


# The Implementation of Flipped Classroom to Improving Students' Writing Skills at University of Brawijaya

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ARTICLE INFO	ABSTRACT
<p><b>Article history</b> <i>Received June 25, 2021</i> <i>Revised Dec 16, 2021</i> <i>Accepted Dec 19, 2021</i></p> <p><b>Keywords</b> <i>Flipped Classroom</i> <i>Writing</i> <i>Student Perception</i></p>	<p>This study aims to investigate the effect of the flipped classroom on students' writing skills, active involvement in the classroom, and students' perception of flipped classrooms. By using a pre-experimental design, this study involved 27 fourth-semester students of Class B, Educational English Department of the Faculty of Cultural Studies, University of Brawijaya Malang, in the academic year 2019-2020. The participants were selected through cluster random techniques. The data was collected from pre-test and post-test questionnaires, field notes, and video documentation. The results suggest that the student's writing skills were improved by 26.222 mean scores by using flipped classrooms, from 52.44 scores of pre-tests to 78.67 scores in the post-test. Besides, flipped classroom method has been observed to help the student be more active in self-learning online. The student also presents a positive perception towards flipped classrooms in improving writing skills, with score of 73.56.</p> <p style="text-align: right;">This is an open access article under the <a href="#">CC-BY</a> license.</p> 

## I. Introduction

In Indonesia, almost all schools or colleges still provide a one-way material delivery method, commonly known as Teaching Centered Learning (TCL) or traditional classroom. This method only makes the students passive because they get the material only from the teacher, so their creativity will not improve (Nurjannah et al., 2017). So, the teaching and learning process becomes mere knowledge transfer. Indonesia needs to change this learning system into Student Centered Learning (SCL). In the same way with previous research from Wu et al (2017) in their research says, The flipped classroom as an educational product that includes a touch of technology has become an integral part of educational practice in various fields such as language in education, the researcher used flipped classroom method to improve the teaching. Flipped classroom learning requires the use of technology such as the Internet and other supporting software (Mihai, 2016). According to constructivist learning theory, students learn much by doing, discovering, exploring, and trying out new ideas (Clark, R. C., & Mayer, 2021). Specifically, Flip learning is a teaching method in which the instructor's with direct guide can be transferred from the student to another, where the resulting groups are transforming

From resulting group are transforming into a complex, engaging learning experience with instructor guiding students through the implementation of principles and creative research related on the subject. (Love et al., 2015). Using flipped teaching, this study examines its efficiency on students' active involvement in online learning. Recently people preferred the written form of communication in accessing information to oral communication so that writing skills are essential. The students can view any material outside the classroom and address it with fellow students or adapt what has been taught in the classroom to new content in a flipped classroom (Shih & Huang, 2020).

Flipped classroom generates efficient learning because it involves learning at home (before class). The students can learn first at home before entering class, to help them understand the material in their own style. It is expected that students already have concepts and knowledge before coming to the class (Hwang et al., 2015). The technology or application supports the learning because the students can try to find the source material at home. This method can be done individually or in pairs to support the writing process in an argumentative essay (Beckman et al., 2014).

Based on the fact above, the purpose of this research is to combine flipped classrooms with the Schoology app. However, this study carries difficulties for EFL students' because they have a difference in attitude, motivation, and learning style in English. According to Mok (2014), there are two components in a flipped classroom namely "switch the classroom environment to become online." Because active learning is a general definition for teaching methods that focus on student engagement and loyalty, it is important to use active teaching methods in the classroom. (Prince, 2004). In the same way, The flipped classroom, the process of sending information in traditional classrooms, take outside the classroom using computer technology and Internet, where "information transfer" is follows through interaction in an active learning environment. (Berrett, 2012).

## II. Method

This research used a pre-experimental design, by One-Group Pretest-Posttest based on (Creswell, 2002). This method was selected since the study investigated the effects flipped classroom through students learning outcomes, students' active involvement, and student perception on writing performance. This research was conducted in four stages in class, namely, free writing, outlining, revising, and final draft. The subjects of this research were 27 fourth semester students of Class B, selected through cluster sampling in the Educational English Department, Faculty of Cultural Studies, University of Brawijaya Malang, in the academic year 2019-2020.

To obtain the data, the researcher used Field notes, Video Documentation, a Questionnaire list, tests (pretest and posttest). The analysis of data on students' learning outcomes in writing was carried out using a T-test by SPSS 18.0. While the data on students' active involvement in the classroom and their perceptions were analyzed using the Likert Scale.

Table 2. Paired Samples Test

Pair	Pre Test - Post Test	Paired Differences				T	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
1		-26.222	7.255	1.396	-29.092	-23.352	18.780	.000	

### B. Is there any effect of flipped classroom on students' active to improving in the classroom?

The significance test is used to determine the significance and linearity of the regression. Criteria can be determined based on the significance test (Sig),

## III. Results and Discussion

This research was carried out from 30 January to 12 March 2020 in 7 meetings with 120 minutes for each meeting. The argumentative essay writing pre-test and post-test, as well as questionnaire list, were used to find out the flipped classroom effects on students' learning outcomes, students' classroom involvement and to know the perception of student through the flipped classroom in enhancing their writing performance. The findings of this research are presented below.

### A. What is the effect of flipped classroom on students' writing skills as the learning outcomes?

The results of the pre-test and post-test scores of the student of Academic Writing Class B and paired sample T-test results are presented in Tables 1 and 2. The scoring of students' writing pre-test and post-test was adapted from Rubric Jacobs, an indicator for writing assessment, consisting of five categories with five levels to score the students', involving their content, organization, vocabulary, language use, and mechanic. The data in Tables 1 and 2 show that the probability value (significance) 2-tailed is 0,000 < 0.05 then  $H_0$  is rejected. So, it can be concluded that there is an effect flipped classroom through students' learning outcomes in the experimental group, seen from before attending a flipped classroom treatment with (pre-test) and after attending a flipped classroom treatment (post-test).

Table 1. Paired Samples Statistics

Pair	Pre Test	Mean	N	Std. Deviation	Std. Error Mean
		1	52.44	27	6.327
	Post Test	78.67	27	6.373	1.226

with the provision that if the scores of sig < 0,05. Based on the data in Table 3, the obtained Sig. = 0,02, indicating that Sig.< of significant criteria (0.05). Thus, the regression equation model based on research data is classified as significant, as it fulfils the criteria.

Table 3. Students' Perceptions on the Flipped Classroom

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	732.176	3	244.059	6.784	.002a
Residual	827.453	23	35.976		
Total	1559.630	26			

<sup>a</sup>. a. Predictors: (Constant), student be active

<sup>b</sup>. b. Dependent Variable: Flipped classroom

### C. What are students' perceptions of Flipped Classroom in Writing?

Descriptive statistics is a statistical analysis that provides a general description of the data statistically, including the characteristics of each variable observed from the mean, maximum, and minimum, and std. Deviation. The students' perception is categorized as positive with 26 students choose positive and 1 student choose very positive category. Further analysis showed that the mean score of the students' perception of the flipped classroom in enhancing their writing skills is 73.56, categorized as positive can be seen in Table 4 and 5.

Table 4. Results of Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Students Perception of Flipped classroom	27	49	90	67.30	7.745
Valid N (listwise)	27				

Table 5. Students' Perceptions on the Flipped Classroom

Category	Interval Score	Frequency	Percent	Valid Percent
Very Positive	80 – 90	1	3.8	3.8
Positive	79 – 60	26	96.2	96.2
Moderate	59 – 40	0	0	0
Negative	39 – 20	0	0	0
Very Negative	19 – 0	0	0	0
Total		27	100	100
Mean Score			73.56 (High)	

Based on the findings effect of the flipped classroom on students' writing skills and student perception about the flipped classroom, a few interesting facts are discussed in this part.

### D. What is the effect of flipped classroom on students' writing skills in learning outcomes?

According to Bishop & Verleger (2013), flipped learning is a strategy to help teachers carry out efficient and effective learning. In the flipped classroom, students are active during the lesson and have the role of structuring the information (Munir et al., 2018). In the same way, Writing is a method of sharing information, thoughts, ideas, and experiences to others in the written form. Through writing, the students can inform others, explore the ideas, carry out transactions and tell what they fell. Students should receive feedback on their writing so they can analyse and reflect on their writing, which the students are require to practice deeply, collaborating, peer-review, and revise themselves based on the reflection from teachers. (Pavanelli, 2018).

The flipped classroom method in academic writing courses has been reported to generate improvident, observed from the difference in the mean score from a pre-test in the form of free writing before the treatment and the final test (post-test) in the form of argumentative essays after treatment of flipped classroom. The mean scores of pre-tests in academic writing courses are improved by 26.222 mean scores by using flipped classroom, from 52.44 mean scores of pre-tests to 78.67 from the post-test. This signifies that flipped classroom in academic writing courses, class B in the University of Brawijaya Malang is effective. According to (Johnson & Johnson, 2002).

Students try to achieve the common group objective in different roles in these groups; that is, each student completes the part of the work he/she is assigned to. In line in this view indicates that the improvement in students' writing skills in Flipped Classroom process, the students became more interested when the researcher applied this strategy in a class by using a Schoology app. Flipped classroom combined with the Schoology app generates interactive learning, where the students take responsibility for their own learning. Besides, the Schoology app helps students to be confident, well prepared and can increase teacher and students' interaction. Also, it aids the students be able develop their thinking in high order skills, and self-online learning using the material they have learned and video they have watched at home.

### E. Is there any effect of the implementation of the flipped classroom on students' involvement in the classroom?

to solve the problems and improve learning process in education to enhance student-centred learning that enables students to take control of their own learning by creating a learning environment in

which students are encouraged to engage, think critically, improve problem-solving skills, and collaborating, with meaningful interactions (Alsowat, 2016). In the implementation of the flipped classroom using Schoology, the students are asked to actively find the materials (e-books, journals, and so forth) as a primary reference in the academic writing course. One of the research participants mentioned that "the use of internet in the learning process using flipped classroom is very necessary" because in attaining information or learning resources we can use search engines, such as, google, google scholar, e-library, ProQuest, Mendeley library, and so forth. The source of information via the Internet is always updated every day, so students can access their required materials by only typing the keywords.

In the classroom, the students have started paperless culture, because it felt more efficient, as they don't need to print (the material, and it can be accessed anytime and everywhere by students with their gadgets. In the current era, many of us are dependent on the Internet as media digital. Similarly, the students in the Faculty of Cultural Studies in the University of Brawijaya are also dependent on the Internet because students and lecturers have a role for digital literacy and open access to e-resources. (Gilster, 1997) describe that digital literacy is the ability to understand and use information in multiple formats from a wide variety of sources when it is presented via computers. In other words, the source of knowledge on the Internet is more complete and easier to find by searching through the keywords, as we know every student may have more than one gadget like a laptop, handphone, iPad, or tablet, to access the material. Their access is also supported by campus facilities such as the Wi-Fi hotspot and coworking space that facilitate students to actively involved in the learning process and manage the information properly.

Flipped classrooms helps students to actively learn with their environment and friends so that the learning process involves cognitive, affective, and cognitive aspects. Arthurs & Kreager (2017) claimed that the opportunity to "actively engage with the subject matter as well as with other individuals. Thus, in active learning, the students can collaboratively work, by analysing and applying, giving opinions in the classroom, discussing, solving problems, and Question and Answer section. In recent years, instructors have been faced with a technological revolution in education by using digital technologies in their education, (Clark, R. C., & Mayer, 2021). The lecturer, as a facilitator in class, should help the student to attain a concept and understand the material before coming to class, by providing the materials in the Schoology app. The

students will be familiar with self-online learning that is supported by the media as learning resources and the Internet through the Learning Management System (LMS) by the schoology app.

This finding related with previous studies from Grami, (2012) that students showing positive attitudes through peers' feedback. The observations results on students' writing confirm the phrase "practice makes perfect" because that emphasizes the student to develop by models, concepts, and structure in academic writing. Basically, students are active, creative, and sensitive to their environment which contributes to better success. Additionally, feedback and evaluation from teachers and friends are also necessary as a form of exploration to examine the way students complete the assignment and support and help their friends who have difficulties. Besides, the feedback serves as a learning and evaluation on learning outcomes that can be viewed individually or in group.

#### *F. What are students' perceptions of Flipped Classroom implementation in improving their writing skills?*

The flip classroom model allows students to spend more time outside the classroom because the lectures are delivered video that they must watch before classroom. (Musib, 2014; Roach, 2014).

Based on the results of the questionnaire analysis, the students' perception is categorized high, with 26 students categorized the activity as positive, while one student classified it as very positive. Further analysis showed that the mean score of the students' perception of the flipped classroom in improving their writing skills is 73.56, categorized as high. Some respondents said that online platforms such as Schoology facilitate them to read learning materials without opening a book because reading a book makes me yawn. Without using technology, classroom activities merely focus on textbooks and lecture talks, making students tend to be passive and bored. The students' perceptions toward flipped learning can improve their understanding and learning outcomes in Academic writing courses. During the learning process, the researcher shares the material in the form of presentation slides or videos that students can easily access as a reference for free learning by using a Schoology app.

In this case, the flipped classroom learning process is no longer limited by space and time, but it still maintains the learning process, like in the classroom. Indirectly, students and lecturers have more opportunities to interact and communicate from online platforms, design, layout, text, video, and pictures from the schoology application. In same point of view, LMS is a management system that allows teachers to

pro-vide teaching materials, organize the learning process, and evaluate the learning process (Rahman et al., 2010). Consequently, the students gain higher interest in opening, reading, watching the video, and checking the material because it involves a digital learning process so that the material can be received optimally. Blended learning (flipped classroom) has contributed to building strong interactions between learners and teachers, as well as among fellow learners (Graham et al., 2013). The previous studies from Herawati (2013); Idris (2021) can support the result of this study because both have the result that there is

no interaction between the learning model and the initial capabilities of the learning outcomes of students.

In contrast, Flipped classroom model, students watch video lectures at home, learn other materials, and then actively participate in during classroom (Kiang & Yunus, 2021). Different from conventional lecturing that only focuses on a single source of the textbook, in this learning, the knowledge, skills, attitudes, and the material source are gathered from many sources available online (self-learning materials).

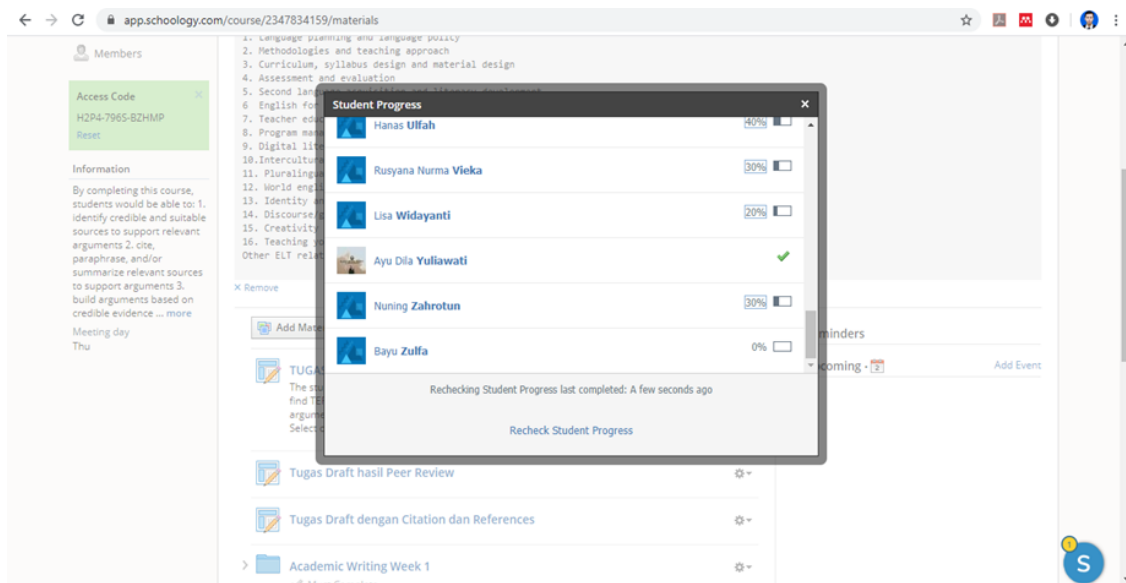


Fig. 1. The indicator students' access to the material.

The lecturers only monitor the students' activities via "student progress" features on Schoology Application. The students' access to the material can be seen from the indicator can be seen in Fig. 1 on the students. The appearance of the indicators means that the student completed reading the material and watched videos on the Schoology app. Otherwise, when students scale 0-90% graphic, it means only some course material that students click and read. This is a good feature for monitoring learning activity on the students"

#### IV. Conclusion

The flipped classroom implementation in improving students' writing skills has enhanced students' participation and happiness to learn, as proven from the result of students' response in using flipped classroom combined with the Schoology app. If the learning is connected to the Internet, the students enjoy studying and have accelerated comprehension of academic writing material. It can be concluded learning based on technology can engage the student in the

new experience, increase their active participation in class, and work in pairs very well during the learning. Further, the combination of a flipped classroom with a Schoology app as blended learning can improve the student's writing skills because they get a greater chance of exploration, such as searching the material for themselves to find what they need about the topic. Although the student has difficulties, they try to solve their own problems.

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