner. The result shows that there is no great discrepancy among the score mean of students' writing from the first, the second, and the third examiner. The result of the inter-rater reliability (IRR) or Kappa on the students' writing score is 0.704 (reliable: between 06 and 0.79)

Procedures

Step One

Preparation for the flipped learning materials, the materials are lesson plan, video, Google Classroom (for online flat form), online quiz and in-class online exercises, and group worksheet (writing task).

Step Two

Video and online quizzes were uploaded in the Google Classroom so that the students could access them whenever and wherever they were. But before the students accessed the teaching video and the online quiz, the pre-test was administrated. Then, both groups were taught for four meetings each. The treatment was teaching the experimental group through Flipped Learning instructions, while the control was taught through the Traditional Method. There are three (3) stages in implementing the Flipped Learning instructions, namely before-class, during-class, and after-class. These three stages were applied to the four (4) meetings of treatment for the experimental group by using a different quiz, in-class online activity, and worksheet in each meeting.

Table 2: Treatment for Experimental Group

No.	Flipped Learning Approach	
	Stage	Learning Activities
1	Before-Class	<p>Giving and Taking Knowledge The students watched the online teaching video wherever and whenever they could in Google classroom. If the students had difficulties to understand the video, they could bring the questions to class. The video was a 20-minute video on how to describe a process. Started from the introduction and report, until to the language choices and grammar usage in the describing process.</p> <p>Basic Cognitive Test After the students viewed the teaching video, they would answer the online test provided by the lecturer in Google Classroom. This test is to measure their understanding of how to write a describing process essay. The time for the online test is only 30 minutes with 20 multiple-choice questions.</p> <p>Lecturer' Notes After the students did the test, the lecturer studied the report of students' answers. From the Google Form, the lecturer could see the students' understanding of describing process essays. The report showed the weakness and strengths of students. From this report, the lecturer prepared materials, exercises, and worksheets for discussion used in the class.</p>
2	During-Class	<p>Lecturer-Students Interactions (30 minutes) During class, the lecturer discussed again the answer for the online test and reported the students the result from the online test so the students knew their level of understanding. Then, the lecturer asked the students if they had questions related to the explanation in the teaching video or lecturer opened for discussion.</p> <p>Students – Students Interactions controlled by the lecturer (60 minutes) During class, the teachers were given a discussion worksheet related to a deep understanding of describing process essays. The students were divided into 5 groups (5 persons in one group). The students discussed all questions given in the discussion worksheet including writing tasks end the end of the sheet. Then, the students presented their answers and their writing so that each group could see the different answers and writing. During the presentation, the Q&A sessions were opened so that the students could get more understanding. Besides, if there were questions or problems that students could not answer or solve, then the lecturer was involved to answer and solve them.</p> <p>Individual Exercise (30 minutes) During the class, the students were given exercises, asking the students to write a describing process essay. The time given for this exercise was only 20 minutes. After doing the exercise, the students were asked to upload it to Google Classroom. The class was ended by giving the conclusion to students and the lecturer informed the students that the result and revision of the exercise would be available online in Google Classroom before the next class.</p>
3	After-Class	<p>Evaluation. After the class, the lecturer reviewed the students' works and gave comments (if any) in Google Classroom. Then, the students got the result and revised (if any) from home online in Google Classroom. Then the lecturer marked the paper. After marking the paper, the students can get the score personally in Google Classroom.</p>

The treatment for the control group was implementing the Traditional Method. the Traditional Method is a teaching method in which teachers are to believe as the main sources of teaching and learning or it is commonly called teacher-centered learning. Moreover, in this method teachers become the main controller in the classroom, and students just merely the listener and remain passive in the whole duration of the teaching and learning process. Usually, there are three

activities in the traditional method. They are lecturing or presentation, exercises & discussion, and closing by giving homework. These three stages were applied to for (4) meetings of treatment for the control group by using different materials, exercise, and homework in each meeting.

Table 3: *Treatment for Control Group*

No	Traditional Method	
	Stages	Activities
1	Before Class	Teaching Material Preparation The lecturer prepared material, presentations, and exercises, and students did not do anything.
2	During Class	Lecture – Students Interaction (60 Minutes) The lecturer delivered lectures or presentations in class and students just listened to the lecturer until she/he finished the lecture or presentation. Doing Exercise (50 Minutes) Then, the lecturer gave exercises related to the presentation to the students and students did the exercises. After that, the lecturer gave the answers to the exercises and asked the students whether they had questions or not. Closing (10 Minutes) Finally, the lecture closed the class and gave homework to students.
3	After Class	Evaluation Students did the homework at home and submitted on the due date given. The lecturer marked the homework and returned it to the students.

The stages of both treatments (Flipped Learning Instruction and Traditional Method) are similar. Both have before, during, and after. Besides, both treatments have the same duration of time that is 2 hours each during class activities. The lecturers for both groups were different person but both lecturers have the same background of educational level and teaching experience. The two lecturers are females, holding a master's degree in Teaching English as Second Language, and having more than 5 years of teaching at the tertiary level. Moreover, the two lecturers' ages are still young (below 40 years) and both of them are Malay. Therefore, both groups were equally treated. The only difference is the methodology applied in the treatment and the main purpose of this study is to investigate the significant effect of the flipped learning instruction on students' writing achievements.

Step Three

After the treatment, the post-test was administered to both groups. Then, the scores of pre-test and post-test from both groups were collected and tabulated using Statistical Package for Social Science (SPSS) version 21.

Data Analysis

The objective of this study is to investigate the effect of Flipped Learning instruction in English writing achievement. Therefore, the quantitative data (writing score) were analyzed by using Compare Means (ANOVA) and ANCOVA in SPSS version 21 to find out the significant differences of Pre-Test and Post-Test means of both groups and the significant effect of Flipped Learning instruction on DME students writing achievement at University College of Yayasan Pahang.

Results and Discussion

After careful analysis of the writing test instrument with the written outputs of the tertiary English learners, the following presents the thorough results and discussion of the analysis of the specific objectives.

Results

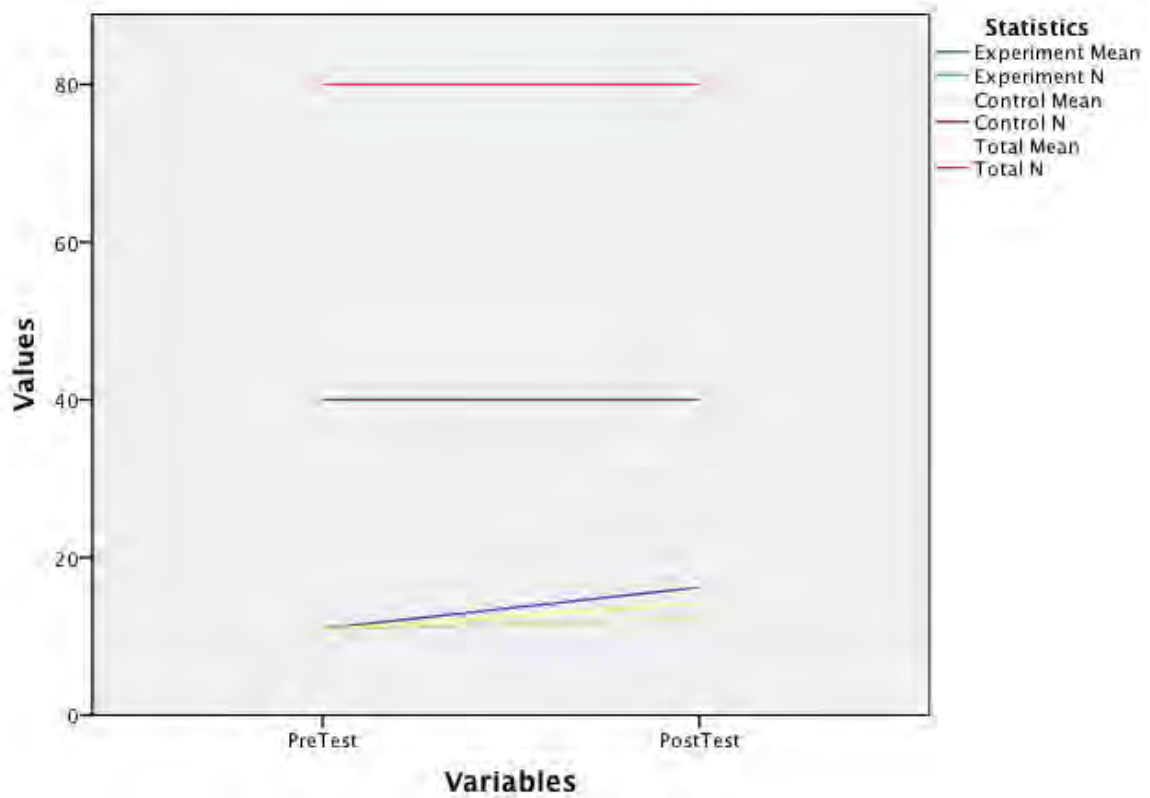
Before running the required parametric test, the normality of the contribution assumption was confirmed. Then, Compare Means (Mean and ANOVA) was employed to examine the significant differences between both groups (experiment and control). As a result, the comparison of control and experimental groups is presented in the following table.

Table 1: *Descriptive statistics of control and experimental groups' writing scores.*

Group		Pre-Test	Post-Test
Experiment	Mean	10.975	16.200
	N	40	40
	Std. Deviation	2.224	2.015
Control	Mean	10.800	12.250
	N	40	40
	Std. Deviation	3.368	3.119
Total	Mean	10.887	14.225
	N	80	80
	Std. Deviation	2.837	3.280

Table 1 shows the values of Pre-Test and Post-Test means and standard deviations for each group and a total of both groups. The mean for the Experiment group increases 5.225 from Pre-Test to Post-Test, meanwhile, only 1.45 increments for the Control group but both groups improved on writing score. On the other hand, the mean of the Pre-Test for the Experiment group is only 0.175 higher than the mean of the Pre-Test for the control group. To compare, the mean of

the post-test for the experiment group is 3.95 higher than the mean of the post-test for the Control group. Moreover, the mean for the Total groups increases from 10.887 in the Pre-Test to 14.225 in Post-Test. To sum up, the experiment group outperformed the control group on writing achievement. In accordance with, the statistical differences between both groups are presented in the following figure.



The ANOVA test procedures (table 2) offered two tests (Pre-Test and Post-Test) of the contrast between the control and experimental groups.

Table 2: Descriptive statistic of Pre-Test and Post-Test

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Pre-Test	Between Groups	.613	1	.613	.075	.785
	Within Groups	635.375	78	8.146		
	Total	635.987	79			
Post-Test	Between Groups	312.050	1	312.050	45.250	.000
	Within Groups	537.900	78	6.896		
	Total	849.950	79			

From Table 2, there was no significant difference in the mean of the pre-test between the experiment and control groups ($F=0.75$, $p= 0.785 >0.05$). In contrast, there was a significant difference in the mean of Post-Test between Experiment and Control groups ($F=45.250$, $p= 0.000 <0.05$).

ANCOVA was employed to test the effect of FL instruction on students' English writing achievements. The result is presented in the following tables and figures.

Table 3: Descriptive Statistics of Difference between Experiment and Control Groups

Descriptive Statistics				
Dependent Variable: Difference				
Group	Mean	Std. Deviation	N	
Experiment	5.275	1.012	40	
Control	1.550	1.501	40	
Total	3.413	2.265	80	

Table 3 shows the descriptive statistics of the dependent variable (difference) between the independent variable (experiment and control groups). From the table, the mean difference for the experiment group is 3.725 higher than the control group. Moreover, the estimated marginal means of difference are shown in Figure 2.

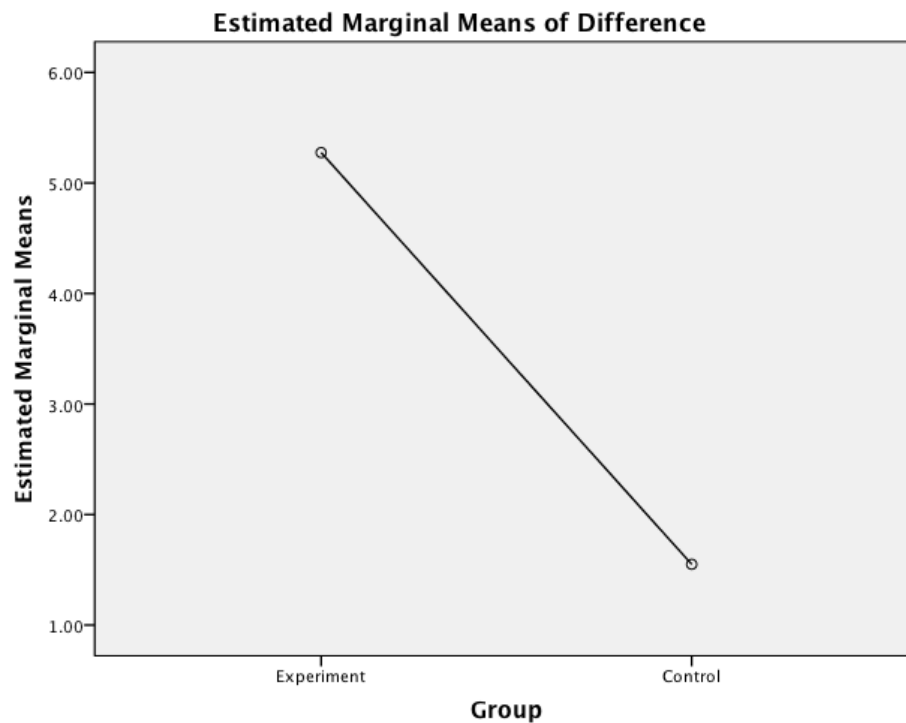


Figure 2: Estimated Marginal Means of Difference between Experiment and Control Groups

Table 4: *Tests of Between-Subjects Effects*

Dependent Variable: Difference						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Corrected Model	277.513 ^a	1	277.513	169.274	.000	
Intercept	931.613	1	931.613	568.256	.000	
Group	277.513	1	277.513	169.274	.000	
Error	127.875	78	1.639			
Total	1337.000	80				
Corrected Total	405.388	79				

From Table 4, the result of tests of between-subjects effects shows the significance between the groups (experiment and control) ($F=169.274$, $p=0.000<0.05$). In this study, the experimental group was taught through Flipped Learning instruction and the control group was taught through the Traditional Method. Hence, Flipped Learning instruction significantly affects the DME students' English writing achievement.

Discussion

There have been many studies on the implementation of FL instruction in English language teaching as a foreign or second language. Even though the methods of study might be different from one study to the other studies but the main purpose is to make the teaching and learning English process become effective and efficient and to enhance students' achievements. In this part, a discussion of the result in connection with the research question (RQ) is presented as follows:

RQ: Does FL instruction significantly affect the English writing achievement of DME students at the University College of Yayasan Pahang (UCYP)?

The result of this recent study tends to support the previous scholars who said that FL instruction gives a positive impact on English language teaching and learning (Han, 2015; Hung, 2015; Leis, Cooke, & Tohei, 2015; O'Flaherty & Phillips, 2015; Webb & Doman, 2016) since the result of this current study indicates that the FL instructions significantly affects the DME students' English writing achievements at University College of Yayasan Pahang, and the students who were taught through FL instruction outperformed the students who were taught through Traditional Method. Therefore, FL instruction very much suits the current students' needs as FL instruction offers four pillars, which are flexible environment, learning culture, intentional content, and professional educators (FLN, 2014).

The participants of this study (DME students at UCYP) were very much in touch with technology. They did not feel comfortable if they were separated from their phone because the phone is being their primary needs. On the other hand, they preferred a flexible learning place. They did not want to stay in class and just listened to the lecturer traditionally. Accordingly, Dudeney and Hockly (2012) said that students nowadays are digital natives who grow up with technology. Consequently, the students need everything to be easily accessed from digital. They need flexible learning places. Since FL instruction offers this flexible environment, the FL instruction is very much relevant to current tertiary students' needs and lifestyles.

Furthermore, the students very much enjoyed doing the exercise in class rather than having homework at home. This is because they have friends and lecturers in class to discuss if they faced difficulties. It means that the learning culture was built in the FL instruction where the learning culture was student-centered and active learning. This is in line with Brown (2007) who said that to achieve good learning outcomes, recent English educators should develop valuable engagement both inside and outside the classroom by creating a student-centered learning culture. Therefore, the students-centered learning culture was built in this study that is why students who were taught through FL instruction outperformed the students who were taught through the Traditional Method. Moreover, the result of this study is supported by Bui (2018) who found out in her qualitative research that the first benefit that was recorded was a sense of deeper learning. Most students mentioned the chance to be exposed to many brainstorming activities as well as deeper pair and group discussion when taking part in the flipped lesson.

On the other hand, the content of teaching-learning materials in this study has been standardized with the students' level of proficiency and needs. The content was easy to access through the Internet and students can easily study the content whenever and wherever the students want. The students felt challenging when they studied the materials and answer the quiz. They did not feel that they were stupid and understood nothing, as the language use and content suited to their proficiency levels and needs. This is one of the reasons why FL instruction significantly affected the students' achievements in English writing.

Lastly, one of the most important things in implementing FL instruction in teaching English is that educators should be professionally digital-savvy. In this current study, the educator professionally used technology so much in the teaching-learning process started from Google classroom, kahoot.it, quizlet.com, etc. The students enjoyed learning through the digital and it is

very suitable for their needs. That is why the students were very much engaged with the teaching and learning environment. Hence, the FL instruction has a positive and significant effect on tertiary students' English writing achievement at the University College of Yayasan Pahang, Malaysia. Accordingly, the implementation of FL instruction in teaching English at higher learning institutions in Malaysia is recommended.

Conclusion

Following the result and discussion, the FL instruction with its four pillars is very relevant to the current students as FL instruction fulfills the current students' needs. As a fact, the DME students at UCYP who were taught through FL instruction got higher scores mean than the students who were taught through the Traditional Method did. This study is limited to the implementation of the FL instruction to teach English writing to Diploma students in Maintenance Engineering at the University College of Yayasan Pahang, Malaysia. The research methodology in this study is experimental research. In so doing, the data collection is only quantitative data from pre- and post-tests of academic writing from 40 students in each group. The tool to tabulate the data is the Statistical Package of Social Science (SPSS) version 21. The result of this study is only to prove the significant effect of FL instruction on students' English essay writing achievement. Therefore, further study on students' and lecturers' perceptions and satisfaction on FL instruction implementation are suggested for future researchers. Besides that, this study only focused on writing skills. Therefore, further study on other language skills (listening, reading, and speaking) are suggested for the complete result of the FL instruction implementation in English Language Teaching.

References

- Abu-Rass, R. (2001). Integrating reading and writing for effective language teaching. *English Teaching Forum*, 39(1), 30-39.
- Alsamdani, H. A. (2010). The relationship between Saudi EFL students' writing competence, L1 writing proficiency, and self-regulation. *European Journal of Social Science*, 16 (1), 53-63.
- Bergmann, J. & Sams, A. (2008). Remixing chemistry class. *Learning and Leading with Technology. International Society for Technology in Education* [online]. December 2008, pp.22-27. [Assessed 6 December 2018} from <http://wordpress.ed.pacificu.edu>.
- Bretzmann, J. (2013). Flipping 2.0: Practical strategies for flipping your class. NerBerlin, WI: The Bretzmann Group LLC.
- Brown, H. D. (2007). "English language teaching in the "Post-Method Era: Toward better diagnosis, treatment, and assessment," in *Methodology in Language Teaching*, J. C. Richards and W. A. Renanyda, Eds. New York: Cambridge.
- Bui, T. M. T. (2018). Flipped learning: a possible model in the Vietnamese EFL tertiary context. *Asian EFL Journal*, 20 (8), 69 – 75
- Dudeny, G., and Hockly, N. (2012). *How to teach English with Technology*. Edinburgh Gate: Pearson Education Limited.
- Demirel, E. E. (2016). Basics and key principles of flipped learning: classes upside down. *International Journal of Languages, Literature, and Linguistics*, 2(3), 109 – 112. <https://doi.org/10.18178/ijlll.2016.2.3.77>
- Evseeva, A., & Solozhenko, A. (2015). Use of flipped classroom technology in language learning. *Procedia - social and behavioral sciences*, 206, 205-209. <https://doi.org/10.1016/j.sbspro.2015.10.006>
- Flipping Learning Network (FLN). (2013). The flipped learning model: Executive Summary. Retrieved July 22, 2018 from <http://www.flippedlearning.org>
- Flipping Learning Network (FLN). (2014). Extension of the Review of Flipped Learning. Retrieved July 22, 2018 from <http://www.flippedlearning.org>
- Han, Y. J. (2015). Successfully flipping the classroom for learner autonomy. *NYS TESOL Journal*, 2(1), 98-109.

- Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 1–27). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hsieh, J., Wu, W.-C., & Marek, M. (2017). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning*, 30(1-2), 1-21. <https://doi.org/10.1080/09588221.2015.1111910>
- Hung, H.-T. (2015). Flipping the classroom for English Language learners to foster active learning. *Computer-assisted language learning*, 28(1), 81-96. <https://doi.org/10.1080/09588221.2014.967701>
- Kellogg, R. T. (1996). A model of working memory in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 57–71). Mahwah, NJ: Lawrence Erlbaum Associates. <https://doi.org/10.4324/9780203811122>
- Kvashnina, O.S. & Martynko, E.A. (2016). Analyzing the potential of flipped classroom in ESL teaching. *iJET 11* (03), 71 – 73. <https://dx.doi.org/10.3991/ijet.v11i03.5309>
- Leis, A., Cooke, S., & Tohei, A. (2015). The Effects of Flipped Classrooms on English Composition Writing in an EFL Environment. *International Journal of Computer-Assisted Language Learning and Teaching*, 5(4), 37-51. <https://doi.org/10.4018/ijcallt.2015100103>
- Meyers, C., & Jones, T. B. (1993). *Promoting active learning: Strategies for the college classroom*. San Francisco: Jossey-Bass.
- Muldrow, K. (2013). A new approach to language instruction: flipping the classroom. *The Language Educator*. November Eds. Retrieved on December 1, 2015 from The American Council on the Teaching of Foreign Language (ACTFL) [https:// www.actfl.org](https://www.actfl.org)
- O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *Internet and higher education* 25(1), 85-95. <https://doi.org/10.1016/j.iheduc.2015.02.002>
- Sarpparaje, M., Jeyasala, V. R., Rathiga, K. and Sasirekha, K. (2018) Flipped classroom approach to make the best utilization of ESL classes at Mepeo Schlenk Engineering College – a try out. *The Asian ESP Journal 14* (7.2), 209 – 228

- Serquina, E. A. & Batang, B. L. (2018). Demographic, psychological factors and English proficiency of ESL students. *TESOL International Journal*, 13 (4), 182 – 191
- Tucker, B. (2012). The flipped classroom; online instruction at home frees class time for learning. *Education Next* 12 (1), 82-83.
- Upadhyay, A. (2018). A conceptual model incorporating Twitter as a language tool in ESL/EFL learning. *TESOL International Journal*, 13 (4), 49 – 54.
- Webb, M., & Doman, E. (2016). Does the flipped classroom lead to increased gains on learning outcomes in ESL/EFL contexts? *The CATESOL Journal*, 28(1), 39-60.