FLIPPED CLASSROOM, TEACHING SOLUTION FOR WRITING CLASS (CASE STUDY OF INDRAPRASTA PGRI UNIVERSITY STUDENTS)

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ABSTRACT

The research was designed to investigate the result of a study comparing two English writing classes of Indraprasta PGRI University student in the sixth semester of 2015/2016. There were thirty students for each class chosen randomly. The research was conducted from March to July 2016. One class was taught in a traditional way and the other using the flipped method. A test is given at the end of the treatment to detect the level of student understanding. Results of post-test are compared by using t-test to gauge whether the method of "Flipped Classroom" has effect on student understanding. This research is a field research with posttest-only control group design method. The theory used to determine the ability of the students is a statistical theory by Sudjana, cohesion was analyzed by using the theory of cohesion in English by Halliday and Hassan. Factors affect the ability to write theory by Harmer. The study resulted t_{count} 2,256 and t_{table} 1.67 at $\alpha = 0.05$ level. So $t_{count} > t_{table}$, so that Ho refused mean significant. It can be concluded also that there is a positive and significant influence.

Key words: flipped classroom, writing, teaching solution

ABSTRAK

Penelitian ini dirancang untuk mengetahui hasil dari penelitian yang membandingkan dua kelas menulis Bahasa Inggris mahasiswa Universitas Indraprasta PGRI di semester keenam 2015/2016. Ada tiga puluh siswa untuk setiap kelas yang dipilih secara acak. Penelitian dilakukan dari Maret-Juli 2016. Satu kelas diajarkan dengan cara tradisional dan yang lain menggunakan metode Flipped. Sebuah tes yang diberikan pada akhir perlakuan untuk mendeteksi tingkat pemahaman siswa. Hasil post test dibandingkan dengan menggunakan t-test untuk mengukur apakah metode "Flipped Classroom" memiliki efek pada pemahaman siswa. Penelitian ini merupakan penelitian lapangan dengan metode posttest-only control group design. Teori yang digunakan untuk mengetahui kemampuan siswa adalah teori statistik dengan Sudjana, kohesi dianalisis menggunakan teori Kohesi dalam bahasa Inggris oleh Halliday dan Hassan. Faktor-faktor yang mempengaruhi kemampuan untuk menulis teori dengan Harmer. Hasil dari penelitian ini diketahui bahwa t_{hitung} adalah 2.256 dan t_{tabel} 1,67 pada $\alpha = 0,05$. Jadi $t_{hitung} > t_{tabel}$, sehingga Ho ditolak berarti signifikan. Dapat disimpulkan juga bahwa ada pengaruh positif dan signifikan pada penngunaan flipped classroom terhadap kemampuan menulis mahasiswa.

Kata kunci : flipped classroom, menulis, solusi pengajaran

INTRODUCTION

Lecturers of Indraprasta PGRI University, as well as lecturers from other universities in Indonesia, face problems in providing appropriate teaching in accordance with the students' ability. Problems faced by lecturers and students in Indraprasta PGRI University are quite complex; the diversity of the students' ability, motivation, and time to study at campus.

Each lecture teaches in different technic and speed. If the lecturer is quite sensitive to the ability of the students, he most likely will try to accommodate the students' comprehension capability. Unfortunately, in one class, there are always three types of students in terms of the comprehension capability of teaching materials, namely:

1. Students who have average ability, or can be called at the level of average. These students will feel comfortable following the normal speed of lecturers in teaching.
2. Students who have the ability above average or a good achievement performance may feel that it is too slow so they quickly get bored with the teaching of lecturers. Their attentions split because the courses are no longer challenging.
3. Students who have the ability under the average feel that the lecturers teach too fast. They cannot catch the material.

Unfortunately, after more than a decade, this condition is not much different. According to the chairman of the Jakarta Book Fair, Hikmat Kurnia in KOMPAS, Indonesia was only able to publish 18,000 books per year, which is far behind China which published 140,000 books per year, or even Japan (40,000) and India (60,000) (Widiantoro, 2012).

Lecturers often face a dilemma to pick the best way to accommodate the different students' ability and motivation. In fact, the advancement of technology for teaching and instructional needs allows lectures looking for creative ways to solve the problem. One trend that is in the field of teaching is a technic of "Flipped Classroom". The technic is often applied at the level of secondary school teaching. "Flipped Classroom" starts to be used by lecturers at colleges. Seeing positive results from the application of this concept, more lecturers want to apply this concept in their classes.

By understanding these problems, this research has been carried out with some of the following purposes:

1. To develop and provide materials to students online.
2. To examine the results of the experiment "Flipped Classroom" on Writing subject:
   a. Student grades
   b. Student perception of aspects of the "Flipped Classroom"

Writing is an activity to submit ideas through the medium of language (Nurgiyantoro, 2008) .In teaching of writing, there is an active productive activity that emphasizes language elements and activities that emphasizes the idea of producing language. Although the writing assignment is given in order to assess the language proficiency, the assessment should consider the accuracy of language in relation to the context and content. Fluent communication of a composition depends on the visualized language symbols. To be able to communicate through written symbols as expected,

the writer should put his ideas precisely, orderly, and completely. We often hear that the organized language is a manifestation of an organized mind.

The term argument comes from the Latin "arguer" which means showing, making clear, and proving. Argumentation essay is a form of rhetoric that tries to influence the attitudes and opinions of others so that they will eventually come to believe and act according to what is desired by the speaker.

Flipped classroom is a reversal of the traditional learning procedure. Learning materials, which is usually done at school, is done at home. In reverse the hard materials which are usually hard materials are conducted at home. In traditional learning, students learn the subject matter managed by the teacher in the classroom (through talks or direct explanation from the teacher, group discussion, or reading and watching), then do the tasks for reinforcement at home (in the form of homework). In the flipped classroom, students learn the subject matter at home (through watching instructional videos, making inclusion, noting the important points, making inquiries, discussions with friends online or reading resources needed), then do the tasks for strengthening in the classroom.

In the classroom there is also discussion, laboratory practices, clarification of concepts that students have not understood, but the nature of the reinforcement or deepening.

In his book Flip Your Classroom: Reach Every Student in Every Class Everyday (Sams, 2012) writes "Basically the concept of a flipped class is this: that the which is traditionally done in class is now done at home, and that the which is traditionally done as homework is now completed in class."

Hypothesis testing is done by doing a "t-test" with a significance level of 0.05 with the following formula: if $T_{(count)} < T_{(table)}$, the null hypothesis (H0) is acceptable or not there is a significant effect, if $T_{(count)} > T_{(table)}$, the null hypothesis (H0) is rejected or there is a significant effect.

The steps of analyzing data in this study are (1) to determine the assessment rubric, and (2) the category value of student achievement can be determined. Achievement of students from the lowest value to the highest value can be divided into five categories, namely, poor, less, sufficient, satisfactory and very satisfactory. A complete description can be seen in the table below.

Table 1
Assessment Rubric

POINT	VALUE	DESCRIPTION
A	86-100	Shows mastery and understanding of the structure organization and system of good grammar. At this range, the students writing is categorized in stages of a very satisfactory
B	70-85	Shows mastery of the organizational structure and quite good grammar. At this range, the student's writing is classified a satisfactory level
C	51-69	Shows partial mastery of the organizational structure and grammar. Understanding at this stage is categorized enough.
D	26-50	Shows limited understanding of the structure organization and grammar. Understanding at this stage considered less

| E | 0-25 | Showing absolutely no control of the organizational structure and grammar. Understanding at this stage considered bad |

Assessment Rubric in this study is an analytic rubric. This column is adapted from rubric created by Jacobs, Hamp-Lyons and Andrade, and rubrics used in the San Diego Unified School District.

METHOD

In this design, there are two groups which were selected randomly (R). The first group was given a treatment (X) and the other group did not.

This study used a true experiment. In this design researchers can control all external variables that influence the course of the experiment. Thus, internal validity must be high. In line with this, the purpose of true experiments according to (Suryabrata, 2011) is to investigate the possibility of mutual causality by imposing treatment and comparing the results with a control group that was not treated. The samples used for the experiment as well as the control group were taken randomly from certain population. Or in other words, there must be a control group and a random sample in true experiment.

Furthermore, the type of research used in the experiment is true posttest-only control group design. In this design, there are two groups selected randomly (R). The first group was given a treatment (X) and the other group was not.

Chart of this study as follows.

R	X	O1
R		O2

The influence of the treatment is (O1: O2). In the study, the treatment effect was analyzed by using a different test statistic t-test. If there is a significant difference between the experimental group and the control group, the treatment accorded significant influence.

This research was conducted at the English education department of Indraprasta PGRI University in the second semester 2015/2016 for the writing course. Implementation of the research was carried out by measuring the results of post-test. It compared the students' achievement in the control class and students' achievement after treatment using "Flipped Classroom" technic. This technic had the students read the material or watch video / multimedia before they come to the class. They discussed the difficulties experienced during the class with their lecturer. The role of the lecturer as facilitator is to answer and explain various questions from the students about the problems they found at home. The facilities and software used in this experiment as follows:

1. Video software maker: My Screen
   Recorder Pro 2.3
2. Online learning software: Schoology
3. Lecturer's Blog:
   bejo2210.wordpress.com

In this study, data were collected using observation method with check list technique, interviews with technical notes, technical documentation record, and test method using written test technique.

1. Observation Method

An observation method is a way of collecting data by observing and recording the observed thing, then recorded on observation sheets. The advantages of this observation method is that researcher can observe the

studied thing directly without removing or adding things that are important in the study. Observation viewed the relationship between the observer and the Observant. There are two, namely participatory observation and non-participatory observation. Participatory observation is the observation made when observer participates in the activities undertaken by Observant. Non-participatory Observation is the observation that put pure observer as an observer (Sanjaya, 2013). This study used participatory observation that lecturer as researcher also involved in the teaching process, so the situation of students during the learning process can be observed directly.

2. Documentation Method

Documentation method is a way of collecting data. We can archive or document all forms of research activities. The forms of documentation may include notes, agendas, transcripts, etc. (Suharsimi, 2006). The applicability of documentation method done by identifying the name set as research subjects were obtained from the attendance list. In addition, document the results of observations related to the activities carried out during the research process, either recording or tests conducted during the study. The results of the observation will be used to determine the state of students during the learning process.

3. Test Method

The test method is a method used in the study. It is used to measure the ability of research subjects in mastering a particular subject matter. In educational research, the test is often used as a tool to measure the ability of cognitive, affective, and psychomotor field. Type of test used in this study is a written test. Written test adapted the format of the IELTS exam.

Sample taking in this study used Random Sampling. Researcher selected a random sample from students and conducted a survey to them. Then, we drew a conclusion on their writing argumentative or responded based on the feedback from this group. Based on these results drawn, a conclusion about the effect of flipped classroom technique to the entire population and mentioned figures disclaimers "plus or minus 5%.

1. Treatment

Treatment is conducted to students of experiment class in the flipped classroom. Students are given the materials in the form of video, slides, and other forms of files. They will learn the materials at home. They will also be given exercises that will be done online or offline. This experiment classroom activity discussed issues and challenges faced during the study and the exercises at home. As for the control class, they studied with the traditional technic used in traditional classroom.

2. Post-test

Implementation of the post-test performed after carrying out a series of treatment or treatment process. Implementation of the post-test is done by checking the result of the assignment of the argumentative essay, it aims to see the students' different outcomes after a given treatment between the control class and the experiment class.

The data analysis technique is designed to analyze the data that has been gathered from sources both qualitatively and quantitatively. As for the stages to analyze data are as follows:

1. Descriptive Analysis Technique

The data obtained will be presented in a frequency distribution table form for each variable of the study. Then the data will be processed

and analyzed. It measures central tendency and layout as the mean, mode, median and standard deviation. Then, a histogram graph will be made.

2. Data Requirements Analysis Technique

The technique performed normality test and homogeneity test. Normality Test used Chi Square test. It aims to test the relationships both dependent variable and independent variable distribution if it is normal or not. After normality test gave an indication that the research data result was in normal distribution. Homogeneity test using F test method was conducted.

3. Research Hypothesis Testing Technique

Hypothesis testing is done by doing a "t-test" with a significance level of 0.05 with the following formula: if <, then the null hypothesis (Ho) is acceptable or not there is a significant effect, if>, the null hypothesis (Ho) is rejected or significant influence.

namely an experimental class taught using techniques Flipped Classroom and the control class taught using conventional technique. Here is the data from the two classes that have been mentioned.

RESULTS AND DISCUSSION

The data analyzed in this study was the students' data test result. The students were selected through random technique and divided into two classes,

Table 2
Distribution Frequency Control Class

No	Class	f	xi	xi^2	$f.xi$	$f.xi^2$
1	41-45	1	43	1849	43	1849
2	46-50	5	48	2304	240	11520
3	51-55	9	53	2809	477	25281
4	56-60	8	58	3364	464	26912
5	61-65	4	63	3969	252	15876
6	66-70	3	68	4624	204	13872
	Jumlah	30	333	18919	1680	95310

Table 3
Distribution Frequency Experiment Class

No	Class	f	xi	xi^2	$f.xi$	$f.xi^2$
1	42-48	3	45	2025	135	6075
2	49-55	6	52	2704	312	16224
3	56-62	10	59	3481	590	34810
4	63-69	4	66	4356	264	17424
5	70-76	5	73	5329	365	26645
6	77-83	2	80	6400	160	12800
		30	375	24295	1826	113978

Table 4
Descriptive Analysis Result of Experiment Class and Class Controls

Class	Lowest score	Highest score	Mean	Media	Modus	Variance	Standard deviation
Experiment	42	82	60,87	59,7	58,3	97,77	9,89
Control	41	69	56	55,5	54,5	42,41	6,51

Table 5
Normality Test Results Experiment Class and Class Controls

No	Class	X^2_{count}	X^2_{table}	Explanation
1.	Experiment	1,97	11,07	Normal
2.	Control	1,45	11,07	Normal

Normality test used chi square test for normality, for more research data is presented as table 5. Homogeneity test is a test of variances at least two or more distributions. The results of the homogeneity test obtained $f_{count} = 0.43$ while for f_{table} obtained of 1.84.

Furthermore, the tests of significance were calculated using the formula "t-test". (Supardi, 2012: 320), the $t_{count} = 2.256$. As for the t tables of t distribution table for α = 0.05 and df = n1 + n2 - 2 = 58 by the use of interpolation formula t table values obtained for α = 0.05 and df = 58, namely table = 1.67

The result of descriptive analysis showed the average value of the experimental class at 60.87 while the average value of the control class is 56. It indicates that the average value of the experimental class is higher than the control class.

Table 4 showed the control class normality test results obtained value of 1.45, while the value X^2_{count} X^2_{tabel} for $α$ of 5% by dk = 6 -1 = 5 is equal to 11.07. Thus $X^2_{count} < X^2_{tabel}$ namely 1.45 <11.07, these results suggest that the normal distribution of data. Likewise, the experimental class obtained X^2_{count} value of 1.97, while the value X^2_{tabel} for $α$ 5% by dk = 6 -1 = 5 is equal to 11.07, the result indicates normal distribution of data.

The homogeneity test obtained value of F_{count} 0.43 and F_{tabel} of 1.84. It concluded that $f_{count} < f_{table}$ is 0.43 <1.84, thus the data is homogeneous.

From these results show that when the data were normally distributed and homogeneous then the analysis can be continued to see the significance of the data by using a significance test or t test.

Testing criteria are:
$t_{count} > t_{table}$ then H0 is rejected, which means significant
$t_{count} < t_{table}$ then received H1, which means insignificant

The result of t test is t_{count} amounted to 2,256 and t_{table} 1.67 at α of 0.05 level. So $t_{count} > t_{table}$, so that Ho refused mean significant. It can be concluded also that there is a positive and significant impact flipped classroom use the writing skills of students.

CONCLUSION

In this study, we have discussed how the use of flipped classroom, effectively improve the quality of English argumentative writing students in class treatment. An opportunity to discuss material that is difficult to help the teacher directly, repeating the materials provided by the teacher in the form of slides and video at home, and study at a convenient time

and unlimited is an important factor in student success with this technique flipped classroom.

In the flipped classroom students control their learning activities (Fulton, 2012). Therefore, the authors hypothesized that students in the flipped classroom environment will feel more in control of their learning. They can choose when and where they want to learn, so as to improve their writing ability, evidenced by the improvement in the quality of writing skills.

Although the results of this study indicate flipped classroom is valuable for students in grade 3 writing, the author is limited by some weakness. First, the sample size of the class S6A and S6B probably not considered large enough to provide a strong enough indication whether similar results would be observed in many other classes. Conclusion larger sample size is needed in future research.

The second drawback is the limitation of students in using the Internet network, make no maximum student discussions online when it finds problems in a video or slide they learned. It's become a common concern for the expensive internet facility in the country.

The lecturers are trying to use the flipped classroom must consider things like the length of the video between 10 to 15 minutes, using a video recorder that both application and make a clear presentation slides. It is statistically proven to improve students' writing ability.

Use of flipped classroom seems to be quite effective in EFL environment, but there are important points to note from this approach. Type what students get the most from this technique classroom flipped? Do students who are good or less good at writing is further improved results with this technique? Questions like these will be the focus of further research in an attempt to discover more about the effectiveness of the flipped classroom.

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