

The Use of Flipped Classroom to Improve Students Writing Skill Using WhatsApp Group

Wahyu Restu Indayani

Universitas Muhammadiyah Gresik, Jawa Timur, Indonesia
Jl. Sumatra No. 101 GKB Gresik
restuinda.1302@gmail.com

Yudhi Arifani

Universitas Muhammadiyah Gresik, Jawa Timur, Indonesia
Jl. Sumatra No. 101 GKB Gresik
yudhi_arif@umg.ac.id

Ulfatul Ma'rifah

Universitas Muhammadiyah Gresik, Jawa Timur, Indonesia
Jl. Sumatra No. 101 GKB Gresik
ulfamarifah@umg.ac.id

Received: 7 February 2022

Accepted: 18 February 2022

Published: 28 February 2022

Abstract

The rapid advancement of technology has piqued the interest of English Language Teaching (ELT) researchers in investigate the effectiveness of flipped classrooms. The subject of this study is two classes of tenth grade students from SMA Muhammadiyah 10 GKB. A quasi-experimental design was used in both classes to determine the significance of the difference between the flipped classroom via WhatsApp group class and the non-flipped class. In this study, the improvement of students' writing skills during treatments is measured. The experimental group (N=23) was given recount text video material and a task from a WhatsApp group outside of class, while the material was reinforced in class. The control group (N=23) was taught using non-flip teaching, in which learning material is mostly delivered in class and additional exercise is given outside of class. The initial and final tests include a pre- and post-test. The results show that the significance value (2-tailed) was 0.010 ($p < 0.05$). This means that a flipped classroom using a WhatsApp group improves students' writing skills significantly. It is suggested that advanced researchers use another field of study to implement this flipped classroom. The findings of this study will help students improve not only their writing skills, but also their other skills. As for the teacher, the flipped classroom has shown a positive impact on students, providing an opportunity for teachers to implement this model.

Keywords: Writing Skill; Flipped Classroom; WhatsApp

1. Introduction

The availability of modern technology with a variety of functionalities can help students learn more effectively. Educational technology entails combining ideas from numerous sources to produce the optimal learning environment for students, like how social media can influence the teaching process or how teaching models can mix teaching and technology (Fu, 2013). During the transition phase of learning techniques from a teacher-centered to a student-centered, many methodologies and models are used. A model that allows students to review the material on their own, to take an active role, and to pursue their interests based on their area of competence, as a result of today's rapid technological advances (Bishop & Verlerger, 2013). To keep up with the technology age, researchers have just discovered a flipped classroom model that may use social media to deliver learning content.



The term "flipped classroom" or "reversed classroom" has recently gained popularity in education, and it has piqued the interest of educators. This refers to the practice of swapping out homework for classwork. Advantage of flipped classroom is more focused to empowering students for grow and expand their target language potential. Students in flipped classroom are given more interactive and group discussions focusing on problem-solving activities rather than listening to theoretical lectures. As a result, the teacher can monitor and provide feedback to students in class (Kim, Kim, Khera, & Gentman, 2014).

In addition to its benefits, the flip classroom also offered the drawbacks as other teaching approaches. As a result, the class becomes more teacher-centered; yet, under flipped classroom conditions, learners have more flexible learning activities outside of the classroom using electronic resources, allowing them to study English in a more flexible manner outside of the classroom. As a result of the flipped classroom, the teaching-learning process is more student-centered. Students in a flip classroom can view the information from home via digital connection to the web. If a student is missing at class due to co-curricular activity or illness, he or she can quickly catch up through the offline or online activities offered (Makinde & Yusuf, 2019).

The widespread adoption of technology in public and academic settings is changing the way people engage with, learn from, and share existing or newly created information through multi-directional communication (Taylor, King, & Nelson, 2012). Students and teachers can use social media to learn in the classroom, and some teachers have done so. By emailing or chatting, students can improve their communication skills (Sakkir, Rahman, & Salija, 2016).

Writing is a way to share information, such as status updates and comments, which are common on social media platforms like WhatsApp. WhatsApp has emerged as one of the most promising social networking applications for today's smartphones and computers (Bouhnik & Deshen, 2014). In real life, students are struggling with writing abilities; however this is not the case when using WhatsApp (Brydolf, 2007).

Although writing is regarded the most challenging of the four language skills, it has been shown that using appropriate teaching techniques and resources that integrate the students' interests and capabilities can drive learners to enhance their writing skills (Oktaviani & Desiarti, 2017). Students may enjoy studying writing by channelling their interests and making the most of their favourite hobby, which is the usage of social networking sites such as WhatsApp and the use of technology as a learning tool (Justina, 2016). Many models of learning that can be apply to help student in facing difficulties in terms of writing, one of which is flipped classroom. This study is intent to discuss about flip classroom through WhatsApp group.

Teaching Writing in Senior High School

Teaching is not easy, but it is necessary. Some classes and students can be difficult and frustrating at times, but it's also important to remember that when done correctly, teaching can be a lot of fun (Harmer J., 2007). In Indonesia, where it has been taught and used for approximately 65 years, English is classified as a foreign language (Marlina, 2013). The allocation of Mandatory English Language in the tenth grade is two hours per week, according to Education Minister and Culture of the Republic of Indonesia regulation number 69 of 2013, addressing the basic framework and curriculum structure of High School or "Madrasah Aliyah."

Writing is a complex skill that, according to Heaton (1975), can be difficult to teach at times. It is necessary to master not only grammatical and rhetorical devices but also cognitive and judging aspects. In this study, the emphasis was on recount text. According to Bryne (1988), students should pay attention to linguistic aspects, the connection between writing and reader input, and the mechanic's aspect when writing. In order to produce a successful recount text, students must be encouraged to express their opinions and guided through the writing process.

Teaching Flip Writing Using WhatsApp

According to Masek and Yamin (2010), in a non-flip classroom, students are taught entirely through the lecturing method, tutorial sessions, and "chalk and talk" approach based on teacher-centered learning. During class, students are mostly silent as they take notes on teacher lectures and respond to homework (Hamden et al., 2013). The teacher employs group discussion to solve the problem. It can contribute to the creation of "excitement" in the classroom (Bonwell & Eisen, 1991). According to Mason, Shuman, and Cook (2013), aside from the quiz and midterm test, the majority of the lecturer's time in the non-flip classroom was spent explaining the material and solving textbook-type problems, with the answers copied from the board by the student.

Flipping the classroom should be used to maximize time efficiency and to facilitate interaction between teacher and student. The advantages are the efficiency of time usage and the interaction, which is mostly in-group. In a flipped classroom, students are typically asked to watch videos at home and discuss them with their peers. However, the times are still inefficient because they need to meet in order to discuss the material. As a result, the WhatsApp application is used in this study to encourage and improve teacher-student collaboration (Mistar, 2016). WhatsApp's adaptability has the potential to meet a wide range of writing learning needs (Fatah, 2015). Students and the teacher are connected through WhatsApp even if they are not in class, so the teacher can help students when they are stuck with a writing problem and discuss it with their group WhatsApp. Student activity was used in class to reinforce the concepts.

2. Method

The concern design for this study is a quasi-experimental design. According to Ary (2010), a quasi-experimental design is one that does not use randomization but instead employs other strategies to provide some control over uncontrollable variables. The researcher can use this design to see if the flipped classroom model via WhatsApp group is effective in improving student writing skills. A pre-test and post-test are given to two groups in this study, an experimental and a control group of Senior High School tenth grade students. For this study, the experimental group will be treated four times in total. Students in the experimental group will receive materials from a shared WhatsApp group. The materials, on the other hand, will not be shared with the WhatsApp group for the control group class but will be shown in class. Non-flip teaching will be used to instruct the student.

Participant

The population is made up of all three classes of SMA Muhammadiyah 10 GKB, Gresik, East Java, Indonesia (a private Islamic Senior High School in Gresik). The study's sample was taken from two tenth-grade science classes. The researcher used an English placement test provided by the school to find the two homogeneous courses. Following that, the English teacher was requested to confirm and clarify topics so that the students might be convinced of their similar English competence. Based on the above factors, two classes from X MIA 1 and X MIA 3, each with 23 students, were chosen as the sample. The experiment class, X MIA 3, had 23 students (12 males and 11 females), and the writing activity was assigned through a WhatsApp group using the flipped classroom model. The control class, X MIA 1, consisted of 23 students (11 males and 12 females), and the writing activity was mainly assigned in class using a non-flip classroom.

In this study, two tests were given: a pre-test and a post-test. For the pre-test and post-test, the researcher created a writing test. The students writing was measured during pre-test and post-test to check the significant difference between experiment and control group classes. To address the issue of the research findings' validity, researchers and assessors assessed students' writing outcomes and progress. Each evaluator evaluates student performance using a rubric (Halliday & Hasan, 1976; Struthers et al., 2013). The information gathered was then analyzed and divided into three phases. The Kolmogorov-Smirnov normality test was used in the first phase to determine the normality of the data distribution, as well as a homogeneity test to determine the variance in the research data. The researcher calculated the average score in the second stage. The average score in each writing test was calculated using the pre-test and post-test results from both groups. Next, a t-test was used to conduct a hypothesis test.

3. Findings and Discussion (Capitalized 1st letter, New Romans, Bold, 12pt)

The finding of this study was divided into three phases. That was normality test, homogeneity test, and independent t-test. The finding of this study are shown below;

Table 1 : Normality Test

	Groups	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PreTest	Experiment	,104	23	,200*	,953	23	,332
	Control	,159	23	,117	,949	23	,253

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 1 reveals the pre-test results of the normality derived from the experiment and control group. The df for both classes was df=23. Since the results of the normality test derived from the two groups are beyond Alpha 5% with p= .332 and p= .253, the data from both groups have been normally distributed.

Table 2 : Group Statistic

	Groups	N	Mean	Std. Deviation	Std. Error Mean
PreTest	Experiment	23	70,6704	6,82772	1,42368
	Control	23	67,5833	4,81769	,98341

Table 2 shows the mean score between both classes from pre-test score. The amount of students was 23 for each. According the table, the mean score between both are 70,6704 and 67,5833. As a result of the statistical descriptive analysis, it can be stated that the average pre-test outcomes among students in the experimental and control groups differ.

Table 3 : Independent T-Test

Table 3 illustrated the value of Sig (2-tailed) is 0.002, which is less than 0.05 ($0.002 < 0.05$). Thus, the average pre-test scores of students in the experimental and control groups differ significantly.

Table 4 : Normality Test Result from Pre and Post-Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PreTests	,104	23	,200*	,953	23	,332
PostTests	,199	23	,018	,928	23	,099

*. This is a lower bound of the true significance.

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PostTest	Equal variances assumed	6,618	,013	2,703	45	,010	3,30978	1,22437	,84378	5,77578
	Equal variances not assumed			2,685	40,009	,011	3,30978	1,23270	,81842	5,80114

a. Lilliefors Significance Correction

Based on the table 4, the significance in the Shapiro Wilk test for the pre test score is 0.332, and the significance in the post test is 0.099. Both significance levels were greater than the criterion of significance of 0.05. As a result, it can be claimed that the data in this study are normally distributed.

Table 5 : Hypothesis Testing

The results of the t-test is displayed in Table 5. According to the value of Sig. (2-tailed) was .010 in critical value at a 5% level. It indicates that the significance value was less than 5% (at the 95% confidence level) or ($0.010 > 0.05$). As a result, it's possible that the null hypothesis will be rejected. It can be argued that there is sufficient data to establish that employing flipped classrooms with a WhatsApp group is more effective than group discussion in improving students' writing skills in Senior High School's tenth grade.

The purpose of this study is to use a WhatsApp group chat to see how the flipped classroom affects English writing skills. The researcher hopes to learn more about the major effect of the flipped classroom on writing skills through a WhatsApp group chat with tenth-grade students at SMA Muhammadiyah 10 GKB. The findings of the study show that the value has increased, as well as proving that the hypothesis is correct. When the pre-test and post-test mean scores are compared, the difference is 70,6704 to 82,4348. The researcher chose "flipped classroom using WhatsApp group" because it requires students to work in small groups, requires the use of social media during learning activities, and combines outside and inside learning.

As a result, they should all be able to understand the lesson and should not be afraid to write stories or share their personal experiences. In class, the researcher conducted a pre-test for the research's initial process. The pre-test was designed to evaluate the students' writing abilities. The pre-test revealed that their writing abilities remained poor. The results show an increasing score after receiving treatment from the researcher and testing in the post-test.

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PreTest	Equal variances assumed	6,345	,015	3,262	45	,002	5,17043	1,58491	1,97826	8,36261
	Equal variances not assumed			3,223	33,168	,003	5,17043	1,60436	1,90697	8,43390

The use of a flipped classroom with a WhatsApp group was found to be an effective way to improve students' writing skills in this study. The experimental group scored 82,4348 on the post-test, while the control group scored 79,1250, indicating that the experimental group outperformed the control group. In addition, the sig. (2-tailed) value was 0.10, indicating that the significant value is less than 5%. As a result, it's possible that the null hypothesis will be rejected.

In the tenth grade of SMA Muhammadiyah 10 GKB, it was determined that using a flipped classroom to develop writing skills through a WhatsApp group had a significant impact. The outcome confirms that expectations were met.

Throughout this study, the use of flipped classrooms via a WhatsApp group proved to be beneficial in improving students' writing skills. Another comment backs up the previous comment, stating that flipped classrooms allow students to learn both inside and outside of the classroom (Hawks, 2014). While outside learning, students can return to the video material as often as they need (Mary, 2016). Students will be flexible in their learning because the teacher cannot ensure that students understand the topic sufficiently. When students learn in a flipped classroom, they are more confident in their abilities (Hamdan et al., 2013). Students will receive an explanation from the teacher outside of class through the methods used, such as lectures, tutorials, and drills in which students must participate (Hawks, 2014).

The researcher used four treatments in both the experimental and control groups. The interventions of the experimental group help the children learn. The interventions of the experimental group help the students learn. According to previous research, most students struggle with writing issues such as spelling, punctuation, grammar, vocabulary, and so on (Heaton, 1975). Meanwhile, students are guided through the writing process in this study, from pre-writing to publication. After receiving feedback from a friend, students are also encouraged to improve their writing. Before the work of their group is released, they give each other feedback. In the previous study, however, students' writing skills were found to be inadequate due to a lack of motivation. It means that students must be motivated to write in order to overcome their fear of doing so. The use of WhatsApp groups in the flipped classroom improves students' writing skills, and they are no longer overwhelmed.

The disadvantage of using a flipped classroom is that students who do not understand the material may become shy and avoid interacting with one another if the teacher does not divide students into small groups. As a result, the researcher divides the students into small groups of three to four students and works with them from the beginning to the end of the writing process.

After completing this study on the use of flipped classrooms to improve writing skills using the WhatsApp group, the ability to write improves. This flipped classroom encourages students to write down their feelings, communicate with one another via WhatsApp, and learn through social media, making it easier for them to understand the material.

4. Conclusion

According to the post-test score, the mean experimental group scored 89.4348, while the control group scored 79.1250. The experimental and control groups' significance (2-tailed) was 0.010, indicating that the significance level was less than 0.05. The researcher discovered that using flipped classroom through WhatsApp group for students writing skill at tenth grade students of SMA Muhammadiyah 10 GKB after conducting the research and based on the research findings and discussion. The data from their pre-test and post-test shows that a flipped classroom through WhatsApp groups helps them improve their writing skills. According to the findings of this study, students' writing skills improved significantly when they were taught in a flipped classroom through a WhatsApp group. As a result, the researcher concludes that a flipped classroom using a WhatsApp group can be used to teach writing to senior high school students in tenth grade.

5. References

- Oxford University Press 1983 Oxford Oxford University Press
 Writing 1988 Oxford Oxford University Press
 Membaca Sebagai Suatu Keterampilan Berbahasa 1994 Bandung Angkasa
 How to Teach Writing 2004 Essex : Longman Group Ltd.
 High School English Grammar and Composition 2006 New Delhi S. Chand and Company Limited.
 Minding MySpace: Balancing the Benefits and Risks of Students' Online Social Networks *Education Digest: Essential Readings Condensed for Quick Review* 7324-8
 The Practice of English Language Teaching 2007 Harlow Pearson Longman
 Evidence in Support of Written Corrective Feedback 2008 *Journal of Second Language Writing* 17102-108
 Social Network Sites: Definition, History, and Scholarship 2008 *Journal of Computer-Mediated Communication* 13210-230
 The good, the bad and the wiki: Evaluating student-generated content for collaborative learning 2008 *British Journal of Educational Technology (BJET)* 396 October
 Defining Writing Ability for Classroom Writing Assessment in High Schools 2009 *Journal of Pan-Pacific Association of Applied Linguistics* 13153-69
 Student Learning Through Social Media *Journal of Sociological Research* 3229-35
 ICT in Education: A Critical Literature Review and Its Implications 2013 *International Journal of Education and Development using Information and Communication Technology* 91112-125
 Learning English as Foreign Language in Indonesia through English children's literature 2013 *he International of Literacies* 1941-49

- The Flipped Classroom: A Survey of the Research 2013 *120th ASEE Annual Conference & Exposition* 23.1200.2-23.1200.18 Atlanta
- Advantages and Disadvantages of Flipped Classroom : Stem Students' Perception 2014 *ICERI 2014* Sevilla, España
- The Experience of Three Flipped Classrooms in an Urban University: An Exploration of Design Principles 2014 *The Internet and Higher Education* 1-55
- The Flipped Classroom: Now or Never? *AANA Journal* 824p264-269
- WhatsApp Goes to School: Mobile Instant Messaging 2014 *Journal of Information Technology Education: Research* 13217-231
- Electronic Social Media in Teaching: Usages, Benefits, and Barriers as Viewed by Sudanese Faculty Members *American International Journal of Social Science* 4558-68
- University Students' English Writing Problems: Diagnosis and Remedy 2015 *International Journal of English Language Teaching* 3340-52
- Students' Perception on Social Media in Writing Class at STKIP Muhammadiyah Rappang, Indonesia *International Journal of English Linguistics* 63170-175
- Use of Whatsapp to Enhance Reading and Writing Skills at Undergraduate College Level *Journal of Language in India* 1647-60
- A Lecturer's and Students' Perspective toward Ethnic Snake Game in Speaking Class at Universitas Muhammadiyah Malang 2017 *Teknosastik: Jurnal Bahasa dan Sastra* 15253-59
- Role of Social Media in Teaching-Learning Process *Journal of Emerging* 6196-103
- The Flipped Classroom: Its Effect on Students' Performance and Retention in Secondary School Mathematics Classroom *International Journal for Innovative Technology Integration in Education* 11117-126
- The Grammatical and Mechanical Errors of Students in Essay Writing 2019 *Jurnal Bahasa Inggris Terapan* 5261-75
- Nurendah. 2014 Scientific Approach to Enhance Indonesian RFL Learners' Descriptive Writing Performance *English Review: Journal of English Education* 31114-124