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## The Effect of Using Video in Flipped Classroom Type on the Ability of SMAN 1 Bangkinang Students in Writing Recount Texts

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### ABSTRACT

In academics, writing is a challenging skill but it is also very important to master. Based on the results of the observation at SMAN 1 Bangkinang, the writer found that students often find it difficult to write English. So this resulted in most students not being able to achieve the minimum standard of KKM in English lessons. Therefore, the use of video in flipped classroom type can be a strategy to overcome this problem. The primary aim of this pre-experimental study was to find out if there was any significant effect of using video in flipped classroom type on the ability of SMAN 1 Bangkinang students in writing recount texts. Applying a writing test consisting of pre-test and post-test in one group was used for this study. According to the findings of this study, shows that the t-test score was 6.656 while the t-table score in significance level 5%  $df=23$  was 2.069. Since the t-test was higher than the t-table, it can be concluded that there is a significant effect of using video in flipped classroom type on the ability of SMAN 1 Bangkinang students in writing recount texts.

## 1. Introduction

This study was carried out using pre-experimental research with a one-group pretest-posttest design. In this design, to see whether there is an effect of the treatment, it was seen from the score of the pretest and posttest. There is no control or comparison group in this design (Best & Kahn, 1998). According to Hermawan (2019), a population is a group that is targeted in research which will later become the focus of researchers in researching so that it is clear who the results of the research will be used for. The class X students of SMAN 1 Bangkinang in the academic year 2021–2022 were used as the population for this study. The total population in this study amounted to 101 students consisting of class X Science, X Social 1, X Social 2, and X Social 3.

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Cluster random sampling was the method used in this research to determine the sample. Kothari (2004) stated that cluster random sampling is the total population divided into smaller subunits and then from these clusters are randomly selected to be sampled as a whole. Class X science has been selected as the sample in this study which consists of 24 students.

The writer used a writing test with quite a pre-test and post-test to collect data. The pre-test was administered at the start of the study and was carried out before the treatments were given. The students were asked to compose a recount text based on the ideas and arguments they have with the topic of historical recount text. After that, before the students did the post-test, they were given treatment first. The sample class received treatment by using the flipped classroom learning model with video in recount text learning. The treatment was given five times with different topics in every meeting.

After implementing the treatments, the writer held a post-test to determine the improvement of students' writing ability in recount text and to see whether there was a significant effect of using video in the flipped classroom type. The topic was the same as in the treatment according to the topic obtained by each group. After students completed their writing, then the three raters evaluated the written outcome using the writing assessment rubric created by Heaton (1990).

To analyze the data obtained, the writer used statistical parametric calculations, namely the T-test formula. This aimed to see and determine if there is a significant difference between the writing of student recount texts before and after the treatment. If the significance value is (2 -tailed)  $<0.05$  or if the t-test is greater than the t-table with a level of significance of 5%, it can be concluded that  $H_a$  is accepted and significantly affects each variable. The writer used the SPSS 22 program for the t-test.

## **2. Methodology**

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### 3. Results and Discussion

#### *Descriptive Statistics of Pre-test and Post-test Scores*

The total score of students' pre-test and post-test can be described in table 1 below.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
POST-TEST	24	62.67	83.00	73.57	4.560
PRE-TEST	24	39.33	77.67	61.31	10.206
Valid N (listwise)	24				

Based on table 1, the data shows there is an increase in the average post-test after being given treatment in the form of giving videos to the flipped classroom type before being given treatment the average pre-test obtained was 61.31 with a maximum score of 77.67 and the minimum score is 39.33, while after being given treatment, the average post-test result is 73.57 with a maximum score of 83.00 and a minimum score of 62.67. Based on this average, it can be said that there was an increase in students' writing abilities after being given treatment. For more details, the writer presents the results of students' abilities in each aspect of writing

including content, organization, vocabulary, language use, and mechanics. The results of the student scores displayed are the assessments obtained from the three raters.

### ***The Result of the Pre-Test***

Before receiving the treatment in the form of using video on flipped classroom type, students were given a pre-test. Next, the writer asked three raters to assess the students' test. After the data was obtained from the three raters, the writer calculated the students' scores to see the students' ability in writing recount texts before being given treatment. Table 2 below shows the mean student scores based on the aspect of writing.

Table 2. The Students' Ability in Each Aspect of Writing in the Pre-Test

<b>Rater</b>	<b>Content</b>	<b>Organization</b>	<b>Vocabulary</b>	<b>Language use</b>	<b>Mechanics</b>	<b>Total Score</b>
R1	17.67	12.88	12.04	14.71	2.96	60.26
R2	17.79	13.25	12.46	14.54	3.08	61.12
R3	18.29	13.92	12.92	14.33	3.08	62.54
Average	17.92	13.35	12.47	14.53	3.04	61.31

The above table depicts the mean score of pupils' writing abilities based on each of the three raters. The mean score of content is 17.92, the mean score of organization is 13.35, the mean score of vocabulary is 12.47, the mean score of language use is 14.53 and the mean score of mechanics is 3.04. Meanwhile, the mean pretest score of students is 61.31.

### ***The Result of the Post-Test***

After the pre-test was given to the students, then they were given treatment in the form of giving videos in the flipped classroom type for five meetings. After the treatment was given, the writer began to give a post-test to the students to see the effect of the treatment given on the students' writing ability in the recount text. Post-test data obtained from raters are then calculated and analyzed. Table 3 below shows the mean student scores based on the aspect of writing.

Table 3 shows the average score of students' writing abilities from each aspect obtained from the assessments of the three raters. The mean score of content is 22.33, the mean score of organization is 15.90, the mean score of vocabulary is 14.74, the mean score of language use is 17.51 and the mean score of mechanics is 3.08. The mean score of the five aspects in the post-test shows an increase from the students' pre-test scores. In addition, the mean post-test score of students was 73.57 which also increased from the students' pretest score which only got a mean score of 61.31.

Table 3. The Students' Ability in Each Aspect of Writing in the Post-Test

Rater	Content	Organization	Vocabulary	Language use	Mechanics	Total Score
R1	22.71	15.71	14.25	18.08	3.08	73.83
R2	21.79	15.71	14.71	17.21	3.13	72.55
R3	22.50	16.29	15.25	17.25	3.04	74.33
Average	22.33	15.90	14.74	17.51	3.08	73.57

### *The Comparison Between Pre-Test and Post-Test*

The treatment that has been given to students has a good effect on students writing abilities. The improvement in each writing aspect's score as well as the difference between the pre-test and post-test average scores represent evidence of the improvement. The improvement can be seen in the 4 and 5.

Table 4. The Improvement in Each Aspect of Writing

No.	Aspects of Writing	Pre-Test	Post-Test	Improvement
1.	Content	17.92	22.33	4.41
2.	Organization	13.35	15.90	2.55
3.	Vocabulary	12.47	14.74	2.27
4.	Language Use	14.53	17.51	2.98
5.	Mechanics	3.04	3.08	0.04

Table 4 shows the improvement of each writing aspect from the pre-test and post-test. These improvements included an increase in average content of 4.41 points, organization of 2.55 points, vocabulary of 2.27 points, language use of 2.98 points, and mechanics of 0.04 points. From the table above, it can be seen that aspect content has the highest increase and mechanics has the lowest increase.

The improvement in student scores can also be seen from the average pre-test and post-test as shown in table 5.

Table 5. The Improvement of Students' Mean Score

Mean Score		
Pre-test	Post-test	improvement
61.31	73.57	12.26

Table 5 shows an increase in the average score of students from the pretest to the post-test of 12.26 points. Therefore, it can be said that giving videos in flipped classroom type can improve students' writing abilities in recount texts. The data also can be shown in figure 1 below.

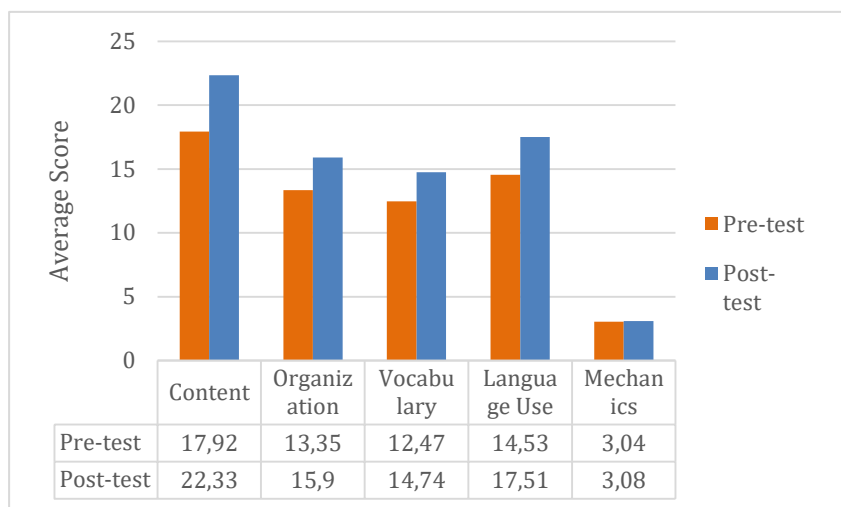


Figure 1. The Improvement in Each Aspect of Writing

**Normality Test**

Before the data obtained is analyzed, the first step is to determining whether or not the test data distribution is normal. To test the normality of the data, the Shapiro-Wilk test was used because the sample used in this study was less than 50. The results of the normality test can be seen in table 6.

Table 6. Tests of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Students' Post-test	.137	24	.200*	.967	24	.595
Students' Pre-test	.146	24	.200*	.953	24	.312

Table 6 shows the results of the normality test using Shapiro Wilk with the pretest having a significant value or p-value of 0.312 and the p-value (sig) for the post-test value of 0.595. Data is said to be normally distributed if the value of Sig or p-value is greater than  $\alpha = 0.05$ . Based on the data obtained, the results show  $p \geq \alpha$  ( $0.312 \geq 0.05$ ) and ( $0.595 \geq 0.05$ ), which means that the data obtained are normally distributed.

**Result of T-test**

The following are the findings from the data analyzed using the t-test formula to determine if the formulated hypothesis is accepted or rejected. The result of the t-test can be seen in table 7 below.

Table 7. Paired Samples Test

		Paired Differences							
		Me an	Std. Devi atio n	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2- taile d)
					Low er	Upp er			
Pair 1	Posttest - Pretest	12.2 64	9.02 7	1.843	8.45 2	16.076	6.65 6	2 3	.000

To determine whether the distinction from the average obtained is significant, the significance value of the paired sample test was being used, which then determines the decision in the study. From the paired samples test output, the sig (2-tailed) value is 0.000, which means less than 0.05 or the t-test was 6.656 greater than the t-table on the df 23 was 2.069 with the level of significance 5%. So, it can be concluded that  $H_a$  is accepted, which means there is a significant effect of using video on flipped classroom type on the students' ability of SMAN 1 Bangkinang in writing recount texts.

### Discussions

Based on the results of data analysis, it is shown that students who have been given treatment have improved grades. The outcomes of the average writing test of students support this statement, where the mean of the post-test is higher than the mean of the pre-test.

The data shows that the average pretest score of students is 61.31 and after students received treatment for five meetings, their post-test score increased to 73.57. This increase in average indicates that there is an effect of the use of video in the flipped classroom on students' writing abilities. Tarisman & Hanafi (2020) found the same thing in their study titled "The Effect of Whatsapp in A Flipped Classroom on Students' Writing Achievement at MTsN 1 Konawe". The results of the students' writing test showed a descriptive increase in the median score on students' writing achievement, with the average score greater in the post-test than the pre-test.

Apart from the average pretest and posttest of students, the increase in students' writing ability is also seen from the average aspect of writing when treatment has been given and a post-test has been carried out there has been an increase in the average score of the entire writing aspect. The writing aspects include content, organization, vocabulary, language use, and mechanics. From the results that have been analyzed, aspect content is the highest score in the post-test. With an average pretest score of 17.92 and after being given the treatment it became 22.33 with an increase of 4.41 points. Meanwhile, the average score of mechanics became the lowest score with an increase of only 0.04 points. The same result is shown in Tarisman & Hanafi (2020) research, where the highest average also took place in the content aspect and the lowest average took place in the mechanics aspect.

In addition, research conducted by Sarani et al (2020) shows that aspects of content, organization, and vocabulary are the result of the positive influence of the use of the flipped classroom on students' writing development. However, what is different from this research is that the research of Sarani et al stated that the aspects of language use and mechanics do not have a significant difference, while in this study language use has a significant difference in students' writing abilities.

Besides the average pretest and posttest scores of students, there is a reason why the use of videos in flipped classrooms can help students enhance their writing skills. This is because the use of video in the flipped classroom can create an active learning process for students. As Ahmed (2016) stated that active learning is a learning process in which students take an active part in activities and take control of their learning to create active learning the teacher can introduce writing lessons to students' lives by using videos as student activities at home. The use of video lectures will make the class more effective because the time in class is focused on conducting question and answer sessions, focusing on the arrangement of problems, practice, and on flipped learning with the guidance of the teacher (Umutlu & Akpınar, 2020).

The implementation of video usage in the flipped classroom was successfully carried out during the treatment process for students. These videos were delivered to students before the class started the following day. The material was presented succinctly, concisely, and clearly in a single video uploaded on the YouTube platform, with the link shared through Google Classroom. The use of video had a significant positive impact, both on students and on the effectiveness of teaching and learning. Instructional videos represent a novel innovation in online learning through the utilization of the Blended Learning Flipped Classroom method. Students' enthusiasm and interest in course content have surged as they observe the learning outcomes before and after receiving the instructional videos (Sembiring, 2021). Moreover, students found it easier to understand the material, and teachers had more time for interaction the next day since the material was delivered through video, allowing the focus of the learning to shift towards discussions and Q&A sessions. The video can be shown in figure 2 below.

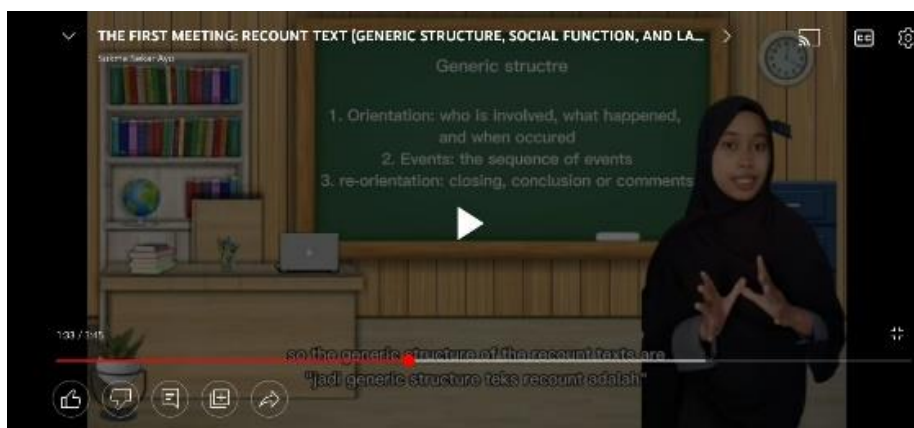


Figure 2. The use of Video in Flipped Classroom



Students' understanding of the material could be observed from the students' responses on Google Classroom, as well as the summaries of the material and writing assignments they submitted through the platform. The Google Classroom interface can be seen in the figure 3 and 4 below.

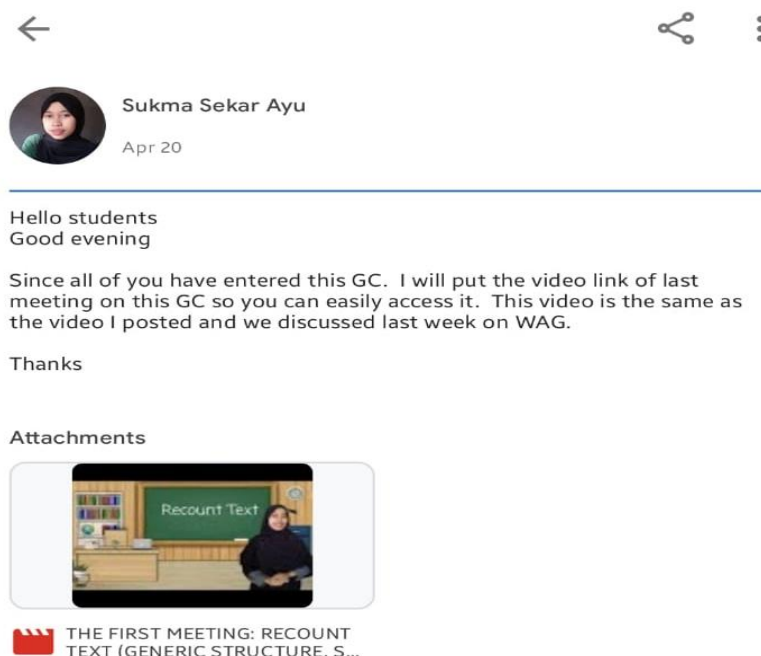


Figure 3. Google Classroom



Figure 4. Google Classroom

The use of videos in the flipped classroom, as described above, can significantly enhance the effectiveness of learning for students. Teachers act as facilitators who reinforce the understanding of the material, while students take control of their own learning process. According to Zhang (2017, in Gudex, 2022), within the framework of the flipped classroom model, the teacher's role transforms from that of an instructor into that of a facilitator with the responsibilities of monitoring student comprehension, assisting in the learning process, and encouraging more profound exploration of the subjects being taught. Moreover, the utilization of videos fosters a deeper level of critical thinking among students regarding the presented content (Jiao, 2022). This encourages students to be more active in asking questions and improves their ability to write recount texts compared to before adopting this approach. The figures below illustrate how the learning process takes place in a face-to-face classroom.



Figure 5. Learning Process



Figure 6. Learning Process



Figure 7. Learning Process

Based on the results of the research, theory and supported by previous research, it can be concluded that the use of video in the flipped classroom type can improve students' writing skills, one of which is writing recount text and is a strategy that can not only be applied at SMAN 1 Bangkinang school but also other schools in help improve students' writing skills. The results of the study showed that more than half of the number of students achieved the KKM score after being given treatment. In implementing this strategy, efforts need to be made so that it can be carried out properly, such as the teacher being willing to spend more time preparing materials, videos, and other learning tools before class starts. Availability of facilities such as devices and good networks so that students can access the material provided.

#### **4. Conclusion**

The study's goal was to determine whether there is a statistically significant effect of using video on flipped classroom type on the students' ability in writing recount texts. From the research findings, it is shown that students who have been given treatment have improved grades. This was indicated by data analysis from the pre-test and post-test. From the result of the tests, it can be concluded that  $H_a$  is accepted, which means that there is a significant effect of using video on flipped classroom type on the students' ability of SMAN 1 Bangkinang in writing recount texts.

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## References

- Ahmed, M. A. E. A. S. (2016). The Effect of a Flipping Classroom on Writing Skill in English as a Foreign Language and Students' Attitude Towards Flipping. *US-China Foreign Language*, 14(2), 98-114.
- Auriana, H., Nuraida, I., & Oktaviana, F. (2021). The Influence Of Youtube Based Video Toward Students' Writing Skill In Recount Text (The Quasi Experimental Research At Tenth Grade Of Smk Daruttaibin. *Journal of English Language Teaching and Literature*, 4(2)
- Belt, E. S., & Lowenthal, P. R. (2021). Video Use In Online And Blended Courses: A Qualitative Synthesis. *Distance Education*, 42(3), 410–440.
- Bergmann, J., & Sams, A. (2012). *Flip Your Classroom : Reach Every Student In Every Class Every Day (1st ed.)*. International Society for Technology in Education.
- Best, J. W., & Kahn, J. V. (1998). *Research in Education (8th ed.)*. Allyn and Bacon.
- Defaizo, J., Jones, J., Tennant, F., & Hook, A. S. (2010). Academic Literacy: The Importance and Impact of Writing Across the Curriculum – a Case Study. *Journal of the Scholarship*.
- Gudex, C. (2022). The Flipped Classroom: A New Perspective. *Medical Writing* . 31(3) 80–82). European Medical Writers Association.
- Harmer, J. (2004). *How to Teach Writing*. Pearson Education, Inc.
- Heaton, J. B. (1990). *Writing English Language Tests*. Longman Inc.
- Hermawan, I. (2019). *Metodologi Penelitian Pendidikan Kualitatif, Kuantitatif dan Mixed Method (1st ed.)*. Hidayatul Quran Kuningan.
- Jiao, L. (2022). The Application of Flipped Classroom Teaching Model in English Writing Course in Educational Informatization 2.0 Background. *Sino-US English Teaching*, 19(4).
- Kong, S. C. (2014). Developing Information Literacy And Critical Thinking Skills Through Domain Knowledge Learning In Digital Classrooms: An Experience Of Practicing Flipped Classroom Strategy. *Computers & Education*, 78, 160–173.
- Kothari, C. R. (2004). *Research Methodology (2nd ed.)*. New Age International Publishers.
- Leis, A., Cooke, S., & Tohei, A. (2017). The Effects of Flipped Classrooms on English Composition Writing in an EFL Environment. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 5(4), 37-51.
- Palazón-Herrera, J., & Soria-Vílchez, A. (2021). Students' Perception And Academic Performance In A Flipped Classroom Model within Early Childhood Education Degree. *Heliyon*. 7(4).
- Rahim, S., & Wahi, W. (2023). Improving Low Proficiency ESL Primary School Students' Writing Skills using Flipped Classroom. *International Journal of Social Science And Human Research*, 06(04).
-

- Rotellar, C., & Cain, J. (2016). Research, Perspectives, And Recommendations On Implementing The Flipped Classroom. *American Journal of Pharmaceutical Education*, 80(2), 1–9.
- Sarani, A., Zarei, M. J., & Navidinia, H. (2020). Effect of Online Flipped Classroom on Students' Writing Development at Senior High School. *Journal of English Language*. 12(26), 495–515.
- Sembiring, D. A. K. (2021). Daring Melalui Metode Pembelajaran Blended Learning-Flipped Classroom. *Jurnal Pengelolaan Pendidikan Desember*, 2(2), 61–71.
- Sengul, F., & Bensen Bostanci, H. (2021). In-Class versus Out-of-Class Flipped Classroom Models in English as a Foreign Language Writing. *Propósitos y Representaciones*, 9(SPE1).
- Silalahi, D. E., R Sihombing, P. S., & Purba, L. (2021). High Order Thinking Skill (Hots) Questions On Learners' Writing Ability Of Report Text At Efl Of Fkip Universitas Hkbp Nommensen. *Jurnal Dinamika Pendidikan*, 14(2), 17-32.
- Tarisman, & Hanafi, H. (2020). The Effect of Whatsapp in A Flipped Classroom on Students' Writing Achievement at MTsN 1 Konawe. *Advances, Social Sciences Research Journal*, 6(12), 253–268.
- Umutlu, D., & Akpınar, Y. (2020). Effects of Different Video Modalities On Writing Achievement In Flipped English Classes. *Contemporary Educational Technology*, 12(2), 1–16.
- Warnock, J. (1983). The Writing Process. *Rhetoric Review*, 2(1), 4–27.
- Whatley, J., & Ahmad, A. (2007). Using Video to Record Summary Lectures to Aid Students' Revision. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, 3, 185–196.
- Yu, Z., & Gao, M. (2022). Effects of Video Length on a Flipped English Classroom. *Sage Open*, 12(1).

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