

Mobile Technology-Assisted Flipped Classroom Method to Increase the Complexity Students' Reading by Video Narrative in Junior High School

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Abstract

The study aimed to find out the significance of the mobile technology-assisted flipped classroom method to increase the complexity of students' reading by video narrative through fairy story YouTube videos as a media in Junior High School. This research design is a quantitative study with an experimental research design. The population was all of the students at SMP Negeri 4 Satu Atap Panai Hulu, Indonesia. The sample used by random sampling technique was divided into two groups were experimental group taught by mobile technology-assisted YouTube video narrative and the control group taught using the reading book method. The data was collected by using pre-test and post-test and were analyzed by using the t-test formula of 16.0 SPSS. The result found that the t-test is the value of sig. (2 tailed) of $0.000 < 0.5$ means that there was a significant effect of mobile technology-assisted flipped classroom method to increase the complexity of students' reading by video narrative through fairy story YouTube video as a media.

INTRODUCTION

Increasing education for children will spur the achievement of Sustainable Development Goals target in 17 points, especially to improve children's literacy and numeracy in each schools. It is hoped that the role of education will be able to increase Indonesia's competitiveness in supporting of the 2030 SDGs. Digital literacy in schools is able to make students, teachers, education staff and principals have the ability to access, understand, and use digital media, communication tools and networks. Digital literacy competence is very important for students, especially during post pandemic time. The application of distance learning encourages easy internet access for every level of society (Ahmad, 2022). Reading according to a dictionary definition, is the ability to examine and comprehend the meaning of written words. Comprehension then is at the heart of any conventional definition of reading (Brassell, D. and Rasinski, 2008). Reading is the process of understanding the ideas, concepts, and information contained in books or other written works (Heryatun, 2020). This is consistent with Somadayo et al., (2013) claim that reading is a process in which the reader must comprehend the written words in order to know the meaning of the entire word. The meaning of these words will enable the reader to comprehend the reading's message. Reading is one of the basic English abilities that students should learn because it will help them gain more information, discover more facts, and certain more things. In this case, the first consideration in the reading process is comprehension. The fundamental element of comprehension

is the interplay between the reader's prior knowledge and understanding of the information from the text because reading without comprehension would impede the reader from understanding the information in the text. Reading comprehension is therefore an essential component that helps kids learn more and improve their reading skills (Yuvita et al., 2022). Students with a high reading comprehension level may receive better input than those with a low level (Herlindayana et al., 2017).

Students learn a variety of text genres in reading particularly for junior high school that are pertinent to the curriculum, one of which is Narrative text (Yuvirawan et al., 2021). A narrative text is one that tells stories and recounts events according to the author's timeline. Usually, narrative texts are designed to provide readers with entertainment by depicting various events as if they had actually occurred to the reader (Heryatun, 2020). It could be a myth, a legend, a folktale, a parable, moral tale, or a fairy tale (Yuvirawan et al., 2021). In terms of rhetorical structure and textual elements, each genre has its own characteristics. Narrative text has its own rhetorical structure and textual elements. Afterward, there is the purpose of each textual component. The rhetorical parts and textual components of narrative texts are orientation, complication, resolution, and re-orientation (Sulistyo, 2013).

The preliminary observation is conducted at SMPN 04 Satu Atap Panai Hulu, Kabupaten Labuhanbatu. The findings show that reading comprehension materials, particularly narrative texts, is still a challenge for many students. Students often have trouble understanding what they read due to a variety of factors. The first is internal factor, which are those that originate within the students. This factor include students' lack of motivation, interest, and enthusiasm in reading. They are frequently bored with activities that are repetitive and excessively serious (Yuvita et al., 2022). This is evident when teachers request pupils to read a text; they frequently feel lazy and just skim it without making an effort to comprehend what they are reading. Another factor that causes students to struggle is a lack of vocabulary and limited time to cognitively process the text, which causes them to misunderstand what they are reading. This is consistent with the finding of Qrquez & Rashid, (2017) research, which found that secondary school EFL students have difficulties with reading comprehension when confronted with ambiguous words, unfamiliar vocabulary, and limited time to cognitively process the text. The second factor is an external factor that may come from the teacher's strategy or teaching media during the learning process. Students feel that having to do simple English homework while participating in educational events not only irritates them but also depresses them. They need a solution that is entertaining, straight-forward, and not boring as a result (Yuvita et al., 2022).

Flipped Classroom is a learning method where students get the material first before the learning process takes place and requires students to study the material independently at home. Flipped in this term refers to the opposite of conventional learning methods, namely things that are usually done in class such as material introduction is done at home, and which is usually done as homework is completed in class with the teacher and classmates (Herlindayana et al., 2017). This method can make it easier students to understand the text and still enjoy the process of learning English. This approach allows students to read and attempt to comprehend narrative materials outside of the classroom before learning them in the classroom. Therefore, students will have more time to understand the content and do searches for terms that are obscure and unknown. Additionally, the author used a video text narrative as a tool to engage students' interest to the learning process in order to increase their motivation and enthusiasm for reading. The flipped classroom method also can help students become more active and independent in the learning process (Astuti et al., 2019). According Hernawati et al., (2021), using video as a learning medium makes learning more exciting, which can boost learning motivation and student comprehension of the material. The use of technology in the classroom, according to a different viewpoint, aids

teachers in motivating students to engage in higher-order thinking strategies. The video, which told a simple story, and its sentences and contents were all understandable to the students. It is the responsibility of the teacher to choose pertinent sequences, get students ready to watch, keep them focused on the lesson, and then play and repeat the video (Siregar, 2020).

In a previous study entitled "Flipped Classroom Model to Enhance Students' Reading Comprehension" which compares the original flipped classroom model with the flipped classroom model integrated with jigsaw IV on second grades of a senior high school in Pesawaran, Wulandari et al.,(2022) found that the use of a flipped classroom model enhances students' reading comprehension in both classrooms. Students' pre-test to post-test scores increased with either the flipped classroom model integrated with jigsaw IV or the original flipped classroom model. Furthermore, another study entitled "The Effect of Flipped Classroom Model towards Students' Reading Comprehension" which is conducted by Yuvita et al., (2022) also found that flipped classroom model had a significant positive effect on students' reading comprehension. Therefore, the researcher conducted research on the use of the flipped classroom method in increase students' reading comprehension skills in narrative text, to find out whether using the flipped classroom method in teaching reading comprehension can increase students' reading comprehension in narrative text.

METHOD

This research used true experimental research, with Pretest-Posttest Control Group Design. Experimental research are an experimental group and a control group, where taken randomly (Sugiyono, 2019). In experimental class, researcher was applied the flipped classroom method used video narrative text from Dyggie & George youtube channel: <https://youtu.be/N4taZ3iHeSk>

While in control class the researcher was used reading book method, the researcher used reading comprehension tests for pre-test and post-test. To analyze the data, independent sample t-test in SPSS version 16 was used in order to compare the means from experimental group and control group after the treatments in order to determine whether there is statistical evidence that the associated population means are significantly different. This research used simple random sampling, where VIII B as control class and VIII A as experimental class. The total number of sample was 45 students, 22 students for control class and 23 students in experimental class.

The sample is a representation of the population's number and characteristics (Sugiyono, 2019). Simple random sampling was utilized in this research, in which population members were chosen at random from the population without regard for the population's stratification. A random sample is defined as a sample taken from the population using a technique that ensures that (1) each possible sample of a given size has an equal chance of being chosen and (2) every member of the population has an equal chance of being chosen into the sample (Robert R. Pagano, 2011). The samples were 45 students: in class VIII B as control class there were 22 students and in class VIII A as experimental class there were 23 students.

FINDINGS

The data obtained in this study came from the results of pre-test and post test conducted on the control group (variable used conventional method) and experimental group (variable used flipped classroom method). The samples were 45 students: in class VIII B as control class there were 22 students and in class VIII A as experimental class there were 23 students.

Test of Normality is used to determine the normality of a data distribution. The normal distribution is a symmetrical distribution with the modus, mean and median at the center. The normal distribution is a symmetrical distribution with the mode, mean and median at the center. To test whether or not a data distribution is normal, there is a decision-making guide, namely if the value of Sig. or the significance or probability value is < 0.05 then the distribution is not normal and if the value of Sig. or the significance or probability value is > 0.05 then the distribution is normal (Nuryadi et al., 2017). Since the sample in this study was less than 50, the Shapiro-Wilk test must be used, if the sample was more than 50, the Kolmogorov-Smirnov test must be used (Wulandari et al., 2022). From the Table 4, it is found that the significant level (Sig.) on Shapiro-Wilk test are as follow: .136, .214, .052, .141 for all the data of pre-test and post-test from control and experimental group, it can be concluded that the research data is normally distributed.

Table 1. Tests of Normality

	Kelas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	ig.	Statistic	df	Sig.
Student Learning Outcomes	Pre-Test Control Class (Conventional)	.163	22	135	.932	22	.136
	Post-Test Control Class (Conventional)	.176	22	076	.942	22	.214
	Pre-Test Experimental Class (Flipped Classroom)	.130	23	200*	.915	23	.052
	Post-Test Experimental Class (Flipped Classroom)	.158	23	143	.935	23	.141

a. Lilliefors Significance Correction

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

It may be inferred from the result above that the study data is normally distributed because the significance value (sig) for all data on the KolmogorofSmimov Test and the Shapiro-Wilk Test is larger than 0.05.

Determine data was homogenous or not, testing for homogeneity was also carried out. Then, it can be seen from the Levene Statistics to assess the equality of variances in different sample (Wulandari et al., 2022).. The basis for decision making for the homogeneity test is if the significance value > 0.05 then the data is said to be homogeneous, otherwise if the significance value is < 0.05 then the data cannot be said to be homogeneous (Nuryadi et al., 2017). The results on Table 5. shows that the significant level (Sig.) based on the mean is $0.347 > 0.05$, so it can be concluded that the variance of the control class post-test data and the experimental class's post-test data is homogeneous or the same.

Table 2. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Student Learning Outcomes	Based on Mean	.905	1	43	.347
	Based on Median	.479	1	43	.492
	Based on Median and with adjusted df	.479	1	38.081	.493
	Based on trimmed mean	.931	1	43	.340

It can be inferred from the output above that the variance of the post-test data for the experimental class and the control class is homogenous or equal because the significance value (sig) based on the mean is known to be $0.347 > 0.05$.

This test is used to determine the means difference between two independent populations/data groups (Nuryadi et al., 2017). This Independent Sample t-test has assumptions/conditions that must be met, namely the data is normally distributed, the two groups of data are independent (free) and the variables are linked numeric and categorical form (with only 2 groups). In this study, the Independent Sample t-test was conducted to determine whether there were differences in student learning outcomes in reading comprehension in narrative text using the conventional method and the flipped classroom method. By means of the result obtained in table 6. the significant (2-tailed) value is .000, it means that it lower than 0.05. It can be concluded that there is significant difference between students' achievement in control group and experimental group. The average post-test scores for the control class (conventional method) and the experimental class (flipped classroom method) are 77.64 and 85.52, experimental group students got higher mean score than control group students. So it can be concluded that the flipped classroom method is more effective than conventional method.

Table 3. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Student Learning Outcomes	Equal variances assumed	.905	.347	4.626	43	.000	7.885	1.705	4.448	11.323
	Equal variances not assumed			4.602	39.915	.000	7.885	1.714	4.422	11.349

It can be concluded from the output above that there is a difference between the average post-test of students utilizing the conventional method and the flipped classroom method because the value of sig. (2 tailed) is $0.000 < 0.05$.

The aim of this study is to find out the significant increase of using Flipped Classroom method on the students' reading comprehension in narrative text. Considering the fact that reading comprehension materials, particularly narrative texts, is still a challenge for many students, so should be provided with more appropriate teaching method in order to increase the lack of their reading comprehension ability. Therefore, recent innovative teaching method such flipped classroom is suitable to use.

Referring the results of quantitative analysis showed that the flipped classroom method is more effective than conventional method, since the flipped classroom method it resulted better achievement. The results of this study was in line with the results of a previous study entitled "Flipped Classroom Model to Enhance Students' Reading Comprehension". This study aims to examine some different effects of two nontraditional approaches when they are applied in learning reading. This study uses a true experimental design with samples are 65 EFL students on second grades of a senior high school in Pesawaran: 15 males and 50 females. In experimental group (the flipped classroom model integrated with jigsaw IV) there were 32 students and in control group (the original flipped classroom model) there were 33 students. The data from this study were obtained from the pre-test and post-test and analyzed in the Independent sample t-test in SPSS version 26. The result reveals that The use of a flipped classroom model enhances students' reading comprehension in both classrooms. Students' pre-test to post-test scores increased with either the flipped 40 classroom model integrated with jigsaw IV or the original flipped classroom model (Wulandari et al., 2022).

Some studies also examine the use of flipped classrooms at universities, such as a study entitled "The Effect of Flipped Classroom Model towards Students' Reading Comprehension". The focus of this research is to determine whether the flipped classroom model has a beneficial effect on students' reading comprehension during their second semester at Universitas Pancasakti Tegal in the academic year 2020/2021. With a sample of 39 students were randomly assigned to two equal groups of 17 students each: an experimental group (flipped classroom) and a control group (traditional classroom). Data were obtained through pre-test and post-test which were then analyzed using paired sample t-test and Independent sample t-test. The results of this study also showed that the post-test scores the experimental group significantly outperformed the control group ($p < 0.05$) so in other words using a flipped classroom model had a significant positive effect on students' reading comprehension (Yuvita et al., 2022).

DISCUSSION

In accordance with the objective of the study, it can claimed that using the Flipped Classroom Method has significantly increase students' reading comprehension of narrative texts, as demonstrated by paired sample t-test analysis. The results of the paired sample t-test of the two samples are there is an influence from the use of the flipped classroom method on students' reading comprehension in narrative text. The magnitude of this effect is evident from the mean score Post-

Test of the Experimental Class which has improved from 61.83 to 85.52. So it can be said that there is a significant increase in reading comprehension of narrative texts by using the flipped classroom method. This means that the null hypothesis is rejected and the alternative hypothesis is accepted. Following the results of the Independent Sample T-Test, students who used conventional method and those who used the flipped classroom method had different average Post-Test scores with a large distinction between the mean score Post-Test of students using conventional method and flipped classroom method are 77.64 and 85.52. So it can be said that the Flipped Classroom Method is more successful than Conventional Method. As a result, it may be said that there is a significant increase in reading comprehension of Narrative Text by using flipped classroom method in class VIII SMPN 04 Satu Atap Panai Hulu and the Flipped Classroom Method is more successful than Conventional Method.

Regarding to the aim of the study and based on the findings and data analysis, it can be concluded that there is a significant increase from the use of mobile technology- assisted flipped classroom method on the students' reading comprehension by video narrative text. In the pre-test to post-test scores of students in both classes showed good scores.

Students who were taught to increase the complexity students' reading by Video Narrative showed better results. It similarity with previous study (Rianti et al, 2024) said that students' reading comprehension of English narrative texts through problem-based learning, an make students feel interested and can improve their ability to analyze the text. They have more time to find the meaning of new words contained in the text at home before the learning process takes place and used video as a teaching medium was engage students' attention, increasing their interest and got their extrinsic motivation for reading activities by video through mobile technology in the post pandemic time. It can be said that, they more prepare to directly engage in learning process. Therefore, when the learning process takes place they already have prior knowledge of what they previously understood, so that they become more active in responding to learning materials.

The impact on using this method can also increase children's active use of mobile technology as teaching material, not just watching Youtube. It similarity with previous study (Hongjiao Gao & Fan Li, 2024) said that learning may utilize mobile wireless networking or be offered with self-learning. For teachers in future activities, they can provide learning that is fun education using mobile technology assisted flipped classroom method with various subjects or as teaching materials on Youtube with descriptive video, procedure video.

CONCLUSION

Researchers should pay more attention to student activity when learning activities take place, for example such as asking questions or providing opportunities to raise inquiries regarding material that has not been fully grasped. This is done to investigate whether students really understand the learning material or not. There were some students who were passive during the learning process, maybe because they did not study the material and videos that had been given previously. Therefore, students must practice their honesty for the sake of learning and progress in their education because students must participate actively in the process of learning as well as open a mind set, not hesitate or be ashamed to ask questions and express their opinions.

The flipped classroom methods can assist English teachers improve their students' learning capacity, attention, motivation, and independence, particularly when it comes to reading comprehension in narrative literature. Cooperation and contact between instructor and students throughout the learning process must be emphasized in order to create a more conducive learning environment and help students grasp learning content.

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